Cock Fighting All Over The World

C.A. FINSTERBUSCH

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COCK FIGHTING

All Over the World

By

C. A. FINSTERBUSCH

Published by

GRIT & STEEL

GAFFNEY, S. C.

1929

INDEX

Natural History of the Cock	17
Origin of Game Fowl	31
Fundamental Differences in Malays	53
Crossbred Game Fowl	67
Scattering of Game Fowl Over the Earth	77
Fighting Cocks and Cock Fighting	89
Pit Practices and Rules	99
A Collection of Cock Spurs	111
Anatomy of Game Fowl	117
Breeding Stock	135
Breeding Chart	152
Rearing Chicks	155
The Female Line	163
The Male Line	169
Type and Style	173
Gameness and Fighting Spirit	183
Strength and Endurance	193
Speed and Ability	197
Feeding and Walking Cocks	203
Conditioning and Testing Cocks	215
Setting and Fighting Cocks	233
Nursing Cocks	241
Caucasian Fowls	247
Ancient Cocks	253
Arabian Cocks	259
Greek Cocks	265
Egyptian Cocks	271
Phenician Cocks	275
Roman Cocks	283
English Game Fowl	289
French Game Fowl	307
Belgian Game Fowl	322
Irish Game Fowl	326
Spanish Game Fowl	330
American Game Fowl	346
Canadian Game Fowl	363
Australian Game Fowl	364
South American Game Fowl	368
Sundaic Game Fowl	388
Sumatra Game Fowl	392
Balinese and Madoera Games	398
Sumatra Game Fowl. Recent Researches	399

Filipino Cocks	406
' Oriental Game Fowl	407
' Indian Game Fowl (Asil)	411
Haiderabad, Madras and Calcutta	429
Ceylon Hennies	433
Indian Malays	434
' Japanese Game Fowls	435
Siamese and Malacca Fowl	455
Madagascar Fowl	460
Brazilian Game Fowl	462
' Game Literature	466

LIST OF ILLUSTRATIONS

Sport in Southern Sumatra—Frontispiece.	
Photo of the Author	5
Gallus Bankiva, Red Jungle Fowl	19
Gallus Varius or Furcatus the Wild Cock of Java	19
The Culm or Malay Cock of India	21
Typical Sumatra Game Cock	21
Typical Heads	23
Steel Fighter and Typical Silhouette	33
Naked Heel Oriental and Silhouette	35
Slasher Fighter and Silhouette	37
Gallus Giganteus	55
Show Sumatra from Belgium	69
Furcatus Cock at Buenos Aires	71
Large Aseel or Kulang, Indian	73
The Caravan's Rest	79
From Dr. Clarke's Collection of Cock Spurs	113
Development of Artificial Spurs	115
Skeletal Anatomy Illustrated	119
Heads and Feathers	121
Sumatra Game Cock	123
Organs of the Cock	125
Principal Glands and Their Location	127
Convenient Type of Hatching Nest	137
Different Types and Stations	141
Breeding Chart	153
Newly Hatched Chicks	157
Selecting Chicks	159
Type and Style	175
High Flying in Long Heels	185
Close Fighting in Short Heels	187
White Brazilian Cock	195
A Brain Blow at First Fly	198
Dubbing, Spanish and English	209
Different Styles in Dubbing	211
Trimming for Battle	217
Sparring with a Dummy	219
Taking Hold of a Cock	235
Green Cocking Scenes	254
Old Persian Game Cock	256
Arabian Game Cock	261
Scene in a Greek Cock Pit	269
Egyptian Cocks	273
Ancient Phenician Voyagers	277

Roman Game Cock	285
Game Cock of Queen Elizabeth's Time	291
English Fighting Cocks of Today	293
English Henny Cock of About 1830	295
Muff, Tassel and Plain Head, English	297
Gray Game Hen, English	299
Mr. Herbert Atkinson Holding a Pyle Cock	301
H. Henry Cliquennois, Famous French Cocker	309
French Cock, Heeled	313
French Light Weight Cock	317
Flemish Game Cock, Belgium	323
Blue Bruges Cock, Belgium	324
Typical Irish Game Cock	328
Spanish Game Cock in Full Feather	338
Spanish Cocks and Zapatones	334
Mr. Ed H. DeCamp	346
Grist Champion Stag	347
Campbell Blue Boone Cock	347
Knob Comb Blue	348
Raggio Blue	348
Tait Claiborne	350
Allen Round Head	350
Blue Falcon	351
Miner Gray	351
Dr. H. P. Clarke, Indianapolis	353
Short Heel Fowl	355
Half Black Jungle, Half Shuffler	355
Gravel Road Grey	356
Pit River Warrior Shake	356
A Miner Blue	358
Australian Game Cock	365
Australian and New Zealand Fowls	366
Cocks of Argentina, Peru, Paraguay	369
Three Cocks of Chile	371
The Prettiest Pit in All Mexico	373
Breeding Yard at Buenos Aires	375
Peruvian Heeled with Slasher	377
Jap Cock, Buenos Aires	377
Don Cristobal de Armero, Lima, Peru	379
Asil Cock Bred at Buenos Aires	381
Argentine "Puon"	381
Sr. Atilio Rossi, Buenos Aires	383
Old Black Sumatra Cock	389
Two Balinese Slasher Cocks	390
Typical Oriental Naked Heeler	409

Pair of Asils, Khan Strain	413
Pair of Asils, Sona-tol Strain	415
Siyah Rampuri Cock and Hen	417
Kaptan Asil Cock and Hen	419
White Sport from Rampur Stock	421
Rampur Asil Hen	423
Cock Coops at Lucknow, India	425
Pair of Asils bred in England	427
White Calcutta Cock and Author's Daughter	429
Old Calcutta Cock	430
Asil Bred in Argentina	430
Henny Game of Ceylon	431
Malay Game of India	434
Typical Shamo, Tuzo and Ashura Cocks	437
Pair of Shamo Japs	441
Ainoku Game Cock, 13-lbs.	445
Jap Cock in Argentina	448
Malay Naked Heeler of Siam	455
Exhibition-bred Sumatra in England	456
Naked Neck Madagascar Malay	457
White Brazilian Cock	458

FOREWORD

Books travel far and wide

Most of the volumes consulted eagerly for just one date, one phrase, connected with the cocks, had a long journey behind them.

By rail or ship. Some must have traveled about a century ago, packed in queer boxes, on board old-time clippers.

In many ways, books connect us with past times;—they are the foot-paths of history. And so, this book will take the reader many times around the world and many, many centuries back into the past.

The subject of game-fowl is so full of interest, so full of details, that many earlier writers, though perhaps infinitely better prepared than myself, have dropped the matter, and so, their books remained unwritten.

I do not by any means believe that this is complete. What I have been able to grasp is a mere fraction, but it required at times considerable labour and a great enthusiasm to carry the work forward.

I have picked up my information from everywhere; have approached Royalty, scientists, diplomats and the humblest labourer, and am glad to say that everywhere I was treated alike, with very good and honest will. White, Negro, Red and Yellow Men have contributed their share!

This is the result; I can offer no excuse for deficiencies.

As the work progressed I learnt that I must necessarily go round the world. Just once more! I must hear again the click of the anchor cable running in-board through the hawser; see the tug casting off the tow-line in fair water. Then the off-shore quarterly breeze will fill the expanse of canvas;—all aboard made fast in ship-shape fashion and while the ship leans gently over, leewards, the wind will sing through the rigging the old song of adventure, hopes and strange desires.

The blocks and capstans reveal secrets when hard pressed by straining lines: Madagascar, Siam, India and the luring South Sea! All over the world there are cocks and many varieties are there of which we know nothing. They all together tell us the history of humanity.

If I find out, I will tell you about them when I come back!

C. A. FINSTERBUSCH.

San Antonia by the Sea, Chile.

THE AUTHOR.
C. A. Finsterbusch. Santiago, Chile.

NATURAL HISTORY OF THE COCK

The domestic fowls, known in the whole world by numberless varieties, may justly be divided in two large groups: Game and Non-game Fowls. It is queer that breeders of either group look at the other with a certain disdain and while the utilitarians look upon the Game birds as a sort of nuisance, the average game breeder classifies any other than Game fowl as "dung-hills" and does not feel for the same any sympathy other than that connected with the cooking pot.

It has been stated time and again that all domestic poultry is descended from the "*Gallus Bankiva*"* but close study of this subject proves this hypothesis to be wrong. In fact, there is no acceptable reason why, if the *Bankiva* has been tamed and domesticated, the other wild varieties should not have undergone the same procedure.

There are tolerably good reasons for believing that this was done, as we shall learn in the proceedings of this treatise.

Science recognizes four different wild varieties, still extant in their natural haunts, viz.:

GALLUS FERRUGINEUS (*Bankiva*). The red jungle fowl. It is found in wild state all along South the Himalaya, India, Siam down to the Sunda Archipeligo.

GALLUS SONNERATI. The gray jungle fowl. A particular inhabitant of Southern India or Deccan.

GALLUS LAFAYETTI. The specific variety of Ceylon, and,

*All dunghill poultry books follow this old idea but modern scientists do not. Note this extract from a letter to the author written by E. C. Stuart Baker, Hon. Secretary of the British Ornithologist's Union: "I am in full accord with your opinion that Linne's *Gallus gallus* (*Bankiva*) can not be maintained as the parent of all domestic stocks. I think with you that the Grey and Ceylon Jungle fowls, as well as others, have at one time or another had some influence on them."

GALLUS VARIUS, the interesting jungle fowl of the Dutch East Indies.

Of all these varieties the Ferrugineus or Bankiva is geographically the most extended variety, being found not only in India, but also in Siam, Malaya, Sunda Islands and the Philippines. As such, it appears to have been domesticated in much larger numbers than the other species, and consequently its type has been evident ever since in overwhelming proportion. No doubt that this fact has led so many excellent naturalists to the erroneous supposition that it is the ancestral form of all domestic poultry. That this, however, is not so, we shall endeavor to explain in the following lines.

GALLUS GIGANTEUS. (Temm.) There is no doubt that the common domestic fowl known in Europe and bred for centuries as barndoor or game-fowl is conspicuously of Bankivoid type and characteristics. Besides these, however, fowls of large size, with feathered shanks, showing a marked deviation from the traditional Bankivoid type, were known as *Asiatics* or *Mongolics*. Nobody could account for their existence until the tolerably pure ancestor was discovered in the East scarcely a century ago, and later identified under the name of *Malay*, from the descendants of some Oriental birds of this group imported into Europe from Malaya. Since then, it has been a matter of speculation, whence this awkward, gigantic fowl descended, and though many authors consider the Oriental giant a mere variation of the common Bankivoid domestic fowl, no sincere student of the Gallus species can be convinced that both Bankiva and Malay hail from the same source.

They are radically different, mentally and physically.

The above mentioned error being due to the fact that most scientists, though fairly familiar with the barn-door fowl of Europe, show surprising ignorance regarding everything connected with the other group of do-

mestic fowl identified as Game-birds, and most, if not all, fairly pure Oriental or Malay cocks have decidedly been bred during countless centuries merely for fighting purposes. As such they were not usually found roaming about as dunghills, but kept studiously confined and out of the way. Explorers and authorities on the Gallus question, such as Temminck, at once were impressed, when they saw the first specimens of these queer birds, that they were glancing upon the representatives of a new species, yet unknown to Western science. Giant size, scantily feathered, long and heavily muscled legs, remarkably short in wing, these birds resembled, as the ostriches, specimens that were too heavy to fly, and subsequently adapted themselves to a new life where they could develop those characteristics that have ever since identified them. Their enormous size warranted the name

THE RED JUNGLE FOWL.
Gallus Gallus, Bankiva or Ferrugineus.

Temminck accorded them, viz: "Gallus Giganteus." Science opposed this and failed to recognize it as a distinct variety for several reasons that have not proved to be convincing, beyond the statement that a wild ancestor corresponding to this type has never been found, nor are there any records

GALLUS VARIUS OR FURCATUS.
The wild cock of Java.

of an extinct like variety.

If we consider, however, that the possible habitat of the original wild Malay is scarcely known to Europeans since the 15th century, that a giant dove relation, the dodo, (*Didus ineptus*) was radically exterminated also, and that the Malay shows all traces of being domesticated since many centuries, we come to agree that the above statement proves nothing.

The Malay (wild) cock must have been exterminated long before any European showed up in the Orient, and only preserved to our days in a domesticated form, and this, besides, only kept,—as stated,—for the pit.

There are reasons for believing that what we know as Malays today are only remnants of the birds of yore and that genuine, pure birds are extremely rare, even in the Orient. Yet, the fundamental type has been reproduced with such a marked prepotency that there should be but little difficulty in picking up fairly true breeding stock.

While descriptions of the wild Galli; Bankiva, Sonnerati, Lafayetti and Varius, may be found in almost every work about Ornithology, the Malay has been left out, a reason for quoting its characteristics herewith.

TYPE AND SIZE: The body is peculiar and unique in shape and carriage, and the Malay, contrarily causes the impression of wanting to duck under or hide. This is not casual, as the Malay is a runner, while other Galli are decidedly flyers. Consequently both have quite different modes of living and logically different anatomy. The body of the Malay is rather short, very strong aft, extremely broad at the hips and narrow between the shoulders. The breast is flat and broad, lacking the depth of flyers and their strong pectoral muscles. The wings are very short and unable to lift the heavy body. The legs, however, from their insertion in the hip to the strong hocks are heavily muscled and extremely powerful. Nature has provided that the

corresponding bones, being of generous proportions should give greater surface for muscle insertion by means of rims and protuberances that are unknown to pure Bankivas, whose bones are smooth and light. The Malay's bones are not only filled with marrow, but are stayed inside, with the well-known spongy reinforcement. The muscle distribution of hips and legs, and

THE CULM OR MALAY COCK OF INDIA.

the corresponding skeletal portion is so arranged as to produce the most convenient angles for power exertion, giving the bird a slight roach aft and a drooping tail, characteristic of the Malay. Weight being localized aft, the breast is drawn flat and broad, forming an ideal base for the extremely long and strong neck which is inserted well under the wings and low. The neck rises with a sharp curve upwards forming at the extreme a broad, powerful base for the head. This is also peculiar. Very broad at the jaws, the eyes are protected

from above by overhanging so-called beetle brows, and from the side by prominent cheeks. Upper and lower mandibles close tightly and boxing, forming a curved beak, massive at the base and short.

TYPICAL SUMATRA GAME COCK.

The ample base of beak and broad jaws allow a wide gap, so as to en-

able the bird to swallow big lumps. Correspondingly, the gullet is very ample, and a large dewlap completes this outfit. The crop, however, is small, as is the proventriculus and gizzard. The digestive tract is short, and far from being so elaborate as that of *Bankivas*.

Shanks and feet, fairly large, massive and strong. Excellent organs for running and scratching, but scarcely adapted for roosting on thin branches.

HABITAT AND FOOD: The enormous size and weight of the Malay, reaching 24 inches, and weighing 14 and more pounds, would demand very ample and powerful wings to alight and fly, and therefore instinct and adaptation placed him not in the forest, where the trees would be useless to him, but in the grass jungles where the huge bird can hide perfectly and push his way forward, aided by his strength and weight. Under these conditions the delicate single serrated comb of the *Bankiva* would soon come to harm and the after-blade would entangle with the grass. Not so the Malay comb, which is a sort of hard elastic cushion, fairly smooth and broad. Here we find an explanation for the beetle brows also. They being intended to serve the same purpose, protecting the delicate eyes. The face and upper neck of the Malay is covered with bristles. Earlobes and wattles very small and tough. The strong neck, flat breast and peculiar shape of body are excellently adapted for this habitat, while the weight and power is a primordial condition for romping a way through the tangle. Here we find also a reason for the scant and extremely hard feathering of Malays. While the flying bird has long and soft feathers, long wings and tails, these would be a decided hindrance in the grass jungles of the Malay. When *Bankivas* are frightened, the male alights on a tree, but the lesser feathered females, with short or scant facial appendices, hide in the brush. An observation that confirms the feather

peculiarity of the more or less henny-feathered Malay.

In their natural haunts, birds must find their food. The Bankiva merely turns the leaves, but does not dig deep holes. His leg power would not suffice for this purpose, as the toes are long and thin, well adapted to roost on trees, but not for scratching. Therefore

TYPICAL HEADS.

1. BANKIVA. 2. SONNERAT. 3. VARIUS. 4. SUMATRA. 5. MALAY.

it feeds on seeds, fruit, leaves and what he finds on the surface of the ground. In the grass jungle, the Malay will hardly find the same conditions. Young sprouts in the spring, and seeds in autumn, that would be his vegetarian menu. During the rest of the year, however, the Malay must hunt for something else. Here the broad gullet comes in handy. Crabs in the swamp,

frogs, lizards and insects, even snakes, for which, even through a long course of domestication they show a marked preference. When insect and amphibian life sleeps, the Malay is able to search for food, digging deep holes, and we have conducted experiments showing that they really do this work perfectly, while Bankivas would have starved.

The small crop, gizzard, short and tough intestinal tract of the Malay indicate carnivorous habits. Would he be confined to vegetal food only, the apparatus would not suffice to supply the body and he would become stunted. This is a probable explanation why, besides the giant strains, dwarfed ones have been produced in domesticity.

HABITS: Though, as stated before, the Malay must have been domesticated some thousand years ago, they still show some traits and proclivities pointing to their wild ancestors. One of these is their marked inclination to dig deep holes, even when not forced to do so by hunger. This may be observed especially when walking fowls in the open country or garden, when Malays will never err digging and scratching at the roots of bushes where they diligently pick up minute morsels. On examination it was found that their crops were filled with insect, frog and other little eggs, besides heaps of larvae. It is also interesting to note how they behave when frightened. Bankivas usually resort to a run for home, Malays stoop motionless with head inclined towards the point of menace, and when running in a patch covered with plants and grass, they generally turn left and right and hide. Not so when on open range, while the Bankiva will take to wing and alight, the Malay runs straight forward, seemingly slow but nevertheless quick enough for an average man. His run is always toward the next thicket, which he spots with amazing rapidity.

There are reasons to believe that the original wild

Malay was fairly monogamous, though not of solitary habits. In confinement, his inclination to favor a single hen as mate is a general drawback in the breeding pen. As soon as this particular hen becomes broody, the cock will mate with another hen of the same flock, and so on changes mate as circumstances demand. It is a well-known fact that pugnacity of cocks increases in the breeding season. We have observed that Orientals kept in natural conditions lay well the whole year round at intervals. Typical Malay hens we had under observation laid five, seven and eight batches of eggs in the year, all of which proved fertile. Asil hens, that were ever since reputed as the worst layers, laid four batches under such conditions. Many friends who could afford land enough kept Malays under observation with identical results. This winter laying, for which Malayoid and Mongolics are known, would necessitate the services of the cock constantly, in consequence the cock must be sexually fit the whole year round and as such show high pugnacity in all seasons. This is effectively so and they do not seem to lose either pugnacity or gameness for a single day, not even through moult, which is effected slowly during the hot season, sometimes taking as much as five months to complete. In fact, it has been observed that during the whole year round it is difficult to pick up a Malay not showing pinfeathers and others in the process of completion. All these characteristics may possibly prove different in extremely cold climates or where the stock is not pure, but in sunny countries this is a positive fact.

The pugnacity of all Galli is proverbial. What the average breeder does not know, however, is that the fighting spirit is a secondary sexual expression, caused by testicular segregation, and that this influences not only the mental, but also the physical means of combat. We know that deer that have been injured in one testicle show abnormalities in their horn branches and

when emasculated do not grow horns. The relation between the sexual glands and the male's means of combat is at once apparent. Pheasants, turkeys, peafowl, etc., that are related to Galli, have weapons like these, i. e., natural spurs. It is queer to observe the spurs of the Malay. Set fairly low, thick at the base, they grow straight and pointed downwards. High and up-curved spurs, such as those of Bankiva, would cause the cock to entangle continually in the grass, but such that are pointed down allow the grass to run past swiftly. Spurs are generally only indicated on the females, but spurred game hens are conspicuous in breeds where the cocks carry very large and curved spurs, such as all flyers do.

The gameness, pugnacity and strength of the Malay has induced cockers to cross him on native fowls with a view of improving their fighting ability, and subsequently through centuries of experimenting many varieties have been produced giving rise to the numberless breeds of domestic poultry, both dunghill and game.

EVIDENCE OF ORIGINALITY: While breeders and students of Oriental Game fowl are thoroughly convinced that they are descended from a different—now extinct—wild ancestor and quite unlike the traditional Bankiva, many authorities, both on game and fancy poultry, are prone to believe that the Malay is only one of the multiple variations due to domestication. One of the proofs quoted against the originality of the Malay, and upon which the great Darwin based his statement is that “no such wild fowl has ever been found, considering its extinction an improbable hypothesis seeing that the four known species have not become extinct in the most ancient and thickly peopled regions of the East.”

Now these four known species are “flyers” as stated before, while the Malay is not. We have further considered his grass jungle haunts. The wild fowl of India

is extremely shy. Even the dunghill Bankivoids are shy. But the Oriental or Malay is confident and tame in disposition. Apparently no man was able to run a Malay down nor could he well approach his victim, as the Malay has too sharp eyes and ears to grant any success. But hunted with dogs or driven out by fire, the Malay soon became helpless, being unable to fly. As to its extinction, we have a similar case from historical date. The Dronte or dodo (*Didus ineptus*) of the group of the doves, unable to fly, larger than a swan, gray with yellow wings and tail, both atrophied: feet short, strong. Extinguished at the end of 17th century in Mauritius. A near relation of same the Solitair (*Didus solitarius*) the size of the goose, lived in the island of Diego Rodriguez, in the Indian ocean and some 300 miles from Mauritius. Think how both extinct species were related to the doves as the Giganteus or ancestral Malay was to the Galli. As non-flyers they were easily extinguished.

It is improbable that both "Didus" were not to be found, before the advent of the white man, in other islands also, yet it must be denied because there are no records.

Non-flyers were easily eradicated in the densely populated regions of the East, and if the Malay was saved, it was only due to his marked tameness towards man and its utility to provide diversion. Another argument is emphasized on analogy in domestic fowl, seeing that the multiple breeds known as Asiatics, Americans, Mediterranean, etc., all show marked variation between each other. Some have single, others rose, and others pea combs. Some are short, others long feathered, etc. This variation is supposed to be strong in all living beings.

The argument has a weak point, however. We know that the Malay has been crossed on Bankivoids in different degrees of blood percentage. In China this cross

has produced the Mongolic breeds, as nobody will doubt who knows the Red Canton fowl, almost identical to the Rhode Island Red. And these Rhode Island fowls have been produced mating Red Malay cocks with the barn-door fowl of New England, U. S. A.

There are many grade Malays in India of the same character, the Chittagong for example, whence the English Exhibition Malay is derived. But if those crosses would not have been effected, lacking the Malay, it is probable that the Chinese fowl would have assumed the character of the Mediterranean, which on the other side, are examples how far the Bankiva can and will variate when bred pure.

As will be shown further on, the Persian cock, the Egyptian, the Greek, Roman, Italian, Spanish and English Game, are the course of one evolution, that proves again how far and wide variation is reasonably possible. But just how from a Bankiva, a giant five times as large, with completely different anatomy and physiology, as described above, may be expected to vary, is a statement that claims for scientific demonstration. Variation and evolution are possible within the limits of the breed or species. It may assume the form of enlarged size or capacity, change of color, adaptation to climate, etc., but it will not trespass the well defined boundaries of inherited ability. The skeleton will not change nor will the internal organs up to a degree that marks a profound difference between the Bankiva and the Malay. Most European breeds tend to revert to the original Bankiva, and this is set forward as a proof of origin from that source. It is also a well established fact that crossbred Malays tend to revert also to their original type, with such propotency and marked tenacity that we take this very important item as convincing proof of the originality of the Malay type. Game breeders know this well enough. And besides, Orientals, even crossed, never revert to Bankiva.

We do not believe that besides the Malay, only the Bankiva has ancestral rights to our domestic fowl. The color of Sonnerati, its comb and other peculiarities show up pretty often in Game fowl. It has been stated that the Sumatra Game fowl is a cross production between Bankiva and Malay, but the more we see of them, the farther we get from the point that the Bankiva is the sole ancestor of domestic poultry. Apparently and with all probabilities, all wild jungle fowl have been used now and then for crossing, and if the Bankiva type and color is evident in the progeny in a higher degree it is merely due to the fact that its wide area of distribution has caused people to use it in proportionate degree also.

We have examples of how the Bankiva is capable of variation under domestic conditions in the old fighting breeds of Europe. In Italy, the former game birds degenerated into birds that lost the color and hatching instinct. In Spain and Mediterranean Islands, several breeds evolved from the game birds of yore, yet others were kept pure, and the Spanish fighting cock of today, where kept pure, is as pure Bankiva as the Game fowl of Rome, Greece and Persia. It has not changed, neither in type nor size. In the North of France, departments of Nord and Calais, the Bankiva has attained large size; three times that of Spain, yet has not changed in type and characteristics. Still larger are the game birds of Belgium, the Flamand and the Liegeois, while the Bruges shows decided Malay cross. It is an open question if the larger breeds of Belgium do not carry traces of Oriental blood, but in the main they are fairly Bankiva in type.

The Game birds of Ireland, reputed for their quality, are tolerably pure in blood and do not differ fundamentally from their ancestors of Persia, yet they are variated or should be in more than 20 centuries of domestic life.

Why did or do not tolerably pure Bankivas vary, even approximately, towards a Malay type? And why in the Orient should they have done, when there they have been submitted to the same selection for the pit? Why does Malay blood in the East show up in the progeny with so marked tenacity, for numberless centuries?

We find but one explanation: The Bankiva type is perpetuated through so many generations for the same cause as the Malay does. Both are originally pure, and from different wild ancestry. The *flyer* and the *runner*!

ORIGIN OF GAME FOWL

The origin of game fowl is dark! There is no doubt, however, that originally the cocks were tamed merely for providing sport.

Whatever records there are, and these are of almost recent date, compared with the antiquity of cocking,—tend to confirm the general assumption that fowls were merely kept for diversion.

Undoubtedly, cocking is a thing of the East, and as such, unknown in Europe before the Phenician era. It is, however, probable that some sort of Mongolic fowl was introduced in the North of Europe when Asiatic hordes progressed towards the West, the remnants of which may be recognized in the barndoor fowl of North Russia, Prussia and England. These birds were probably not game and if so, they became degenerated in the course of centuries. Such were the old fowls, of Mongolic type, the bones of which have been found in England and the probable ancestors of ancient breeds as the Kent, Sussex and Surrey. It has been stated by well informed authorities that such a fowl as the English Dorking existed in Rome where it enjoyed reputation for its excellent culinary properties. It is very probable that the Mongolic type of same is due to introduction of the above mentioned fowl from Russia. At least the road that the bird described then is clearly traceable up to our days. Perhaps a coincidence but in subsequent observation we find the same coincidence, corresponding also with the scattering of other types of fowl, in fact, almost invariably.

In the course of bygone centuries, we find that in countries where cocks attained reputation as in Rome, Greece, Egypt, Persia, etc., they were not indigenous, but introduced purposely. All traces point to the East, indicating the probable source of origin somewhere South of the

Himalaya comprising India, Siam, Malaya, Sunda Archipelago and the Philippines. Practically the natural haunts of all existing and extinct wild Galli.

The oldest records invariably refer to the cock as something normally usual and in state of domestication long ere since. The mention of cocks in the "Institutes of Manu" concern laws or regulations of the sport, showing that it attained so wide distribution that it was deemed necessary to draw attention to the subject. If we consider that these "Institutes are nearly thirty centuries old, we may safely deduct that cocking in India was older still than the famous "*Manavadharmacastra*" or laws of man."

India has been identified also as the country where the game Orientals originated, and if we change the term of "origination" to "preservation," we do not go far wrong from the presumably correct facts. Our investigations show that the Malayoids came from farther East and South, while in India such birds as Bankivas, domesticated Sonnerati and Lafayetti were common before the advent of the Malay which was introduced by foreigners.

We have already given an explanation why, despite the existence of the gray and the Ceylon Jungle fowl, the Bankiva predominated, being found commonly extended over wide zones, while the afore mentioned are restricted to limited regions only.

It appears that there should be no tangible reason to account for the fact that such a bird as the Malay should have displaced the aboriginal Bankiva, yet there is evidence to this effect bearing relation to the exigencies of the pit. We shall discuss later, that game birds are grouped distinctively as steel and naked heel fighters. The Malay, with its enormous leg power is a genuine and insurpassable naked heel fighter. In India, steel was not used in the pits, and as soon as the cockers found out that Bankiva type fowl could not stand the Malay naked heel,

it was substituted for the latter, crossed out and even forgotten. Just how good these Bankivoids were, may be deducted from the performance of Persian and Greek game cocks, which were descendants of the tolerably pure Bankivas of North India.

From the game fowl of South India, we can trace the original blood of

Sonnerati and Lafayette which is evidenced in the different colour hues and the peculiar carriage and shape of the comb. Such game fowl found their way into South Persia by the sea route much later than the Bankiva

STEEL FIGHTER AND TYPICAL SILHOUETTE, BANKIVA.

which presumably was introduced by the caravan road in North in very early times by Arian people. It is a fact that while the game fowl of North Persia was small, Bankiva coloured and with fairly large straight combs, those of the South were larger, mostly some dark hue, and combs of irregular shape. It may be also supposed that the game fowl of South India having had, now and then, some infusion of the little known Malay blood carried the propensity towards large size and beefy comb.

We know further, that Spanish, Italian and English game fowl were evolved from ancient Persian cocks, and so we can understand, why, even in the purest strains of Caucasian pit birds occasional rose and pea combs appear, as well as strains differing completely in their colour from the original black-red Bankiva. This difference in colour is especially evident in the new born

chicks, where distinctives of Sonnerati and Lafayetti may be observed, as well as occasional traces of the Gallus Varius, to which we shall refer later on.

Comb and skull of any species of Galli are remarkably fixed and less inclined towards variation than any other part of the body. The skulls of the Indian wild fowl, Bankiva, Sonnerati and Lafayetti do not show marked difference showing near relation to each other in comparison to their common ancestral pro-gallus form, yet minor details in their face mark a deviation corresponding to their different zone of propagation and living mood. All three may be crossed and produce fertile offspring. They differ, besides, in colour of their combs. The bankiva has a thin fairly large blade with deep serrations. The Sonnerati has a smaller comb, set upright with a shorter base and smaller spikes. The Lafayetti is nearer the Sonnerati fowl, but with very small serrations and thicker blade. All three differ considerably from the Gallus Varius or forked tail Jungle cock of Java. The comb of the latter is thick, single and when out of season lopped to one side. While the Indian Galli have the traditional double wattles and more or less distinct earlobes, the Varius (Ayam Alas of the Javanese) has a single wattle. Comb and wattle of the latter are of changing colour as is the case in some pheasants and turkeys.

There is a marked difference also in the feathering. While the continental Gallus has the conspicuous long-flowing neck hackle of the traditional game fowl, the Varius has feathers rounded at the extreme, such as we know in the peafowl and pheasants, once more evidencing relationship to the Phasianus family. The Varius has produced another species, by hybridization with Bankiva, recognized scientifically as the "*Gallus Aeneus*" or Bronze Jungle Fowl. While some authorities believe that this is a feral variety others maintain that it has been produced spontaneously in wild state, due to the sensuality of the

cock on one side, and to the similarity of all females "inter se." A very similar product to the Aeneus has been produced in confinement mating a Varius cock to a Bankivoid hen. The offspring proved to be fertile between themselves and with other domestic fowl, but the expectation that in this way a Malay type may be produced proved to be wrong. On the contrary, it proved once more that the Malay is a different bird altogether and no attempt to produce it in the breeding pen has been to any avail yet.

All wild Galli are very difficult to tame and domesticate, yet the natives of some of the Sunda Islands and Philippines

NAKED HEEL ORIENTAL AND TYPICAL
SILHOUETTE, MALAY.

succeed in catching and keeping wild cocks, giving us an index how possibly the first cocks were tamed and later domesticated, several thousands of years ago.

Wild cocks are trapped in different ways but mostly caught with nooses made of horse or carabou hair in which they entangle. With marvellous skill these natives proceed to tame the birds with food and observing their sexual proclivities. Apparently their sensuality is stimulated by feeding methods to such a degree that it is current occurrence that cocks discharge seminal liquid when lightly touched around the vent.

Cocks are not confined in coops but are attached to a

pole by a string, so that they can see, but cannot get at each other. Pullets or laying hens are first placed cooped under a basket-like coop in sight of the cocks, but later on are also tied by a string to a pole. The cocks become naturally excited and are constantly stimulated with some spice. The tamer will then take a hen and satisfy his sexual ardour. Later on, the cock is lead to the hen regularly, until it becomes accustomed to being handled.

As the other cocks see and experience the same procedure, they become desperately wrathful at each other. They get their wings properly shortened and are now pitted regularly and no cock apparently ever tries to get away. In due season, Bankiva cocks are reported as deep game, but following natural inclinations as described in former chapter are not dependable when out of breeding trim. This is exactly the case also with the domestic variety, unless specially fed for the purpose.

It is said that the natives, after fighting the cocks in season, loosen them again as soon as they start to moult, it being a general belief that no cock can stand the coop during the period of natural disease that is produced by moult. Yet many have been kept successfully and in the course of years domesticated completely. In the North of India, the same process has been followed, and many times wild hens caught with a hatch of chicks. For this purpose the natives proceed to scatter adequate food near the nest of the hen observed for some weeks. Some go so far as to put flat bowls with water in the neighborhood of the hens, to which Arrak or Rhum is added every day. When the hen goes out with her brood she finds a prepared dinner, millet soaked with Arrak and water mixed with it. In the following drunkenness the diligent native simply puts the hen and brood in a basket and carries the whole lot home.

It was many years ago that we heard of this trick and we eventually succeeded in catching our neighbor's

pigeons, using the same trick, and for which our "pater familias" gave us a sound thrashing, still fresh in memory, though the focus of it was considerably farther below and behind.

Today the natives of the Indian Jungles continue to catch wild Jungle fowl, with an elaborate apparatus of loops and nooses, but as they are not considered good food, happily the prosecution of the game is not insistent. So they have been saved up to our days, assisted by their wonderful prolificacy. In some parts of India, however, they have grown scarce.

SLASHER FIGHTING SUNDAIC AND
TYPICAL SILHOUETTE, SUMATRA.

When the Bankiva and other flying Jungle fowl degenerate, they lose their colour, and the white wild Bankiva seen and shot in the South of Philippines, the "lubuyu" is believed to be a feral degeneration of the red variety, for which also speaks its larger size.

The Bankiva is also found in the Dutch East Indies but missing, as well as pheasants in New Guinea, Aru and Kei islands, which show Australian characteristics in their fauna.

In Sumatra, Java, Bali and Madura a breed of game fowl was found that was known as the "Pheasant Type." English authors confounded it with Malays, that were pheasant "coloured" but otherwise strictly Orientals, as they perhaps never knew this type as originally introduced in the States in 1851.

This particular breed was introduced in America from Sumatra, where it had remained pure for centuries in hands of Mohammedan natives, who were always

deeply inclined towards cocking. Henceforth called Sumatra game, they exhibited a different type from the ordinary and Oriental fowls, being extremely fast and aggressive. The body elongated, heavily feathered, long winged and tailed, they were exceedingly rare and proved to be quite an acquisition. In more than 50 years of crossing and inbreeding the original stock deteriorated to a type of fowl, now often seen in English and foreign shows and admitted to the Standard of perfection, as Black Sumatra game. European and especially English breeders have lost sight, however, of the most outstanding feature of this rare breed, the pheasant type, and a peculiarity only known in pheasants and this species,—the multiple spur. What is now known as Black Sumatra game is a breed evolved for the show pen, due rather to the breeder's skill than to anything Sumatran. Time and again reports were published in the poultry press relating to the Sumatra as another extinct (or near extinct) Gallus species, and all the information that could be had, scientifically and otherwise, tends to confirm the assumption that if not really an original wild jungle fowl, at least it was one distinct breed unlike anything known before and after. The investigation about the origin of the Sumatra has been disappointing. Tradition says it is a pure, old, genuine jungle fowl, but science says that the specimens met with in wild state are feral due to the abandonment of the farms and pepper plantations when their owners, Mohammedan settlers, were badly beaten by the Dutch conquerors in centuries of war and pursuit.

The Sumatra game fowl was really a local breed or species, bred since many centuries by Arabian and Persian settlers in the island of Sumatra. It was not introduced here, but found either wild or domesticated by them in the place, their characteristics being fixed centuries before. The Arabs and Persian settled down firmly on Sumatra and sent missionaries all around the archipelago.

We do not know very much of this activity beyond what has been recorded in the smaller island of Java, where the Hindu had settled and developed a vast and flourishing empire. In the Hindu chronicles, called the "Vedas" as well as the Javanese folk-lore, it has been recorded that this empire was founded about the 75th or 78th year of our era, by a prince or prime minister coming from Hindustan. Though it appears that some relations between Hindustan and Java were evident long before, this prince, Aji-Caka by name, introduced proper government, law and religion.

From the Javanese chronicles, called "Babads" it appears that the first inhabitants were called "Kalangs" while the Hindu named them "Rashakas." It is fairly sure that these "Kalangs" had not only domesticated barndoor fowls before the Hindu came, but had also "Game-cocks" of Bankiva type, as may be deducted from engravings in stone, centuries before the Christian era.

Whatever influence the Hindu had on cocking it is not known yet, but the extremely elaborate sculptures in the temple of Boro-Budur do not give us information to this end. Historians believe that the Hindu abhorred the cocks and being Buddhists did not tolerate any fighting, unless this was carried on between the proper Javanese or "Kalangs."

The Arabs called on the East point of Java in their travels, to repair and replenish their vessels, and in the course they formed a settlement in the place now called Soerabaya, just opposite Madura, modern cocking centre of the Dutch East Indies.

The Hindu epoch in Java culminated with the sumptuous expansion of the Empire of Mendang Kamulan (Mataram) with the capital at Brambanan in Mid-Java, where the ruins of the once formidable palace give mute testimony of enormous wealth display. The rich ornamentation, sculptured with infinite patience and artistic

skill on stone, however, can give us no information about the fowl, that evidently were kept.

About 925 of our era, a rebellion was cause of the downfall of the Empire of Mendang Kamoelan, and the emperor driven out of Brambanan, made several efforts to settle here and there until at last he succeeded in taking firm hold in Pakuan (Batu Tulis near Buitenzorg) where at once he established his capital with the name of Padjadjaran, centre of another empire which about the 11th century succeeded in subduing smaller kingdoms as Priangan (Preanger), Jakarta and at last Banten (Bantam). The Empire of Padjadjaran reached the summit of its glory during the end of the 14th century having extended its reign into Central Java.

In our relation it is so far of importance, as it was during this epoch that the first Hindu Prince ever yielded to Mohammedan faith. While in Java cocking was practiced, it was the sport, not of the aristocratic Hindus, but that of the lower native population and as such extended far and wide. It seems strange that the artists of those days should not have immortalized cocks and cocking in some more generous form than what they actually did, viz. in very small and scant metal works.

We know that arts and craftsmanship flourished during the golden age of the empire of Mataram and numberless highly skilled workmen, artists, builders of temples, sculptors and manufacturers of the finest metal products came forth from the educational centres of the Empire.

Military authorities educated the aristocratic population in the use of finest arms. Wonderful arms, damascene and copper work were produced of such high quality that they cannot be equaled, even in our days. The art of tempering different metals has been lost, and so highly developed was the skill of spurmakers, that no Western gaff or spur can be compared with the quaint slashers of those days, many of which are still preserved in posses-

sion of native chiefs and are as good as new. That is exactly one thousand years ago! The men are converted to dust once more, but their work is still fresh and alive!

The ruins of Boro-Budur, Mendut, Tjandi Sewoe, etc., are still considered as wonders of the world, while the once so famous Empire of Mataram was covered by the dust of oblivion.

In the succeeding epoch of the empire of Padjadjaran, the Hindu Prince Hadji Purwa was converted to Islam and tried to influence his brother to the same effect. The population felt readily inclined to the more convenient Mohammedanism and adopted the new faith. The then reigning prince (Hindu) sent a punitive army to bring his subjects to reason, but met with defeat. Padjadjaran met his fate as all empires had yet done; while engaged in a war with the Mohammedan state of Cheribon, which conquering Bantam in 1526, fell upon Padjadparan, destroying it completely about 1570,—and the light of Islam came over Java !

As stated before, the lower caste population stuck to their cocks and cocking and with the now established new Empire of Madjapahit, founded by Arabs and Persians from the West coast of Sumatra as early as the 7th century, they now evolved the sport to the height that gave them their reputation throughout the world. It is generally understood that the cocks they used were far from being identical with the fine breed of Central and North Sumatra, theirs being decidedly Bankiva with a non controlable admixture of the smaller type Malay from the Peninsula of same name. As crossbreds, they exhibited different type and fighting style, while there is full reason to believe, in fact there is evidence to the effect that a full feathered black game, crested fowl was evolved, the progenitor of the Silky variety, and possibly the ancestor of most, if not all, tasseled game fowl of the world. These birds showed also a marked inclination to black

pigmentation, sometimes being not only black of skin and flesh, but showed also nearly black blood and black bones. Later, liberal infusion of Malay and other bloods, produced the freak known as Silky. Of course these hybrids showed a looseness of feather and other abnormalities that barred them from the pit. Nobody seems able to understand whence the frizzles and the Silkies came from, but if we sit down to think the whole matter through carefully, we again come to its point of origin being in or near Java.

Students of naval architecture and navigation history will recognize the notable feats of the early Portuguese sailors, who eventually discovered the enigmatic Indies and their enormous commercial possibilities. In fact during the 16th century the Portugese monopolized the Indian trade, while the Dutch acted as continental agents in Europe. The route was studiously kept in secret, though now we may follow same, studying the sequence of their ports of call along the African West coast. Portuguese fleets loaded jute on their way home and after calling at Tamatava for fresh water and varied supplies crossed the Atlantic bound for Brazil, the coast and possibilities of which they had discovered and taken as colony. The cargo of jute was intended for the manufacture of bags for the Brazilian coffee. Here, once more, the ships refitted, loaded and took fresh provisions for the sail homeward.

Whoever happens to know what it means crossing the Atlantic on sailing ships of a few hundred tons, will understand that the cruise could not be effected without taking in full provisions. As a result, the traders soon found out that the almost naked Tamatava fowl, as well as a crested Silky they shipped either in the Indies or Madagascar, stood the confinement pretty well. And so it came that Brazil, all along its coast, was provided with those Malay fowl that are as pure Orientals as the Shamo of Japan or the Culm of India. In Brazil different types of Oriental

game fowl may be found. Types similar to the Haiderabadi game or the Madrassi, Calcutta, Culm, the naked neck Madagash and the Black Silky of Java. Frizzles have been produced in Brazil due to mutation or simply degeneration of the old Black Game with Tassel. They are also rather frequent on the Pacific coast of America, especially in Chile, where it is sure that Dutch Pirates had settled in the bay of Arauco, where they maintained friendly relations with the brave Araucano Indians. Here the Dutch gathered supplies and frequently chased and destroyed Spanish convoys bound for Peru. These Dutch Pirates, it is believed—and in a single case evidenced by the then adventurous Captain Oort (later Admiral)—came from the Dutch East Indies, where the Dutch had already settled, and where the Pirates found themselves continually molested by Dutch and English frigates. It is queer that where the American coast was in direct connection with Java, fowls should be found that are,—as the antique game of Java,—crested, silky and black skinned. One has but to observe the mongrel fowls of Chile to find lots of evidence.

Here they developed other freaks as feathered earlobes or earrings, and the production of greenish or bluish egg shells. The latter fact, caused a good Spanish poultry expert to read a paper in one of the World Poultry Congresses, claiming that the hen that laid them was an original American variety indigenous to the continent. Subsequently the hen was depicted as bearing earrings and laying dark blue eggs, while in reality the shell is greenish or bluish due only to the loss of red colouring matter in the oviduct. That is to say,—a mere freak. As we have observed thousands of such hens and thousands of such eggs, we may state right here, that there was no other excuse for such a blunder, but that the good professor was caught unaware with strictly falsified information.

The Black game fowl of Java, may be related to the Black Sumatra, though not identical. We shall learn further on, how, both, Sumatra and Black Javanese game came into India introduced by the Mohammedans, scattered there and eventually lost, but how part of this blood came to give their share towards producing the world's most astounding and perfect game fowl, the Rajah Murghi or Asil of Lucknow. That a black fowl existed, there is not the slightest doubt. The Persian knew it as well as the Hindu of the Deccan. It has been described in 1882 by the Nawab Yar Muhammad Khan in his Urdu-book "Sayd-gah-i Shawkati" as a bird in which the skin, bones, tongue, eyes and blood are all black. The Hindustani name for the breed is "*Karnatak*." In Persia a similar breed is known as "*Sabzwar*," probably the name having been derived from a place of the same name in Persia; the test of this breed is the colour of the tongue, which must be completely black.

Buffon, the great naturalist, has described the same black fowl, as black cock of Mozambique, while science has identified them with the name of *Gallus Morto*."

Our investigation, carried on with many helps through years of patient labour, confirms our firm belief that whatever Black fowl went out of Java, was crossed with Malay and Bankiva blood, while the original Black game was the small, pheasant type, dead game *Sumatra*, which apparently became extinct since. This fowl was dead black, with very large eyes, long wings and tail, heavily feathered and, as stated, of rather pheasant type. The comb was diminutive and neatly pea-shaped. The shanks of the male were armed with a rose, whence two or three prongs emerged, constituting the multiple spur unknown in other fowl. By crossing possibly with a view to add size and power, the inclination towards black pigmentation faded away in some offspring, while in others

it was so accentuated as was the case with the "Karnatak" of Deccan.

In India, the black fowl degenerated and lost its pit qualities (dead gameness) becoming a barn-door fowl but reputed for its pugnacity. When the original Sumatra stock came into the hands of clever breeders of game fowl excellent use was made of it, and in the kingdom of Oudh,—it is almost sure,—gave its share towards the production of the world's most perfect fighting fowl,—the Asil.

In years of constant investigation we heard insistent reports of another game fowl used in the North of Persia, and which, it was believed was credited with being the original Persian bird, so much admired by the Greek. This bird was rather large, compared with the small wild Bankiva, and had red shanks and feet. We thought that the shanks were meant to be reddish or dark pink, but Persian "connoisseurs" insisted that they were red as those of pigeons, and besides had a lark crest behind the comb. It was only recently that we could identify the bird as a pheasant or pheasant cross. Our experiments towards crossing pheasants on Galli, eventually proved to be failures, but it appears that the cockers of yore, being that they had other material at hand, or that they knew more than we do now, apparently succeeded in producing fertile hybrids. At any rate, such birds were rare, ghosts for speed when matched with artificial spurs or slashers, they lacked power and bottom which have been attributes of the Oriental Malay ever since, and which have saved them from being cast aside, as so many old breeds.

The original and famous old Persian cocks were Bankivas principally. Sometimes with an admixture of Gray Jungle fowl blood, and sometimes with Black game blood, which would account for the larger black game of Tanagra of antique fame.

Egypt got fowl from Persia and India, long before Malay blood was introduced. They were probably introduced by land through the caravan road, as the ships they had then, were unable to travel over sea. These were planked but without keel, the necessary stiffness to avoid their sagging was given them by trusses supported overhead. Such boats sailed perfectly along the smooth rivers, but would not stand the lively motion of any sea. The famous Phenician ships evolved much later and at their epoch, the Egyptian already had fowl.

The Israelites, after leaving Egypt, during and after the stay in the desert, had no fowls nor pigeons. The squabs presented for religious sacrifice were invariably wild and taken out of the nests when necessary.

In the Hebrew Old Testament, there is but one reference to fowl used for culinary purpose. (1 Kings 4:24) Solomon (Schelomoh) had on his table "Barburim" which Luther translated into "fatted animals," but in fact it means "fowls." Solomon's marriage with the daughter of the Pharaoh possibly led him to imitate the use of fowl on the table, to please his Egyptian wife. The Egyptians had domestic fowl and geese, but the children of Israel had not. These were introduced and kept universally, much later and probably constituted a sound trade for the Sidonians or Phenicians, who got them from Persia, both game and barndoor.

The Phenicians played a grand part in the scattering of game fowl along the coast of the Mediterranean and Northern Europe. It may be noted right here that these game fowls were strictly of Persian origin. As such, they were in the main Bankivoids, with traces of Black and Sonnerat blood. This will explain, we suppose, why rose combs appear in pure Caucasian game now and then, and why gray colours are common. It is also an explanation whence the tasseled game and the henny varieties come from, as we have mentioned that the black blood of Per-

sia was of mixed Sumatra-Malay origin. It was probably just that one drop of alien blood that accounts for varieties, that otherwise would have had no reasonable explanation.

It has been a source of speculation whence the Persian got their game fowl. Authorities have stated that it was indigenous to Persia and domesticated locally. We have strong reasons, however, to presume that they were introduced from North India, where the small game Bankiva was known as "Teni" or small breed. Arian immigration into Persia is possibly responsible for the introduction of game fowl, while the larger breeds of the South and Central Provinces, besides being introduced by the caravan road, may have been scattered by ships, in much later ages. Arab and Persian seafarers contributed their share, great sailors, raiders and pirates and besides, keen sportsmen, to whom cocks always had a great appeal.

And so we see facts established once more, that, though not evident proof, makes this theory more plausible. In the North of Persia we find the small Bankiva game cock, black-red in colour. In Central Persia and the South a correspondingly larger breed, with all the adjuncts of the crossbred fowl introduced from Southern India and the Central Provinces.

It is very difficult to trace the origin of the Indian game fowl, being, as it is, that numberless varieties were evolved in the course of centuries and centuries. For cocking must have been thousands of years old in India before any records were known. We can deduct from analogy, however and based on old legends which by and by are being translated by Anglo-Indian scientific societies into English.

It is reasonable to expect that in early times the natives tamed the wild Jungle fowl in the form described, and used them much in the same form. This was especially the case in North India, where the cocks became perfectly

domestic. These were the possible ancestors of the Persian game fowl, referred to above.

The ever-shifting masses of people introduced a new element coming from Burmah and Siam, a large, powerful cock, domesticated from time immemorial and kept almost exclusively for fighting. The natives must have been deeply impressed by this bird which was infinitely superior to their own for naked heel fighting and no doubt that crossing operations were started as soon as opportunity offered itself. The ordinary Indian game fowl as well as the fine game of that country, show evident traces of ancestral crossing, and though strongly Malayoid, are unlike the pure old Malay, descended from such an extinct bird as described by Temminck under the name of "*Gallus Giganteus*."

Nobody can say what crosses have been made, but judging from the then existing stock it is safe to suppose that any of the single comb varieties may have been used. No doubt that local breeds were evolved and fought to reputation. Game Bankiva and game Malay could not have failed to produce a mixture that was then considered ideal, and from which the breeding stock was subsequently selected according to ring performances. There must have been fairly good strains established when the trading Arab and Persian travelers, who decidedly had relations with Sumatra and Java, much before the advent of the Dutch, first imported cocks from those islands. Pure Sumatras and the lesser Javanese game. Indian cocking experts had once more opportunity to admire here something undreamed of in game fowl yet. The speed, terrific fighting tempo, incessant aggressiveness and doubtless clever fighting style of the small black game of Sumatra, could not have failed to impress deeply the expert of those days as they have done ever since; for, the game fowl of Sumatra was really a deep, high class, game fighter, bred and selected by most expert cockers who enjoyed

a cock fight in a measure that the average Western fancier fails to grasp.

While some of the birds were the true high caste fowl of the pheasant type, that has since become enigmatic, others were their lesser offshoots. The traders have kept the source secret, seeing that the rich adepts paid high prices for the imported specimens, and consequently no hens were imported. In the following use of the cocks for crossing, the lack of females has been evidenced in that the type perpetuated,—though carrying black game and Sumatra blood,—was ordinarily that of the Indian game, while only such Sumatra characteristics were imparted to the offspring as the males could transfer in heritance. Spirit, aggressiveness, sensuality and in course of selection, small size, as the cocker soon found out, that increased size was invariably accompanied by lacking speed and the high spirit they admired in the new acquisition. There are evidences of the use of Sumatra and Java blood in the Asil game of Central India, especially in the birds of Hindustan, kingdom of Oudh and North Deccan:

(1) The existence of the black fowl degenerated into common barndoor birds.

(2) Evidences of black blood, black faces, black shanks and black feather colour of the famous Asil strain of Black Rampur Game.

(3) Tendency to grow long tails, wings and hackles of the Asil fowl, when not subjected to the severe selection as usual in India, an occurrence that is not seldom found among foreign breeders, and attributed to degeneracy.

(4) Occurrence of thick spurs of triangular section, indicating double spur, grown solid and tendency to multiple spurs.

(5) Occasional appearance of thick combs, lopped to one side, such as that of the Gallus Varius, in offshoots of Asils. The case illustrated being of a Cornish game pro-

ceeding from the yards of Mr. Walter Firth, England, i. e. from unsuspected procedure.

(6) Appearance of Sumatra characteristics in feathering and colour of Asils and its offshoot the Cornish game, never before observed in other Malayoids, Siamese and Japanese game fowl.

To these characteristics, we may add, the rather small size of pure Asils, between 4 to 5½ pounds quite unusual among Orientals, though this characteristic may be attributed to selection and feeding methods, well adapted to arrest growth.

It appears that the introduction of Sumatra and Javanese game fowl was via the land route, and whatever changes took place in the game fowl of South and West India was probably due to the use of cocks from the North Deccan and Hindustan, anent which later.

Siam has been looked to as the country of origin of the Malay. There is no doubt, that, at least, from here and Malacca, the original Malay was scattered but nobody can say whether this is the original land of the bird or not. There is no doubt that the birds introduced in India came from Siam via the land route, while in later years Siamese game found their way into Japan where they became the National Game Fowl and enjoyed a world wide reputation as Shamo-Japs.

Siam, Sayam or Muang-thai means the "Land of the Free," and it is to be deplored that its early history, beyond 1300 of our era, is very dark. It appears however, that the land was very often invaded by Chinese, Lao and Malay people. It is scarcely ¼ of a century ago that the French took hold of the East portion of it, the territory of Indo-China. French scientists believe that the Malay is indigenous to that part, and from here was taken to China where, crossed with the ordinary barnyard fowl, many centuries before our epoch, produced, through incessant selection and inbreeding, the large sized Mongolic

fowl that at one time should prove such a valuable acquisition as barndoor fowl of Europe and America.

From Siam and Malacca the giant Malay has been introduced into Japan, Sunda Islands, India, Madagascar and Australia. Again from these points they found their way into the rest of the world. Crossed on native games here and there, to impart power and size, they surely lost something of their sharply outlined characteristics in their offspring, but seldom,—very seldom—indeed, they failed to transmit their peculiar type and savage fighting instinct, for Malays are naturally game and naturally determined fighters the whole year round.

No Caucassian shake will ever attain the natural fighting proclivities of a tolerably good Malay, as the latter is naturally large and consequently balanced in speed and strength. The Caucassian shake is unnaturally oversize, and consequently sluggish (excepting French and Belgian).

The average game cock of today is the product of more or less scientific selection, and his current size is, by far, much larger than any of the ancestors. We have to admit that under proper domestic conditions the high-spirited little Bankiva may have gained fairly in size, and no doubt that it has, but we maintain our doubts that it is capable of becoming a giant as the Malay.

If we reconsider the matter of origin of the game cock we will scarcely find ourselves in position to credit the Bankiva with sole rights to ancestry. It is true, by its frequency, its chance to become the common fowl of Europe, it has always been the type of tradition. Alien blood in the ancestral game cock gave the Bankiva the possibility of varying widely in minor characters, giving place to the belief of the variability of the species. But never has any Bankivoid been known to vary its type so far as approaching the pheasant, as the old Sumatra did,

nor change its general characteristics so far as to even resemble the original, giant Malay.

As for the game breeder of average education, three types stand firm as ancestral foundation:

- (1) The Bankiva or Caucassian type.
- (2) The Sumatra or pheasant type, and
- (3) The Malay or Oriental type.

FUNDAMENTAL DIFFERENCES IN MALAYS

As the traditional Caucassian game cock resembles closely it's wild ancestor, the Bankiva, so the average Oriental or Malay game must bear some resemblance to the much discussed "*Gallus Giganteus*." We agree that the species Gallus is liable to variation under long centuries of domestication, but bear in mind that this variation must be logically circumscribed to intrinsic ability. That is to say, a Bankivoid will normally vary within the possibilities of the species. It may suffer the effects of mutations, or violent changes, as evidenced by the spontaneous production of rumpless birds, five-toed, leg-feathered and albino coloured specimens, but it will not acquire the characteristics of a bird that is fundamentally different, such as the Malay.

Many authors, otherwise well versed on domestic fowl, will not agree that a Bankiva and a Malay have sprung from totally different wild sources, arguing that the numberless varieties of barndoor fowl are comprobants of the variability of the species. This statement is, however, in so far erroneous, as there would probably not exist such varieties, if both elements, Malay and Bankiva blood, would not have been mixed to this effect.

It is probable that the "*Gallus Giganteus*," progenitor of the Oriental or Malay fowl became extinct long before historical time; whatever is left in domestication is nothing but remnants of a highly interesting and doubtless, very useful species of bird. These remnants became known to very few European travelers scarcely a century ago, in some instances as common, semi-degenerated barndoor fowl, and in the prime as genuine fighting birds "par excellence." As such, they were not exhibited in public, but generally, as is usual in the Orient, kept in seclusion and studiously hidden from profane eyes. That is the explanation why the many varieties of Oriental game fowl,

which will be dealt with in the course of this treatise, are so generally ignored by the average fancier. Many naturalists would have given the problem of its existence a sincere consideration had they only had the chance of knowing them as they emphatically deserve, and no doubt that the Poultry Standard of Perfection would be enriched by recording several varieties of Oriental game fowl, that besides being unquestionably game have many points of economic value that have been evidenced in such breeds of barndoor fowl, which have been built up on their blood. We do not go far wrong if we state, in this connection, that about 80 per cent of the Modern Standard Poultry owe their economic and beauty excellence expressly to their Malay ancestors. Anent which, later.

Studied game fowl authorities recognize tacitly a deep difference between what is known as Caucassian or Bankivoid and Malay or Oriental type. Caucassian is the traditional bird of the Western pits,—with fairly large single comb and wattles, (if not dubbed), flowing hackles, large tail and wings. It is the cock that we visualize mentally when we say “Gamecock.” It is the same represented in many old escutcheons and coats-of-arms. It is the bird that has created hundreds of typical words in the English language. His type has been modelled in heraldic form for hundreds of ornamentation works. It is the traditional game cock.

Bred in Europe since the dawn of civilization; introduced by Phenicians and Romans, it is the same type of the noble cocks of the Roman and Greek cock pits. Widely distributed in Egypt, Arabia and Persia, whence its history started,—so far as our records go,—but probably bred there and elsewhere many, many centuries before. For long centuries Europe knew no other than the Caucassian or Bankiva type, and before knowing the genuine, ancient pit game type of the Orient, their offshoots were already distributed all over the world. So, it appears rea-

sonable that so many authorities do not believe in a pure, extinct Malay wild ancestor.

What is known in Europe as "standard-bred" Malay, is far from being the genuine bird referred to in these lines.

The English Malay is a fancier's fowl, a standard-bred Chittagong, but not a pit bird. His points of excellence are entirely due to the English fancy point of view; his origin probably hailing to the dark bazaars of some Oriental ports. In some instances really game—(Orientals are natural fighters)—it failed to fulfill the expectations of English devotees of the sod. Crossed and experimented with, it gave it's

GALLUS GIGANTEUS.

Hypothetical reconstruction of the probable wild ancestor of Oriental game breeds.

share towards the production of the Cornish Indian game and what has been called Modern or Exhibition game. But it is far from being what is known among cockers, as Oriental pit game. And yet his type is profoundly different from any Caucasian fowl.

It is, as a matter of fact, extremely difficult to trace the type of the ancestral Malay. For this purpose we have investigated and studied patiently the numberless varieties and breeds of Oriental game fowl before we attempted to set forth a theory, that has had as many detractors as it has had staunch supporters. Breeding Orientals for many years and observing them from the first gasp of breath until the last, we have gained a little knowledge of their mentality, their surprising physique and their natural inherited proclivities and habits.

Our firm conviction, as a logic consequence, is that the Malay or Oriental is different from the Bankiva, fundamentally. That is to say, it does not differ only in some points of type, but is a different species altogether, and doubtless descended from the wild, extinct trunk identified by Temminck as "*Gallus Giganteus*."

The type may best be judged by the accompanying illustration showing the conjectural outline of the bird. The wild bird was a giant, compared with the light Bankiva (3-3½-lbs), tipping the scales at anything between 12 and 15 pounds. That this size is not an acquired characteristic, but a natural one, may be deduced from the persistent tendency in all Malays and their offshoots to produce giant descendants. The large birds are naturally strong and quite lively for their size, nothing of the sort of overgrown specimens, showing that their size is normal. The whole type shows an athletic constitution in the fighting male, while the hens are, or rather were, fully 1/3 less in size and weight. The body is compact and short, flat and broad at breast, narrow between the wings, and very broad across the hips. The legs are so disposed that they step long in forward direction and are consequently fairly long. The flexor muscles are inserted on a large surface of the rump and as in all strong limbed creatures, the latter is conveniently inclined, for mechanical reasons. This gives the bird a curved shape of back (not roached) that is especially noticeable in henny-feathered specimens, and which has been rather overdone in the show-Malay, as a fancy point. We see the same mechanical convenience in draught horses, such as Percherons, etc., where the hind quarters are abnormally strong.

Malays have long necks, carried in "S" shape which can be stretched at will and with surprising speed. The length of neck corresponds to length of limb, and is very strong by nature, showing that besides a convenient method of

picking up food it was constantly used as a pushing rod, the end of which, the head, is well adapted to push his way forward through grass and reeds.

The other end of the trunk, "the pope's nose," is short and broad and very strong. It would appear, at first sight, that this organ would not interest anatomically, yet it is important and characteristic of the Malay. The short tail is usually displayed sideways, so that it fans out like a spread hand, not vertically like that of *Bankiva*. It is an organ used to maintain equilibrium, and very strong to counterbalance the effects of the heavy neck. This is especially noticeable observing Orientals fighting, when their tails play an important role.

The colour of Malays, when pure, is dark, and the most frequent is black-red in cocks, while the hens are dark brown with black lacing. Only such breeders as have observed Oriental birds in grass thickets and brush, can appreciate what perfect protection, from a mimetic point of view, this colour affords. There is no doubt, that this colouring scheme has been intended by nature to act as protection (camouflage), as the Malay does not go far from this rule after coming from the shell, when the little ones are coloured dark brown with a broad stripe from head to tail, and only have narrow stripes at sides, unlike the chick colour of *Bankiva* which is composed of narrow stripes. As the feathers grow, the Malay develops splashes of black and brown, very noticeable on clean ground but difficult to detect the bearer when running through thickets.

We have observed this convenience hundreds of times, when dozens of naturally coloured Malays vanished in the garden, but a few light coloured specimens could be detected from any distance at a glance.

The egg of the Malay hen is coloured any hue of brown and possibly speckled, according to local conditions. Other Galli, so far as we are informed, lay white eggs, the tinted

shell being a characteristic of Asiatics and crosses. In so far, coloured eggs, are evidence of crossing, while white is not a proof of purity.

The skeleton of Orientals again shows a marked difference, while the Bankiva, as most flyers, show hollow, pneumatic bones, those of the Malay, especially in legs, are filled with marrow and reinforced laterally by a spongy bone structure. All bones of the Malay are naturally strong, a fact at once remarkable in the skull, which is heavy and very hard. The enormous thighs are heavily muscled and the bones show excrescences and ridges that materially strengthen them primarily and besides give a larger surface for muscular insertion. The bones of Bankiva are light and smooth.

Game breeders know the quality of Oriental skin and feathers, which are tough and hard. It is a well-known fact that Oriental feathers are very short. Otherwise they would soon come to grief in the constant rubbing against reeds and grass. In fact they are so short and scant, that the skin is shown in bare patches on breast, wing butts, etc. For the same reason the skin must be of utmost resistance. In long and abundantly feathered birds, the skin is softer according to greater blood circulation, and absence of the constant friction. In direct relation to the skin is the muscular constitution. Bankivas are deep-keeled and developed in breast and wings, while their legs are comparatively weak. They do scratch on the surface and turn leaves in search for seeds and insects, but do not dig deep holes as Malays do with greatest ease and visible satisfaction, even in heavy soil. The density of Malay muscles is abnormal, lacking water and the extreme elasticity of the flyer. This is an explanation why Bankivoids lack bottom and endurance in a long drawn fight, while the Oriental generally fights long battles consuming far less humidity and naturally becoming less tired in a drag. Dryness and density of muscle accounts

for the fact that Orientals mature very slowly, taking as a rule twice the time of any flyer.

The blood vessels correspond to the general physique, those of the Oriental being extremely tough and comparatively of smaller section.

The head of the average Malay is completely different from that of Bankiva, and a sure index of distinct ancestry. It is, in so far interesting, as the head and adjuncts play a most important part in the sexual activities of most all birds but prominently in Galli. The Bankiva has an elongated profiled skull, with large eyes slightly bulging out. Cheeks flat, ears small, beak and mandibles long and narrow at base.

How different that of the Malay! Broad across the eyes and short from beak to nape. Heavily boned above the eyes, where the brows bulge out, forming the characteristic overhang protecting the deep set eyes in a most effective manner, when the head rompes his way through the jungle. The cheeks are salient and hard-fleshed, corresponding to a broad jaw. The eyes a trifle small in appearance, being deep set, but the auditory channel of ample section. The beak is short but thick at base, and with broad jaws and ample muscles a most powerful organ, which the bird requires for tackling big prey as snakes and frogs. Confidence in the biting power of their beaks, induces Orientals to employ this weapon liberally in a fight. They are good billers, and lacking wind, they resort to beak-holds more than is liked in Western countries.

The Bankiva displays a fairly large and red comb, single and with multiple serrations, while long wattles hang under the jaws. If this bird would be required to live in dense grass and brush it would soon harm his appendices, while the after blade of comb would become entangled while trying to pull the head back hunting for bugs in a thicket.

The Malay has none of these appendices. The comb is a hard, elastic cushion, set well forward, and adapted for life in the grass. It serves as a protection to the eyes and base of beak bulging over the skin where it is thinnest. The Bankiva cock takes care of his comb and when disturbed roosts up on a tree, while the females, that have practically no comb hide in the thickets. The bright hue of the cock's coat and the humble partridge of the female are related to the same trait proportionally. When Malays are startled by stray dogs or any vermin, they resort to a short run hiding behind or under a bush. Never do they attempt to alight even if trees are near.

The Malay has practically no wattles, but a large dewlap, covering a broad throat, well adapted for swallowing coarse food. Instead it has earlobes, that lay flat over the hackle, and which do not show the almond shape usually met with in Bankivas.

In the theory that the Malay is a variation of the Bankiva, we do not find the slightest reason to account for the profound change which should have affected the head, it being a widely demonstrated fact that head peculiarities persist tenaciously in retaining their original characteristics. We see this evidenced in cattle, dogs and horses, which all have sprung doubtless from several different wild trunks. Typical skulls and heads remained almost unchanged in domestication.

Grass jungles do not afford a large variety of vegetable foods. Sprouts and seeds, both valuable feeding stuffs, were available, each, only once a year. The diversity of vegetable food available in the forests lacked here, so that the Malay must have resorted to animal food the whole year round. Insects, crabs, frogs, snakes and their eggs and brood were plenty. That is why they could develop into such large birds, with weight and strength in abundance to dig for their prey. This animal staple food, easily digested and assimilated, had a marked influence on their

make-up. The intestinal apparatus is composed of short and tough guts, very far away from the elaborate digestive tract of the Bankiva which relied on vegetables as staple food. Animal food is rich in nitrogen, therefore smaller quantities could be ingested, hence the short digestive tract, the bad fattening qualities, and the large size of the birds.

With vegetable food they remain stunted in youth and fall back in advanced age. Malays do not fatten evenly, but accumulate fat around the intestines and internal organs. The animal food accounts for winter-laying and continuous breeding during large parts of the year. Hence the breeding fitness, constant gameness and exceedingly long drawn out moult for which Orientals are known among cockers. The Malay's gameness and fighting proclivities are derived from its sexual functions by testicular and other gland's secretion. This causes a higher degree of vitality and in the course of their wild life, Malays have developed another notable feature for which they have an unprecedented reputation. Their healing flesh! Terrible wounds, which at first sight appear incurable, heal rapidly. Hundreds of desperate cases have we observed, of wounds from which Orientals recover in surprising fashion, where Bankivas died hopelessly. This healing flesh has been observed also in other game fowl, which in more or lesser degree have inherited it from the Malay.

If we observe the Malay from the point of view of its habits and natural haunts, we learn that it is a bird that became a non-flyer from adaptation to its environments, just as did the Ostrich, Cassuar, Emu, Kivi and the extinct Dodo or Dronte. They developed legs at the expense of wings. We have a parallel case in the Ostrich, the most perfect runner; powerful legs and long neck. The Malay is slightly different in so far as its legs serve him for digging up most of its food. They are heavily boned and muscled in the leg, and their power is simply

abnormal. We do not need to emphasize this item as it is a natural consequence, there being hundreds of reported and observed cases in which the kick from an Oriental cock's shank defies description.

The feet are likewise enormously strong, with stout toes armed with a broad, flat, spadelike claw.

The spur is also characteristic. The flyer has a curved up natural weapon, but the Malay has a strong, straight spur pointing downwards. The curved spur would continually become entangled in the grass, but this downward pointed straight weapon is no hindrance, allowing the grass to slide past with no difficulty. As fighter, the Malay is a ground combattant. It does not fly up to locate uppercut or ripping blows as the spectacular flyers do. It relies on more or less single blows, swung half round, crossing shanks, and served out with tremendous power.

We have a case in record where two cocks being sparred with muffs, the one struck the other with the shank at the base of neck, breaking this instantaneously just above the crop. Another cock fighting through the slats of its coop, simply tore the wood to pieces with a single blow. Whoever doubts of these performances can put any sound Oriental game cock to the test, and, we are sure, will be much surprised at recording incredible feats. Following personal experiences we want to emphasize that the so-called "Exhibition or English Malay" is not to be considered as a "game cock," despite its Oriental features.

Orientals do not differ in their anatomical and physiological constitution alone, from the Caucassian birds. They differ also in their mentality and habits. When they fight, they really mean business, and when defeated cannot resort to flying away as a Bankiva does, but must stand up to the bitter end. Hence its judgment, tactic and calculation when pitted, that is generally abhorred by cockers that are accustomed to the spectacular wing-work of most Caucassians. An Oriental may fight, as in

Japan, for several consecutive hours displaying the same cool judgment and dead, determined gameness. In India, Asil cocks are fought for days in succession with impressing gameness and endurance. Their dogged courage and unfailing fierceness being the natural course of their sexual habits, as they do not finish their breeding operations in one short season but are fit almost the whole year round.

For the same reason they do not seem to have flocked in harem fashion, but apparently run with a single mate until the hen becomes broody. Then they lose interest in her and go in search of the next, fights and pairs again. The best fighter and gamest cock has the greater chances of mating again and again, hence their superior pit qualities as a result of natural selection. As Darwin would say, had he known the Orientals, "Survival of the Fittest."

Malays display monogamous habits in domestication also, preferring a single hen of the flock, while others are laying infertile eggs. This is a serious drawback, especially when hens are running out on free range. But as soon as the hen shows signs of broodiness, she is abandoned and another courted in succession. If allowed to steal her nest, a Malay hen will cleverly select a very good, hidden place, out of disturbance by flood or predatory animals. She approaches and leaves her nest in absolute silence and does not cackle. This is done by the cock, however, as soon as he meets the hen. Just how the cock knows that the hen has laid a few minutes before, no scientist can reasonably account for. Our explanation being that behaviour of the hen and the expression of the eyes are sufficient symptoms for the cock, which has a highly developed eye suited for short distances. Not so the Bankiva which has eyes suitable for long range. Besides, the Malay has wonderfully developed ears, being somehow able to detect any noise from very far.

It receives the first warning of approaching danger through the ears and hereafter levels the eyes in that direction. Sometimes it will act following the accoustic warning, before there is any chance to take a glance at the peril. We have conducted several experiments, gaining the impression, that when a cock crows in the neighborhood, never mind how many accoustic disturbances and phonetic distortion there may be, between the observed Oriental and the other cock crowing, the Malay is mostly able to locate the other cock instantaneously, even if it can not see him.

Bankivas showed to be rather erratic. The latter being an eye-bird above all, while the Malay is fundamentally an ear-bird (phonotropic). It is by this means of communication that both sexes meet in the grass jungle, where the sight is obstructed and consequently the visible signs of sexual readiness to pair, comb and wattles, are out of place. The scale of warning, calling and communicative sounds are very varied in Malays but not loud. The cocks do not crow as much,—by far—as Bankivoids. This is a fact very well known in Holland and Belgian where fans indulged in crowing competitions at shows, not very long ago.

A Malay cluck directs her chicks towards a place or calls them to another by peculiar sounds given in certain directions. The chicks do not turn round to glance at their mother's eyes but incline their heads towards the direction indicated. When warned before some flying perilous preys or hawks—the chicks lay flat down and look like dead. It is easy to pick them up then. Generally they jump forward towards any stone, piece of wood, etc., with a view to appear flush with same.

Bankiva chickens run about in different directions and if any winged creature fly straight away. Malay chickens and adult fowl have a peculiar habit of resting on their hocks, not necessarily when they are fatigued. We have

reasons to believe that originally the Malay cocks were henny feathered or very nearly so. The large display of hackle and sickle feathers would have been a hindrance in the grass jungle, and the object of displaying bright colour hues on sexual feathering, very logical in eye-birds, living in full sun, are out of place in phonotropic birds, living in semi-darkness. There is still a variety of tolerably pure Malays in Ceylon, known locally as "Kikillia" i. e., henny. A large variety is also known in Siam and Indo-China, while most Oriental crosses, and such that derive from these, display very scant sexual plumage, so wealthy in Bankivoids.

Centuries have gone and past. We shall discuss several of the modern Malayoids in forthcoming chapters, which mostly have some cross of alien blood. They have been used to improve in centuries gone by the pit cocks of many countries. They really would have become extinct even in domestication, were it not for a marvelous power they have inherited from their wild ancestor: *Tenacious Prepotency!*

CROSS-BRED GAME FOWL

It is only natural that fowl proceeding from so many different sources as the Bankiva, Black Jungle or Sumatra, and the Malay must display entirely different fighting style and traits. We take it for granted that in very remote epochs the primitive cocker did not attempt to tame the Bankiva so long as he could get hold of the Malay. He did not know about artificial spurs, and besides, the Bankiva needed some precautions to prevent his flying away. As a matter of fact, such cockers started to fight the birds matching them in nature's weapons, and the invention of the artificial spur, though extremely old is an achievement that followed the domestication of the high speed flyers, many centuries later; perhaps milleniums. Such a bird as the non-flying Malay may have been tamed easily, judging from analogy with other wild species that belong to the same non-flying category. For example, the Ostrich, Nandu, Casuar and others, which all are easily tamed and converted to domestic animals. Their lack of wing being the chief cause of easy taming, as they may be confined and fed by artificial methods.

Very different was the case with the flying varieties. The first means of domestication, doubtless, was by catching very young birds. Later on, and based on observation the primitive man may have invented the trap to catch live animals with the view of preserving them as pets or for fun. The natives of Africa and Polynesia are sometimes exceedingly clever in arming traps and nooses with apparently no more material than a string, hair, and occasionally a few twigs. The trouble was to prevent the caught bird or animal from running away and the most simple device was to tie them to a pole run in the ground. The same methods of trapping and keeping the birds, is still in vogue here and there. In Paraguay the

game cocks are sunned and trained allowing them to run round a pole to which they are attached the largest part of the day, in view of their antagonists.

The old Malay, as absolute non-flyer, was probably kept in a sort of run made of woven twigs and weeds, where the bird, with corresponding good treatment soon became tame, and later on domestic. If properly fed and cared for, there is no reason why they should not have bred in confinement very soon, though it may have taken several hundreds of years before the domestication of the bird became complete in spite of the apparently natural inclination of the non-flyers towards tameness.

The problem of the Bankiva was very different and rather complicated. It has been reported by such an authority as Dr. Clarke, Indianapolis, that the natives of some parts of the Philippines catch adult birds early in the season, confine them and prepare cocks for the fights, after which they are released. Adult Bankivas are very difficult to keep confined and enjoy good health. Somehow they resent the prison and often die. A case very similar to their offspring, which become stale in coop after some time and if not cared for properly contract serious illness with fatal result.

Oriental are notoriously adapted to the cage and in the East such game fowl are universally coop walked. It seems that the ability to fly, or the lack of wing, is responsible for the more or lesser inclination to confinement.

Early cockers will soon have found out that the cocks were different concerning their speed, aggressiveness, traits, power and endurance.

No doubt that the natural gameness of the runner Malay, his power, wind and bottom was different from the wingwork, speed and spectacular movements of the Bankiva. It would have appeared then, as now, very desirable to combine all these qualities in one individual, and

the first experiments in cross-breeding were soon started.

There is reason to believe that the native country of the Malay was pretty far from that of any flyer, so that stock of either was not always at hand for crossing purposes. It may have been by chance only that a Malay was introduced into the lands where Bankivas were kept, and traders that carried cocks with them, for fighting or selling, will scarcely have taken females for the same purposes.

It stands to reason therefore, that the introduction of alien blood was effected through the means of the male, and in subsequent generations the original blood infusion became so diluted that it was scarcely noticeable, beyond the spontaneous appearance of alien characteristics in the offspring. We have thousands of testimonials to this effect in breeds believed to be pure through many centuries.

EXHIBITION SUMATRA COCK.

Bred from Belgian parents. Photo by courtesy of Dr. Royden, Norfolk, England.

The production of such a breed as the Black Sumatra Game may well be an example to this effect. There is a certainty that the breed is extremely old, and that it had the same characteristics a thousand years ago, as today. Reports that the bird has been found wild appear now and then in the poultry press but authorities on the matter maintain that such specimens are feral;—not entirely wild. It is very suspicious that the Sumatra game has been produced and kept in the only countries that have a pheasant-like Gallus, the forked Jungle fowl (Ayam Alas of Sumatra and Java). Personally we do not doubt that

there was some influence of *Varius* upon the Sumatra, either in wild state or domestic. The peculiar feathering, single wattle and unique smooth edged comb appear now and then in breeds that have had Sumatra blood in their make-up as in the Shinowaratao or Yokohama fowl of Japan, and in the Asil of India. The same characteristics appear occasionally on some Japanese game varieties.

Then, there is the enigmatic Black Game, progenitor of the tasseled and Silky breeds, supposed to have originated from a cross between the Sumatra and Malay. Hybrids between the *Gallus Varius* and common Bankiva, are found wild as *Gallus Aeneus* or Bronze fowl and have also been produced artificially in the Zoological Gardens of London and Antwerp. The Sumatra is enigmatic, and, although some writers and fanciers have claimed to have produced Sumatras crossing Asil Indian with Yokohama fowl, this statement is in so far erroneous, as both elements carry Sumatra blood in them and, besides, the produce was similar to the "*Show Sumatra*" but entirely different from the old time pheasant type *game bird*. In no case, so far as we are informed, could the old Black Game Sumatra type be produced by cross mating any known variety of game fowl. Incidentally we repeat here, that no amount of crossing dunghill fowl will ever produce game birds, and the old Sumatra was not only game, but evidently pit birds of the highest standard, with speed and aggressiveness not even approached by any other known breed. For evidence of antique crossing we need only study the characteristics of old birds. The game fowl in India is credited with being of Malay origin, yet many varieties, now fixed, differ considerably from the Culm and pure Malay. The Kikilia of Ceylon is henny feathered, heavy, with marked beetle brows and has a strawberry comb. Apparently nearly related to his wild ancestor the "*Gallus Giganteus*." Yet, it is different from the Culm or common Malay of India, which though

generally kept as barndoor fowl, is pugnacious and not seldom tenaciously game in the pit. Fighters they are all, the Oriental kin, some more, some less, but their gameness is not always to be depended upon. Unlike the birds of Siam, which as long as they have strawberry combs are considered as deep game. The average Indian game fowl, despite their sub-division in local varieties have pea combs and generalized characteristics perfectly typical. But they differ now and then, showing knob, irregular pea and even single combs.

It has been stated emphatically by all Anglo-Indian and foreign authorities that the Asil is the oldest, truest

FORK-TAILED JUNGLE COCK
(VARIUS).

Specimen in Zoological Garden at Buenos Aires, seen in startled attitude. Normal carriage horizontal.

in blood and finest game fowl on earth, concerning their purity. Yet, even in the highest caste birds, four or five, sometimes six varieties are recognized which differ among themselves in size, colour shade, type and comb. We shall come to this point further on, suffice it here to mention, that alien characteristics appear that point towards the Sumatra, but which specimens are barred from breeding. Such points are: dark and black faces, composite spurs, abnormally long tails and hackles and colour of eyes. The white Asil reproduced from a photo, property of the author, though entirely pure as far as pedigree is concerned, shows an entirely black eye and is possessed of a surprising speed.

The Asil (Raja Murgh) is related to the common India game fowl, Calcutta Haiderabadi and Madrassi, but by

far not identical. It is supposed, and we believe with tolerably good reason, that a cross of Asil and the Culm fowl of India, produced such varieties as mentioned above and which the natives of India designate also as Asil. At any rate, the small Raja Murph Asil is responsible for the world-wide fame of the India game fowl.

We find similar conditions in Siam, with the difference that in past years the long and stilty Malay was always considered of pure blood and reputed as dead game fighter, so long as it showed a small strawberry comb. Other varieties have been evolved, however, by that old method, crossing and re-crossing, but as the birds concerned, were mostly of Malay origin, with occasional Bankiva and Sumatra infusion, the result was condensed into a breed strongly Malay in features. At any rate Oriental. What happened in these old countries, several centuries ago, may be only faintly deducted studying carefully, old pictures and manuscripts.

Japan is a land where once the game fowl was bred in numberless varieties from the huge Shamo, the largest breed on earth, to the tiny Tuzo, which is just over Bantam size. A close study of all the birds to be seen, barring naturally the hundreds of ornamental and dung-hill varieties, shows the effect of crossing in all degrees, as we shall learn further on, discussing the game fowl in Japan.

In Persia, we find today nothing but crossbreds, due to the introduction of Oriental blood from India. In former years, however, and in the time of Alexander the Great we could spot two distinct varieties. The smaller one of North and Central Persia, a pure Bankiva, and the larger in the South, mostly dark coloured, even totally black, due to crossing.

The Greeks got their game fowl from Persia and Tanagra, birds were reputed, according to Mr. Harrison Weir as "*large and black*" and by far the best game fowl

of Greece. Apparently, these birds were indebted for these characteristics to the Sumatra, as evidenced by their sometimes multiple combs and wealth of black plumage. Nearly akin to the game of Tanagra was the black game of Mallorca, which, though Bankiva in type, also showed some typical reversion to alien blood.

The Arabs had their fowl from Persia also, and we believe that the same marks of crossing were there known also, as may be judged from the transcription, quoted here, from the "Aja' ib-ul-Makhlugat" or "World of Wonders"—an Arab work by Al-Qazwini, who died A. D., 1283, translated by Colonel D. C. Phillott, of Calcutta. A part reads as follows:

THE LARGE ASIL OR KULANG.

Deccan, India. Though perfectly Oriental, it is different from the Malay.

"It is said that the chief caller-to-prayer amongst the cocks, is that breed that has long wattles and a castellated comb." (That is a Bankiva, a pronounced crower). Further on: *A white cock* puts to flight the lion. The best of cocks is the *game cock*. Its points are, a red comb, a thick neck, small and black (sic!) eyes, sharp claws, a loud cry." Then further: "It is a belief that one who slaughters a white cock, with a *divided comb* will suffer loss in his possessions and in his house, and also that the Devil never enters a house in which such a cock is to be found." Such was written in the year of grace of 1283. The Arab author refers also to the very small egg that the cock lays but once in his life, there being some obscure

phrases in the old manuscript which are not intelligible. Further, and quite in correspondence with the vivid imagination of the East, the uses of the comb and wing bones are recommended as aphrodisiaca and general medicine.

In other countries of Asia, the use of cocks blood is likewise supposed to "increase the virile power as well as sexual enjoyment;" which we pass on without comment.

That they had crossbred fowl in Egypt also is evidenced by the production of heterogeneous dunghills reared in great numbers, and the introduction of which is credited to the Phenician, who had a decided influence upon the trade in Egypt.

We are aware that so long as any cocker bred game fowl, this was selected on rigid pit lines, and no deterioration allowed to ensue. But the small—sometimes disappearing—amount of alien blood, caused then, as it does now the appearance of variations by degeneration giving rise to the poultry population universally known as barndoor fowl, or, as the cocker says "dunghills."

Such was the case in Greece, Rome and Spain, where besides the genuine Bankiva game fowl, such birds were evolved that in later centuries came to fame as utility poultry under the name of "Mediterraneans." It is apparent that in countries where relatively pure Caucasian game fowl may be found for pit use, the barndoor fowl is strongly of Mediterranean type, as seen in the countries just mentioned and France. We cannot adhere to the supposition that this is mere chance, but that it is a logical result of existing conditions, where the barn-door fowl was evolved from the pit wasters and consequently corresponded to the same type.

And the important conclusion is, that, whatever time elapsed, these Bankivoids did not variate towards any Oriental type, and where such birds are found it is due,

either to later introduction of Mongolic breeds or to straight admixture of Oriental blood.

In England, admittedly, Oriental cocks were used many years ago and probably since or immediately after the route to the East, via Cape of Good Hope was discovered. Old writings about the game fowl of England bear evidence not only of crossing, but of the use of cocks in the pit, with Oriental features, especially noticeable in the combs. For example in Mr. H. Atkinson's book "The Life and Letters of John Harris," one of the matched cocks is quoted in abridged remarks that stands for the following: "Black-breasted silver duckwing, low comb *strawberry* forward, etc."

Peacombs were not seldom, and those who wanted to hide the fact, resorted to cut combs very low. Yellow legs, an Oriental feature, were in succeeding years allowed, but would not have been tolerated a century before that age.

Crossbreeds of any kind, but especially in poultry, are extremely liable to variation, and a natural law sets in, in the form of regression towards mediocrity, with the possible effect of elimination of inferior individuals. Fowl in domestication, falling under this rule, have been preserved and in centuries of care have evolved to the hundreds of varieties of barndoor fowl, which though unfit to be used in the pit, are today a powerful contingent of economical importance.

SCATTERING OF GAME FOWL OVER THE EARTH.

We know that the domestication of fowl is an accomplishment of the Orient and have tolerably good reasons to assume that while the Bankiva moved westward, in very early years, by the land route, the Malay was scattered to far off points by the sea way. This makes clear why the Bankiva was known as far as Arabia and Egypt ages before the Malay. It is well nigh impossible to understand why the game-fowl was taken abroad by early travellers without understanding human nature and history. In the present days, people have so much and diverse means of entertainment that cocking has become more or less rare, and the great mass, following the lines of least resistance have yielded to the lure of facile diversion. We do not want to examine the nature of human amusement under the artificial light, but will recognize that nocturnal life must ruin almost any constitution making a man unable to do his full share of work while the sun is up. Agreeable as it is to switch on the light when the night arrives, we scarcely believe that artificial illumination is an invention of benefit to the average human health. And as it is with artificial light, it is with many innovations of our age, while augmenting the means of earning and diversion they accumulate dangers in disproportionate degree. Ease of communication, possibly to talk across the world, has created a new idea of international government, the Empire of Wealth, to which the human kind has succumbed in hopeless fashion. Human nature! The once highly developed individual spirit has given place to collective action, and only such men as have retained that old condition seem able to lead the masses.

The individual man may be impossible to reckon with

in his actions under certain circumstances, but the masses move and act with mathematical accuracy. It may have been that individuals moved always towards the unknown lands of the early world, but history was made by the masses. Nations made and destroyed by migration.

We have come, apparantly, to a standstill on the verge of overcrowding. There are no symptoms of any great move, and should there be any in the near future we would soon get a warning through the call of the Morse signals by air, by wire. . . !

The times when unaware strange people appeared round the villages, scouts of the following masses, as first sign of appalling danger, are over. Such terrors are only liable to torment us during the night, when in heavy dreams, the wild man of indescribable attitude and ghostly appearance terrifies us and make us grasp anything in sudden awakening. Atavistic dreams!

Our terrors and mortifications, today, are different as we are under the Empire of Wealth, our motions being regulated by the dollar. Animals are becoming only secondary adjuncts to the human families of today. There are cities where horses are seldom seen, cattle a rarity and dogs a public calamity. And yet the human heart hangs around some sort of animal with rare love. Once a necessity, the dog, the cat and other domestic animals become pets. Travelling by horse is getting scarcer year by year. The motor-car is soon displacing our at one time best friend and prime helper. It is the spirit of the age and we can't help it. For the same reasons, cocking is evidently on the decline. From a spectacular point of view, there are too many novelties that afford greater diversion with relative ease and lack of knowledge. From the promoter's point of view, cocking is rather poor business as it cannot gather large crowds around the pit, and for the gambler, there are too many other means to wager under the protec-

THE CARAVAN'S REST.
From a very old picture.

tion of the law. The poor game-cock has to face serious competition. Were it not for the old, extremely rare love of man for this sport, and for the scattering of game-fowl all over the world, cocking would die out. As it is, we expect it to survive even this new complicated technical era. Still, game cocks are travelling all over the world, and as of yore, the superb bird constitutes the pride and happy satisfaction of thousands of true lovers who admire him today as he was admired several thousands of years ago.

The game cock was an article of trade always, and though in the very early years of migrations its introduction into strange countries was a matter of fact nearly related to the appearance of foreign people, it is almost sure that it was since considered as valuable merchandise. The Phenicians carried game-fowl with them as far as England, after they traded with fowls in Egypt and consequently had learned that there was demand for fighting fowl.

It is a matter of speculation, we believe, just how poultry was introduced into Egypt, at a time before any ship ventured upon deep water. Egypt subdued Palestine at one time, and subsequently was beaten by the Assyrian and even became a Persian province many centuries before our era. The Persian and Assyrian were cockers at that time, but it is believed that the Egyptian had poultry before that epoch. A caravan road led from Egypt to India over Palestine and through Persia since oldest time. No doubt that the first game-fowl, therefore, were introduced by regular trade. At least the Egyptian handled poultry culture from a commercial point of view, while eggs and chickens were consumed in great numbers. An idea of the Egyptian poultry industry may be gained by studying the large ovens in which chickens were hatched with evident success.

Barndoor fowl was pretty common before the emigra-

tion of the Israelites but when Moses led them out of Egypt, the Israelites had no fowl with them, nor had they any during the stay in the desert. The first mention of fowl in the Bible refers to Solomon, who used chicken on his table, probably a custom imitated from Egypt, to please his Egyptian wife. At the same time we know of Bilkis, the queen of Sheba (Saba), country in the South of Arabia who traded with Persia and India, more than two thousand years before our time.

We have discussed already the fact that in those early centuries the traditional type was that of Bankiva, and we find early mention of crossbreds only about the 10th century after Christ.

Meanwhile the Persian and Assyrian had cocks long since, which according to what we know, had been introduced by Arian immigration from North India and evidently also of Bankiva type.

The Malay type was introduced in India after that epoch, probably by the land route also, it being much later that this type of fowl was scattered over the world by ships.

We have accounts that the Phenicians went to sea not only on the Mediterranean but on the Indian Ocean also. All probabilities being that the land Ophir, mentioned in the Bible, and whence Solomon's ships went in search of gold and valuable merchandise, was identified with South and East Arabia, the port of which, Mosha (Portus Nobilis) served as gathering place and depot. The Phenician and Arabian seafarers knew East Africa (Sofala), South Africa (Symbabje), India, Oman and Madagascar but kept their knowledge rigidly secret. Solomon left the sea-trade entirely in hands of the Zidonians or Phenicians and while the Israelites despised and avoided intermarriage with them, they left them free to trade at liberty. Phenician caravans, or at least such that were organized by them moved to and fro on the great roads from Zidon to the farthest

Indian centers of production. Their ships, likewise, ventured over the ocean, probably coasting and trading all along Persia, India, Malacca, Sunda Islands and New Guinea. Traces of Jewish races, the so-called "*lost tribe*," were found in the center of New Guinea. There is no explanation how the Jews got among the Papua, other than that early Phenicians stranded on the shores of Guinea and somehow were able to make a living among the wild people and eventually assuming the leadership, established an aristocracy with all its advantages and failings.

This shows clearly how far the Phenicians travelled in those early days and considering the small craft they used to brave the sea we must admire them, even if we do not approve the motives that sent them on the way.

It is clear that the Arabs and Persian were not late in learning the advantages of that trade, and there are authorities who maintain that in fact the Phenicians, always on the move, learned their seamanship from them. It is remarkable that on land as well as on water we find the Arab and Persian in keen competition with the Phenicians. In India still exist numbers of either, firmly radicated, and dedicated to the many trades and craftsmanship for which all three nations were reputed since oldest times. There are indications that the Phenicians indulged in cocking and travelled with game-cocks, probably due to the inclination for gambling which Jewish people seem to love, up to our days.

It is interesting to investigate how cocks were transported in those early days. The large caravans, of course, relied for speed and efficiency on the camel and travelled according to itineraries within limits of time, that made impossible to tend to the comfort of game-cocks. Small animals were carried in cages hung to poles hitched to two camels in tandem fashion. But this method was slow and never used in caravans travelling with single packed camels and valuable mer-

chandise. We see a reference in an old manuscript in which the leader complains that much time is wasted in tending to "the birds," unloading and loading, watering and feeding. Caravans stopped, especially in the desert, at open shelters or halls called "Khans" or "Serais" built on the roadside or near the towns especially for sheltering travellers and their animals. These "Khans" were erected by town authorities or rich traders who were naturally interested in the welfare of caravans that may bring them the merchandise that constituted the foundation of their commerce.

Such a "Khan" was near Bethlehem, in which Christ was born, as it is written: "They laid the child in a crib, as they found nothing else in the room of the Khan." (Luke 2, 7.)

The caravan referred to above was a detachment from a large one coming apparently from India. The fast part of same travelled at double speed, while the slower carried "the birds," monkeys and merchandise of lesser importance. Mares in foal and horses that were seemingly weak, constituted the adjunct and steeds of the guard, but no donkeys. Apparently the last named were only used by small traders who travelled from town to town, bought and sold, and then went on. Donkeys in a caravan are desperately slow, while the motion of fast travelling camels made it impossible to carry live birds cooped on their backs. Those readers who have enjoyed a camel ride will understand what is meant, while such that have not, may learn that it is, at any rate, a torture.

The agents for Roman circus travelled with wild beasts using heavy cars enclosed with iron bars like a cage. Such transport was slow and grooms usually walked along with the cars, while we fancy that birds were also carried stowed in baskets and coops on the top of cages. The Phenicians, it is almost certain, scattered Game-fowl all along the Mediterranean coast.

Introduced them in Spain, North France and England. Their ships were not as perfect as those of the Vikings, yet they undertook long voyages in search of foreign products. They mastered the Mediterranean until about 2000 B. C. they were pressed and confined to the West by the Greeks. In the 9th century B. C. they came under the Assyrian, and in the 7th under the New Babylonian rule, until in the 6th century their commerce was destroyed by Egypt. Later still, Phenicia came under the rule of Persia and was finally conquered by Alexander the Great. Once the greatest manufacturing and trading nation of the East and decidedly the source of great cultural progress, it became wiped out as a nation and the people scattered over the world. Jewish by race and language, like rats, they introduced themselves wherever they could reach with their craft and exchanged their merchandise for native products. What induced them to carry cocks abroad is difficult to understand. Perhaps they put up a show at any landing place to amuse and attract the natives before showing their real intention to trade, and that, with considerable benefit to themselves. Nothing requires fewer requisites than the staging of a cock fight, and while it is rather difficult to keep almost any other domestic animal healthy on board, cocks will keep easily.

It may be also that fowls of Mongolic origin were kept by natives and that the Phenician, aware of the exquisite quality of Eastern cocks, took such over to beat them and bag whatever they bet. But more probable still is that cocks were used as trading objects for which high prices in natural products were demanded and received.

The Phenicians had colonies along the Mediterranean, the principal of which was Carthage of historical fame. It is significant that where they settled or called continually, as the coast of Africa, Balearics, Spain, France and England, we find fowl, now perfectly native, cor-

responding to the type they had in Palestine, Arabia and Persia. It is stranger still, that in the North of France and in England, such fowl was preserved as what it was once introduced, viz.: as Game-fowl.

Centuries later, when the Romans shipped over to England, the natives kept fowl for their diversion. It is almost sure that during the Roman period, Game fowl was further introduced in the countries where the Southern Armies settled, but the following events and political commotions partially wiped details away. We can only judge how much and far Game-fowl has been scattered in Europe by the presence of Bankvoids in such districts that were actually occupied by the Romans.

When the Romans were beaten and new countries developed into nations, cocking was subsequently dropped and partially forgotten, but it kept its prestige and power of attraction for long years, and up to our days in Spain, England, France, Belgium and parts of Holland.

During the middle ages, cocking was practised here and there, apparently not on such an elaborate scheme as in the old days in the rest of Europe, but instead cultivated efficiently in England and France and parts of Spain, in which countries native breeds were evolved attaining the highest repute and well deserved value.

Just how invasions and migrations accounted for the scattering of Game-fowl over the Earth, may be learnt by the case of America, which prior to its discovery had no Galli.

The Spaniards scattered their type of fowl, "Gallos finos," all along the Pacific coast, Argentine, Oriental Republics, Mexico and Cuba together with their barred Castilian game and barndoor fowl. In many places of South America the creel or dominique color is known as "castellano," from the origin of the fowl, while red colored, black-reds and duckwings are generally termed

"Gallos finos" (Game fowls) or Ingleses (English).

In the Spanish fowl, as is also the case in English, Irish and Belgian, we find strains that have been selected for their blue, dark slate and dun colors. There are blues and red-blues in South India, and frequently in Java also. It is a fact that such hues are produced quite regularly in such breeds which we suspect to carry an amount of Black Game blood, which is neither Bankiva nor Malay, specifically.

Now in Spanish Game-fowl, any sort of blue is very frequent, either self-colored or barred as in Dominiques. If we advert further that such fowls are rather inclined to show pea or rose combs, we must admit that if not evidence of the originality of that black Game blood, it makes the theory of its purity more plausible. We have said that the Black-game was viciously aggressive, and such is also the case with most blue or slate colored Spanish and the Dominican strains of America.

In the scattering of Game-fowl in South America, Brazil was in a different position being, prior to its independence, a Portuguese colony and consequently under the influences connected with this fact.

For a long time the Portuguese succeeded in keeping their sailing route to India in secret, but soon the Dutch found out the clue and followed them to India and thence to America, being, along with the English, constant rivals in trade and conquest. Those Portuguese ships sailed to India via the Cape and fleets were engaged to carry jute over to Brazil for the manufacture of coffee-bags.

It stands to reason that a cruise across the Atlantic from the Cape to the Brazilian coast, could only be accomplished in those times with plenty of fresh stores, which the Portuguese eventually took on board in Madagascar. Pigs and fowls were carried alive and so we can account for the fact that the Game-fowl of Brazil

is Malay. The best breeds there, are straight Oriental, Malays, Indian type, naked neck Madagascars (Tamatavas) and a silky variety with top knot which proves to be descendant from the original Black Game-fowl.

In North America events took a parallel course. Irish, English and Scotch settlers in the North, Spanish in the South, French here and there. Exactly the percentage of blood that constitutes the fowl that we know as American Game-cock.

As ships developed to the high degree of efficiency which we have witnessed in the last three centuries, intercommunication became relatively easy. Where the men went in search of fortune or a mere living, they took their cocks with them. We find them now scattered all over the world and a companion of civilized man.

This makes clear that the history of civilization of the world is marked by the introduction of the game cock. Discovery, conquest and colonization is also the history of the scattering of Game fowl.

FIGHTING COCKS AND COCK FIGHTING

The average naturalist does not believe that fighting cocks have a mentality according to which they regulate their actions in the pit and also outside of it. Whatever a cock does that is unintelligible is accounted to instinct. In years of closest observation of all sorts of poultry we came to the conclusion that the average dunghill fowl is fairly silly, bearing the signs of mental degeneration in most of its actions. This is quite natural, so far as confined poultry is concerned, but if the same poultry be allowed to run at liberty in the fields, they will train their observation and sharpen their wits.

Fighting fowl are decidedly different. They must be intelligent to make good performers in the pit, otherwise their chances would be very poor. Of course there are no professional scientists nor laboratories to investigate the difference between what we call instinct and what is mentality. So far as we are aware, instinctive actions are those that are executed without premeditation, and mentality is based on actions preceded by thought and calculation.

We have already pointed out the fundamental differences between the Bankiva flyer and the Malay runner. They differ also in their mentality which is exteriorated in their appreciation of cause and effect. According to their different modes of life, their senses do not co-operate in the same fashion. A Bankiva and Malay taken from their runs and put in strange ones where they must feel entirely foreign, behave according to their natural mentality. When night approaches, the Bankiva will look for a perch, take a glance, calculate the safety and finding everything to its satisfaction, fly up and accommodate himself for the night.

The Malay goes to sleep much later and, if pure, will

never attempt to roost but look for a hiding place to sleep. If crossed, different inclinations inherited, will make him stand under the perch, look, calculate, glance up and down, before it makes any attempt to fly up. It is quite possible that the Malay cross will not even jump up, but if it does it will be very seldom that it reaches the perch with the safety and confidence of the Bankiva, at the first attempt. More likely it will try several times until finally its calculations prove right and the perch is reached. But this is not enough. Once alighted the Malay is never sure on a perch, especially if this is round and thin it will show uneasy until a desired or comfortable position is secured. Even then, it is not seldom for a Malay or cross, to fall down while attempting to sleep. A Bankiva, we have never yet witnessed, to drop from its perch while asleep; but crosses do.

The Malay, knowing the dangers of soil dampness, especially noticeable near or during full moon, is careful in selecting a sleeping place and will readily creep in a box just above floor bevel. We fancy that their peculiar habit of resting on their hocks is somehow connected with their knowledge of dampness in the soil, which they appreciate during the day as a hunting ground for insect life, but show remarkably shy of for the night.

When pure Bankivas are scared on the field by stray dogs or any suspected enemies, suddenly, they resort to their wings and fly away. The Malay runs and hides low down. This trait is especially noticeable in very young chicks as explained elsewhere.

And so are the cocks in a fight. The Bankiva parries blows flying or fluttering, an action that affords wing and tail work, and that makes its motions so spectacular. The Malay relies on footwork, dodging and parrying with outstretched legs.

When the Bankiva strikes, the blows succeed each other with great speed, but no great power; they shuffle,

—a motion that would be well nigh impossible, without the aid of powerful and agile wings.

The Malay will make a poor showing on the wing. It relies on single blows from the ground, not very fast, but carried on with such a terrific power that will baffle any man not familiar with it.

Different from both is the enigmatic pheasant type bird from Sumatra and its offshoots, which besides being exceedingly cunning, is very fast on wing and extremely aggressive.

The cockers, through constant observation, have learned to differentiate the natural different styles, according to which the cocks are classified as naked heel, steel and slasher fighters.

It is pretty sure that originally all cocks were fought in naked heels and this fact accounts for the dispersion and oblivion of the once native Bankiva game in India. Cockers soon found out that the tougher and stronger Malay was better suited for their sport than the light flyer.

We have referred already to the cross-breeding that probably took place as soon as the Malay was known in India, but as the original bird was very large and consequently comparatively clumsy in its movements, a smaller type was preferred and obtained through crossing. The resulting breed was further improved and refined as soon as the black pheasant game was introduced.

There is no doubt that artificial spurs have been used for ages with a view to equalize the offensive means of matching cocks, as it is only natural to suppose that through cross-breeding, size, type and location of natural spur was different in relation to the amount of blood carried. Sumatran and Javanese craftsmanship turned out weapons of steel, copper and silver that were reputed for their deadly efficiency and which subsequently were made larger and so dangerous that a single blow with them be-

came amply sufficient to decide a battle on the spot.

It stands to reason that a small game bird like the old time Sumatra possessed of ghostly speed and furious aggressiveness, had a mighty good chance to rip a slower Malayoid to pieces, before the latter had an opportunity to make use of its strength. On the other side, the latter would probably smash the Sumatra, especially on a long drag fight, in natural spurs, where strength and endurance and dead gameness tells the tale. Apparently, those early slasher fighters were not bred for anything but speed as in their short fights a fatal decision finished the bout before gameness was set to a test.

Cock-fighting in the Sunda Islands was considered as the best opportunity to indulge in gambling, and at one time prior to and during the occupation by the Dutch, the sport was so generalized as to form the principal entertainment of the natives. As the governors and their courts honoured the sport and indulged in it, more than the Dutch authorities cared for, these prohibited cock-fighting in Java and set a firm punishing hand upon the law-breakers, going so far as deporting the native chiefs to foreign places.

There are reasons to believe that artificial spurs were made and used in Persia also, especially in the South, but the Indian cockers stuck to naked heels to try bottom and gameness, going so far as reducing them to mere stubs and even bandaging cocks to render the weapons inoffensive. The tape fights of Lucknow, the "*Dora Dirza*" is such a test for gameness and endurance, and the cocks that are matched and win attain a great reputation as it takes big hearts and strongest muscles to go over a four or five day's fight.

Of course any pair of cocks of a given breed can be matched either naked heel or steel spurred, as well as drag horses can be raced or race horses be placed before the plough in a draught competition, but to get the best.

sport of either, each one is or should be placed in the proper category.

Cockers differ on the point how dead-gameness should be tested. Naked heels certainly put the cocks on a level and natural test, but many good naked-heeleders do not stand cold steel. Of course the true blooded game cock should stand any test and make no difference if punished with steel or natural spur, and good cocks stand to that test gamely, but there should be no doubt, that while the Malay is the ideal naked heeler, the Bankiva does best with English or American gaffs; the Sumatra or pheasant game by natural disposition being the born slasher fighters. The difference between naked heelers and steel fighters is not only based on physical condition, but evidently is borne out visibly by the different mentalities of the cocks.

We have discussed elsewhere the evidence that Malays and Orientals are descended from a wild trunk entirely different from Caucasians. Their constitution and type make them dependable on body strength and tenacity, while the Bankiva depends on speed. When the latter fights, there is a lot of action derived from wing and tail motion that is almost entirely absent in the Malay. This has led many observers to the wrong deduction that necessarily the Malay is slow, while in truth the Malay is far from being sluggish, every movement being executed primarily with the feet and only slightly aided by wings which are kept stretched to maintain equilibrium. According to the general athletic constitution, the resistance of the Malay is something wonderful, the blows received and given carrying such a vicious punch as no other bird could stand for any length of time. It stands to reason that where sharp steel is used, as in all artificial spurs, these are of such easy penetration that they do not require to carry any amount of heavy punch behind them to yield deep wounds. For steel fighting, the leg

power and enormous resistance of the Oriental are out of place.

Instead, speed and continuous action are primordial requisites, such as are or should be characteristic of the light weight flyer. Caucasian or Bankivoids have plenty of wing and tail—in fact so much—that abusing of their means they sometimes fly up several feet in the air, causing a clever cock on the ground to watch and suddenly strike when the flyer is in off-position.

Many a flyer has been killed thus, causing the introduction of the fashion to trim the cocks conveniently. Cutting the wings down has been attributed to the desire of leaving a sharp edge on the quills with a view of blinding antagonist, but would not account for, why likewise, the tail is shortened as was the custom in England in past ages. Where wing and tail trimming is not followed, as in Spain, cocks usually go very high and perform feats, that being highly spectacular do not seem convenient from the technical point of view. The more the birds fly, the less accurate cutters they generally are.

Where Bankiva cocks are used, heavy enough to avoid very high flying, as in France, no trimming is done, and such birds are accurate cutters, enough to kill with straight steel within the time limit for each fight.

Of course flying birds may be used, and actually are, to fight in naked heels as is the case in Spain and Scotland and many countries in South America, but it has been proved regularly, that whenever such birds are matched with Orientals of same weights, the latter have a mighty, natural advantage that usually accounts for their winning. Tough skin, dense muscle and nerve stand for Oriental hardiness and their proverbial punishment absorbing, making them hard to kill.

But as said, these virtues fade away before sharp steel that may be driven deep into the organism with no exertion at all. Sharp pointed artificial spurs, such as used

in Europe and America are relatively of recent introduction. Old-timers were conical in shape with hollow socket as used in Persia and Rome, or, of dagger-shape fixed with tape to the natural spur or stub. From the latter the slasher developed such as used now in some countries from very short blades of less than one inch to soul-searchers over four inches in length.

Almost every steel fighter will handle slashers, all that is wanted being speed and resolution to strike. The first cock able to land a blow is generally the winner, as the hurt bird will scarcely come back if properly cut. Here again are degrees of excellence, the cocks of Sumatra being reputed to be not only extremely good dodgers but are possessed of such aspeed and aggressiveness that they will most likely cut any other cock to ribbons, before they get a chance to try a blow themselves. Old-time slasher fighters were small birds, seldom over 3½ pounds of the Black Game family and fought with the Javanese or Sumatra "Gollok" not longer than 2 inches, fairly curved and keen on both edges. It is said that the art of making and tempering such slashers was lost in the course of time, those of today, though not bad and following closely the lines of their prototypes, falling far away in quality from the old originals.

In the Sunda Islands, the small Sumatra black games were crossed with either Bankiva or Malay, probably with both, producing the modern long-legged Javanese game which is far from reaching or even approaching the high standard of the once famous birds of Sumatra. Such birds are able by size of leg and strength to handle the largest possible slashers, which were evolved in the last three or four centuries, reaching as much as six inches, and consisting of blade and stem by which latter the sabre is fastened to the foot with a soft pad and wooden wedge or bolster.

The smaller bird, it is said, was displaced by the larger

Javanese, but its blood is present, however diluted, in many small strains of Malay games found scattered in the East. Such birds, Javanese, and the corresponding slashers were introduced in America by natives transplanted to Surinam by Dutch authorities and from here carried to most any port of South and Central America by trading ships.

At least this is a conjecture that carries most probability of coming near the actual form how Sundanese fowl and slashers reached this continent. Peru had at one time a breed of fighting fowl that was supposed not to exist anywhere else and recorded as such by Buffon and imitators, but on investigating the matter it was found that they were from the Dutch East Indies whence they came in the ships that carried bag material for the sugar industry. Such birds were introduced in Chile about 1840 also, and it is believed that all crested and tasseled fowl are descended from this source. When Chile was a Spanish colony, about the 17th century, Dutch pirates coming from India succeeded in settling in the bay of Arauco where they evidently entertained intimate friendship with the brave Indians, leaving a streak of fair-haired, blue eyed "mestizos" that have always been reputed for beauty. These Indians consider themselves of a superior race and look upon their black-haired, dark skinned and eyed countrymen with a queer disdain.

There is no doubt those Dutch deep-sea sailors traveled more than once from and to Batavia, Soerabaya and other East Indian ports, and most probably took poultry on board, many of which appear to have been game, as the Indians practiced the sport and Arauco was the only region in Chile where, once, artificial spurs (small slashers) were in vogue. War, Alcohol and other "blessings" introduced by the Whites played havoc with the once invincible Araucanos who fought gamely against

the Spanish for over three centuries. It appears that the Dutch arranged some sort of alliance with the Indians against the Spanish, and many a proud ship carrying the colours of Castilla round Cape Horn found a decided lot of pirates in the Gulf of Arauco in expectation of their prey. The poultry introduced in Arauco, as stated above, were decidedly Oriental, accounting for the fact that besides the traditional Castilian fowl, such of Mongolic type were especially frequent in the provinces of Arauco, Bio-Bio and Concepcion.

A small type slasher was once used in the North of France and neighbouring regions of Belgium, but later fell into disuse and eventually became entirely forgotten. Only very old hands still remember the fact.

It stands to reason that in birds used almost exclusively for short fights in deadly slashers, gameness is not of paramount necessity. All that is looked for is sufficient size to carry the long steels, and wing or speed to tell the tale in the shortest possible way. As of old, gambling is the prime object, so that the small Sumatra bird is not any more cared for, but it is said that this breed has ever since been cared for in some parts of Sumatra and kept by native chiefs jealously guarded and hidden away from the Dutch who for so long fought in vain against the Mohometans of Atjeh or Achinese government, until finally they subdued a veritable caste of the gamest warriors of the East.

Old reports stated that slashers were in use in Persia, but our researches in this direction were evidently negative, though they used a conical spur in the north, the probable precursor of the Roman bronze "Tellum," and sometimes really long. The cocks used with this spur were all fairly pure Bankivas.

Slashers are further used in Philippines and formerly also in Japan, but in the latter country, at least, the naked heel reigns supreme.

Cock fighting and fighting cocks have always been influenced by passing fashions which are to a high degree responsible for many crossings, but if we turn everything upside down, the cat will eventually land on its feet again, and there is no doubt, that according to their physique and mentality, cocks will continue to be grouped, quite naturally, in naked heelers, steel and slasher fighters.

PIT PRACTICES AND RULES

Cock-fighting, as a sport, is very old, yet, any attempt to investigate its age comes to a stop, at, or prior to the Persian era. That it was practised before that age, however, is evidenced by traces in very old manuscripts and by logical deduction. The tradition of cocking is lost in the early beginnings of the civilization we have known, and there is no doubt that cocking is the oldest entertainment of man, excepting perhaps dog-fighting. It is a mistake to believe that only cocks and dogs have been used for fighting; almost any sort of domestic, and many wild animals, have been used for staging fights, though many never were considered from the sportive point of view, merely because there were no rules to judge the spectacle. It is the rules that make the sport. From a natural point of view, a fight is the hostile competition between two beings with the intention to eliminate each other. Logically it should end with the killing of one competitor. Intelligence, power and tricks are naturally legitimate means of obtaining the victory.

A natural fight, therefore, would be to match a pair of antagonists and simply turn them loose on any place and let them fight to a finish. No doubt, that originally, cocks and other animals were fought in this way, and that the first rules were established when cocks of different species were matched. The knowledge of cocks and their abilities appear to have been responsible for the establishment of all fighting rules. Such rules, handed down by tradition and compiled only almost recently, bear strong evidence of what we have been saying for quite a while, viz: Cocks of different species, are by nature, weapons, and general physique, adapted to a certain style of fighting only, and their classification in naked heel, steel and slasher fighter is logically deducted from long observation.

The first aim of the rules, old and new, is to match a pair of cocks on the level, giving both antagonists even chances to fight it out. At the beginning this was not necessary. The native cocks were about one size and color only. It appears that there was considerably more difficulty in setting a rule to decide which of both was really the winner or loser. This is frequently the case when Bankivoids are fought out of season, when they mostly lack the mortal punch and fighting ability. The introduction of alien cocks, different in size, weight and style, must have created a commotion big enough to show the necessity of equalizing chances by rules. Crossing, further still, caused sufficient variation in the next generations to show that cocks were different and consequently had different chances.

The elaborate means of measuring, weighing and matching cocks in India, Siam, and other points of the East, show that differences in type, size and weight were responsible for the utmost care bestowed on the compilation of matching rules and due, no doubt, to suspicion caused by cross-bred fowl. Many of these rules, handed down by tradition, appear senseless under present conditions.

One of the points cared for in the Orient is size. There is no doubt that in naked heels size is a desirable quality if accompanied by power, and as Orientals or Malays cannot grow large, without strength, it stands to reason that reachiness was studiously selected. We even see today the Shamo-fowl of Japan bred to enormous size, with corresponding weight, and in Siam, giants of the Malay breed are by no means rare.

We have stated already that Malays are naturally large, hence their scientific denomination "*Gallus Giga-*teus," so that they may be allowed to grow large without impairing their fighting traits. It is very different with Bankivoids, which lose their vim and dash

as they grow large and become sluggish with excess weight. The same thing happens with the Sumatra, their flashiness being lost when crossed with Malayoids to add size and weight. The English fancy breed, known under the name of Sumatra, carries a considerable lot of Indian Game blood, which was administered to them before they were introduced in England. There is one exception, in the Bankivoid fowl of France, which as the Flemish Games, are rather large, yet are remarkably fast. We always suspected that both French and Flemish carried alien blood, either Malay or from antique native Mongolic fowl, but as their type is straight Bankiva, physically and mentally, and as the best authorities agree that they are straight Caucasian, we must leave them as exceptions to the rule, considering their size a merely local variation. At the same time we must point out that large Bankivoids fought as shakes in Spain and England do not even come near the high standard of quality of the notable French cocks. In discussing this breed, further on, we shall see that there is another small local variety, besides. Where the native game fowl is decidedly derived from crosses, as is the case in the States, where the original fowl was from Irish, English and Spanish origin, with later introduction of Malay blood, size and range of weight is very unstable. In such countries the weight item is basic on any fighting agreement.

Originally weight was absolutely ignored and unimportant, but size was carefully considered. We have stated already that the Raja Murgh or Asil of India was probably originated by crossing Sumatra black Game on Malay blood and the latter probably carrying some of the original Bankiva blood. As the Sumatra was very small and light, it stands to reason that it was no match for any Malay in naked heels, and slashers never happened to be in favor in India anyhow. But the small

cocks impressed the fans, for their courage and flashing speed, and consequently a cross was tried, keeping the dense weight, power, gameness and endurance of the Malay and adding the small size, speed and action of the Black Game. The feat aimed at was to produce a heavy, strong organism, within a small, or rather low, frame.

That this ideal has been reached, nobody will deny who has had the opportunity and pleasure of handling one of the small Asils of India, that became the world's most perfect fighting machines. Pound for pound, no game-cock can turn out such terrific power, endurance and deadly courage as the small Asil fowl of India.

As they grew in number and success, the rules evolved at the same pace until at present it would be really impossible to match a cock that has any visible advantage over its antagonist.

Scales came into play, and weight controlled carefully. From India the scales were introduced in Persia, at least they show the same old type, though some authorities believe that the scales were originally Persian and later introduced in India. We really must have this point of discussion in suspense, but feel inclined to believe that originally from China, the old cock scales, also used in the current trade, were universally used in India, before their use was even known in Persia. Another point of differentiation to account for rules was the way how the cocks were going to fight, i. e., if naked heel or with slashers.

It is only natural that early cockers had the experience that different length and curve of spurs meant different success, and for naked heel fighting, where power of limb was there, as a matter of fact, the long thin and curved spur was studiously avoided. Bankivas that naturally had this characteristic were by and by discarded and finally vanished from the cock-pits. Long

heels in naked spur fighting are undesirable, as they stand for lack of accuracy, a capital fault. The "Kalkatiya" or black spurred Singapore Game have always been famous for being great spurrers. They grow medium, straight and strong heels.

Asils and other Indian Game fowl are not always good spurred cocks, and while the first are fought taped or muffed, the ordinary game fowl are fought naked heels, it being usual to trim spurs to a given length in important matches. This item is still followed in Spain and other countries where the umpire uses a small gadget ("escantillon") to measure the length of heels.

In the Orient it is usual and a perfectly established practice that natural spurs are somehow trimmed to insure straightness, point, and general hardness. In the case of slips, or cocks that have lost a spur, it is permissible to tie on another one, but no metal or horn is allowed. In Spain it is not only usual, but necessary to trim the spurs straight and to get them hardened and polished. When allowed to grow, spurs naturally grow curved.

It is believed the best theory that the adoption of any sort of artificial spurs was born by the necessity of equalizing the weapons of two combatants. Though the idea appears to have originated in the East Indies with the visible aim of making the weapons more dangerous, it was apparently a Persian idea to fight cocks with conical, hollow, pointed metal spurs, to match cocks on the level. As these spurs were made of costly material, gold and silver, it is tolerably sure that only rich people would endorse their use, while the poor ones fought their cocks in the good old way—naked heels.

The Romans fought their cocks naked heel and artificial spurred. The weapons used were apparently

modelled after the old Persian, but made of bronze, known as the "tellum."

If the Persian before, and the Roman after, used the artificial spur, it is reasonable to suppose that the Greek also used artificial spurs. In Spain artificial horn spurs, or such that were taken from a dead cock, are used to arm stags, which are not provided yet with their natural spurs. Belgian cockers also use spare spurs or such of horn, when the articles allow or prescribe them. In Scotland where naked heels was the rule, they use the haip, which may be any spur, short or long, with a short metal socket for fixing in place.

In the newer countries of South America, artificial spurs resembling the old Persian are used in Brazil, Argentine and recently also in Chile. All these hollow, conical shaped, more or less sharp pointed spurs, follow closely shape and effect of the natural spur, and in the rule are dead straight. No curve appears to have found any favor.

The slasher is different altogether. Though length and shape are governed by local rules, as well as the curve, the slasher is not only intended to provide an equal weapon to both antagonists, but evidently the effect desired is to be straightaway deadly. The use of a moderate length of slasher, sharp pointed and keen edged as a razor blade, puts a premium on the fastest and most aggressive cock. Originally slashers were scarcely over $1\frac{1}{2}$ to 2 inches long, but when larger cocks came into use, the weapons also grew, until nowadays in some parts of the world, blades are used that are capable of puncturing a large cock from side to side. It has been said continually, and even we sustained it, that killing or rather winning with such spurs is a matter of chance and luck, rather than anything of quality in the cocks. Yet there is information from Bali, Sunda Archipelago, that some cocks become

champions, killing numbers of antagonists. It may be deduced therefrom—and from the fact that such champion cocks kill always in the first few shuffles—that utmost speed and ability to handle long heels has to account for excellency in soul-searching slashers. Such cocks very seldom get cut, and consequently do not show if they really are what Western cockers and Indians aim at, namely, dead game cocks. There will always be a suspicion that though such cocks are evidently clever in applying their feet with fatal success, they would probably fight shy in short gaffs or naked heels.

We had opportunity, however, to try Sumatra-bred and Javanese cocks in muffs and short Argentine steel spurs, expecting some of them to leave the pit after a few minutes cutting. About fifteen such cocks, however, fought desperately to the bitter end, stood the test deadly game and succumbed after the most severe cutting. If we allow for the difference of climate, and in some instances long travel, which may have accounted for their lack of leg power and accuracy, we are now perfectly satisfied that the high class Javanese, Balinese and Modoera cocks are dead game fowl, and no doubt that their high class and game blood is derived from their most illustrious ancestor, the Sumatra Black Game fowl.

As may be expected they were not perfect fowl, lacking leg power and endurance. The healing flesh, a characteristic Malay feature, was in such degree absent that even cocks that were only slightly hurt during the fights succumbed afterwards. Lack of punch was visible from the beginning, though the thigh appeared well developed.

Slashers were used here and there, now and then, with varying preference. They are used in many countries in Central America, Peru, Ecuador, etc. In Peru even shakes are fought in slashers of enormous length

and considerable weight. To the average cocker it appears that slashers are preferably favored by people inclined to gamble, as it is much easier to breed extremely fast and aggressive cocks than it is to breed the old reliable steady and dead game birds that have always been the backbone of the game.

From the natural spur to the other extreme, the slasher, there are many variations which have been evolved in recent centuries. To discuss the item of modern cock-spurs it requires a full book. We find, however, a common feature in all of them: a socket to fit around the natural stub, to hold the spur in place, and the blade which is round and invariably sharp pointed. The latter is or should be fairly curved, and even dead straight as in the French spur. Varying length in some countries or limited to a given dimension in others.

Different material has been used for their manufacture, gold and silver, but preeminently steel of the very highest order. The art of tempering gold and silver has been lost and no amount of experimenting seems to yield any success. The newer gold and silver spurs are thickly plated steel spurs, but no improvement over the high class full steel. Methods of manufacturing cock-spurs have also changed with advancing years. It used to be a highly skilled masterpiece of forging in Old England, where the hand, the hammer and eye executed what the brains had in mind. In England gaffs are invariably made and forged from a solid piece of steel, and the socket not provided with any sort of flange or flare. It stands to reason that heeling a cock with such spurs, for giving correct set, was an art for which the manufacturer had made no provisions. In France, spurs are cut from sheet steel and the socket formed by laps of the material hammered round and joining. Here the manufacturer provides comfortable

flanges, no doubt, a big improvement. In America we find modern equipped shops where accurate machinery can take care of any sort of job, and where, usually very fine specimens in steel are turned out in numbers. Not all the process of spur making, however, can be entrusted to machinery; as of old, brains and knowledge play an important part, and are responsible for the high quality of some products and the lack of it in others.

It is only logical to expect that the use of different spurs has affected the local rules considerably, so that what is fair in France is not apt to prove good in England or the States, and vice-versa. Sometimes references are made to fair and unfair heels, but of course, so long as both parties agree to fight a certain type of heels, they are fair, unless poisoned or treated in such a way as to cause other injury beyond the natural effect of the steel. Plant and snake poisons, properly prepared, seemed to have been used in early days, as the rules invariably provide that spurs, either natural or slashers, should be tested for fairness, sucking at them or having them cleaned publicly. Foul play, such as poisoned spurs or gaffs, and so many tricks that the desire of winning the stakes has invented, have forced the adoption of very definite rules. Some of these concern the handling of cocks. At one time it was usual to prepare the cocks, deliver them in the pit and never touch them again until the fight was settled. Such practice is still in use here and there, but when the cocks are both down and exhausted, something has to be done to find out which of both win or lose. Handling in such cases is a necessity and nursing in the critical moment will eventually account for victory.

As the points of view differ with the men in different countries, it would be difficult to deal with those rules here, but we shall have opportunity of appreciating

different methods, when dealing with breed monographies further on. For the benefit of readers, however, we want to state that among the many interesting books that deal with game fowl, we strongly recommend to procure a compilation as edited by Grit and Steel, Gaffney, S. C., U. S. A. There are McCall's rules for use in the States, and a most complete compilation of the principal rules of the world, by Dr. H. P. Clarke, Indianapolis, which is the best we have come across. Rules govern the sport, when the cocks are finally ready to fight in the pit, but of course have no influence upon making and conditioning them before they are set down for the final test. This period including breeding, walking, training and conditioning will be dealt with later on.

As may be expected, cocking as any other violent sport, decidedly had and will have some marked influence upon the spirit of the men who practise it. Before all, the enforcement of rules governing the honesty of the game, at once must impress the newcomer that, barring awkward exceptions, the job is straight and honest. Cocks can not be led to stage foul play. Boxing, racing and all sports where human beings play a decisive role can become dishonest, as we have had opportunity to learn in our days of amateurism, but when the cocks are loosened, they go at it as best they can. We do not want to defend cocking at the cost of other sports, but it wants and stands some comparison.

It has been decried as cruel, barbaric and brutalizing. Some even state that it is cowardly to pit two irrational birds to fight, when it would be human to try and avoid them getting at each other.

Cocking has had its detractors and defenders always, so that the argument, pro and contra, seems nearly exhausted.

There is one thing the modern city dweller cannot understand. He is out of contact with nature and all his aim is to earn enough to afford for himself all the comfort available. His eyes are not trained to rest with full conscience upon the general struggle that constitutes life. He cannot understand that the object of life is laid after a big scheme, after which organic life is so arranged as to secure a constant distribution of food stuff. The consumption of these accomplishes growth and transformation, and finally reproduction. The two leading mental factors of life are hunger and love, and to satisfy both the individual must fight. Fight is everywhere! The plants and trees which we behold as the signs of peace and rest, are fighting a tenacious and desperate fight for room under the soil and for light and air above it. And they progress despite this fight.

The little birds, insects and worms, fish and amphibia, they all must fight to get at either satisfaction of hunger or love. Fight on earth, in the water and in the air; desperately and incessantly. There is no peace so long as there is life, in fact peace is felt as a blessing to none except the best fighter. Love and happiness are short but of concentrated power, none but the real fighter can enjoy them for all they are worth in this life. The cock, for example! He must fight very hard and with fatal results, but on the other side his sexual resources seem inexhaustible and his enjoyment of a square meal are too visible to be overlooked. To keep him happy, keep him fighting. Nature has given him weapons that were intended purely for fighting. Teeth and claws serve many useful purposes apart from being fighting means, but spurs have been given the cock to romp his way towards happiness. He must fight!

Some people admit that cock-fighting is not cruel from the natural point of view, but that it is cruel and barbaric to observe its suffering in the pit. This is

absurdly wrong! It may appear barbaric to the newcomer whose nerves are too tender to see a real fight, but who would be delighted to see the performances of many working men who play their lives in the daily struggle for their bread. We see barbaric actions by the thousands in the streets and working centers. We see famine and passion daily, yet do not feel that they have a brutalizing effect upon our minds, we pass them on unaware, our nerves are tempered, our eyes accustomed. Nobody will admit that life in a city is a torture, physically and mentally, as we derive considerable satisfaction from our meals, our drinks and our multiple diversions. So long as we are satisfied, we are blind to the brutalizing effect of the daily misery and when we are not satisfied, we consider our efforts to overrun a competitor as perfectly legal.

And in the meantime, all that is perfectly natural because: *we are fighting!* Anything may be cruel, barbaric and brutal, so long as we are not accustomed to see it. As we grow accustomed, we not only suffer the spectacle of misery and brutality, but eventually enjoy it.

There is no more cruelty in cock-fighting than in any other fighting, and the thousands of cockers we have met and appreciated in our life, turned out to be perfectly normal men and morally truer and better than most preachers for humanity and sentimental stupidity.

As we know the sport and the necessary adjunct, our respect grew with advancing age. We believe that the gambling that has been associated with cocking is not always commendable, but at least the cocker who pins his faith on the performances of his birds is just as honest, and at any rate gamer, than most gamblers that risk their money in any commercial enterprise.

A COLLECTION OF COCK SPURS

The study of cocking has led many a fancier to start a collection of cock-spurs, and we know of three collections at least, that reasonably pretend to be fairly complete. The one, in England, belongs to Mr. Herbert Atkinson, Ewelme, near Wallingford, Berks, England, the world known British authority on the matter who had rare opportunities to acquire valuable specimens. Another, belongs to Monsieur Henri Cliquennois, Lille, Nord, France, who, born in 1850, followed the sport for over 60 years. His collection of cock-spurs is accordingly a rare one. The third is in hands of the American authority on game matters, Dr. H. P. Clarke and a part of which is shown in the accompanying photo. The specimens illustrated represent the development of artificial spurs within historical time, and are:

- (1) Ivory "haip" from Scotland.
- (2) The more common form of Scottish haip, a natural spur set firmly in a metal socket.
 - (2a) Ancient tin spur of unknown history.
- (3) Very old gaff from Scotland. A thimble socket with steel blade.
- (4) A famous silver spur of England. The metal is a silver copper alloy highly tempered; an art, that like many of old times, has been lost.
- (5) A modern English spur of American pattern.
- (6) French spur as used previous to 1894, when every pattern was allowed.
- (7) French spur used after 1894, when the cockers of France learned the superiority of American designs introduced by Dr. Clarke.
- (8) A modern French gaff, 50 mm straight blade, which was generally adopted after the cockers' congress in Lille, in 1901.

(9) Round blade, slasher type two prong socket from Mexico. Very seldom used.

(10) "Zapaton" from Santiago de Cuba, used to arm stags or slips.

(11) Horn spur used in North Belgium. In the South, gaffs are used as in Nord, France.

(12) Bronze socket, straight iron blade, a very old relic dug out in the country of Artois, France. A very rare specimen.

(13) A "puon," steel conical spur as used in Southern Brazil and North Argentina. They exist in five different sizes as set forth in chapter about South American cocks.

(14) Old Singleton from Dublin, Ireland.

(15) Old English spur with iron socket and silver blade.

(16) Gaff from Brisbane, Queensland, Australia, in which country also slashers were used like those of Dutch East India.

(17) American full drop socket of improved pattern.

(18) American front drop socket.

(19) French spur fashioned after an American pattern and used about 1895.

(20) American full drop 1½ inch gaff. This and similar patterns were those that revolutionized spur-making in France and there known as "Armes Americaines." Introduced by Dr. Clarke.

(21) American 1¼ inch regulation heel and also widely used in Canada.

(22) Long blade full drop American gaff. This and similar ones were also shown in France and reputed as the deadly "Gold Spurs," being steel, triple gold plated, extremely dangerous and mortal.

(23) A Filipino slasher from Manila.

(24) Another slasher from island of Guam. Heavier than the Manila.

(25) A Slasher from Padang, Sumatra, originally used with the smaller cocks of yore. In Java very long

SELECTED SPECIMENS FROM THE LARGEST COLLECTION OF
COCK SPURS IN THE WORLD.

Property of Dr. H. P. Clarke, Indianapolis.

foot slashers are used, different from the specimen illustrated which is attached to natural spur.

(26) Heavy Peruvian short slasher. With large cocks, steels are used reaching fully five inches. Two pronged socket.

(27) An old time slasher of Spain. Similar patterns were used in Buenos Aires some three decades ago, introduced by Andalusian fanciers.

(28) Slasher from Chihuahua, Mexico.

(29) Slasher from the Yaqui country, Sonora, Northwest Mexico. This pattern has a very deep drop, as may be judged.

(30) Short inch and a half slasher, Mexico, where cockers are at liberty of using any size that they judge fit for their cocks to carry.

(31) The counterpart of above. A very long and slightly curved, rather weak slasher of Mexico. Rules allow replacement of spur, when broken, and when a cock breaks slasher in adversary's body, the latter may bleed to death, while the spur is replaced.

(32) Dr. Clarke's pattern soft chamois leather sparring muff. These have found considerable favor in Chile, where formerly very hard boxing gloves were used, to the detriment of cocks.

(33) New type French "bouchon" or sparring glove. Formerly cocks were sparred with corks ("bouchons") stuck on spurs; hence the name. These gloves are easily attached and kept in place by elastic rubber bands.

From these few specimens, the reader may gather an opinion of the vastness and decided interest of Dr. Clarke's collection of cock spurs, that took several decades of patience, labour and an infinite wise dedication to bring up

*1. Persian gold spur. 2. Roman "Tellum" (pure silver), found in Cornwall. 3. Argentine "puon". 4. Ivory haip from Scotland. 5. Horn spur from Belgium. 6. Zapaton from Cuba. 7. Ancient relic from Artois, France. 8. Scottish haip. 9. Modern French gaff. 10. Old English silver spur. 11. Sumatra slasher. 12. American regulation gaff. 13. Modern Peruvian slasher. 14. Full drop American gaff.

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DEVELOPMENT IN ARTIFICIAL SPURS.

to this high standard. Dr. Clarke's knowledge of the sport and knowledge of the specific technique of cock spur making has been recognized all over the world, and corresponding with exotic amateurs, the author not seldom was referred to Dr. Clarke in some connection or other. It is queer to note how foreign and home fanciers understood each other throughout the world and respect the views of such well-known authorities as Dr. Clarke, Mr. Atkinson and Mons Cliquennois.

ANATOMY OF GAME FOWL

In the poultry research laboratories of the world, thousands of fowls are operated, dissected and observed, which all come from some utility or fancy barndoor yard. The game cock very seldom reaches the sanctum of the scientist, and consequently the nature of its organism is most generally ignored. Of course the industrial breeders and poultry experts consider the average dunghill as the normal bird, whereas we positively know that they are:

- (1) Of mixed and consequently impure parentage.
- (2) Abnormal in their sexual functions, as their large egg production is artificial, and due to morfological degeneration, and
- (3) As cross-breeds, unstable material for observation from the racial point of view.

Of course, the utilitarian depends largely on the abnormality or degeneration of the dunghill, for financial returns, but, however convenient their existence is, from the economical point of view, the anatomy of fowl should be studied and compared from purebred stock, i. e., game fowl.

Of course, the organism of game fowl shows marked difference from that of any dunghill, the latter being required to turn digestive powers into eggs and flesh, while the fighter is required to produce energy. The glandular function, that governs life, produces different effects in either, game or dunghill, and that is why the one is a game bird and the other just a barndoor specimen.

Many a game fan will never be induced to bother with any scientific stuff, so long as his cocks fight game, but there may come a day when just a bit of knowledge of that scientific stuff would have avoided a defeat and a

consequent heavy loss. The knowledge of the fowl's anatomy is, besides, of greatest benefit for nursing cocks during, and curing them, after battle. Many practices which are detrimental to injured cocks will be found silly, when the function of internal organs is known. We do not want, however, to go on a lengthy description of anatomical character, as this is a study too complicated to deal with here, but shall endeavor to pick up such items as are of practical use and knowledge.

SKELETON. Starting from the egg, the skeleton is built up, according to the development of the organs. It is not built first, and the organs hung to it conveniently, but it is intended as the frame of a given organism. As such it is a means of judging the capacity of the bird. A delicate frame cannot well be the support of a powerful organism, and on seeing a cock with very fine shanks, head and beak, never mind how strong it looks, you can safely deduct that the bird is not stronger than its weakest part, just as in a chain that is no stronger than the weakest link. Here is another point of differentiation between the Malay and the Bankiva. The first is an extremely heavy and strong bird, with a frame adapted for a runner, while the latter is a light framed flying bird, that appears larger and stronger by the profuse feathers it wears.

The dunghill man says that the Oriental cross is coarse while the Bankivoid is fine fleshed. Such difference constitutes the most typical marks of diverse origin, as they correspond to natural adaptation of the birds and as they only are observed in cross-bred barndoor fowl, in the laboratory of the investigator, have not given material for scientific differentiation. They are dealt with, simply, as coarseness or fineness, but not appreciated as what they really are, different marks of birds, with different origins.

The skeleton is composed of different classes of bones ;

tubular, flat and short ones. These are formed by the outer bone tissue and the inner, spongy, marrow containing structure. We have pointed out already that the tubular bones of flying birds are hollow and filled with air, while those of runners are filled with bone filaments surrounded by plenty of marrow. Such tubular bones are those of the legs and wing, which are by far the largest and the strongest. Flat bones, such as the breastbone, ribs, shoulder and hips are intended to form cavities or containers. The most interesting of these being the skull which holds the organs of intellect and fundamental senses, brains, eyes and ears. Taste and smell are only of secondary importance and consequently their organs are rather poor. Short bones, but very thick and strong are those that form the backbone. They are bored to hold the spinal cord, which widens considerably at the lumbar region, so that in pre-historic animals it constituted a secondary cerebral centrum. In game cocks this "loin brain" is of considerable importance as it influences the action of the

ANATOMY.

1. Broken bone with initial callosity at A.
2. Heavy bone of an Oriental healed at B.

poor. Short bones, but very thick and strong are those that form the backbone. They are bored to hold the spinal cord, which widens considerably at the lumbar region, so that in pre-historic animals it constituted a secondary cerebral centrum. In game cocks this "loin brain" is of considerable importance as it influences the action of the

legs. It must be protected by strong bones, which can be felt just behind the hip centre.

The main substance of the bones is a cartilage that yields glue, impregnated with phosphoric lime. The nutrition of the bones is effected through a cuticle with nerves and blood-vessels, the periosteum. Nerves and vessels enter the bone through diminutive orifices, carrying the substances that keep them growing. The marrow or medulla is a greasy substance that keeps the bones elastic. It is interesting to note, that the "*Galus Morio*," or black Mozambique cock of Buffon, was so entirely black, that even the medulla was black as ink. As the intestines were white, it is easy to deduct that the black colour was carried in the blood.

Bones in game fowl are liable to suffer injury and disease. Fractures are very common and may be healed if the wound is kept clean and aseptic. It only requires time and rest, when the periosteum will take care that the bone is soldered properly. On the fracture a callosity is formed which with time disappears partially or completely, especially if the region has been exposed to the sun. Such healed fractures sometimes become harder and stiffer than the bone originally was, due to internal collosity and affluence of blood to the affected portion.

When a bone is broken during battle, there is no amount of nursing that can be of any use. We have witnessed the fact that a cock with one broken wing, continued to fight as if nothing had happened, when suddenly another blow broke his left thigh bone just above the hock. The brave bird went on as best he could but was badly battered in the next few minutes. The owner was prone to give up and save his bird, when the latter got a nice beak hold and killed the other, sound bird, with one powerful kick, and won. On examining and nursing the injured bird after battle, it was found that breast and neck were full of holes, the fight referred to, being with Argentine

"puones." Yet this cock never flinched for a second, was full strong when taken out and consented being dressed, crowing heartily. The one referred to was a 10-pound brassback, French Nord Game. The same cock, feverish and stiff with bandages, showed fight next day and was full of fight. One cannot help but record with satisfaction such notable feats. Only dogs and men appear to be as game as cocks. We saw a dog crawling to the scratch with both forelegs broken, and the Chilian lightweight champion Stan Loayza coming out of his corner with a broken leg, at the second round of a fight for the world's championship, vs. Jimmy Goodrich.

There is no more cruelty or barbarism in any of these battles.

They are samples of how gameness overcomes pain and misery.

Bones grow according to the disposition of the individual, and the material of which they are built up may be found in milk, eggs, meat and all green vegetables. As a matter of fact all these materials should be fed

HEADS AND FEATHERS.

a. Bankiva head. b. Skull, showing how the eye predominates. c. Oriental head. d. Skull, showing that the eye is secondary to the ear. Structure of feather. e. Down. f. Pin. g. Young. h. Complete.

raw and as *fresh* as possible. Bone meal, obtained by calcination of animal bones, is of not much use, as the prime material has been affected by heat. Blood, eggs and milk can very well be mixed with ground corn or bran and fed raw—never boiled.

Bones are kept together at joints by elastic cartilages, that act as well oiled bearings in a machine and protected outside by tough ligaments. Swelling at ligaments is a very bad sign, and the breeder cannot be careful enough to bar stock thus affected from the breeding pen. The skeleton as a whole, and its conformation, stands for power and resistance. It must be nicely proportioned.

MUSCLES AND SKIN. Muscles constitute the flesh of a fowl and are divided into such as can be moved at will and such as move automatically. The first group is used to move the bones, being fastened to these by tendons, and the latter govern intestinal and stomach movements. Skeleton muscles again divide into flexors, extensors, adductors, abductors and rotators. The will is imparted to the muscles by nerves, and should these be cut or injured the communication between brain and muscle is cut off, causing cessation of motion. Muscles being rather voluminous, stand a lot of abuse, but nerves do not. Quality and quantity of muscle constitute the strength of a fowl, but no amount of flesh can be transformed into power if the nerves are not sound. Some large and thickly muscled birds are awkwardly slow, and though after a while they exert all the power the muscles are capable of, they do it too slow to be effective. Lack of speed in such cases, due to nerves that react slowly on any irritation, is called phlegma, and is frequent in oversized birds.

High speed is always accompanied by high nervous irritability and rather small volume of muscle. Some birds are capable, (as well as men and most animals), of executing certain movements with such power and speed that they seem quite inexplicable. The abnormal strong punch

of either cock or man, is an example, and we speak of this phenomenon as a "nervous punch."

As a result of muscle action certain change products are generated in it, which produce the feeling of fatigue. Feeding cocks, so that they can stand fatigue and keep reserve power, is a delicate art which very few cockers succeed in attaining. Old Indian cock trainers were reputed for this art, and in later chapters we shall deal with this item extensively.

When a muscle dies, it loses its irritability, the muscular albumen coagulates and the muscle becomes stiff.

An efficient method of keeping the muscles elastic and free of dangerous fat is slight massaging and hot fomentations, a system regularly practiced by Indian feeders. The quality of muscle stands for punch, strength and endurance.

The muscular system is covered by the skin, which is a protection against loss of temperature and a sort of encasing. The skin generally stands a lot of abuse, being capable of restoring wounds quickly. In some birds, naturally, quicker than in others. Malay cocks have a very tough skin; Bankivas less so and the Sumatra rather delicate. The skin is strictly adapted to environs and use, the harder the wear, the tougher it becomes. Accordingly to this are the feathers which are products of the skin.

FEATHERS. The proverb says that. "Fine feathers make fine birds." This is especially true in cocks, but we

SUMATRA GAME COCK.

Photo from a painting in possession of Dr. H. P. Clarke. According to the inscription, painting represents a cock weighing 5:04, owned by R. H. Macdonald, Lockport, N. Y., 1862 to 1866, a winner of three battles in mains in the year 1865. Handled by J. Donnelly. This cock and a hen were imported from Island of Sumatra.

do not look to them for colour, but quality. Feathers are not evenly produced over the whole skin, but are produced in certain areas only, (feather fields). Between these there are barren areas, completely bare. In some birds the feathers are long enough to cover such bare areas as in Sumatras and Bankivas, but in Malays the feathers are usually so short that the skin is shown bare and reddened between the feather fields. In fact, this is a characteristic of the Malay, which produced a freak variety that is bare on large sections of breast, back and neck.

Each feather is born in a follicle and fed by nerves and blood vessels, but once grown out, the feather dries and is dead. Even then it is kept tight to the skin and serves to convey to the latter impressions from outside acting as feeling organs. Wind, rain or any sensation is passed on to the skin. Besides they act as protection in every sense.

In some species of birds, peacocks and pheasants for example, the feathers of the male are gloriously coloured. In the "*Gallus*" species, less so, they display hues that are most pleasing to the eye. Such richly coloured and glossy feathers are grown in the neck and saddle, wing butts and tail. As they are an attribute of the male bird only, we speak of "*sexual feathers*" and cocks that are deprived of them are termed "*henny*." Such feathers being long and flowing are apt to be bruised and torn in thickly covered woods or jungles, and consequently birds that wear them do not care to rough it in the thickets.

We have said already that the Malay was a bird dwelling in thickly covered grass jungles, and this is apparent at once when we observe that their sexual feathers are notoriously scant and short. In such semi-dark thickets, it would be rather superfluous to exhibit bright colour hues and consequently the Malays are rather dark. Differently the Bankivas, that dwell in full daylight and

A. Internal organs: a. Spinal cord. b. Empty crop. c. Esophagus. d. Windpipe. e. Pectoral muscles. f. Back-bone. g. Lung portion. h. Heart. i. Breast-bone. j. Liver. k. Glandular stomach (proventriculus). l. Intestines. m. adrenal gland. n. Thickened portion of spinal cord. o. Testicle. p. Gizzard. q. Kidney. r. Intestines. s. Vas deferens or seminal canal. t. Remnant of bursa fabricii. u. Vent. v. Oil gland. B. Muscular development of flyer and (M) of runner.

which are the brightest coloured cocks that we know; excepting the Varius of which we know very little, and which is similar to the pheasants.

At the beginning the feather is called a pin, in the chick called down. As the down and the pin grows, a little brush is shown, which later transforms into the regular feather. This has a shaft filled with albuminous matter carrying the pigment that colours the feather. From the shaft springs the tail, composed of featherettes connected between each other by small spikes. Reaching maturity the structure inside the shaft dries leaving the soul, which is a hollow space. Flying birds as Bankivas have a large hollow space and their feathers are consequently very light. Malays less so, but instead grow stiff, hard and elastic feathers that can stand the wear and tear in their natural haunts much better than a flyer would.

Feathers are changed once a year during moult, which takes from one to three months to complete. While this process is a delicate affair in long feathered birds—that take care not to injure the pins,—it goes on very easily in Malays, which seem to be able to moult at least during six months of the year. Malay birds picked up from the yards at any time of the year, always show plenty of pins during the first three years of their life. Later on they moult in short time.

Feathers and skin indicate the condition of the digestive apparatus. When they are dull and loose it may be taken that something is wrong inside.

INTESTINES—DIGESTIVE TRACT. From the mouth cavity a tube leads the food into the crop, the esophagus, which is placed at the side of the wind-pipe. A cut through the esophagus is not of immediate danger to the bird but may become so later, so that it is good to bear this in mind nursing cocks after battle. The trouble is that it can hardly be cut without injuring the windpipe

which may be of immediate great danger by flooding the lungs with blood. In the crop the food is stored and softened before being passed on through the glandular stomach or proventriculus to the gizzard. This is a heavy muscle covering the inner cavity lined with a tough membrane. Hard seeds are ground here and passed on to the duodenum,

small intestine, ceca, colon, rectum and discharged through cloaca and anus. The accompanying illustration shows the position of the internal organs, all of which are relatively delicate.

Flyers have a long and elaborate digestive tract while Malays have short guts and of very tough tissue as explained elsewhere.

With the use of long slashers and gaffs, almost every organ may be touched, especially with body-fighting birds, such as the slasher fighters of the East most generally are. It is believed that the healing flesh, peculiar to Malays and offshoots, is due to their special intestinal organs and some of their glands which work abnormally fast.

INTERNAL ORGANS. The Location of lungs, heart, liver, kidneys, etc., is visible in the cut, their function

PRINCIPAL GLANDS AND THEIR LOCATION.

(1) Thyroid, (2) Thymus, (3) Adrenal, (4) Spleen, (5) Gall, (6) Liver, (7) Pancreas, (8) Testicle, (9) Bursa Fabricius, (10) Oil Gland. Fig. II. Female. (11) Adrenal, (12) Ovary (left), (13) part of oviduct, (14) kidneys. Figure III. Male. (11) Adrenal, (15) Testicles, (16) Kidneys, (17) Vas Deferens or seminal ducts.

being too well known to want any description. Injuries to any of these organs prove easily fatal, as may be expected, especially when the blood pressure is high. It is a rule to fight the cocks empty, i. e., unfed, so that the temperature and general pressure are low. The art of feeding cocks consists in strengthening the muscles to the highest limit but avoiding fat deposits near or around the internal organs, which produce premature fatigue and excessive heat.

Constant exercise, massage and fomentation bring these organs into forced activity avoiding fat accumulation, while the kicking power or punch cannot be developed very much more than naturally possible by the limits set by the general disposition of the bird.

NERVES. These are organs that transmit sensations, thoughts and motion. The system is divided into animalic and vegetative nerves. The animalic system transmits those sensations and motions associated with consciousness (brains, spinal cord as central organs with nerve ramifications). The negative system, or sympathetic, controls the function of the glands, intestines, heart, etc., uninfluenced by the will. Both systems are not strictly separated but exchange fibers in their function. The whole apparatus is comparable to a tree, where brains are the roots, the spinal cord the stem and the ramifications which divide into fibers, the twigs and leaves.

Apart from transmitting the command of motion, nerves have a direct influence upon the glands. The motoric nerves terminate into plates in the muscle fibers. The sensation nerves, which transmit any feeling, pain, pressure, etc., terminate into buttons.

The speed of sensible transmission of the nerves is about 110 feet per second and every nerve reacts to any irritation corresponding to its nature. The process is always controlled by some portion of the brain.

Naturally nerves are spread all over the organism and come near the surface of the skin in form of tiny ramifications forming the system of the touch. The presence of narcotics in the blood temporarily cause an interruption of sensibility, and the gameness of a fowl depends largely on the function of certain glands which have identical effect upon the nervous system. During a fight, a cock, dog or man, may not feel any pain, as the glandular segregation has such effects upon the nerves, or otherwise, the irritation of such nerves that cause a being to fight are affected to such a degree that the reaction to blows or cuts, normally painful, do not cause the corresponding nerves to react. This ability is stronger in some individuals, that stand a lot of punishment without being knocked out. Others, contrarily, go down with the slightest touch and die from injuries that appear to be merely scratches. Such deaths are produced by sudden reaction of the nervous system upon the cerebral centrum, much as is the case with a sudden discharge of an electric battery. It may be noted that when a fowl gets its neck wrung or completely cut, it struggles vigorously for quite a while, though there can be no feeling of pain. In a fight, cocks are killed by a single and minute cut lightening-like, producing the most spectacular knock-out imaginable.

There are also nerve-nodules (gangliae) intersected in the nervous system; the size ranging from that of a pin-head up to that of a lentil. They are numerous in the vegetative or sympathetic nerve system, which is for this cause also called the gangliar system. They exist also in the cerebro-spinal system, forming small nervous centres which influence upon their ramifications, much as does the brain and spinal cord. It is obvious that such spots are extremely delicate and when injured they may cause a partial paralysis of the affected organ that is extremely dangerous for the game cock so affected.

Nursing cocks injured in the nervous system can only

be effective either by soft massage or application of heat. Indian cock fighters resort to both with greatest success and they do not attend a fight without taking with them a small cushion filled with a special dough kept very hot. Local application of ether, may help, but is not as effective as hot fomentation.

Nerves play a much greater and more important part in the fight than muscles, as the latter are useless if the nervous system does not its full share. Powerful punch, nervous punch, speed, retaliating, clever footwork and almost every phase of a fight depends upon nerves and their perfect control. It stands to reason that shy, frightened or ill treated cocks with their nervous system run down or worn by abuse will go badly handicapped to the pit. Caucasian birds are most generally of a nervous disposition and difficult to manage in small runs. They want to enjoy liberty and only become nervous when walked in runs where people enter frequently and tamper with them.

A grand country walk is, therefore, primordial condition to make a cock. Muscles can be produced by judicious feeding, but nerves are made and tempered in the country walk. Orientals are, by their natural constitution, of harder temperament, suffer confinement better and become extremely tame. They may be pen or coop-walked if country walks are not available, but require much exercise to avoid internal fattening, to which they are strongly liable.

GLANDS. These are organs which produce specific segregation in the body. Some of them produce minute quantities of liquid that perform important functions in the organism and others eliminate toxic materials from the blood. Such are known as true glands, as the salivary, kidneys, liver and pancreatic glands. Others merely transform the blood and lymphatic juice, as the spleen and lymphatic glands.

The function of glands is not entirely known, but, recognized as of greatest importance, they are objects of the most intense study. A modern branch of medicine is based upon gland segregation and decrepitude has been actually cured by grafting juvenile glands into old organisms. Operative removal of some glands show marked change in the body and may even prove fatal. Injection of gland products into a diseased body cause beneficial reaction and sometimes leads to a complete cure. We are on the verge of great discoveries, but as it is not our intention to treat the subject deeper than necessary we give a list of the principal glands in the following lines.

Bursa or Fabricius Gland: This is a sack-like organ placed just above the cloaca in chicks and embryos. The inner surface is lined with glandular tissue. Removal of this gland causes the chick to stop in growth and finally die. When the chicks reach maturity the bursa shrivels and ceases its function.

Intestinal Glands: These are very numerous and mostly all connected with digestive functions. Disorder in them, caused by toxins, cold, etc., cause immediate bowel trouble.

Liver: This is the largest gland composed of two lobes, right and left. In the right lobe the gall bladder is imbedded emptying the gall into the duodenal loop by a duct. An important product of digestion.

Pancreas: Intestinal salivary gland, emptying into the duodenal loop to which it is attached. Also important for digestive process.

Spleen: A large gland, which apparently regenerates the white blood corpuscles but otherwise of unknown function and importance. Disturbances operate on the mind through the blood. Cocks that become stale in coops show a diseased spleen.

Thymus Gland: Present in young birds. During the

growing stage, this is the most important gland being intimately related to the sexual apparatus. The thymus gland influences growth until sexual maturity has been reached. When the sexual glands start their function, the thymus shrivels or disappears. Its absence or disease lessens nerve and muscle action and retards sexual development considerably. When the sexual glands are removed the thymus grows enormously large.

Carotid Glands: Abundantly supplied by blood-vessels and placed at base of the carotid arteries.

Adrenal Glands: Or Suprarenals. Located just before the kidneys. Their function is unknown. They produce two opposing secretions (hormones),—adrenalin and cholin. When the adrenal glands are removed, the absence of adrenalin causes nerve and bowel trouble, accompanied by physical and mental decay. Convulsions and death follow. The adrenal together with sexual glands, influences feather growth. Diseased suprarenals in females cause the ovaries to degenerate and make her assume masculine characteristics. Reversion of sex.

Sexual Glands: Ovaries in the female and testicles in the male. Their soundness is all important in breeding. They produce germ cells, sperm and ova and besides segregate mysterious matter that form the character of the individual. The fighting spirit and gameness are direct reflections of the sexual glands. Uncontrollable inclinations of the sex are due to the sexual hormones generated in these glands, and affect the whole life. Love and hatred, the greatest joy and the greatest misery of life, are affected by their segregation. Their influence upon the brain and general mentality is constant, of greatest benefit in the normal individual and of fatal effects upon the degenerated. Their size does not warrant any quality, but too small and too large glands cause specific mental abnormalities.

Injuries to any gland impair the general health. Their

disease is inheritable and being strictly connected with the nervous system, it stands to reason that stock injured on either should never be used for breeding purposes.

EYES AND EARS: Both are fundamental organs of basic sense in fowl. There are animals like the dog, horse, elephant, etc., that depend upon their olfactory senses for orientation in life. Their eyes are, comparatively, of secondary order. The acoustic organs, however, are generally well developed in all, the reason being that they are the seat for a most important condition in all moving beings, the equilibrium. Just how a cock needs this in his entire life, nobody but the cocker knows best. That is why game fowl have so highly developed and most excellent auditory organs.

Bankivoids have excellent day eyes but their ears are not so sharp. Malays go to bed later, (being able to see in the dusk), but have not so good day-sight. Instead, they have very sharp ears and usually take a notion by acoustic means before they have any chance to see the source of certain noises. When a cock crows in the neighbourhood, or a dog barks, the cock under observation knows exactly where the individual stands.

This notion has been given the cock to keep at convenient distance, one from each other. When kept in pens cocks show discomfort and fury when another, newly introduced cock, crows or talks in the neighbourhood, though they may not see it. It takes some time until they get accustomed to each other's challenge, but some cocks never conform themselves.

Again here is a difference between the nervous Caucasian and the tranquil Oriental; the latter seeming less affected by a rival. A cock learns from the talk and noise of the hens in the neighbourhood when they are approaching the laying period, and of course tries to get at them. On learning that he is imprisoned and hearing that another cock is attending to those hens he becomes furious

or nervous, a state of mind that must be detrimental for a fighter. Many are the experiments that we have conveyed towards obtaining security that cocks, especially Orientals, get their orientation by the auditory way, whereas Bankivoids are liable to fly up somewhere and survey the field with their eyes.

We have come to the conclusion that in either sense, both Caucasian and Orientals are highly developed. Barndoor fowl show here also, the signs of degeneracy. The habits of a cock are a logical effect of its anatomy. This is somewhat difficult to learn, we agree, but at the end it spells full understanding.

BREEDING STOCK

It needs not special mention that between just poultry breeding and breeding Game-fowl there is a world-wide difference. For the poultryman a gamecock is just a gamecock, and when he is taught that there are numerous and definite breeds with numberless varieties he will be blankly surprised. It is queer how, outside the cocking fraternity, ignorance abounds surprisingly with everything concerning Game-fowl.

The cocker does not limit a variety to a standard weight or size, but a cock tipping the scales at six or more pounds is termed a shake-bag or shake. Size differs all over the world, just as the preference towards large or small cocks. We shall deal with the item "size" in the description of the principal breeds, in detail, wherever possible.

MATING: The first step in breeding consists of mating, that is to say, to put males and females together towards producing offspring. This sounds very easy, and in fact, for ordinary purposes it does not require any preparation. But the game breeder must be exceedingly careful that both parents mated really have the power of transmitting desirable qualities to their offspring. To know if they will, it is necessary to observe one's fowls for several years at least, and even then failure may ensue by any of the different causes that govern scientific mating.

We must bear in mind that fowl, as any living creature, has been produced by parents, that in their turn, and to their ancestors ad infinitum, have equally been produced by the same process of breeding.

Each individual develops from one single fertilized cell that carries material from both parents. As such, this cell, or ovum (egg) has forever been charged with parental hereditary material, and in consequence, the

resulting offspring is directly related to their ancestors by this chain of original germ cells, that constitutes the foundation of the individual.

Heredity is supposed to be transmitted by minute granules or rods, of even number, in each cell, the mass of which is called chromatin, while each rod is a chromosome. A germinal cell is a capsule containing plasma and in the center of which lies the chromatin composed of an even number of chromosomes. Fecundation is effected by the fusion of a female with a male cell. One would believe that a fertilized cell would double its original number of chromosomes. This is not so, however. When the cell is ripe, the chromosomes form and divide each in two. The cell divides also forming two out of one. Then both cells are of equal value again, but only with half the amount of chromatin. This division, as it is related to the quantity of chromatin, is termed *quantitative division*. The resulting two cells do not stop at that. The halved chromosomes form again, and instead of splitting, separate in two groups, each with half the number of chromosomes, causing the cell to again divide in two new ones, each of which carry half the number of hereditary rods. As this division is related to the general quality of the chromatin, it is known as *qualitative division*.

One original cell, in the female, has thus divided into four, but not all of them may become fertilized. In fact, three of them remain stunted, and are called "Polar Bodies," their function being to stimulate the orientation of the last resulting, real germ cell. This then is a capsule containing half the original quantity and half the quality of the undivided cell. The same division takes place in the male cell, with the difference that all four attain equal fertilizing value, and are all used in fecundation.

Fecundation, as said, is the fusion of male and female cell. The male cell grows a caudal appendix which serves for locomotion. As such it can travel in search of the female cell which does nothing to meet the male sperm. When both halved cells meet, the chromosomes of both oppose each other in an attraction vertex. The capsule gives way and the contents of the male cell is emptied inside the female, which henceforth becomes fertilized and may develop into a new being. The yolk completes its formation and is expelled from the ovary falling into the oviduct, where the egg is completed and finally sealed by a shell. It so is laid by the hen, ready and complete, nothing can be added to its enigmatic contents, as all the necessary elements to start a new being are there. How this new being will result has been already determined by the order and quality of the parental chromosomes.

BREEDING STOCK.
Hatching nest. No floor on bottom. Top
can be conveniently covered.

It stands to reason that the better the parents have been selected, the better the offspring should come. Speed, punch, temperament, gameness, etc., are not inherited as unities of such, but are the result of anatomical structure. They are not primary causes, but effects of the corresponding organism. Consequently, we may expect qualities, if they have been present or extant in the parents, in the desired degree. But we have learnt that each cell undergoes double division, quantitative and qualitative, so that the transmission of parental qualities, through the chromosomes, cannot be relied upon entirely. The desirable chromosomes may

have gone astray in the polar bodies of the female or in the lost sperm of the male. To know if certain qualities will be transmitted with any degree of certainty it is necessary that such qualities should be present also in the grandparents, and to be surer still, in the whole line of ancestors. It follows, that selection of desirable qualities must be constantly practised from generation to generation, and where this is done, the breeder will experience no difficulty in finding out that the females come much more even than the cocks, and become finally so perfectly selected that all are about equal in breeding value.

Cocks always show a tendency to vary, due—there should be no more doubt about this—to the erratic use of one of the four divided sperm cells. That is to say, any of the four resulting mature sperm unities may be used in fertilizing an ovum, so that two full brothers may be absolutely different in their qualities.

Patience and persistency in selecting a desirable breeding type in your stock will lead you to desirable results after all, though there are all probabilities that if you reach your standard for hens in four generations or five, it will take you about four times as much time to reach the same standard of perfection with your male line. Of course you may be one of those lucky breeders that hit the nail with the first blow, but let nothing lead you to believe that luck will cling to your breeding operations, just that easy. In the long run, only the deserving have luck, and believe us that long experience and serious investigation and observation of irrefutable facts lead us to advise you that no honorable breeder should let luck take any part in his breeding operations.

Chance plays an unavoidable part anyhow, as nobody can state definitely whence his breeding stock came from. But as soon as you have tolerably selected and pure breeding stock, stick to it, for all they are worth. If they are not as good as the high standard desired

for the pit, which is a serious matter despite what all detractors say, better scrap your stock and get reliable breeding stock elsewhere. Whatever the price of good stock is, as soon as they reach the high notch of sufficiency, they are valuable animals produced with greatest luck or care, and we quite agree that many specimens, especially breeding hens, cannot be paid decently even if counterbalanced with money. One must wonder how some breeders can depend on pit-cock breeding as a business, facing the competition of hundreds, like him, who fight for lower prices and rates, and we believe that the newer time, in which everything appears to have a market price, is responsible for such an unsatisfactory state of affairs. Nobody but the breeder knows exactly what his cocks are worth, and by a breeder we mean a man that has stuck to his strain in all its purity and has not been led to cross for obtaining higher quality. Of course crossing may be resorted to earlier or later for some convenience, such as originating new strains or imparting vigor to a weakening strain, but those who have neither the experience nor sufficient knowledge should keep their hands off.

We have seen what selection means, based on the technique of cell division, and which in fact comes to the bottom of the secret of success, which in its shortest way spells *inbreeding*.

There is a difference between disorderly inbreeding of nearly related stock, and scientific inbreeding on approved lines. If carried on properly, there should be no deterioration in the offspring by inbreeding;—but, as in every phase of natural laws, *order* is the prime condition. We have evidences accumulated in cock breeding and breeding different domestic animals, that the highest prepotency, or power to transmit individual qualities, is attained only by constant and judicious in-

breeding. Such is the case with racing pigeons, pit-dogs, horses, cattle, sheep and swine.

Furthermore, there are evidences that wild animal species which show a remarkable uniformity, are the more uniform the more inbred they have been. Where outbreeding is resorted to occasionally, naturally variation sets in, producing varieties and sub-varieties that are the direct effect of cross-breeding.

When fowls are bred in, it can be done in two forms:

1. In vertical sense. i. e., from parents to offspring and grandparents to grandchildren, or
2. In horizontal sense, i. e., from sister to brother or inter-cousins.

Some recognize also a diagonal line, i. e., from uncles to nieces,—but on observing carefully,—in *inbred* stock it always means a combination of both.

The offspring always carries one-half the blood of the sire and dam, and when either is bred on the offspring there is always that other half blood of the other parent to counterbalance the effects of too intensive inbreeding.

When the blood in two mates is alike, or nearly alike, it terminates that the chromosomes in the germ cell cannot come to order, which finally means *sex determination* unsettled. The result is, total (very seldom), or partial hermaphroditism. In such specimens, though sometimes the external characteristics show as either male or female sex, the glandular system is unsettled and incomplete. Consequently the gland segregation is insufficient and general weakness, or scant growth is the result.

Nature goes a step further and trying to eradicate constitutionally inefficient specimens, punishes this abnormality with reversion to mediocrity, giving place to a series of malformations that should play havoc with

the stock in a short time. Loss of color is one of these tokens and in Game fowl, cocks that are too finely bred, that will stand any amount of cutting without fighting back. Incomplete sex or partial hermaphroditism is the result of disorderly or horizontal inbreeding. It is almost as bad as crossing out, and should be studiously avoided wherever possible. There are many theories pro and contra inbreeding, which all we have observed carefully. It appears that in some animal species, nature provides for means towards avoiding inbreeding, but we have a notion that when this happens the corresponding species has reached a

BREEDING STOCK.

Different types of sires. a. Low stationed Oriental. b. Low stationed Caucasian. c. Close-heeled high stationed Caucasian. d. High stationed Jap.

higher degree of organic development, and Nature finds it necessary to cause variation by out-breeding. Our knowledge of wild life, however, is so restricted, that we cannot judge every phase of it, but we may assume as pretty sure that wherever a species is evolving towards a high standard of uniformity, inbreeding in a vertical direction is resorted to, but as soon as the standard is reached, nature provides for outbreeding

with a tendency to divide the species in varieties. The latter form always happens when an animal species is preparing to scatter over large areas.

The secret of uniformity in breeding, considering the mechanism of chromosomes distribution, is undoubtedly revealed by breeding in on the vertical system.

It stands to reason that constantly inbreeding in this form, will finally fix any characteristic, good and bad ones. It closes hermetically,—the whole,—from introduction of any outside characteristic, and further improvement will be rendered impossible. It follows that the chosen stock must be of the highest order and the breeder who is going to inbreed his stock for uniformity must be tolerably sure of the stock's characteristics.

After several generations,—there is no fixed number to it,—the offspring will show a marked uniformity of type and qualities, yet, some other fancier may have stock of superior order, and you want to improve your own. Here is a simple example: If your stock has been strictly inbred, your breeders must have acquired that much-desired prepotency, or power to transmit regularly desired quality. Possibly the other fancier will have inbred his stock to the same effect. Then you cross with two different elements that have about the same degree of prepotency, and if you do not obtain fine results from such a mating, your luck is rather low. All probabilities are that you will succeed, but we must bear in mind that the dynamic in cell division is not known sufficiently to be actually controlled, and things take a course that we never had reason to expect. Dormant qualities, from ancestral strain, suddenly appear and surprises of all sorts may puzzle you, but in the main, if prepotency has been attained in *both* parents, you cannot go far wrong.

This is simply showing you how variation takes place by cross-breeding or breeding out, and in fact the only

item that speaks in favor of the system, is that cross-breeding doubtless imparts vigor and vitality to the offspring, while degenerated fowl, by inbreeding horizontally, may be, likewise, regenerated with just one outcross. The latter fact accounting for the fact that there are so many breeders who advocate the system and who become naturally convinced of the excellency of it. But, prepotency, as a positive power in breeding operations, can only be attained by methodical inbreeding in vertical sense.

TYPE AND COLOR: Uniformity, physically and mentally, will, in due course create a type. This type is composed by the symmetric and harmonious proportions of the whole body. Atrophy in some organs and hypertrophy in others,—we have learnt,—is due to defective glandular function, the segregation of which will affect growth correspondingly. We have reasons to believe that abnormal feather growth is controlled by glands which are stimulated by external causes. This is so in most animals and especially visible in the species inhabiting regions where extreme winter colds give way to hot summer. The most interesting feathers in cocks are those known as sexual, i. e. neck and saddle hackles, wing butts and tail. While these are profuse in the pheasant type Sumatra, middle in the wild Bankiva, they are decidedly scant in the Malay. We would deduce therefore, that the difference in those three types would be the effect of difference in some specific glands and due to external influence. This is effectively so, as profuse feathered fowl have very large adrenal glands, while they, as the testicles, are comparatively small in the Malay, which takes also more time to reach full maturity, and enjoys a longer life.

It appears that the adrenal glands also control the color scheme, and the "Gallus Morio," Sumatra and their offshoots, which have very large adrenal glands

are sometimes tinted black even as far down as the bones. It stands to reason that birds which necessarily must exert this and other glands to their utmost efficiency, while producing feathers and color, will feel rather weakened at moulting time. Again here we have the evidence that heavily feathered and brightly colored birds have a heavier moult, than those with scant plumage. The Malay does not resent the moult and its fighting spirit is not broken during that period, but Bankivoids and full feathered slasher fighters become really sick and if not attended to carefully, even die.

We have learned why the Bankiva as flyer has more and needs more feathering than the Malay runner and consequently, their type must be entirely different following a logical reason. Accordingly, what is the ideal type of the one species, may prove wrong in the other.

The breeder, looking for his ideal type, must therefore conform his aims towards what he wants or must produce. Moderation in every sense is the golden rule. In younger years, we were aiming towards producing a giant fowl, not for the pit, but for the satisfaction to see how far nature allows a fowl to grow. We eventually succeeded in producing birds tipping the scales at 18 pounds, when we learnt, by actual experience, that Japanese Game fowl, of this weight, were by no means so scarce. With advancing age we learnt that no extreme is of any good in the long run, and there should be no doubt that for game fowl, extremes in size are accompanied by sluggishness and failing nervousity.

There will always be some breeders who advocate breeding shakes, and there is no earthly reason why they should not do it. It all is a matter of personal taste, and when we learn of the extreme superiority of the French shakes, we have to leave the item of size entirely to the prevailing natural conditions.

It is not size, but type, that makes a real fighting

breed, while color marks the variety. Though, in cocking circles breeders care not a fig for color, we eventually will learn that uniformity of quality generally goes hand in hand with an even color scheme. This means that in high-bred and selected stock, color should be watched with the interest it deserves.

BREEDING GROUNDS: We have pointed out that fowls have highly developed eyes and ears, their orientation being accomplished by either or both. That the ears still govern the mind when the fighting cock has been accidentally blinded, may be learnt by observing that the poor blind one is able to pick his corn up when he can hear it dropping to the ground.

These organs give us an idea of what grounds they will want for ideal breeding. A barren yard or run and enclosed sleeping quarters are, to our ideas, bad enough. Whenever possible we keep bamboos and other plants inside the runs. Birds love plants and feel happy in their proximity. It would be ideal to have them run at ease and complete liberty, but mating requires having them confined. That is why we cover the wire with vines and put plants inside the runs. It can be done with little cost and besides gives your runs a touch of poetry, that if not of practical use, will appeal to your mind. Besides, where there are plants, the soil must be worked, and breeding pens require that the earth be renewed at least four times in the year.

The soil upon which fowls run becomes stained, and in the course of years is the cause of many diseases through emanations. A fowl has its respiratory apparatus only a few inches above the ground and must inhale its vapors. Roup comes from foul grounds.

The remedy is very easy and consists in digging the earth as deep as a shovel will permit, and wherever possible, the upper layer should be removed and used in

the garden, while garden earth or any fresh earth should be spread on the runs. By this simple method, we are able to record a seven years use of the same runs, with not a single case of cold or roup. Removing and changing the earth constantly, is responsible for the destruction of parasites also. The breeder who has but once observed the general happiness in the runs, when the soil has been changed, will resort to this method constantly, if not hopelessly lazy or otherwise hindered.

Air, sun, shade and protection against bad weather, are important items, and great liberty is allowed to the inventive mind to provide for same in the most efficient way. We should, however, never recommend keeping game fowl inclosed in sleeping houses. Contact with the air always proves beneficial, and if the sleeping quarters are protected from draughts and the fowls liberally fed, they will not suffer in cold nights so long as the quarters are dry. We have had not much experience with snow, but have seen perfectly sound game-fowls sleeping under a miserable roof up in the mountains with a four-foot snow on the ground and a freezing wind blowing constantly. We have also seen fowls sleeping on a fence with two inches of snow upon their backs. It is all a matter of custom, and the more rugged your fowl, the better they will stand any sort of peril. Coddling has never proved to be of any advantage to a fighter, whether cock, dog or man;—but hardiness is positive strength.

EGGS: When your stock is selected and uniformity attained, you may run the cock with a certain number of hens, preferably no more than half a dozen if the run is fairly large, but if you are not sure that you will identify the eggs of every hen, you better resort to single mating, i. e., keep the hens apart, introducing the cock to them as soon as they have laid and you

know that the oviduct is empty. Keep the cock in a comfortable coop in sight of the hens, (if you want to breed from this one specimen only), and feed him liberally as advised elsewhere.

Collect the eggs daily, handle them gently and keep them clean. If necessary to wash them, do it in lukewarm water and dry afterwards. Mark them at the big end with signals of hen, cock and date of laying. When the chicks come out, the big end of the egg,—where the air space is,—mostly does not get crushed and you can see what chicks you have. Besides, marking on the big end cannot affect, even when using penetrating and poisonous ink, the contents of egg, and this is the portion that hens touch at least, so they won't efface the marks.

Do not keep eggs enclosed in boxes and, though they will stand storing for a few weeks, it is sound practice not to store them any longer than a week. Eggs lose some of their internal moisture by evaporation, and just a drop of water lost may impair the embryo's strength fatally. Hens usually lay their eggs on, or very near the ground. Even flyers do not make their nests upon a tree. This has been observed on most prolific mothers. The reason is this: A nest in a dark cool place is not subjected to air currents nor exposed to sun rays. Both cause evaporation on the soil and consequently on the eggs. As prolific layers have to wait a week or two, until the batch is laid, it stands to reason that provisions against evaporation must be made. If you scratch the soil near a grouse's nest, you will find moisture one-fourth of an inch under the surface. Birds that lay only a few eggs, pigeons, etc., are careless about their nests. Other birds make elaborate, isolated nests to provide against evaporation.

Light is another factor, the more so as it is mostly accompanied by some temperature. Prolific layers are

careful not to expose their eggs longer than necessary once they have started hatching. Embryos are heliotropic, i. e., they orientate their position "in ovo" according to the light source. You can have this demonstrated opening an egg. The chick may be very small, but the eyes are almost complete and enormously large. During the hatching, the embryos are kept in complete darkness, unless the hen raises to take a little food and water. This is the moment when the embryo gets its orientation from the light and turning its body conveniently assumes a position that is initial for the current day of incubation. If you open all eggs carefully after the cluck has been off for 20 minutes, you will find all embryos in the same position, and the eye near the surface, larger than the other. Effect of the light. When the cluck goes on her nest again, she turns the eggs slowly, and the embryos being without the light orientation, also turn round and get the benefit of even incubation. The heat source being above, the lower portion of the egg naturally becomes much cooler.

From the above observations the reader will at once note that most, if not all incubating apparatus are wrong from the very beginning. Their thermal and mechanical appliances may seem very efficient, but only very few eggs get a normal chance of producing sound chickens. In fact, many malformations of embryos are due to inefficacy of the artificial method. We have conducted hundreds of experiments and are fairly sure that a good incubator can be turned out and would suggest that interested readers should get information before building any.

For breeding game-fowls of the highest order, the breeder must rely on the old efficient cluck, but it would be necessary to observe the fundamental precautions to give the embryo a full chance to start its life.

1. Do not use any but normal sound eggs, clean and fresh.

2. For the nest select a place, dark, cool and clean. If the ground is soiled take the precaution to dig a little depression and then cover it with a few shovels of clean, damp earth.

3. Level this earth with your flat hand and sprinkle some handfuls of chaff, which is better than long straw. Then make a slight depression in the middle so that the eggs roll naturally to the center.

4. Cover the nest with a box of liberal dimensions to allow the hen to stand up and turn round.

5. This box should have a door to let the hen in and out at one side. It is necessary to close the hen up the first few days until she gets accustomed to her environs, which may seem strange to her at first.

6. The top should be slatted or covered with a screen to allow free passage of air and light and if rain is expected provide for a roof.

7. When the whole is set, place a few twigs and a bunch of straw on top of nest, and cover the sides with earth. The object is to provide a cool and isolating room.

8. Place the eggs in the nest. A dozen is quite enough. When the night arrives take the cluck and place her gently over the eggs and shut the door.

9. Do not touch hen or eggs the following day. She does not need either food or water, but complete silence.

10. The second day, you may open the door. Give a handful of corn a yard away from the door and place a water fountain. Watch the hen if she goes to bed for herself or needs to be closed in again. If she takes her nest for herself, after some minutes, the hatch has all chances to come out perfectly.

You must provide also a dust bath for your cluck. Dig a hole one yard square and 10 inches deep. Cover

it with very light earth or dust. Not sand. You may add a shovel full of fine cinders.

Nothing more is wanted!

When you feed your cluck, take care to give her the corn counted and next day deduct the number of seeds she has left over. You will be astonished how few she eats. Provide cool water liberally. Every three days give her a meal of chopped onions and garlic mixed with bran. Also morsels of stale bread.

During hatching time keep cocks away from the cluck's run, and any other hens and chickens that could molest her.

By nature, hens hide their nests and seclude themselves completely. When they go broody they eat very little and appear starved. The provision is to make them feather-light. During hatching, hens scarcely sleep and become lighter towards the end, as the shells get thin and fragile. They are so, much better mothers than the gluttons that clean up every morsel on the yard. Besides,—if the hen eats too much, the fecal matter gathers in the cloaca in large amount, which can be judged by observing her evacuation when she rises from the nest. If the run is small it is good to remove her droppings daily, as they are emanating offensive gases.

You will expect your chicks on the twenty-first day. Some breeds take longer and others less time. Leave the cluck in peace until she creeps out with her brood. Of course, as soon as the cluck is accustomed to her nest you have left the side door permanently open, unless you are afraid of rats during the night.

From the nest remove shells carefully and keep them until you are sure that you have the number of chicks that actually hatched out. One may be missing or dead in some corner. Take the remaining eggs out and open carefully. You will find clear eggs, and embryos that had not the strength to come out. Check such

cases with the marks on the big end of egg. It will reveal to you the story of failures. Study from them and you will learn a lot, that even old hands do not know.

Do not use fresh clucks or hens that are just starting to go broody. They will probably lay one egg more, the so-called cluck-egg. Old hands fancy that cluck eggs produce dunghills. At any rate they are abnormal eggs, and you cannot afford to take any chances. We have experimented with cluck eggs. Cocks hatching out sometimes appeared quite normal but hens from such eggs are strongly inclined to go broody and become very good mothers. It is best to have none of the sort when you are careful about the quality of your stock.

To the cluck and chicks provide ample space. Do not go and overcrowd your yards. During the first weeks keep hen in ample coop over soft and dry soil. Later on, let her run at ease.

Overcrowding is the chief source of disease and degeneration, and the main cause of production of dunghills. Nature keeps fowls fairly distant one from each other. Do not go and contradict her.

BREEDING CHART

The accompanying chart shows the effect of inbreeding, so far as blood proportion is concerned.

No. 1 is the Male (M) ; No. 2 the Female (F) ; and No. 3 the Offspring (O). On mating 1 and 2 the Offspring shows $\frac{1}{2}$ M Blood and $\frac{1}{2}$ F Blood.

Breeding back No. 4 generation to the Male No. 1, the resulting offspring will be as No. 7, $\frac{3}{4}$ MB with only $\frac{1}{4}$ FB.

Breeding back No. 5 generation to the original female No. 2, the offspring will come $\frac{3}{4}$ FB with only $\frac{1}{4}$ MB as No. 8.

Further inbreeding generation No. 7 to the male, will result in offspring carrying $\frac{7}{8}$ MB and only $\frac{1}{8}$ FB, as No. 10.

Breeding back generation No. 8 to the original dam No. 2, will give offspring carrying $\frac{7}{8}$ FB with only $\frac{1}{8}$ MB, as No. 11.

Breeding stock from generations 4 and 5, or 7 and 8, or 10 and 11, will give offspring identical in blood proportion to No. 3, as illustrated in Nos. 6, 9 and 12.

Vertical breeding from offspring to original sire, will rapidly accentuate the proportion of the male blood, while the same operation on the vertical line of the female, will accentuate the female blood. The vertical M line is the masculine strain and the vertical F line the Female strain.

If specimens of any generation are bred in horizontal line the result will always be $\frac{1}{2}$ blooded stock, v. gr.: (1+2=3) or (4+5=6) or (7+8=9) and (10+11=12).

As a cock will seldom be used in the pen more than three generations, the strain is restarted with one of his $\frac{3}{4}$ MB or $\frac{7}{8}$ MB for males and $\frac{3}{4}$ FB or $\frac{7}{8}$ FB for females.

It stands to reason, that whatever the blood proportion

BREEDING CHART.

Breeding chart showing blood proportions.

is, the breeding stock will be selected according to a certain standard of quality and type, and wherever possible, also colour will be considered. Specimens falling entirely or partially off the line must be watched carefully as they not seldom show extraordinary qualities.

In advanced inbreeding off-specimens come but very seldom, type and colour becoming now fairly regular.

REARING CHICKS

About the twenty-first day of incubation the embryo inside the egg has finished its development and has been provided by Nature with a tool to break the shell. This tool is a hard point or horn on the little beak. Many writers on the subject have supposed that the chicks strike the shell with considerable power. This is wrong. The normal chick simply stretches a bit and the point coming in contact with the shell, which in the meantime has become extremely fragile, breaks it. Following the normal turning round a vertical axle of the egg, and continuing the same movement the chick breaks the shell in a line around, and growing stronger, his stretching movements finally lifts the upper portion of shell.

The natural seal over the egg is broken, and the way into life is open. The chick turning round in the shell has twisted the cutaneous connections from the umbilicum (navel) to the outer membrane lining interior of shell. By this twisting, the blood-vessels that approached the outer shell, serving as respiratory means, are strangulated at the same time that the tiny lungs start breathing directly as soon as chick breathes the assimilation of the yolk is effected, and consequently this process,—a combustion,—leaves refuse, which will be found invariably, in normal chicks, in the form of dark excrements and whitish urinary discharge. The amount and condition of this discharge, as well as the condition of the blood-vessels inside the shell, tell us exactly how the health of the newly born chicks is. Greenish or yellowish discharge is a sure sign of pre-natal constipation which most generally also affects the lungs. Keep your eyes upon your chicks, and when you see some of them moping around and lamenting, show your true human feelings and strike them off as early as possible.

No chick lamenter will ever become a breeder. No nursing, no doctoring will ever cure them. They may grow and apparently recover, but some day may pay you back what you have sinned against a natural law that provides that the weak and miserable should vanish from the earth.

It sometimes will surprise you to see sick chicks being born, when according to natural laws and your expectations they should be dead in shell, but the same Nature has given the chick a reserve power to counteract the evil effects of hard luck, and this brings out chicks, that eventually will survive, as indicated above.

The normal chick is a joy to behold. Generally wide awake and full of life. When you approach the nest, you hear the old cluck purring with great satisfaction, and not long after you see a downy little head projecting from her feathers with a pair of clear, large, inquiring eyes. Little jewels are these eyes, that must have made man feel happy from the earliest beginnings of civilization. And they come every year since, with the spring, renewing hopes and promises.

They have met the face of their masters in all parts of the world. The Filipino native, the Chinese, the Indian, the Persian, Egyptian and Greek, as well as all their successors, in all centuries gone by, have approached the nest of the cluck and have answered the inquiry of a pair of chicken eyes with a friendly, satisfied smile.

For thousands of years, every spring, the same thing. An extremely old event, and every time new.

It is good practice to induce the cluck to stay upon the nest until the chicks venture already a short excursion. Confining her to the nest by force will prove fatal for the chicks, if she is nervous or unwieldy, trampling them to death. The best practice is to leave in the nest one or two infertile eggs if there are not

such there already. The day before the hatch is due, keep the nest shut up, and cover it with a sack or rug. Darkness and stale eggs keep the cluck for one day longer in the nest with evident benefit for the chicks on a cold spring day.

Weather controls the management of the cluck as well as the temper of the latter. But whether the weather is good or not, it is wise to keep the mother hen away

REARING CHICKS.

Just out! They still show the horn tips, a tool provided by Nature especially for cracking the shell.

from trouble and other fowl, in a spacious sun-coop. At least for a few weeks, when the chicks have learned to roam and usually undertake excursions on their own account. If the hen is infested with parasites, the chicks will, as a matter of fact, also become infested, but if you have taken pains to keep your fowl clean of these pests, the cluck will be normally clean and will not infest her brood.

Most fowl have some feather lice, but never should be allowed to become infested. This case happens when they cannot free themselves while in the runs. Dusting hens with insecticides, always means some sort of maltreating them, so that natural means of disinfection should be provided. Here again the simplest and cheapest way is the best.

Keep a soft dust bath in every run. A box without bottom and cover, of liberal dimensions, will provide a permanent dusting bath. Soak the box with waste motor oil, painting it over and over again. Then place in some depression in the run. Put dust or very soft earth in the box, free of grit and sand. Sprinkle wood ashes upon the earth and turn. If your hens are already infested, it is wise to pour ordinary kerosene and a bit of carbolic acid upon this dust. Thoroughly mix the earth and cover with another layer of dry dust or earth. The hens will soon dust and keep themselves fairly clean.

Provide such a dust-bath near the cluck's nest, but do not pour any insecticide in the earth. Just keep the dust or earth soft and dry. At times renew the filling.

If you notice scab in your hens, grease them about head and neck. Vaseline is good, but any sort of mineral oil will also answer the purpose. If you notice scaly legs, at the first sign, lift the hen from the run, wash her shanks and paint them liberally with common lamp oil or kerosene. It is a radical cure. If the hen is hatching, keep her in a coop for a day or two, placing, meanwhile, another cluck over her eggs. Before placing the cluck back, clean her legs, as the slightest touch of oil will damage the embryo. If due to hatch soon, better do not oil cluck, until chicks are out.

Lice infested chicks may be dipped with oil, besides providing a convenient dusting bath.

Chicks like to scratch near plants or bushes where the earth is damp and soft, and insects likely to be found.

Some breeders like to feed the chicks from the first day. We do not, and wait full two days before giving them their first meal. If we had not found this system satisfactory, entirely, we would surely have adopted some other means and give consequent advice.

The reason is as follows: Chicks have absorbed the yolk into the intestinal tract, and have a lot to do to store the matter away properly. It takes from 24 to 36 hours until this has been accomplished, and any amount

SELECTING CHICKS.

If suspended by the nape as shown in Nos. 1 and 3, some will crumple up (1) denoting females; or stretch out (3) showing males. When lifted by their feet, females again crumple as in No. 2 and males stretch as in No. 4.

of food ingested during this time will retard the process. The best system is to let them peck upon clean earth at will, but not providing any food nor drink.

In the cluck's yard, where you expect the chicks to run about the first two or three weeks of their life, it is good to have placed a day or two before hatching

out, several bucketfuls of tender grass, with earth adhering. It is not the grass, but a great variety of little insects and worms, that they pick up from such earth. Renew this earth with grass almost daily. Such you will find upon every path in the garden, and if not, provide for same sowing timely. Barley and oats are very good for the purpose, but wheat, millet, and most any cereal is just as good.

You will come across some breeders that feed their chicks with boiled eggs. There is no earthly reason for feeding boiled foodstuffs to any animal. No food improves in its components by boiling. Contrarily, many vital elements, termed *vitamins* are actually destroyed by the boiling process. Boiling seeds destroys their germinal power, and that which gave the seedcorn its life—the embryo—is killed.

We know that the albumen of the egg, in a raw state is easily digested, but when it is subjected to heat it becomes hard and indigestible. When lime-water is boiled, the dissolved lime settles on the vessel that contains the water. It is a bad practice to eat boiled food, as many vital elements are killed and become useless. Man eats too large amounts of foodstuffs that are previously boiled, and consequently is subject to numerous diseases unknown among people and animals that eat raw stuff. When such people are subjected to a natural diet of fruit, milk and raw eggs, they never appear to be satisfied at first, due to the dilation of the stomach, which requires a good fill to appease the so-called hunger.

Feeding chicks on boiled eggs, milk and meat is absurd, but giving these stuffs raw is of immediate and high benefit.

They should be allowed to eat as many worms and insects as they can. They digest and assimilate them quickly. As a tonic, give them a feed of ground raw

meat mixed with any sort of cereal flour or middlings. Bran is generally and beneficially used for that purpose. Raw milk as a drink is ideal, but may be fed as curd, mixed with bran or middlings. The latter carries a lot of cellulose acting as bulk or ballast, that cause the intestinal glands to work and consequently develop into useful organs.

As soon as the chicks grow feathers and go roaming, give them a feed or two of mixed smashed seed. Corn, wheat, barley, oats and millet. Scant meals and often during the day should be the rule, rather than few meals with generous rations. What they eat in excess is expelled as manure and may cause bowel trouble.

Let them roam and work for their choice morsels, in the garden or runs, but if you have no such, then it is necessary to provide for exercise in a deep litter of chaff.

When garden runs are not available where your chicks may hunt bugs and worms, you can breed worms for them efficiently, in the following manner:

Flat boxes with sides two inches high are filled with bran and thoroughly soaked with buttermilk or sweetened water. Prepare one every day of the week. This means seven trays in constant use, so that it would be good practice to have the bottom made of zinc. Place trays in a room and let the flies gather upon them. Next day prepare your tray No. 2, and so forth until the 7th is finished a week later. Go on your first tray and you will find it filled with maggots. Dump the contents before the cluck, and within half an hour no worm will enjoy life any more. Take the tray and prepare it again. Next day empty tray No. 2, and charge it again; then No. 3, 4 and so forth, until you begin with No. 1 again.

At the end of summer you will have run short of flies in your house too. The other system is easier and

less troublesome, besides being the cheapest way. Dig a hole three feet in diameter in the cluck's run and one foot or two deep. When the chicks are coming out, fill the whole with fresh stable manure, preferably from horses. As in larger towns, horses are becoming scarce you may fill the whole with chaff or short cut straw. Dampen the straw with water and any sweet. Sugar, molasses, milk, etc. Let the cluck have access to this mine, and do not worry about what becomes of the worms therein. They generally mean rapid growth in your chicks. Observe your chicks in the garden as we have. They sometimes find a nest of any little vermin. You marvel what they are digging at, and you cannot see anything. Open your chick's crop and you will find them partially filled with little worms and eggs, scarcely discernible under the magnifying glass. You may wonder what varieties of little vermin there are in your garden, that you never saw before. Chickens have wonderful eyes, and can see with bare eyes better than you possibly can with best glasses. If you rear your chicks on a farm and have a big yard for them, have this worked before hatching and sowed with clover or oats. Dig a big hole in the middle and make here a heap of manure. Now and then throw water upon the heap. Your chicks will enjoy the worms, and you will get rid of flies. At one time we reared a lot of pheasants and about midsummer we had no more flies in the house. For delicate or rare birds, you can grow and breed flies under screens. This will sound rather absurd, but we were compelled to resort to this stratagem when we run short of flies feeding young pheasants.

You can substitute worms for eggs, meat and milk, but at any rate, feed them raw and mixed with bran.

Provide clean sleeping quarters for your chicks and never feed too near them. Have cool water plenty and "ad libitum" under some shelter.

If confined, provide ground charcoal and chick-grit liberally, in separate vessels. Instead of cleaning the ground with a broom, it is better to spray the soil with plenty of water and then work it over with a shovel as deeply as you can. Do not forget to give them a dust-bath and make them scratch and dig in the litter for every little corn they want. As in so many activities of man, the cheapest and easiest way proves here the best. Plenty of air, sun and liberty are the essentials. As soon as you must resort to artificial means of rearing, it means costly investments and complications without end.

By hand-feeding your chicks, you get them so perfectly tame that you may pick any off the ground and examine closely. We usually give the raw meat and bran mixture upon the out-stretched hand. They enjoy it immensely and as soon as the chicks see you coming with the daily ration, they will jump upon you and try to tear the morsels from your hand.

Tame chicks grow into fine pit birds. It should be a matter of fact to the breeder and rearer to grow the chicks tame as pets, so that when you put them on their walk to grow into shapely stags, you will know each of them by name, and will know what to expect when they come back.

THE FEMALE LINE

The foundation of breeding is the mother hen. She influences her offspring mentally and physically within wide ranges, as she builds the new being with material segregated from her own organism.

We have told already how the process of cell division goes on in the female. The original germ cell divides previously in two sister cells, halving the mass of hereditary matter (chromatin). In the final division,

again, the number of rods, which is always even, is divided in two new cells, which each contain half the number of chromosomes. One of the latter only, is used for reproduction while the remaining cells become stunted, acting as polar bodies. The reproductive cell is then fitted out until it reaches the state known as yolk, which is contained in the follicle. When the yolk is complete, the follicle bursts gradually and the yolk falls into the mouth of oviduct. Here it becomes fecundated in the form expressed elsewhere, viz.: the life male cell adheres to the blastoderm and empties its contents into the female cell.

Judging from precedence, it is almost sure that the opposing sexual matter start a struggle for position and sex determination, which becomes settled immediately if both parents are strong characters of their respective sex. That is to say, if neither has any tendency towards hermaphroditism.

The yolk proceeds forward in the oviduct and is not influenced any more by the male. The yolk is covered with several layers of albumen and finally closed in by a tough membrane, upon which lime salts are exuded forming the shell. On the well lubricated oviduct the egg is slightly pressed out of the oviduct into a chamber near the vent, called the cloaca, and from here expelled from the body.

All that the egg carries from the male is nothing but the minute mass of plasma containing the somes. Yolk and albumen, the material to construct the chick are entirely segregations from the hen, yet the fertilized germ cell carries all the hereditary matter necessary to make a new individual, similar to both parents.

The hen's duties towards the new chick are not finished with laying. When she steps into the nest to deposit another egg, she turns the previously laid ones,

so that they may be not harmed. Then she goes broody, and with greatest care and her own body temperature, she hatches the chick out during the three weeks required for that process. Then she goes a step further, nursing and protecting the chicks until they finally can take care of themselves.

The influence of the mother hen upon her offspring is at once apparent. It stands to reason that the breeder who aims at some degree of perfection in his stock must be exceedingly careful about the selection of his mother-hens. Any good game cock can fertilize satisfactorily the eggs of your hens. You can select your brood cock from the best breeding yards and can buy him for relatively little money. You can test your cock until you are satisfied that he is a true dead game cock. But in the mother hen only the true blood will tell. When her sons fight in the pit, they will behave exactly as the mother made them.—they will fight for her reputation.

The greatest percentage of breeders bestow great pains in procuring the best sires available, but let the females come as chance determines it. Very few very wise breeders go in for selecting the brood hens as they should. You can only try your hens single breeding them and keeping exact records of their sons' performances, and when you come across a true-blooded hen, do not hesitate to breed the choicest son back to his mother.

From the same mating you will save those pullets that are in type, color and mentality similar to their mother. Breed these back to their sire, as he was chosen as a true son of his mother, and try the offspring keeping exact records. Single mate wherever possible, in fact you should make it a rule when you are out selecting valuable brood stock. You will always find that in a batch of sisters, one will be better than the rest.

You must find out which, and stick to her as the producer of the highest quality.

Close inbreeding for dead gameness, which is transmitted through the female line, may result in your cocks coming seemingly slow. You can improve your speed within your strain, as will be explained further on, but you cannot afford to be without the deepest gameness, and be sure that you have it in your selected females.

Give your brood hens the best of life you can afford. They do not require to roam in freedom as the walking stag, but you must provide the best food and company for them.

Females are strongly sexual and henceforth impulsive. Their actions are instinctively generated by feelings and they need the presence of a male. They are amorous, though they do not show it. Just as most female beings. Nature made them so and provided that their actions be governed by their sexual impulses. Males are cooler in disposition and have developed a different brain. They act according to logic and the brains are stimulated by external impressions. Females act impulsively and their nerve centers are stimulated by internal impressions. They are closer related to nature and can by this fact not go over certain limits. The function of their sexual organs is constant from maturity to senility. The production of eggs is not affected by the will, but is more or less a constant rule. When time and conditions are there, the eggs mature and must be expelled. The sexual organs are in activity, the glands perform their function, and the female is under the rule of her sexuality by the law of nature. When the male is away from external impressions that should react on his sexual apparatus, the function of the latter is stopped and will not re-assume its activity until impressed externally by the

opposing sex. The male is sexual (strictly) in presence of the female only, the female is sexual even in absence of the male. When she is in her period of sexual activity she will be in love, imaginarily, and will act accordingly, though not always conscious of it. She will even deny the fact. A male must have positive reason for his sexual activity, and in the absence of the corresponding female, sexual gland segregation influences his strength and fighting spirit. That is why, during conditioning, cocks are kept confined out of view of the hens.

The hen, from the minute she has started to mature into a sexual being is constantly elaborating around her future brood. The food she ingests is turned into eggs, and consequently the blood vessels, and the nerves that feed the sexual glands and apparatus, are plethoric. She shows her state of sexual nervousity externally, by the bulging belly, moist vent, red head and noisy behavior.

Keep your hens true in blood and thoroughbred, and when you are sure that they are right, you can test any game-cock on them. If there is anything wrong with the offspring, you will be sure that it is on the cock's side and you can exchange him, but keep true to your mother hens. Gameness, mentality and fighting disposition are transmitted through the hen. How many times have fanciers tried to cross an Oriental cock on their hens with a view to originate a new strain. When this cross failed to come up to expectations, almost invariably the cock was blamed for the failure. But it is in the hen. If she is not true-blooded it will show up in the offspring.

We have shown that most Game-fowl are to a certain degree crossbred. It will show in the offspring when breeding out, but if they are pure, and you use a cock of the same strain, the chicks will come as their mother, surprisingly even.

We would advise never to introduce a dubious hen in your breeding runs. Watch her sons in a fight and test them after cooling down. It is all in the blood, and if a hen is capable of producing high quality sons—whatever the sire—she is a true-blooded mother.

Do not go and blame the cock if your stags disgrace you in the pit, as it is the mother's blood that shows up. But if you have true-blooded hens and you are sure of the fact, do not hesitate to make an experiment with a good cock you know. Stags fight for their mother's reputation. She gives them the fighting spirit, gameness and dogged courage. A good cock, through a true-blooded hen transmits latent powers to his daughters, and this will show the heir in their own sons.

If you have cocks and hens of true blood, stick to them and do nothing let you tempt to cross. Breed in and in on the parental line, and stick to your female line for improvement.

But if you have dubious hens do nothing of the sort. Better get rid of them as soon as you can. A high class cock means nothing if you have not true-blooded hens. They are the foundation of your stock. The cock is merely a breeding factor.

We have told in previous chapters how to breed in for fixing desirable qualities. We may add that the behavior of the cocks does not show the quality of their sisters. They fight for their mother's reputation, but when fixity has been attained in the cocks, you may rest assured that the females of your inbred strain are fixed also. As soon as your strain has reached the standard characteristics you were striving at, they will come even as peas in type, style and color. You will have assured prepotency in your female line. Your fighting blood is then fairly pure and you will have true-blooded mother hens to breed from with greatest confidence.

THE MALE LINE

To appreciate the mother, test her sons. You do not fight the hens as a rule; the cocks are there to fight.

You will observe it thousands of times when you visit a breeder's yard how the cocks are prominent. They will be shown to you and their records noted. The cock is an individual, a finished product, result of preceding breeding operations. The hens are generally flocked and are mostly seen in groups. Very seldom do you see the hens single penned, the cocks always are. They are the actual tools of your success in the pit. Many breeders select their stock based on the sire alone. The pedigrees are traced from him and his ancestors, and the breeding line established thus is termed the "Male Line."

We have said elsewhere that the female is even more important than the cock in transmitting breed or individual characteristics, and given the reason in the physiological process of cell division.

There are reasons for believing that the hen produces her egg based on more constant laws of biology, than the cock produces the sperm. The latter is segregated in fairly large quantities, there being thousands of sperm unities ejaculated in every copulation. Furthermore, the cock may serve a hen several times a day, enlarging considerably the amount of chance in the fecundation of the ovum.

The cell division goes on in such a form, that the original cell splits in two, and these again split in two, so that the original individual cell is divided in four sperm cells all of different breeding value. The cock has many characteristics of secondary sexual importance that are absent in the hen. Such are, the head-gear, luxurious neck and saddle hackles, sickle feathers on tail and the fighting weapons, the spurs. Whenever

a hen grows such masculine attributes, there is fear that she is becoming partially masculine also, by hermaphroditism. On the other side, in Game-fowl, it has been noted that hens selected constantly for their capacity in producing male characteristics, after long generations become overcharged with masculine hereditary matter and show it in their female offspring with above mentioned characteristics. Such hens are known as "male-bred." They are the result of selection on the male line. The females lose many of their sexual tokens and become masculine in appearance.

Breeding on the male line alone, will never, in a lifetime, result in even stock with any fixed breed or strain characteristic. Gameness fails here and there, and many are the strains so built up, that show a regular percentage of runners. In America exists hundreds of strains that are bred on the male line, it being obvious that these strains vary constantly in type and color. It is probably the cause why there is not a fixed type of American Game fowl that can be termed American breed.

Breeding on the male line, especially in cross-bred Game-fowl, is the cause of multiple variation in type and characteristics, and as the males are—as said above—prominent in the breeder's yard, it stands to reason that the diversity of the type found anywhere is the result of breeding based on the male line.

England had notable examples of remarkably fixed strains in years gone by; such were the Derby Reds, which all came out even as peas. Cocks of this strain were used here and there on other strains, the females of which were, supposedly, fairly inbred, and produced new strains; the Pyles for example.

So long as there was not alien blood introduced, the average type of Game cocks was notably fixed, and the

English Pit Cock was known throughout the world as fairly typical in type and carriage.

But sometime Orientals were introduced and it is fairly sure that the largest percentage used in breeding were cocks, not hens. That is why in English stock, we find several typical Oriental features corresponding to the male line. Such birds are entirely different from the original pure English Game which was pure Caucasian or Bankiva, as may be judged from numerous old pictures which have come down to us.

Wise breeders observe that breeding strictly on the male line may impair the deep gameness of the stock, but otherwise improve speed and ability. Our experiences point to the fact that all desirable qualities in the Game-fowl may be perfected and improved by breeding strictly on the female line and in and in along a vertical direction. We have an example in the true Arabian horse, which has been bred from time immemorial based on the female line. There are numerous varieties of domestic horses showing notable features, power or speed, but all in all, there is not a single individual that will turn out as much power per pound of horse-flesh as the true-blooded, straight-faced Arabian.

Another example of supreme quality may be observed in the Raja-Murgh or Asil fowl of India, also generally selected on the female line. No game-cock in the world is set to such a test of power, gameness and endurance as the little cocks of Lucknow and North India, as we shall learn further on.

Great strains of dogs, for the pit or field, have been bred on the female line, and wherever they have been subsequently selected on the male line, have deteriorated.

Of course in breeding any sort of stock, there must be male and female to produce offspring, and where these operations must be carried on in a fairly large scale as is the case with fowls, cattle, sheep, etc., there

are always probabilities that the female stock becomes fairly selected in the course of years.

But there is a difference between strictly selected female and male lines, and it is good to observe that fixity in type and quality are obtained quite easily, selecting the females and breeding them to their sires or sons for improvement, and that breeding on the male line will show great diversity in type and style.

We have a natural example on which we base our statements. All flocks and herds in wild state are conspicuously fixed in their characteristics. These herds and flocks, horses, sheep, hogs and all sort of birds, are composed of a vast majority of females, with just one or two males, which all are of one inbred family. The younger males are generally if not regularly born from the same flock or herd and succeed the old leader when it becomes too old.

The surplus of male elements in a flock are fought away and run astray becoming easily the prey of foes, and diminish.

The flocking inclination is inborn feminine and results from mutual maternal defense. When young animals or birds roam away, the females go in groups. Males go solitary.

And finally, the fighting spirit has been bred into males to separate them. Weapons were given them to keep them separate and at a fair distance. The male is an incidental fecundation factor in breeding, but the female makes the offspring almost entirely.

The male comes to the world with natural prerogatives, but must fight and play his life to put these into play.

The female line is the flock in Game-fowl and the male line its final product. Do not go and reverse this order.

TYPE AND STYLE

The type of a cock is expressed by his general physique and as such is the sum of muscular and skeletal combination. Consequently the type is merely an external feature, and obviously visible.

Style is the mental disposition of using the physical means in the fight, and consequently the expression of brain and nerve function.

A perfect fighting type cock may be rendered useless if he lacks style, but on the other side a deficiently built cock may possess a brilliant style that counteracts physical deficiency.

We have seen that Orientals, Bankivoids and Sumatrans, whether by nature or careful selection, have different anatomy and consequently possess different types and styles, that have warranted their classification into naked heelers, steel and slasher fighters.

In the naked heeler, type has a greater importance than style; in the steel fighter type and style must be even, while in the slasher fighter, style is of greater importance than type.

Breeding for type is naturally easy, as the selection is only governed by external features, and so we see many breeders in standardized poultry that have a well-delineated type, but which are not game nor have any style.

All recognized barndoor fowl breeds have been bred and selected according to type; and their varieties are identified by colour. Both, type and colour, have been generally fixed to such a degree that on seeing a specimen it may be immediately identified. The cocker has been a bit too careless about this feature (aiming at other results), giving type and colour only superficial importance. In England, breeders of game fowl—on the contrary—have paid so much attention to fancy type and colour points,

that their selection for the show coop have in instances seriously impaired the stock's utility for the pit.

Breeding for style is a much heavier job than for fancy points. Cocks must be watched constantly, and when desired qualities are attained, only judicious inbreeding is liable to perpetuate the style. Even so, divergences are frequent, due to the fact that both, style and type, are characteristics transmitted by the cock to the offspring, and we have seen that cocks are by nature not prone to attain fixity as soon as the hens, by the chance involved in the process of cell division.

Many breeders have been led to believe that breeding on the male line is safe enough, particularly noticing that type and style characteristics were transmitted from the sire to offspring, seemingly without interference from the dam. These features being easily visible are soon noticed and wrong consequences deducted, due to partial ignorance.

We may sum up the facts, that when in inbred stock, type characteristics are noticeable in transmission from sire to offspring (male) the corresponding dam has acted in latent but beneficial form. That is to say, the cock has shown prepotency, which is one of the features aimed at in selecting brood stock. If the dam is known to do her share, then the whole breeding is on a sound basis, and you may continue to inbreed judiciously.

It is well nigh impossible for a breeder to appreciate style and type if he is not a good judge of what a fighting cock should be. Many strains only identified by a more or less fanciful name, show such irregular style and type, that it can be only accounted for by injudicious judging of the breeding stock. But very few breeders are, at the same time, able judges, and believe they can make compensations for certain items, when other features abound.

Order is Nature's first law, and when breeding game fowl we must consider natural laws correspondingly, do-

ing each operation with forethought, logic and order.

A "*bloody heel*" is essential in every fighting cock. It is the instrument derived from type and style. Literally it means that the spur is set in such a way on the foot

that the point hits a mark at strict right angles. Such a spur is always dangerous. All the joints of the leg correspond mathematically to the position of foot. Bloody heeled cocks injure antagonists with almost every blow and if the punch carries power it is obvious that the point will penetrate the tissue. Dry heeled cocks are the contrary. A bloody heel is mostly accompanied by straight

shanks and close legs. Wide, straddling cocks, with

open legs, or such that are knock-kneed, lack accuracy, being—somewhat—physically deformed. Natural good cocks must be bloody-heeled, as a consequence of their good type. Avoid squatty cocks and hens in your breed-

DETAILS OF TYPE.

- a. Well set body and heels. b. Bow-legged.
c. Duck-footed. d. Long-faced head; weakness.
e. Short, stout face; strength; f. Low-stationed.
g. Stork-legged. h. High-stationed.

ing pen, however good they may be otherwise. Deficiencies in type are easily fixed by inbreeding.

WINGS: Steel fighters and slasher cocks need a lot of wingwork. The former, according to length of heel need more or less wing. Long steel will require, just as slashers, acrobatic flying, consequently large and powerful wing. Short steel, or regulation gaffs, require more infighting style, consequently less wingwork. We believe that the fashion of trimming wings was originally introduced to prevent cocks going too high in action. Naked heelers require very little wingwork, especially so, when fought blunt heeled, as is the custom in Japan and parts of Brazil.

FEET: All four toes must be well stretched in a fighting cock. It is of such importance, that a breeder allowing a crooked foot cock or hen to run in the breeding yards, should feel humiliated. No feet, no cock. Duck-footed game fowl fall easily on their tails. Balance can only be attained by well-spread, straight and sound feet with good back-toe. Bowlegged cocks have notoriously bad feet. Scrap them.

HEAD: Somewhere we heard a statement that the head of a cock has no meaning. This is wrong. The head is the most important index of invisible qualities of the cock. Head, face, eyes and appendices are notoriously stable in transmission. If you cross a Bankiva with a Malay, you will notice in the offspring that they show more or less of either parent in the facial expression. The longer the beak, generally, the longer the bone. Softness of flesh on face indicates lack of muscular power. The eye, with its peculiar expression, indicates the state of mind and nerve quality. Blood affluence to the face shows state of heart and lungs. When the liver is wrong, the comb becomes blackish. When the comb droops, the sexual glands are out of order. Bowel trouble is shown by general paleness. Lung congestion and pneumonia are

indicated by purplish face. Study facial expression of game fowl closely and you will learn to know the strong cock and the fast one. The coward also. Every distinct breed of fowls has a peculiar facial expression, that we fail to describe in words.

THIGHS: In long-feathered fowls, as most flyers are, the thigh is generally hidden under some amount of fluff. Some breeders prefer long-thighed, high-stationed cocks as they land their blows with greater power. If accompanied by speed they are all right, but generally speaking, for steel and slasher fighting a medium sized thigh is best, though short ones are capable of extraordinary speed, and this counts in long heels.

BACKS: In so many descriptions of fowl, you find stated, that short backed fowls are ideal. Extremes, however, are undesirable. Too short backs in steel fighters result in unsteady walk and consequent lack of accuracy. Too long hacks, result in failing strength. Such cocks become weak easily and do not stand the gaff for any length of time, though they may die gamely.

In flyers or Caucasian cocks, the back is fairly long, it only appears short to the eye, being partially covered by profuse feathering.

In Orientals on the contrary, it is rather short and inclined aft, but appears longer for the lack of plumage and drooping tail.

Width of back is often wrongly judged measuring across the hips with contracted legs, when it should be done just before the hips with extended legs. Shoulders are near together in Orientals, and broad in Bankivoids. This is only natural, being the starting or insertion point of lesser or larger wings. Shoulders should be measured, —for judging lung capacity,—with a grip of the hand, from the back, just behind the shoulders and under the wings.

ABDOMEN: The state of condition of a cock is judged

by general handling and observance of the abdomen. This should be hard but elastic. Rather small and never bulging out. A sagging abdomen is a sure sign of worst breeding. Between breastbone and tips, sideways of vent, (pelvic bones) there should be but small space, and the general touch indicative of strong physique. The caudal appendix (pope nose), seat of the tail, cannot be strong and massive enough. In flyers very mobile, but in naked heelers broad and firm. It is well to remember that flyers fan their tails vertically, but Orientals do it horizontally.

NECK: Massive, strong necks, not too short, stand for muscle power and wearing qualities. Thin necked cocks are easily knocked over. Where the neck joins the head, Orientals show a bony protuberance, considered a sign of true blood. It is an appendix due to the general strong boned skeleton. Some fanciers have it, that this bone is indicative of prepotency. It is a desirable adjunct, when it does not show any hypertrophy, but is far from being a breeding characteristic in other fowls than Orientals. Bankivoids are fairly flush on the nape and none the worse for it. It adds strength in crossbreds.

We have stated already that style is the mental disposition of the individual in using its physical means. They do it instinctively, and we do not believe that style can be taught any cock. Even if it were possible, in the minute or second of distress, a cock will act instinctively, using the natural style inbred in him or otherwise produced by the nervous transaction caused by heredity. In the moment of danger, instinct counts.

A groggy cock, blinded and injured to the limit, may strike an instinctive blow with fatal consequences. Thousands are the examples. To counteract such accidents, the punishing cock should have cleverness, a feature that can be perpetuated, as all mental actions, only by close inbreeding.

SHORT HEELS: It has been stated that a good style cock may use any length of heel with equal success. This is false, however, and due to observance of game cocks that have been produced by indiscriminate crossing and consequently without fixed style. Short heeled cocks should be bred towards certain style, where their weapons become more efficient.

Such cocks fight with heads carried high, always, infighting and pushing hard, striking with spur over spur, crossing legs perfectly. They do not allow the other cock to take any decided foothold, fighting incessantly on the offensive. High flying is consequently dangerous, and a good cock lets the other get high and strike terrible shuffles on the instant or just previous to landing. Such cocks wear their antagonists down and hurt them badly in breast and base of neck, but as soon as possible they jab short blows to the head and neck, instantly pushing and infighting again for next opportunity to land a head blow.

Such cocks do not resort to bill holds but are clear leg fighters. They infight, punch and push in a clinch until they get their opponent's guard down, then like a flash they strike to the head and when the blow lands an accurate cut, off go the eyes, ears or brain, and down the cock. Such cocks should be particularly good finishers, short jabbers, and flashy with their feet. High stationed cocks generally do not stand such fighting long, unless extremely strong. Generally they go down slowly and droop forward. Barring Orientals which are partially insensible around the breast and can absorb tremendous pounding.

LONG HEELS: These, as slashers, require a very particular style of fighting. Generally long heels require lots of wingwork and acrobatic performances as the cock is required to pierce the body. As such they are body punchers. They bring their cock down landing on heart or

lungs. Attack from every point and cut into the stomach, breast, back and everywhere. They are not required to be head fighters, as most cocks, if not injured directly in the brain, or through ear and eye, do not seem to care much about cuts in the fleshy region.

But a few cuts, with two or more inch steels, through the ribs or abdomen, will cause a cock to feel sick, and if rattled or cut near the heart will fall on their tails and fail to come up properly without bill-hold. Long heels do not require much leg power. Body punching, good wing-work, side-stepping, and all the clever wits of the ring. These are the most spectacular fights to be witnessed, though an adversary seldom is killed at once by a brain blow. A blow through the back into one of the chief nerve-centers paralyses an adversary and sends him down.

If the hurt cock manages to fall upon his feet, he may stagger only and become temporarily disabled, giving the other an opportunity to land some more deep cuts that will cause it to go to sleep. With slashers, any amount of cutting proves easily fatal, due to profuse bleeding, but the style of fighting is about the same. The first lucky blow with slashers should show the winner at once, as such a cut will usually sever blood vessels, nerves and muscles.

The great fault with long-heelers not bred to the purpose is that they lack the ability to land the initial deep body cut, continue to give and receive punishment, and becoming weak drag the fight into countless pittings. Flyers are prone to get hurt in their breast-muscles, lose the wings and drag the fights.

That there were highly bred long heelers in England a century or two ago, nobody will deny, that has studied the history of famous British strains. Long heels required a very particular style, and shifty cocks with flashy speed and notable wits. Their breeding is naturally diffi-

cult and the greatest care should be exercised in selecting the mates of a run.

NAKED HEELS: Again a different style altogether. Power and mortal punch are paramount requisites. Any blow, cleanly landed should be capable of, at least, breaking a bone. The trouble is that such strong cocks can take a lot of punishment before they realize that they are hurt. The eye should be active and nailed on opponent. Good judgment is indispensable, no blow dare go astray. We have witnessed a pair of Brazilians, fighting, that would have been a credit to the most cunning and shifty man-fighter. For a few minutes both cocks out-guessed each other and none could land. Suddenly, change of tactics and one cock upon the other in a maddening rush. Then on they go cool as before, until one is feigned to make a false movement, when crushing come the blows.

In Europe and America, too little care has been bestowed on naked heelers, we believe, to fully appreciate the performance of high bred cocks. Power, wind and endurance, and quite an amount of speed and judgment are essentials.

GAMENESS AND FIGHTING SPIRIT

No difference of type and style can account for the presence or lack of gameness and fighting spirit in the true game cock.

Gameness is a primordial condition, without which no cock can enter the pit. If a cock should be built up, the first material to attend to, should be gameness. It must be there already. It cannot be bred into a dunghill, by any amount of breeding, though deficient stock may be considerably improved by grading.

It is the hen that carries all in her for transmitting dead-gameness to her sons. It is laid into the egg with the maternal yolk, with the maternal chromatin and the maternal blood.

An inbred game cock may be put over plain hens and produce some sort of fighters, but will never produce a game offspring.

A true game hen, however, may be mated to an ordinary cock and produce grade stock. Inbreeding the grades on their true game mother, will grade up the progeny, but the yellow streak of the ordinary cock will eventually show up.

It is, as a matter of fact, rank foolishness to try any sort of grading dunghills to their game mother or grandmother.

Gameness is a delicate matter to deal with in the breeding yard anyhow, so that the honest and careful breeder cannot be too particular about the item of gameness. Novices are more inclined to try and experiment along this line and sometimes will not take any advice until they have to pay for their experience some day.

No game fowl is good enough to look at. However pleasant and proud a cock may be, if he is not of true game-blood, keep him away from the breeding yard.

Breeders differ on their appreciation of gameness and while some are satisfied with stock that will fight game during a battle, do not care how the cocks behave the day following. If they do not show fight after cooling down, they allow them an alibi, considering their sick condition as sufficient excuse.

Others demand categorically that a game-cock must show and take a pounding the day after having been cut down and die game. Such cocks generally will show fight the third day also.

For steel and slasher fighting the second day test is considered sufficient, but when cocks are to be fought naked heel, they must take a pounding the third day. This is asking for a very severe test, as natural spurs cause bad wounds and after a milling, cocks may really become very sick. Orientals are naked heel specialists, and being of very rugged constitution, will stand such a test better than a nervous Caucasian. A good standard for gameness is, we believe: three days test for Orientals, two day's test for Caucasian, and single day test for extreme fast slasher fighters, which are naturally more delicate in skin and tissue. So long as there are such game cocks, there is no earthly reason why a breeder should be satisfied with less, and most any cocker may face some day adverse conditions in the pit, where his cocks will need that extra gameness badly.

To believe that a cock should take his death gamely in a battle, as sufficient, is in so far wrong—(as we have already adverted),—as cocks have a very keen eye and know exactly when the other cock is failing in courage. An uninjured cock, or nearly so, may be caused to run before a badly cut cock, that shows no signs of quitting.

Cocks have a very clear notion of each other's courage, guided by their supreme sight and do not fail to draw the consequences. Just a bit of reserve gameness may win a doubtful battle or main. We deem it fairly superfluous to

describe the real meaning of fighting spirit in a cock, as we come in contact with that spirit daily. It is ignorance to suppose that pugnacity is artificially produced in a cock by stimulation. Pugnacity exists in all parts and is the motive power in the struggle for life. Love and hunger are the direct cause of same. Plants fight for their place under the earth

and above. Insects, reptiles, fish, birds and animals fight for survival. Originally, the man fought constantly—for love and hunger. Wars, as practiced between the Nations of today, is nothing but organized fighting for some substitute, “en masse” of the old

High-flying in long heels.

motives. Food resources, racial expansion, and the corresponding politics, are an accumulation of the individual fighting motives, hunger and love. Both must be satisfied by the individual, the Nation, and the World.

From Nature's point of view, the average tame city-dweller will not understand why these fighting proclivities have been instituted as natural law. It appears more reasonable, and liable to general benefit, if contrary to existing conditions, there would be a peace law. Quite apart, that fight is necessary from a selective point of view, it must be borne in mind, that the general inclination of most beings towards sociability, would, lacking fight, soon cause specimens of a race to associate in

great conglomerations. The distribution of food would be made difficult, but in the case that such agglomeration would readily find enough food, there would be that other problem, which is just as serious,—the droppings,—which accumulating daily in mass, would turn the best place insufferable.

Nature wants ample space for each individual to keep up a standard of sanitation. Just fancy what would become of a large town, like London or New York, if there were not a torrent of water carrying away the discharge of several million inhabitants.

If we see Nature from a very elevated point of view, we will recognize that the whole system of life is an organization of food distribution. Just what this organization is for, we are not able as yet to explain, but we can observe that one species feeds on the other, and each species feeds, grows, reproduces and then vanishes from the surface, giving place to another generation. If Nature's intention would have been only to create life to populate the earth, there would not exist death, and consequently no fight.

As things are, there exist two opposing powers,—apparently contradictory,—which dispose of the organic matter: Nature—(birth) which is capable of developing a more or less highly organized individual from one original cell, and Morture (death), which disposes of that organism, after completion of its mission. What the origin of life and the object of death is, we can only guess. The mystery produced by both, has created the sense for Religion, the study of which constitutes the history of human mentality.

The period of life of each organized individual is marked by constant fight, and success is reckoned by the ability to do the fighting, or the ability to avoid it. The human kind seeks peace in prosecution of the latter, but outside the human dwellings, the fight rages invariably.

9
Willing or not, fighting is a factor in life and Nature, only we human kind, that have the ability to avoid it partially, do forget that lower beings *must fight*.

To brand cock-fighting as a cruel and barbaric sport is absurd, when we know that man kills millions of living things daily to appease his hunger. Cocking is nothing but an organized natural sport, from which the onlookers derive moral profit tempering nerves for the daily struggle, and learning how to carry on upright in the constant mill of life. As both combatants are equally matched and fall on to fight guided by nothing but their own desire

IN-FIGHTING IN SHORT HEELS.

to do so, it is perhaps the only sport where a decision conforms to the most perfect honesty. Cocks cannot be taught to make foul play of any sort, nor can they be helped to win, if fatally destined to succumb.

All that a man can interfere in the cock's triumph is fitting him out to do his best, in the several stages of production of game cocks. And therefore, to take the last objection on the subject, the cocker and breeder of game fowl should learn the matter thoroughly. He can then meet the criticism of any detractor with tranquil conscience and haughty mien.

Very few breeders know the origin and anatomical seat of both gameness and fighting spirit. It has always been vaguely identified as a mental disposition, so that, an

investigation of the matter should prove, at least, interesting.

The fighting spirit is present in almost every being, normally bred. We even find it in females. In our early years we staged cricket fights and for that purpose we always kept some in convenient places. We also had some fighting lizards, spiders and guinea pigs. In some species the fighting is done by the females, but generally speaking, it is almost always the male who fights. Two males meeting have the desire to fight, they go out on the war-path looking for trouble. Very seldom do males stop to consider the probabilities of triumph. A little bantam may offer fight and eventually overwhelm a larger antagonist. Gameness induces the lesser one to stand the unequal test, and though it may feel distressed takes its death from his superior antagonist or actually conquers him.

Nature sets a premium on gameness, at any rate. Consequently it is a desirable quality in the process of perpetuation of the species. We agree that in game fowl pugnacity and gameness have been developed artificially by selective breeding, and that its presence is liable to reduction by careless mating or managing breeding stock. Gameness disappears in the male (or female) by the removal of certain organs, which actually generate and perpetuate that state of mind. A capon does not show either pugnacity or gameness, and man has made it a regular feature of emasculating domestic animals, cattle, horse, sheep, etc., to maintain peace in the herds, removing the source of pugnacity—the sexual glands.

These then, are the organs that generate pugnacious inclination, evidenced in the behaviour of distinct sexes. The male is constantly (or nearly so) in breeding form, and any sexual temptation acting on external senses, eyes or nose, has an almost immediate retro-action upon the sexual glands.

The sexual activity of females is bound to certain periods, during which the sexual glands are stimulated by different agents. In this state of mind they are inclined to jealousy, developing pugnacity towards other females, in identical conditions.

It is well known that game hens are decidedly pugnacious towards the inmates of the same run during the laying period and fall upon each other at the slightest provocation.

In this state of mind they lay the eggs, i. e., under the expression of fighting spirit. Cocks running in the breeding yard, are extremely pugnacious also and even jealous against their ordinary tender if it happens to be a man. If the feeding and tending is done by a woman, they do not worry about her. It is the old rule sexual over-cross attraction or repulsion, which can be witnessed in all sorts of animals.

Hens that are cooped or confined without cocks, assume the ordinary copulation position when a man enters and tries to pick her up. They do not behave so when a woman is the visitor.

Fighting spirit is thus generated by active sexual glands, the secret of which is carried in the blood in the form of hormones, or minute agents, and which act upon the nerve centers. That it affects the brain is evidenced by the fact that a portion of discerning power vanishes. The affected individual is forced to perform feats, which ordinarily it would avoid. The weak may attack a powerful antagonist;—a cock will fight a dog or man, etc. This fighting spirit is present even in dung-hills, which will fight each other as soon as they have a chance to do it.

It may puzzle some to notice that the fighting spirit is expressed also in chicks, which have not yet sufficiently developed sexual organs to account for this fact. In the chapter about Anatomy, however, we have already

indicated that the Thymus gland is intimately related to the sexual glands and that it governs sexual expression and growth of secondary characteristics, until sexual maturity has been attained. When the sexual glands start their function, the Thymus shrivels or disappears. The hormones of both, Thymus and sexual glands, have the same effect upon the nerve centre so far as fighting instincts are concerned. That the Thymus has also some effect upon the generation of love is evidenced by sexual precocity observed on heavy laying strains of barndoor fowl. It has been investigated however, by close examination of such precocious Tenorios, that they cannot copulate, to any degree of completion. Theirs is only a simulation of love.

Both sexes have a strong bearing upon transmission of pugnacity, but all indications are that the greatest proportion is effected through the male, while the female is the basis of that other complimentary factor, discussed as gameness.

While fighting spirit may be present in any ordinary rooster, be strong in game crosses and abnormal in purebred, gameness is the quality by which the fighting spirit is kept alive and active even under the stigma of defeat. More than that, it must preserve that spirit after cooling down. Gameness is the perpetuation of the fighting spirit.

It is the natural will or unconscious duty of carrying on the fighting spirit to the utmost limit. It requires, consequently, some wearing means, as every exercise of a primary desire signifies wear or consumption of the prime motive, expressed in satisfaction. A strong desire for love or hunger is mitigated as soon as either is satisfied. So the fighting spirit or pugnacity must find its satisfaction when the fighter has had enough of it to quit. Gameness however is the quality of maintaining the prime desire or will to the utmost limit of possibility.

As such it must be recognized as stored energy, the material of which are the hormones of the Thymus and sexual glands. These must have been stored in the blood, nerve centres and gangliae or otherwise been generated during the fight. We know further that in the fury of combat no attention is paid to fierce injuries, which in normal state would cause immediate and intensive pain. This pain sets in, however, when the body cools down after the battle. During the consumption of the sexual hormones, we deduct logically, there must be another agent acting as sedative and astringent, and have to recognize as such as segregation of the suprarenal glands, termed "Adrenalin."

In fact, we have learned in old Indian writings about "Murgh-Nama" or cock fights, that when a cock shows signs of pain and the fighting spirit is vanishing, it should be given a kidney stimulant, whence the cock will come back with augmented fury. In the chapter dealing with Indian Game, we shall reassume this item once more. The Nawab Yar Muhammad Khan, author of the "Sayd-gah-i-Shawkati" an Urdu work on sport, recommends hot fomentation upon the kidneys, which will have a tendency to cause the Adrenal glands to secrete their usual liquid.

Fighting spirit and gameness are transmitted from parents to offspring. Aggressiveness and fighting spirit are the male's heir and gameness that of the dam. As these qualities are due to sexual gland segregation into the blood and nerve centres of the parent, it stands to reason that it must be present in the parents in the moment of copulation, previous to the fecundation of the germ cell. It naturally affects the chromatin matter of the cell before the process of cell division, so that these qualities are transferred to the hereditary matter quite some time before the egg is laid, formed, fecundated and prepared.

It is supposed that the function and formation of the glandular system is transmitted through one or more chromosomes; these are a life part of the germ cell and consequently a life part of the parent.

The egg, or germ cell rather, is the binding link between parents and offspring, while their mutual love is only a conventional adjunct, as may be noticed by the indifference of the chicks towards their sire. No chick can live when it has not inherited the quality of glandular function, and no chick will be game, if the parents have shown, even a momentary failure, in the respective organs.

The hereditary agent, a chromosome or part of it, carries hormones from the parental sexual glands, that exert their influence on the chick. Being a very rare material, it stands to reason that in prolific hens the chances of inheritance are considerably diminished, but in such as usually lay few eggs, the heritage of gameness is transmitted with greater certainty.

This is an explanation why high-bred game hens lay only few eggs, but in non-game or barndoor fowl prolificacy is a characteristic much sought for and actually attained.

STRENGTH AND ENDURANCE

Fighting puts a great strain upon muscles and nerves and is recognized as the most violent exertion the body can be put to.

We have had opportunity to witness several thousand fights, cocks, dogs, men and oddities. Some beings are natural fighters and go at it with a decided self-confidence, while other beings engage in a fight with all the signs of terror. One would believe that the latter are naturally cowards, but the error may be noticed when the whining dog or nervous man engages in a terrible fight and behaves up to the highest standard.

This nervousity prior to warming up, is due to a mental disposition and the effect of late or defective gland segregation.

Nervosity in any fighter is a heavy fault and specimens thus afflicted should never be used as breeders. This is especially the case with Game fowl, as nervous cocks are acting under the stress of impaired mentality and prone to run at the slightest notice. Such cocks stage a comeback and may surprise their antagonists with a furious attack. Wheelers have been developed from such stock, and though many cockers fancy this stratagem, we are opposed to any cock that resorts to such tricks.

Nervosity should not be mistaken for anxiety. A tough, high spirited cock, especially if experienced in the ring, may feel anxious to fight at once when he notices the presence of any antagonist.

The nervous cock, however strong and rugged he may appear, is prone to fail and go down after some buckles, particularly when injured.

This brings us to the source of strength and endurance.

The unity of power is the muscle and the accumula-

tion of same is strength. Bones and muscles are intimately related in their proportion and easily detected by handling. In a well balanced cock, the relative amount of muscle and bone may be detected with a glance at shanks and head, which generally are in equilibrium with the rest of the body. Endurance is the power of maintaining the initial energy for a given length of time. It is strongly related to gameness, which is the power of using endurance up to the limit. As such, endurance is of nervous character and derived from glandular segregation. When the latter fails, endurance becomes lost.

It stands to reason that however strong a cock may be, he is usually poor if his muscular wealth is not properly backed by endurance. The latter must consequently be a matter of very careful consideration in the selection of breeding stock. Sparring cocks with small muffs or gloves, or testing them with corked short gaffs, will generally show the degree of endurance and energy of your stock.

Muscular sufficiency, energy, health and alertness, constitute what is known as physical vigor and is the source of strength and endurance. It is produced by nervous and glandular function which normally are inherited factors, but are preserved by correct keeping and feeding methods.

It stands to reason, that when such quality has been inherited, it must be improved by giving the youngster the best chance to bring physical vigor to the highest state. Adverse conditions in youth will materially affect vigor and any sort of disease may impair it seriously, acting upon the nerve centers and, consequently, upon the glandular system. We may say that, as the muscle is the unity of strength, the gland is the unity of health, each of which constitutes an individual organ. Function makes the organ! Exercise is, there-

fore, absolutely necessary for the proper muscle development. Hence the necessity of providing scratching sheds and country walks. Nerves and muscles are developed in their highest possibility by constant function.

Free runs in the fields, with no disturbance and preoccupation, will have the beneficial effect upon the nervous system that stands for endurance.

A cooped cock, constantly frightened and worried by hundreds of impressions that make him feel the confinement, and which we cannot judge from our human point of view, will seldom, if ever, grow to perfection.

Coop-walking requires a lot of care and judgment that can be avoided by country walking. A lazy life, in confinement, will never make a good cock.

If you observe the individual muscle, as unity of power, we must admire what strain it can support in the laboratory. In actual practice a muscle is seldom used up to the limit of its capacity, and when this is done it may be the cause of a collapse or sprain. Wing muscles are governed and moved differently from those of the leg. This is a fact deducted from the effect these motions should have. The exertions of the wings are

WHITE BRAZILIAN.

Strong head and shanks, evidence of strength. Such birds are armed and fought with "puones".

braked by the resistance of the feathers against the air, while those of the legs are not braked at all if they miss the target. The movement of the leg is a punch and should naturally come to a stop as soon as the point of application, the spur, hits an inert hard body.

The function of both members, wing and leg, are different. The movement, however, is effected by muscles which are very much alike, but which differ widely in their nervous control. The proportion of energy bestowed on either wing or leg constitutes the profound difference between primarily, flyers (Bankivas) and runners (Malays), and the nervous disposition of both constitutes their intrinsic character.

Punch is the power, velocity and weight behind the spur in the moment of finding resistance. If a cock would cut slowly, velocity and weight would be naturally absent, and it is tolerably sure that even a sharp spur would not cut through hard muscle under such conditions. Punch, then, is necessary, and the sum of power, weight and speed. It is commanded by nervous exertion, and its intensity can be truly abnormal, as we have witnessed in some cocks capable of breaking wood boards with a single blow, that would have required a hatchet. This performance of the nerves is known as tension, and cocks under the effect of same, have been known to be killed instantly by a single blow. It is the more remarkable as when a fowl gets its neck wrung, it is capable of struggling for quite a while, yet in the pit many a cock is killed instantly.

The sum of muscular and nervous capacity, the power of serving out forceful punches and the capacity of doing this incessantly, is the physical perfection known as strength and endurance.

SPEED AND ABILITY

Speed is a quality entirely different from strength, and though it is effected by muscles it depends greatly on nerve function. It will be noticed that fast fighters generally lack the physical grandeur of the more powerful and strong cock. But do not run away with the idea that fleshless cocks are naturally fast. Duds are duds. Fast cocks are naturally nervous and this quality will always be noticed in the facial expression, that reveals high spirit and abundance of temperament.

It is generally accepted by game authorities, that before the artificial spur was invented, cocks were classified as slow and fast ones. Some early cockers will have fancied the slower but exceedingly strong birds, and others the extremely fast cocks with plenty of action.

We at once come to the modern classification of cocks, placing the strong but slower cocks in the naked heel category, and the flying, very fast birds, in the steel class.

The fast bird depends a lot upon its wings, which must be naturally long and backed by generous pectoral muscles. Long wings are accompanied by large tails and ample feather growth in the whole body, from which we naturally deduct that speed may be sought for in abundantly feathered specimens.

This abundant feathering is a protection, which nervous birds want much more than the strong and rugged naked heelers, and once more we see the difference between the strong Oriental which is fairly bare, and the flying Bankiva and Sumatra which are more or less profusely feathered. Physical characteristics that are derived from organic structure and that mark fundamental differences between the original flyers and runners.

There is no doubt that the earlier fast, flying cocks, were deficient fighters out of season. This is the case

even in our era, despite all cross-breeding. Nervosity and the profuse feather clothing caused the yearly moult to be more cumbersome than was the case with the short feathered Oriental, which—by the way—did not rely on its wings for a living. We know that many cockers take the greatest care with their stock during the moulting period, and cocks that hack in this state are by no means decried as dunghills or cowards. We do not want to state that a fast or flying cock should hack during moult, but

BRAIN BLOW IN THE AIR.

hack they do, and the more so if they carry a yellow streak in their blood. Well bred, fast stock, should carry that reserve gameness and energy that keeps them showing fight even through that critical period and no excuse allowed for moult nor anything. Be sure of that at any rate, but on the other side no sort of breeding will ever be able to avoid that during moult, cocks lose a lot of spirit and strength. The abnormal punch vanishes completely during that period also, and lack of power in their

blows may be detected for a considerable period prior to and after moult.

Nature has provided that pugnacity should come to a rest during the more or less poor winter period, this being specially the case with flocking birds, i. e., Bankivas and Sumatras. The Oriental or Malay, as a single or solitary dweller is not subjected to this law. His haunts were protected, and his food, even in the dead season, was strongly nitrogenous, mostly composed of small animals, insects and larvae. The character of speed resides, not precisely in the legs alone, but in general action of the body. Of course, wings and legs are of greatest importance, as both are used in harmony in all flying birds.

There is no doubt that lack of strength, as compared with that of Malayoids, has induced man to improve somewhat the offensive weapons of flyers. At first it was only a matter of sharpening the natural spurs, but later on, these were substituted or reinforced by artificial spurs. Artificial spurs are generally credited with being the honest way of evening chances between two fighting cocks, and as used today, there is no doubt that this aim has been accomplished. But formerly, there is no doubt also, artificial spurs were invented to render the cuts with them more effective.

At the same time, it will have been noticed that full grown combs were easily torn in combat and generally afforded an opportunity for an easy bill hold. Very old pictures of cocks seem to indicate that originally only the spikes or serrations were cut off, while the deep form of dubbing is really a modern fashion. Then the wattles came off as a matter of course.

This will have improved cocking quite a lot, but still the cocks, more or less heavily plumed, resorted to biting into hackles when tired after a few buckles. Then trimming came in vogue, which is still used in several countries and at instances carried out severely, as it was the

fashion in England, Spain and several South American countries since long ago.

But the cocks, still continued to go very high, and though this style is considered fairly spectacular in Spain and Spanish countries, it soon was discovered that very high-flying was not a convenience.

In England and America chiefly, the wings are trimmed, supposedly to render the quill sharp on edge with a view of blinding the antagonist, but no doubt that originally it was intended as a means of checking too high flying, and possibly, of leaving the pit.

Now, trimming feathers severely, has some marked disadvantages in fairly feathered birds. First is that birds normally protected by the plumes are suddenly deprived of this protection and catch colds that may prove easily fatal and, second, birds that are severely trimmed hang in moult and cannot get rid of the stubs. This latter cause is a matter of continual complaint in Spain, and no doubt a reason why so many cocks are lost during moult.

Eastern slasher fighters, which are normally heavily feathered are not trimmed at all, though comb and wattles are mostly dubbed. Battles in the long foot slashers are so easily mortal, that any amount of trimming is not deemed necessary, so that while using those fatal slashers, naturally no experience has been gathered in reference to feather hindrance in the fights.

Malays, as non-flyers, lack the nervous temperament of most Caucasian fowl, are scant in plumage, and consequently do not hang in moult. In fact they go over that period with no sign of impaired vitality, and many are the cases where hens even lay during that period.

It is true, some Orientals are desperately slow in action, and would probably be cut to pieces when matched with a flyer and fought in long steels. Some of them, however, are notably fast with their legs, and only look slow on account of their quietness and entire lack of wing

action. On the average, Orientals are slow for steel, and flyers lack the strength and endurance so necessary in naked heel fighting. Fighting in steel without speed, is asking for trouble, the more so, the longer the heels in use are. On the other side, the shorter the heels, the more endurance should be bred into the cocks.

Crossing both original varieties and subsequently inbreeding and selecting along a prescribed standard, has produced wonderful strains of game fowl, but as stated, inbreeding cross-breds is rather difficult, and prone to end in degeneracy following that natural law of retrogression towards mediocrity.

Desirable as speed is in steel fighting strains, it does mean nothing if the birds in question have not the ability to use this speed to best advantage. Some cocks go high and show a terrific action, yet seem unable to hurt the adversary. Others display an amazing attack strategy, yet do not land serious blows.

To use both legs in constant attack, and to bring the spurs deeply in contact with the antagonist, is what we term ability. Position and curve of long heels and slashers, make it necessary that steel fighters fly from the ground, hence the necessity for faultless wingwork.

The best speed cocks are such as work wing and legs in harmony, and while alighting dart their shanks forward at a terrific pace. No sooner do they touch the ground than they are up again.

Do not be deceived by wings flapping furiously. Cocks carry death in the point of spur, not in the wings. When you observe cocks do not move your eyes from the legs until you are satisfied that the birds carry that rare quality, speed and ability, at the right point—the heel! If you are in doubt as to your bird's ability, test them out in long and short heels. If they go at it in-fighting, and they do it right, then your stock is better adapted to short hee's, but if they have the ability to land clean blows, at

long range, with sufficient speed for fastest company then you have long heelers.

If your cocks are too fast for human eyes to follow, then you will have to try them out in long heels, and wherever possible, make your notices in your record-book what kind of blow your stock is best at, and choose type of heels accordingly.

Breeding fast and able stock, bloody heeled and leg fighters puts a test on a man's highest skill and patience, but never go and sacrifice gameness for any amount of speed. If you have dead game stock you can improve their speed easily in two or three generations, but if you have fast stock only and want to improve its gameness, you are at a loss.

To improve speed, after you have true-blooded game stock, use a three or four year cock on its own pullets. Save the pullets resulting from this mating as breeders and let them mature separately. Then use these pullets with aged cock that has never been seriously hurt. The offspring will come lighter in weight but tremendously fast.

For intensifying gameness, dogged courage and fighting determination, reverse the process, use a very young cock on three and four year hens, save the pullets therefrom as breeders, and inbreed to a young cock of tested ferocity. In the course of years you will have evolved an extremely fast and another deeply game strain, within your own blood. Then you may try for an ideal combination. Observe type and style, gameness and spirit, strength and endurance, and last but not least, speed and ability.

Let us warn you, however, that even the best stock in the speed line, cannot uphold an extremely fast action for any length of time. Sooner or later they will get tired, so that speed is nothing—really—if not properly backed by ability.

FEEDING AND WALKING COCKS

When a sound chick bursts the shell and steps into life, its individuality is complete. It is fully equipped with everything necessary to grow into a typical specimen of the species, breed and variety, it derives from. The completion of the organism until final maturity is accomplished by growth, the base of which is feeding. No food, however, is employed directly to build up the tissues, it being necessary that the raw stuff be prepared through a process of digestion before it is assimilated.

Science has watched the digestive process of live beings carefully, and great discoveries have been made within the last century, but we are very far yet from knowing exactly what goes on, and why. There are, however, some fundamental facts which have created a theory on feeding and which has proven very valuable in the management of domestic animals.

Analytical experiments have shown that the bulk of foodstuffs is composed of elements like nitrogen, hydrocarbons, fats, mineral salts and ashes. It would appear then that feeding chemically pure elements as indicated above, would be sufficient to maintain life and warrant a normal growth. This, however, is not so. All theories about elementary feeding have proven to some extent fallacies, and it is tolerably sure that men and animals require, besides a chemical ration, a certain quantity of living material. Fresh foodstuffs, vegetables, milk, eggs, meat, etc., carry a mysterious matter, highly valuable in the maintenance of the body health, which in absence of a better word, has been called vitamin or life carrier. This matter may be easily destroyed by heat or disintegration. In some cases a simple process of drying or fermentation may

destroy some vital matter, while by the latter process, new form of vitamins may be evolved.

The action of vitamins upon the organism is not quite clear, but a case may be illustrated to see how they act upon the health. Experiments were carried on with animals and convict men, subjecting them to a diet of polished rice, which is known as poor food. After a lapse of time, and when the internal fat had been entirely consumed, the treated beings showed symptoms of that disease known as polyneuritis, and which progressed towards fatal cases rapidly. Very bad cases were treated simply by feeding fresh fruits, bananas, oranges and lemons affording a complete recovery in a very short time. Scurvy (*escorbutum*) is a disease common in former years of deep sea navigation, caused by running short of fresh foodstuffs, and may be treated efficiently by feeding green stuffs. Notable examples are the case reported on Vasco Da Gama's crew which on the way to India in the middle of the 15th century. As soon as Da Gama could get oranges and fresh foodstuffs the crew improved rapidly in health, but on continuing the voyage the Portuguese soon ran out of fresh supplies and the disease appeared again, at instances terminating with the death of some afflicted seamen. Returning from his first voyage to India, Vasco Da Gama eventually lost his brother from the same cause.

An example how scurvy, which English sailors called the Portuguese disease, may be prevented, is the case of Captain Cook, who realized the importance of fresh vegetables and carried with him a fair supply, and,—more effective still,—forced his crew to eat such stuffs regularly. Captain Cook knew nothing of vitamins, yet his prevision was exactly correct according to modern discoveries.

In poultrydom we have sometimes similar cases,

especially when poultry is crowded, as is the case in industrial chicken farms.

Rearing chicks in quantities requires some artificial and economical feeding methods. Some wise poulterers set in to manufacture feeds according to accepted formulas in which the proportion of albumen or nitrogen to hydrocarbon is about 1:4:6, which is termed a balanced ration. Sometimes the prime material used in the manufacture of these formulas was not fresh or somehow lacked vitamins, and consequently the chicks developed diseases that were all accounted to crowding.

Many of the barndoor fowl diseases are unknown in Game fowl, as for example, what is called leg-weakness. Chicks cannot raise upon their feet. It is generally attributed to the fact that barndoor chicks lack the supreme vitality of the Game ones, but in reality is nothing more than the differences in feeding to which they are subjected.

The influence of vitamins upon the organism is not exactly direct alimentation. It appears that they act upon the glands as a stimulant, so that these function regularly and affect beneficially the general health. As investigation progresses, the importance of the glands is more and more known and in a few generations more may possibly revolutionize medical science.

Some glands are present and used only during the growing stage or youth, such as the thymus and bursa of fabricius. Later on, these glands shrivel and even disappear when the sexual glands are in full function. The importance of the latter may well be appreciated when we observe the difference between a full male cock and a capon. The vitality of the latter is so badly manifested that they succumb to the slightest attack of any disease.

We have seen an experiment conducted under our own supervision, during which a capon was restored

by grafting testicular tissue in the original place. This particular bird assumed full male characteristic and was full of life and spirit, though it failed to fertilize any eggs.

Once a pariah in the poultry yard, it now was noticed by the hens as any other full sexed cock. The energy, however, soon went out after a few months, and after killing and dissecting it, it was found that the grafted organ had shrivelled to a minute spot.

It stands to reason that the glandular equipment of any individual is an inherited characteristic, and no amount of feeding will ever improve any fowl beyond the limits of its individual capacity. There should be no mistake about this item. All that a breeder can do, through feeding, is to give the bird the best chance to develop all his ability inherited from the parents. Birds have a natural notion of what they need, and know perfectly how to search for the required materials. All that they want is a chance to go a-hunting, and as a matter of fact a field or place where they can find the materials sought for. A barren lot, a stony field and absence of vegetation is just as bad or worse than a desert. We have come across some very well informed people who insisted that fowl need no shrubs or plants of any sort. We partially agree to this point of view; fowls do not eat trees, and very seldom feed on leaves, but where there is vegetation there is also small animal life and the necessary breeding adjunct. It is from such secondary company of vegetable life that chicks and fowls feed and derive enormous benefit.

In a well kept, sprayed and disinfected garden, chickens cannot be reared just as good as is the case in a wild orchard or site, where small life may be exceedingly active, although not discernable to the human eye. The ideal garden for rearing chicks is an unkempt orchard, with plenty of vegetation, fresh water, sun

and air, i. e. a little wilderness. Rearing chicks in yards and runs, commonly barren and desert, even if well fed, is so far unsatisfactory as the chicks lack the ideal of their youth, which is to go hunting, searching and scratching.

Yet, ideal places are not always available and ready made, and the game breeder may be compelled to rear a brood or two under adverse conditions. With the knowledge of advancing investigation many natural ways may be substituted for artificial means, and the smallest run can be made an ideal place by substituting the vastness of large gardens by common sense. Providing artificial means of scratching in a bed of litter, feeding raw meat, eggs and milk instead of letting the chicks hunt for their insects. Even providing worms, as explained elsewhere, and finally by feeding on a large variety of stuffs afforded by the season.

Chicks that roam at ease require a lot more food than those kept confined, but if the lot is barren you will soon notice that they come back at every instant begging for some morsels.

It is almost impossible to give a definite feeding formula for rearing little chicks, but as we have had fairly good luck, even under adverse weather conditions, we shall indicate our system forthwith.

When a cluck is due to hatch several loaves of bread is pounded into small crumbs the size of canary seed. Before the cluck raises from the nest, the place where she is going to stay with the brood is cleaned and fresh garden earth with young grass is liberally spread upon the place.

The cluck is confined under a spacious coop and left entirely in peace for one day. A small handful of the bread-crumbs is given next morning with large pieces mixed into the ration intended to satisfy the hen's needs. She will also pick a few grains of maize and

wheat, but her appetite is very small. The bread-crumbs are completely neutral as food, and the largest part of it is eaten by the hen. After the second day prepare and give a ration of cracked corn, wheat, oats or barley, and millet. Feed a little each time, and several times a day. The chicks will soon learn who is feeding them and will ask for food when in need, which is almost the whole day. As soon as their appetites grow, start to feed a little animal food. This should be about one week out of shell. Get a small lump of lean fresh meat ground finely, and thoroughly mix with the cracked corn, including the meal resulting from grinding. One tablespoon of meat scraps for three of corn is sufficient. Feed this mixture fairly away from the hen's coop and give the hen pure cracked corn. Have water amply and fresh before the hen and chicks. An automatic fountain is found very convenient if not forgotten to clean and replenish at least once a day. Let your chicks dig and scratch in straw and damp earth to their heart's delight. If they mope around, reduce the ration, but if they cry, augment it. As time goes on, feed the chicks four or five times a day a cracked corn ration; one meal in the day with scrapped meat, the rest without it.

After two weeks, give two rations with meat and after a month three rations. From the very beginning keep always a supply of green feedstuff before them, though it is better practice to let them run on a clover, or any other lawn. If this is not available, dig a ditch about one foot deep and cover the bottom with manure or simply chaffed straw. Then cover this layer with another of oats or barley about one-half inch deep, and above this a thick layer of some three inches or more of litter, chaff or manure. Soak the whole thoroughly with water and cover the ditch with a frame of $\frac{1}{4}$ -inch wire netting. The sprouts will raise

above the wire gauze and will be picked by the chicks, but at the same time they cannot crawl under and destroy the plants. If such cannot be made, provide lettuce, dandelion, alfalfa or any good grass and feed well chopped every morning.

You have plenty of eggs and perhaps do not care to eat or sell them.

Feed them raw and well mixed with the corn mixture and perhaps adding a handful of bran. Milk is plentiful in some places. Feed it raw in glass or china chick fountains. Metal troughs are attacked by the lactic acid and form poisonous compounds. Milk

DUBBING.

Different fashions: a. Persian. b. Greek. c. American spike. d. American round. e. American hatchet. f. Top-knob, India, and g. English.

may be let to get sour and if you prefer to feed it thus, have the curdle mixed with cracked corn and bran, but do not use bread. The latter should always be fed dry, and only during the first two or three days.

When the chicks are about six weeks old they will have grown feathers and will clean the dishes about six times a day. Then is the time to feed everything they care to eat and will relish the tit-bits saved from the table. We take it as a rule never to feed any sort of hot or boiled food. Laying hens will derive some benefit

from such, but chicks should be fed on raw food entirely.

You will notice that the chicks do not grow fat as old stock does. The reason is that chicks consume a lot of food (especially fattening matter) in their daily exercise, while mature stock with completed growth, sets on fat. Opinions differ about the relative value of fat in fowls. Our experience shows that moderately fat stock overcome any threatening disease easier than lean ones. On the other hand, very fat stock succumb to numerous causes. The golden rule is the middle, while breeding or running out, stock should be moderately fat, but as soon as cocks are cooped to be conditioned, they must be lean. When a cock enters the pit, it should not carry a gram more weight than absolutely necessary.

When the chickens are fully feathered it is time to separate them, keeping the pullets apart from the males, but do not coop either. We usually have already decided where to put the cockerels beforehand, and the time to catch the youngsters is one of extreme expectation. You have watched where they sleep at night. The droppings will usually tell you the right place at time. Then you prepare the cockerels' sleeping quarters in the chosen orchard and have them thoroughly disinfected and aired. The last day, prior to separation, fresh roosting perches and dropping boards are installed. Never use those of last year again, unless thoroughly soaked with kerosene and oil. Scatter plenty of straw and dry litter on the bottom and see that the enclosures are safe.

When the night arrives, you have baskets and crates ready and go along their sleeping places and take the cockerels down and put them into the crates. Make sure that your pedigree marks are still there and identify one by one. You may need to keep a few apart

for observation or other purposes. Transfer the cockerels to their new place and set them on the perches, then close the door until next morning. Let them starve until about 10 A. M. and feed them inside their sleeping quarters for a day or two. Your ration now should be whole corn, wheat, barley and millet. Some breeds are better hand-fed, but it is not good to coop or confine them permanently too early. They will scratch the straw in search of grain, thus keeping it dry, and besides, have a healthy extra exercise. After the second day, release the youngsters and let them roam at ease in their new surroundings. Feed them inside the house upon the straw and keep the latter sweet and dry. This is especially necessary during the winter, which in the meantime should be coming nearer.

So long as there are no hens or pullets, peace will be maintained fairly, but should the growing birds show any inclination to start fighting then it is time to separate them once more; coop them for

awhile, and prepare to send them on walks. Orientals must be separated much earlier, kept in single pens, hand-fed and worked from earliest youth. It must be mentioned also that they grow game and savage much earlier than they usually do by feeding them on a larger ration of meat and green bones.

DUBBING.

a. The Spanish and b. The English fashion.

This is especially the case with Indian Game fowl, Asils and Kulangs, the training of which should be started after four or five months old. But Caucasian fowls should be, as a rule, country-walked, unless the breeder has plenty of knowledge and time at disposal to coop-walk them. The Caucasian cock is made or marred on the walk, with very few exceptions. Prior to sending them out on chosen country walks, they must pass a severe inspection, and pride yourself upon the fact if you have not too many cockerels to eat, after this inspection.

The trouble with this selection is that many breeders are not rigid enough and year after year believe that many small blemishes will improve on the walks. Do not send out cockerels that do not come up to the standard you are breeding to. It is much better that you find out right away if they are worth being walked, as the cock-pit is too expensive a way to find out the quality of your stock.

The trouble with early selection is that people eat too little young stock. If for every fifty youngsters you can send out forty to be walked, this should be entirely satisfactory.

Inspect them one by one. See that they have no crooked bones and are all well balanced. Observe the eyes, feathers, feet and everything you deem of importance. Before sending them out have them dubbed and if necessary marked once more. Dubbing is easily performed starving the youngsters twenty-four hours. Cut away the wattles close to the throat with surgical scissors, while your assistant keeps the bird in hand. Pluck a fluffy feather from the thigh and place upon the wound so that the fluff covers it. Cut away the remainder of feather. First one wattle, then the other. Do not hurry but try and cut clean with a single snap. Too small scissors are no good, choose a good sized pair

so that you can cut through with the first snap. It is the practice in some countries to feed the stag the wattles and comb that have just been cut away. The idea is to give the cock no chance that another may eat part of him, i. e. a sentimental or prejudicial measure. After the wattles are off, take the comb and cut from the neck towards the beak. Some fancy a deep cut close to the head, while others like to leave a part of the comb. The idea is that an antagonist may run a spur through it and your cock may catch him in an awkward position and land a blow under the wing. It is a matter of fancy, more than anything.

After cutting the comb away, put another feather upon the bleeding wound, just as you did when cutting the wattles. This fluff will ordinarily be sufficient to stop bleeding, and you need not bother to take it away as the stags will drop it after a few days. Keep the operated stags separated, as they usually fall upon each other if turned loose in a yard.

Some youngsters bleed abnormally after dubbing. This is not a good sign. They are either precocious sexually, or prone to suffer from hemorrhage. Tender tissues and thin blood vessels account for the latter, and cocks thus found will generally go under in battle after a few hearty wallops. Dubbing is a very light operation and causes absolutely no pain after it is finished. Generally the youngsters eat heartily after it, and do not care a fig for the pain. If you notice some of them moping in the coops or that are sick next day, better dispose of them in the kitchen. After a few days the stags are ready for their walks and you may put them out until the completion of ten or eleven months, when a stag should be ready to take its death in short heels, if of true blood. As said, Orientals, Asils, Japs, Kulangs, Singapores and other games, are a trifle later in maturing, and up to that time run among each other

pacifically. They live much longer than pure Caucasians, and consequently take about six months more to mature. But if properly hand-fed they turn savage early enough and should take their death in any form. In the Orient they are almost invariably coop-walked, though greatest care and patience are bestowed on their training and feeding.

A large field, near or in the woods, plenty of sun and shade, water and vegetation should constitute a walk. That the stags have their walks all for themselves and the pullets with them, is imperative.

CONDITIONING AND TESTING COCKS

Provided you have cocks of the right sort, bred and reared under ideal conditions and set to walk upon a generous country lot, when you go out to fight them you have to face a work that many have attempted with varying success. This work, preparation of the cocks for the acid test, is what is known in cocking circles as *conditioning*. It is of paramount importance for any cocker, and whatever there is in your cocks of high quality, must come out blank and clear by first-class conditioning.

We have had the pleasure of witnessing and even undergoing conditioning as an amateur fighters and are perfectly satisfied that besides a normal and healthy exercise the system of feeding is of commanding importance. Feeding for the pit is synonymous with conditioning, that testifies the importance of it.

The secret of feeding for the pit rests in the ability of giving the cock a diet that improves the quality of the muscle, reinforces glandular action and puts the nervous system in the highest order of efficiency. Altogether, it means supreme health. The quality of muscle means strength, glandular function, sustained energy and nerve efficiency spells ability.

In the course of years of observation and investigation of the methods employed in the whole world we have come across queer customs that caused us to smile, but on going deeply into the matter we have learned by and by, that though our ancestors had no notions of science, they hit the nail on the head with several measures of conditioning.

We have consulted also a vast amount of literature on cocking and as nearly every booklet contains some system of conditioning and feeding cocks for battle, we have incidentally tried several with varying success. Many are

good, some excellent and a few decidedly wrong. There is one trouble with most of them, consisting in that the feeding system puts more or less high strain on the digestive performances of the individual cock. The feeding to which most cocks are subjected is fundamentally different from the diet to which they were hitherto accustomed, and the high value of alimentary and stimulative power contained in the diet, would cause a cock to lose his bearings if continued indefinitely. With one word, the feeding method is not constantly healthy and commendable, barring some few exceptions.

We believe in a constant diet for fighting cocks since we know the importance of glandular and nervous function, all that is necessary through a course of conditioning being a progressive stimulation of the organism and such physical training as will promote a liberal blood circulation.

Some foodstuffs are fattening, others are stimulative while quite a lot are neutral. Variety of feeding elements will provide raw stuff to every organ and exercise will take care that these elements are so distributed that the organ most in need of it will be fed correspondingly by a healthy blood circulation. Fat is checked by rationing food and it will be noticed that the body consumes larger amounts of food on cold days, and smaller when the sun shines generously. Sunshine substitutes food, be it in form of direct light and thermal rays acting upon the body, or in sun warmed air coming in direct contact with the blood through respiration. Sun heat transforms fat into energy, and when this is not used it is stored away in a mysterious form and available in the moments of greatest anxiety, such as distress in battle, injuries or sickness.

Water is an agent that keeps the blood easy flowing. It may be incorporated pure in case of necessity, or with foods that contain it in large proportions, such as fruit.

We have experimentally kept some fowls without drinking water for a full year. Dry seed corn, wheat, oats and millet were fed soaked and after a while suspended as the fowls apparently kept it much longer in the crop than normal. Dry feeding wants a liberal supply of water, which even a large supply of fruit cannot satisfy.

The birds referred to above were perfectly satisfied and happy but could not get fat even though liberally fed. When given water for the first time after a year without it, they refused it and only very slowly got accustomed to it, again becoming fat rapidly. Feeding fruits regularly, apples, pears, pineapples, acid lemons and oranges has another effect upon fowl—they do not become infested with parasites.

TRIMMING.

Left, the Old English, and, right, the very severe Spanish fashion of trimming.

To augment the strength of a fowl to the limits of its ability it is necessary to provide means of constant exercise. Function makes the organ. In open runs or orchards, with plenty of vegetation, straw and manure heaps, they get it automatically, but in small runs it must be provided artificially. The best method to adopt is providing a scratching shed with 10 inches of straw, wherein small rations of grain may be first strewn and later buried. As soon as they get their ration easily and comfortably, they take it easy and become lazy. They are very human in this respect.

Some feeding methods provide cooked or baked in-

gredients. We do not see the benefit of it. Through cooking or heat treatment many elements are transformed and become partially indigestible. Eggs for example; chicks are made from and initially fed through the yolk at a temperature of the normal body heat. Subjecting them to heat, the albumen becomes hard and the yolk with seed capsule dead. Everyone knows the case of the hard-boiled egg and its indigestibility. So, why boil them, when you can feed them raw? The original object of heating or boiling food was to provide an immediate amount of heat to the body. This is not necessary when sun is available. As boiled food loses an amount of its original feeding properties, it is necessary to eat longer portions of same, putting an extra strain on the digestive apparatus and bulging the stomach and intestines to ridiculous proportions. Minerals subjected to heat become inassimilable and settle down in the arteries as lime deposits. Many ingredients that are stimulative agents to the important sexual glands are destroyed by cooking and lose their effect, causing premature decrepitude.

All the assistance that should be rendered to the digestive tract should consist in performing previously the mechanical process of mastication and which is obtained by the grinding or chopping the food. In cooped cocks this is of importance as the normal supply of grit in the gizzard will be dissolved in about 28 days and staleness will result.

Cocks fatten easily in coops, and as water is the agent, it should be reduced gradually and left out in the final stage of conditioning. It is remarkable how little a cock needs food when this is properly combined, but if fed entirely on corn diet or any similar food, a bird will eat a fair amount to get sufficient proportions of the different vital elements. As the fattening agents are always in excess in seeds it stands to reason that the cock soon be-

comes fat. Plenty of sun will cause a partial profit of the fat, in form of stored energy, but will not get rid of the whole fat. If the ration is reduced, the cock will be partially starved on some glands and become stale.

It is necessary to provide stimulants for each and every gland, the harmonic function of all of them spelling health and high spirits.

When cocks come in from their walks to be either tested or fought, they are subjected to a reasonable preliminary and final treatment before letting them go in the

SPARRING COCK WITH DUMMY.

pit for all they are worth. When you have agreed to fight a main or a few battles—custom differs all over the world—you have done so, well in advance of the time, if you are prudent. Do not sign articles of agreement handicapped by time. If you have to do things in a hurry you are badly at it.

Steel fighters may be properly conditioned in twelve days for stags and nineteen days or twenty for aged cocks, so that you must see your way to get this time amply to yourself and a few days in excess to visit your walks and take a glance at your birds. Make sure to get at least half a month for stags and a full month for cocks.

Prepare your runs and cock pens and get everything ready for the cocks to arrive. Then go out and see how the walks and cocks look. Take some corn or wheat with you, as you will want it. Inquire from the man keeping your cock, all you want to know, and especially ask what he has fed them in the meantime. They generally tell

you bright stories. Approach the fowl and note if they are shy or familiar and throw a handful of corn out. Cocks that go at it cautiously and shy, glancing up and around may have been ill-treated. Those that behave perfectly tame and call their hens but do not eat heartily, may have been well kept. You will notice if the fowls have been worried, or starved, or abused in any form. Nothing beats the arrogant spirit with which a well-treated cock approaches a stranger. There is self-confidence and composure in every movement.

If necessary see to it that the cocks you have chosen to fight are fed a daily ration of corn, wheat or millet, prior to taking them home. Make your plan how you will condition and in the corresponding time, go out and get your cocks in. If they are accustomed to sleep in a house, it is easy to catch them, but avoid any sort of a chase after the cock. In the hampers or coops put a layer of clean straw, and at arriving home you put every cock separate in the coops or runs previously arranged. You are a few days ahead for conditioning and have plenty of time to look them over. Let them starve for a while until their crops are empty if you intend to spar them. Many experienced old hands are against any amount of sparring, and this is perfectly sound if you know your cocks. But if they are from mixed precedence, you better ascertain in time what kind of cocks you have. We cannot see how far a short scrap in muffs or boxing gloves can do any good and well-bred cocks any amount of damage. Quite to the contrary, as soon as they have exchanged a few hearty wallops, they will be on the alert and will be quite willing—in fact gratified—to do it again. Of course, if there is any doubt about your cock's blood, better not spar them, but then—do not fight them either. Indian cockers spar their cocks daily, and every day just a round more than previously, and if there are any cocks in the wide world required to be as game as the Indians,

we have yet to see them. Neither do they lose spirits if properly fed;—and that is the question.

There is a kind of standard, however, taking care of individual breeds. Continual sparring makes the cocks clever and slower. We have seen cocks that have been sparred daily, during three weeks, and fought in natural spurs showing the highest possible performance. Fast cocks should not be sparred more than absolutely necessary, as they lose a lot of their speed, and if here resides their perfection, keep it.

Fighters in long steel and slashers, should, therefore, not be sparred, short heelers or infighters can be sparred and naked heelers must be sparred. Barring any sort of abuse, each will derive the logical benefit from the system. After the preliminary spar, you will note what your cocks are, and if you are going to fight, say in short American regulation heels, you will set apart such cocks that are fitting and keep the rest in reserve for any emergency.

You have prepared beforehand your cock-house and numbered every coop of same. Keep a record of every cock as found the first day and weigh them carefully before putting each in his coop. See that your scales are correct and that your weights are the usual standard. Patent scales are very good, but in many countries they weigh by counterbalancing ounce by ounce with weight-pieces. You can have these tested easily at any time. Do not rely on spring scales as the mechanism shows a difference according to prevailing temperature.

It is customary in some parts of the world to have the cocks trimmed prior to lodging them in the cock-house, while in other countries this is done prior to fighting only. Some do not trim at all. Suit your fancy or do as usual in your locality. The Spanish and South American cockers believe in clipping all feathers away prior to conditioning, with a view to getting rid of the feathers soon, to

get cocks accustomed to fight bare. In Spain cocks are trimmed severely as will be seen in a forthcoming chapter. Such is the case in most South American pits, and used to be just as much in England also. There is not the slightest doubt that cocks really get accustomed to bareness, and do not catch cold after the fight is over. Some authorities insist, however, that the latter is the case only with "*dead*" cocks. We believe that the American custom of not trimming at all, excepting clipping the sickles, is a sound one.

Indians do not even go as far,—merely clipping the points of long sickles. Stags should not be started in condition but about ten days before the battle, cocks require nineteen days.

If cocks require trimming of spurs, do it right away, cutting them to the required length. There are special little saws for the purpose on the market. After cutting saw apply white chalk to the wound to stop bleeding.

Look your fowls over for lice, scabs and scaly legs and treat them correspondingly. Molten butter, olive oil and a small amount of kerosene makes a good preparation. Dip a rag in the solution and rub the skin with it. Do not apply more than necessary.

The cock-house should be sunny and perfectly ventilated. Do not allow any smell to be evident in it. Cocks do not take offense of smells but resent vitiated air, just the same. A cock needs about seven times as much air for breathing, comparatively, as a horse. Take that in account and provide for ample ventilation. No draughts, no dust and no noise in the cock-house.

Coops should be mounted on shelf in one single row and be about 30x30 inches in every direction. Porch front so that cocks cannot bother and see their neighbours and an ample door to get the cocks in and out with ease. Straw upon the floor is better than any sort of mats. Do not place coops on the ground. There always are varia-

tions of temperature and draughts, and cocks generally dislike to sleep so near the ground.

Besides, you should be able to look straight at the cock's face and he into yours. Wooden feeding troughs, kept clean and sweet are the best. See that cocks can reach their heads out through the slats easily. Place a canvas or other blind so that you can darken the coop at convenience and you can operate in the house without the whole lot of cocks seeing what you are doing with a particular one.

You have already marked each coop with a number, and consequently the inmate is henceforth identified by same. You have also started a record in numerical order, so that you can see at a glance how you are with each number. Do not rely on the name of cocks. We have heard lots of stories of the funniest sort, due to misunderstood names and the like. But these stories do not help to pay the money when you make a mistake. As a rule we give a conventional name to each cock. It may add romance to the business, but in the cockhouse, there should be order, and nothing better than numbers and figures to reckon your standing.

The coops in the cockhouse may be removable and even made to be taken apart, so that you can store them away conveniently out of season, but it is good practice to have separate sun coops with one or two adjoining sides solid, so you can place cocks near one another but without allowing them to see each other. These sun coops should be also 30x30 inches, but with door on top. To take the cock out, simply lift the door and pick your cock gently grasping around right wing and thigh. A normal cock rests perfectly thus in your hand. Do not lift it by wing or tail, as any such rudeness will cause the cock pain and make him man-shy. Through constant, patient and kind handling even the wildest cock becomes perfectly tame in

a few days. To judge a cock it is necessary to handle him, and besides, it is a joy to do it.

For working the cock you must have an adjacent room to the cockhouse or at least it should be handy. If you can avoid it, do not work your cocks inside the cockhouse. In the training quarters, you want clean and ventilated surroundings. It is customary to have a table with soft padded top and in one corner a cushion or some such contrivance to toss or jump the birds. In another place is a round perch to exercise the wings and it is also good to have a loose one for hand use.

Now you have to make sure what you want to train your cock to. You have your notes already concerning their action in the first sparring test. Diverse countries show diverse methods. For infighters move your cocks to and fro upon the table keeping a constant pressure on the breast.

For naked heelers it is usual to place the flat hand under the breast and tossing the cock slightly up you make him work with legs and wings. In other places they have a round pit and the cock led to run round it in pursuit of another in your hand, or you make him run round following with a little flag. Another method is to have the floor covered with soft saw dust, place the cock on it, and then you shift the cock left and right. The feeder gets a lot of exercise also.

You may as well try your cock with a dummy. This is a body made of chamois or some durable cloth stuffed with horse hair. Neck and head should be well imitated and eyes set correctly. Provide plenty of feathers on your dummy and a pair of flapping wings. You hold the dummy by a stick at the end of which it is made fast. High spirited cocks will at once fight the contrivance while others will refuse it. A short sparring with a live cock will induce most any cock to continue the struggle with

your dummy. By this method you can make your cock fly, jump and kick, to your heart's desire.

Indians spar their cocks daily, increasing the amount of exercise after every session until they are fit to fight in the pit. We have discussed the pros and cons of sparring, coming to the conclusion that it is beneficial in naked heelers, indifferent in short steel and detrimental in long heel fighters.

Tossing the cock high makes them work with wings and legs but some old hands consider the method strictly dangerous. The same is thought about the mattress or cushion. As function makes the organ, feet are hardened making the cock's work on hard soil and after the session wash feet and shanks with cold water and alum solution. We have tried the latter with the best success and there was not a single case of bruises or swellings. To work the wings, set cock on fixed perch and push him backwards so that he must flap and work to get up again. Repeat conveniently.

Another method is holding the loose stick or perch in right hand, with the cock upon it. Then move it up and down, from side to side and forward and backward. The cock to keep its position must work considerably. The Indian method is to place cock on a swing and make him swing for quite a while.

With an assistant you can try another method. Have a towel stretched and place the cock upon same. Take one corner with each hand, while the assistant takes the other two corners. Then stretch, lift and toss the bird, for a good while. Incidentally you may nail one side to the wall, and move the cock alone by letting go and stretching.

You will notice that with either method of exercise, some cocks never seem to get tired, while others soon gasp and lose their wind. Watch the latter with greatest care and see if they are overfat. If not, and especially if they

turn blue in face, you may suspect either lung or heart trouble and not seldom both. Get rid of that cock as soon as possible.

There is no fixed time for working cocks, but from fifteen minutes to half an hour, progressive, morning and afternoon is the average. Some cocks require double that dose. Watch them carefully and act according to common sense.

After working, wash your cocks daily with pure cold water. Use no brandy as the alcohol is absorbed through the skin and is of no earthly benefit. To harden face, head, beak and feet use a strong alum solution and if the joints are stiff apply hot, dry fomentation, with a cushion filled with camomile or a mixture of dry bran, linseed meal and ground black pepper. The same fomentation is used to reduce fat on the belly, thighs and back.

If the weather permits, sun your birds daily after exercising them. If too hot, spread a few branches upon the coops, or a bundle of straw, provided there is no shade available. Put the sun coops every third day upon fine earth so that they can dust themselves. One hour sunning should be sufficient, morning and afternoon, especially if you feed prior to taking them out. Help the birds with a bit of water every day but reduce it so that they get only a spoonful in the latter stage of training.

When they show no thirst, it is a sign that the moisture contained in the food is sufficient. During the rest of the day, give the cocks a complete rest and do not allow anybody to enter the cock-house and tamper with them. The rest has a double effect; it allows them to digest and also recover forces. Some cocks become lazy with too much rest. Put them in a run with plenty of chaff or short straw and let them work for themselves. They will do it if you coop a pullet in sight of them.

In the Orient some cocks are allowed to exercise themselves loosening them in a room or run where a pullet or

hen is cooped. They never rest under such conditions, but should not be allowed to copulate. The following elements may be used for preparing a daily ration, to feed cocks with.

Grains: Corn, red wheat, oats, barley and millet. These should be cracked, (not ground), and the loose meal sifted and saved. When cocks lose flesh too much, meal should be added to their ration.

Legumes: Dry, green peas, ground, is an excellent food for the muscles.

Meat: Lean meat, bullock's feet should be ground in raw state and fed fresh daily. They contain animal albumen which is rapidly assimilated. Brain may be fed as nerve substance. Blood, as fresh as possible, mixed in the food. There is no earthly reason why these elements should be boiled. No bones should be fed!

Eggs: Highly valuable addition to the daily regime as it contains all vital elements. The white of the egg is pure albumen.

Lime: This must be given raw. Bones of sepia, (cuttle fish), ground to powder, may be added daily.

Fruit: Almost every fruit has valuable elements, and besides apples, bananas, oranges and lemons, tomatoes, onions and garlic should be used.

Fat: Some rapidly assimilated fat should be fed and nothing can beat fresh or salted butter. Apart from the caloric value of butter, it contains valuable vitamins, the same as cheese.

Coal: Ground poplar or any charcoal, may be fed daily. It prevents gases accumulating in the guts, oppressing the heart.

Sugar: Raw or refined sugar is a quick muscle food. It has some marked importance on nervous action and supports energy.

Spices: As stimulants to the glandular and digestive system, black pepper, cinnamon, nutmeg, cloves and anis,

and a portion of red ginger root, everything ground fine, should be added.

For adding moisture use raw milk. Never give a ration sloppy, it being preferable to give it dry.

A formula for mixing these elements conveniently works out as follows:

Grain mixture, cracked and sifted	6 lbs.	=	48 parts
Peas, ground -----	1 "	=	8 "
Meat, mixed heart, feet, blood and brains -----	1 "	=	8 "
Raw eggs, about 8-----	1 "	=	8 "
Sepia bones, finely ground-----	1/8 "	=	1 "
Fruits, mixed, and chopped-----	1 "	=	8 "
Butter, warmed slightly-----	1/4 "	=	2 "
Charcoal, fine ground-----	1/4 "	=	2 "
Raw Sugar, ground-----	1/2 "	=	4 "
Spice, pepper, cinnamon, nutmegs, anis, ginger -----	1/8 "	=	1 "
Milk, raw -----	1 1/4 "	=	10 "
<hr/>			
Total -----	12 1/2 lbs.	=	100 parts

This is highly concentrated food and should be given from 2 to 3 tablespoon measures after the exercise in the morning and according to the size of cocks. One spoonful is about one ounce. In the morning and evening cracked grain mixture should be given wetted with a mixture of eggs, milk and sugar. Milk and eggs are beaten and the sugar added conveniently. Then the grain is poured into it, and after being well mixed give about a convenient ration to each cock. If they gain in weight, reduce this ration, but if they fall back too far, augment the concentrated ration mentioned above.

We employed this system for the last five years and are perfectly satisfied that we have never used anything better.

Testing cocks is a matter of judgment and no breeder can get along and maintain the high quality of his cocks, without having them tested now and then. As a matter of security, we never attempt to choose new sires, even from proven stock, without first submitting a couple of pairs to a severe test. In countries where steels are regularly used as in England, France, States and Australia, there is a general prejudice against naked heelers. On the other side, in naked heel countries it is believed that steels do not show the quality of the cock.

Methods and conditions differ, but our experience and researches show that the honest cocker tests his stock severely throughout the world, and though we appreciate naked heel fighting, we are fairly convinced that for testing a cock's gameness, bottom and ability, nothing excels the regulation heels, $1\frac{1}{4}$ inches. To bring all the sport out of the cocks we advocate full drop sockets $1\frac{1}{2}$ inches. This weapon is fairly mortal, yet, requires good cocks to handle them properly, and those that are good with them, may be confidently fought in any length heels. The thing is different however, with naked heels. Here, bottom and strength reign supreme, while endurance and lasting qualities stand over speed and any amount of wingwork.

Tests generally apply to invisible qualities of cocks, as gameness, endurance and fighting spirit. To see the ability and speed of cocks, it is not necessary to go so far as a sparring scrap will show sufficiently what the birds can do.

There should be no degrees of gameness. Fairly game, game and dead game cocks is too generous classification. Either are the fighters game or they are not, and to bring this out clearly, there is nothing else to do than test them.

Steel fighting Caucasian game fowl develop full gameness very early and are perfectly mature after the first full feather moult. The stags of this breed should be game enough to take their death in short heels at 10 or 11

months. The option of one month being considered for the case of very bad weather when they complete 10 months, and which may impair their juvenile spirits.

Long heels are satisfied with one test (sometimes) alone. This is especially so with Eastern Insular slasher fighters and strains derived therefrom. A pair of cocks are prepared carefully and are fought in short heels until one goes down and out taking his death gamely. The remaining cock is nursed carefully and left in peace until the sun is well up next day. Then this cock is taken out, battered as it may be and is shown to a fresh cock or another in similar condition. He should show fight. For short heelers the test goes one step further.

They are fought in short heels with corks on them, to avoid an early kill and let to fight up to complete exhaustion. Nothing tests a cock better than when he is allowed to run completely out of wind. Both cocks are nursed and tended to carefully and left in peace until next day. They receive short meal of stale bread soaked in milk. Exactly 24 hours after the first test they are again matched in short heels uncorked and let one cut the other down or out, or fight to exhaustion. Attended as in first day and given a small dose of brandy—about 5 drops is sufficient—are kept in silence until next day, when they must show fight to a fresh cock. Nobody can expect a badly cut cock to fight to satisfaction on the third day. It is a test of highest quality if they live and show fight. Such cocks, if they are yours, will show you at any time that they will fight the third and fourth day if there is any life in them and will give you the satisfaction that you have dead game fowl.

Naked heelers are tested by letting them fight muffed until complete exhaustion. Nursed as shown before, they are fought blunt heeled next day. Again nursed and cooled, they get their spurs sharpened and hardened and are fought for dear life the third day. One may escape

and is spared as before and must take his death in the fourth day. A very hard, almost extremely hard test, but so long as there are such staunch cocks, there is no reason why others should be bred. The Raja Murghior small Asils of India take their death after any amount of pounding, four or five days, all is indifferent to them. The same cock or a fresh one, they go at him, forocious, full of confidence, deadly dangerous. Broken and smashed, swollen and black with fever, they do not lose their pins and fight and fight. Put slashers on them or sharpest, coldest steel, one inch to three. Nothing matters, they brave anything that comes in the way of trouble, gallant, vindictive, extremely dangerous even with the death rattle in the throat. No beast, excepting possibly the true blooded dog, can boast of such gameness and countless are the records where such small, admirable fighters, have perplexed the spectators performing incredible feats of savage courage and audacity, after being in the last throes of death. So long as such cocks can be bred and perpetuated, why breed lesser ones?

Gameness counts in the acid test; it counts in the fraction of a second between victory and defeat. Gameness wins over death and shows at best when the death knell is sounded for the down cock. Do not be afraid to have too much gameness. There cannot be enough of it. It bars the pain and suffering from the pit.

SETTING AND FIGHTING COCKS

After your cocks have gone through the feeding or conditioning period, they should be fairly ready to take care of themselves when turned loose in the pit to face their supreme moment.

The act of handling the cocks prior to and during a fight is termed *setting*, and the skill required to do this correctly depends largely on the rules you are fighting under. Consequently it is of extreme importance that the setter (pitter or handler) should know the rules thoroughly, and should be able to act accordingly, with greatest alertness.

Where the rules are rather complicated setting demands thorough practice and a lot of judgment. This is especially the case in countries where cocks are fought in sharp steel gaffs of different lengths. A good feeder will not necessarily be a good setter, and this is a point which should be attended to with greatest care. Where cocks are fought naked heels, as in Chile, the rules are extremely simple. Both cocks are set in front, squarely, on the marks in the pit and let loose. No interference is allowed until both cocks cease fighting and after the reglamentory time elapsed the referee calls for a handle. Then both cocks are taken round the waist and set on the line to be faced (*Careo*). Head and neck are not allowed to be touched or raised, even if hanging down. Cocks must peck at each other or no fight. We have seen Chilian cocks breaking the count, this way, for over an hour, under the old rules, until one died in the hands of the setter.

In some parts of India, the rules allow the setter to pick up his cock at any moment he should feel inclined to do so, claiming a "pant" or rest, but during the whole battle, which is carried on through several days, a setter is allowed to lift his cock only ten times. It

stands to reason that a "pant" should be claimed only when utterly necessary, because in the last stage of battle, a cock may be run down badly and have no "pant" to claim, whereas his adversary may have several to his credit. Then it is a matter of giving up the battle or let your cock be cut or smashed to death.

In some parts of Siam, no handle is allowed. Cocks are turned loose and left to fight it out,—as is the case in Japan,—the decision being left to the referee. Where no handling is allowed, it is reasonable to expect that the cocks must be in perfect strength, to carry on the milling to the bitter end.

In Sumatra, handling is allowed under certain rules, providing for the very seldom occurrence of a cock hanging in himself, mat, or antagonist.

As the cocks fight with one slasher only, it is a matter of great study to calculate the steps until they meet each other and to set the feet accordingly. Some cocks require a left, others a right set, and some will actually fly from the pitter's hands. In the latter case the setter holds a hand under the foot while the other must touch the mat. It sounds strange, but in cocks that go at it like a flash it is necessary to take such precautions as the battle is sometimes finished with the first fly. In fact, some cocks are trained to this end.

The rules in Bali and Madoera require that both feet of the cock should touch the ground firmly, the slasher foot being a step back of the right one. Some very clever cocks do not fly at all and rushing forward duck under adversary, turn and strike while the other is landing from his first fly. And so, different rules, different skill require.

The rules tell the setter how to set his cock to, and it does not pay to do anything against them. To be fair in setting a cock to, is an advice that needs not to be emphasized to any extent. Set the bird square and

lightly on his mark, with expediency, and let him travel.

Do not pay attention to remarks in the auditorium but keep your eyes and mind upon the cocks and your adversary setter.

Direct your remarks or claims to the referee, with due prudence and courtesy, but firmly. As you evoke the rules you show your knowledge of them and your judgment, which will enforce immediate attention to your request. It does not pay to become cross, as it will only cause others to become cross at you in return.

Practice and expediency in setting requires a cool head and quick action. If your cock is cutting well and having the best part of the battle, do not interrupt him even if the other cock is down ready for the count. So long as your cock is punishing he is winning.

Do not interrupt him. Your cock may be blinked during the battle. You cannot do anything to assist him, but when you are called to handle, set him sideways so that his sound eye catches adversary. It is a peculiarity of cocks, that when they become blinked, they do not fight on the hurt side and become erratic in their blows by false appreciation of distances.

In-fighters are better and accommodate their style to their uninjured eye, fighting sometimes sideways, giving the impression that they do better work when blinded in one eye. They sometimes really attack bet-

HOW TO TAKE THE COCK OUT
OF COOP.

ter so, when chance has left his better eye unhurt. The small Asil cock is great under such circumstances, but he even fights desperately when totally blind, and never lets go his touch on adversary.

These are, however, exceptions. A lost eye is a heavy loss at any rate. You can do nothing to avoid it, and such injuries will happen repeatedly by the spur, smashing blows (swelling) or wing cut.

Broken legs occur also continually, though how this can happen is something of a mystery to the novice. One would believe that a tiny spur would break or bend when touching a bone. It is also a heavy loss, especially in short heels and naked spur, though we have seen cocks winning with a broken leg. When you are asked to handle, set cock with sound foot well under body and take chances to have him overthrown backwards rather than roll on one side. A cock on his back is always dangerous, consequently do not attempt to set him up until you are asked to do so by the referee. Do not attend to what your adversary asks you to do. In most cases it is the referee who has the right to order you to do something. Cut gaff away if permissible.

Broken wings also occur. You cannot do anything to help your cock in this condition. If rules allow, clip the feathers short.

A cock may become badly weakened through cutting and his equilibrium disturbed. Under such conditions set him wide upon his tail and take chances to have him knocked over on his back, especially if adversary is sharp upon him. But if your cock is punishing and adversary falls on his back, secure a handle as soon as you can.

Drawing heels, when cocks hang, is prescribed in the rules and when you perform this operation, make sure to do it fairly and correctly.

The handling of cocks badly injured during battle requires judgment that is gained through practice. It

is almost impossible to give instructions for the many incidents that may happen.

Some rules allow a certain amount of nursing, others prohibit even handling. In India, cocks are allowed to be nursed thoroughly during the "pant" (pauses), going so far as replacing broken feathers, beaks, and operating injured cocks. The object of this rule is to have the cocks tested severely on gameness and endurance. It stands to reason that a setter must be perfectly experienced to do well, and such a man stands in high repute for his wonderful knowledge and ability.

Heeling cocks for battle is not always the job of the setter, though the latter will acquire experience in this art also.

Naked heelers must have their spurs trimmed. Loose layers of horn substance must be removed until the massive spur shows no sign of weakness. The points must be sharpened and the whole spur hardened. The latter process is accomplished by rubbing the spur with a leather strap wet with alum solution and afterwards polished with a piece of wood. Such is the custom in Chile and parts of Argentina. In Spain, the length of spur is fixed, and must be shortened when it exceeds the prescribed length. Cocks matched are measured on spurs with a little gadget called "escantillon" (mould).

Steel gaffs are generally fixed as to shape and length in the prevailing rules of the countries where they are used, as is also the socket used to attach heels to the natural stub. There is no reason to leave the stub any longer or shorter than necessary to fill length of socket. If too long it will materially shorten the blade, preventing same from penetrating its full length. If too short, it may impair the firmness of the gaff.

In some parts, bolstering under flange of socket is allowed and cockers leave the stub longer with a view to throwing the point of gaff farther. In close heeled

cocks, it does not matter much how you place the gaffs. They will cut with any sort of heels, but in K-legged cocks, the set of gaffs is of greatest importance.

The setting of slashers differ in the several countries where they are used. Where the rules allow the replacement of broken slashers, they are made so light and sharp that they will break in adversary's body. Such light slashers are in vogue in Mexico and Central America. The idea is that when your cock breaks spur in adversary's body, the latter may bleed to death while you are replacing slasher, or otherwise become too weak and sick to do any serious damage.

In Peru, very heavy cocks are fought in ghastly large slashers and as the rules do not allow replacement of broken spurs, the slashers are made stout and heavy.

In the Philippines a different sword-like slasher is used. Generally smaller than usual in the East.

In the Sunda Archipelago, they use two different types of slashers. The older ones are the curved and short weapons attached to natural spur, and the newer is a very long blade fastened to the foot by means of wooden wedge and tape. While the American slasher has a two-prong socket to attach spur to or near the natural stub, the Javanese weapon has no socket at all, so that fastening the steel to the leg is an art which requires skill and practice.

One slasher only is used, and this is attached to the left foot, following the ancient faith that this leg carries the deadly punch. We have seen many cocks carrying the slasher on the right foot, and confess that we could not discern what difference there is between the left and right foot for killing properties, though we quite agree that there are right and left footers in cocks also.

Heeling a cock is an art that cannot be learned properly by any written instructions. The regular way

to gain knowledge is to have it taught practically by an accomplished old hand.

It may be said once more, that a bloody heeled cock will be able to cut an adversary down, even with poor gaffs and deficient heeling. Speculation as to wonderful twists and mortal efficacy of steel weapons is very good so long as you have bloody heeled cocks. You may fight such birds with any kind of gaffs, and they seem to be able to handle them all. It is not a matter of heels alone, death is a peculiarity of the individual cock, hence the importance of breeding such fowl in preference to any other.

NURSING COCKS

As said, some rules allow the nursing of cocks during the battle, between pittings. Others bar any sort of even handling the cocks. The latter is the case in Spain, when a cock loses by a simple knockdown or knock-out. In some parts of Spain as soon as a cock is knocked down he loses. This measure has been taken in consideration of the old-time fights which were unduly drawn through countless pittings. In some other parts of Spain, as soon as a cock is knocked down a count is allowed of varying length, after which he loses. Drag fights are thus eliminated. Cocks have to fight it out within a time limit, varying from 20 to 30 minutes. If both cocks are still up and fighting it is a draw. Modern Spanish cocks are, therefore, required to be venomous from the very first instant, and though they fight naked heels, fatal decisions are the rule. It stands to reason that under such circumstances no other kind of nursing is allowed nor deemed necessary.

Rules in the New World, especially in the United States, allow nursing with certain restrictions and in India nursing is an important, if not the most important part of the battle.

In India the setter goes to the pit with a full equipment of everything necessary for the many phases of elaborate nursing, but under the restrictions usual in the West, a sponge, a dry towel and a water vessel will be generally sufficient. During the battle cocks should not be allowed to drink water nor any other stimulant. Giving alcoholics is as bad as anything else, and the use of brandy for any fomentation should also be avoided entirely.

When a cock suffers under excessive heat, a damp sponge under the wings and vent will materially assist

him. When suffocated, a wet rag or finger inserted into throat should help a bit.

When injuries affect the nervous system causing partial paralysis, foment with a warm hand and massage. Menthol is also good, but make sure the cock does not inhale it. When a cock is dizzy a bit of ammonia inhaled in very small doses will clear his head.

During warm weather, keep your cock as far down to the ground as possible as the air is there cooler, and while nursing your cock, keep his head away from the other cock. Wash shanks and legs with wet sponge but do not dry. The evaporation of the water will cool the cock up.

If the cock is losing spirit, either due to a cold streak in him, or to heavy injuries, stroke him with your hand along the back, pressing the rump down. This massage foment the kidneys and adrenal gland as well as the testicles. Tip gently with point of finger around the vent, which causes the same effect.

When the cock is uncoupled or shows any sort of paralysis in legs, move both feet as if pedalling, massage legs from hip joint to the hocks, and rub these with your thumbs. Set feet close under the cock and place warm hands upon him, by rubbing them thoroughly on any part of your clothes.

When feet are cramped, move the toes and scratch the sole with your nails.

Broken legs and wings cannot be remedied. The only thing to do is to assist the cock in setting to, so far as the rules will allow.

If rattled in the windpipe, stretch the neck for a while, moving head left and right. The object is to pull the arteries out with a view to close the wound, sliding it into uninjured tissue. Let the bird swallow the blood into the crop.

If lung-rattled, no nursing will save the cock. Cold

applications may assist for a short while, but that is all you can do. If lung-rattled with sharp naked heels or steel haips ("puones") nothing will save the cock from a quick death.

A heart thrust seldom occurs, but spells a quick death when it happens. If the cut is near or around the heart, the bird drops down and if it manages to get up again he will incline forward. Warm fomentation may help and when setting the cock, place him down upon the floor. Some people say that pouring water upon the tail helps them up, but we never had an opportunity to see this done.

Thrusts through the gizzard damage the cock enormously. Apply the hand as hot as possible to the injured region.

Injuries to the kidneys, renal and sexual glands are of the heaviest consequence, and a cock thus injured may be caused to run. Apply heat to the lumbar region and hope for the best.

Cuts in the breast sink the cock forward. Apply warm massage, but very gently and squeeze the rump.

A cut near the ear or in it causes a cock to drop down, and if the brain is injured will cause instant death.

A cut through the neck injuring spinal cord, causes immediate death, but when the cut goes through the nape, touching the neck tendons, it makes the cock crazy for a while. In the latter case, scratch the nail behind the comb quickly.

A cut through neck muscles, impairing the most important nerves, causes wry-neck, after which cocks may turn and turn, and even fall down. Catch the head between the fingers and move it quickly in every direction, finally twisting the head in opposite direction and stretching the neck.

Cut in or through the eyes has no repair possible,

but do not apply water nor any medicine to the affected organ.

When the battle is over, put the injured cock into his coop, and before anything else have him thoroughly washed and cleansed. If you have your records with you, note the punctures he has received. Flesh wounds are not dangerous and even a broken bone is not a desperate case. Dress the wounds with a bit of vaseline or camphorated oil. Do not apply alcohol to the wounds, better use iodine if you suspect infection.

If cock is weak, instead of food give him a little drink, half water and half brandy. As a rule you will save him from catching cold, and he will not require food for at least 12 hours.

Keep his coop in a silent place and make it as dark as possible. Before night give the sick cocks fresh water to drink, as much as they like. Next day water and a ration of soaked bread. After they have disposed of this meal, you will notice just how far sick your cocks are and must act accordingly. The idea of feeding cocks after washing them out, is the cause of more complaints than any other. If some cocks recover, in spite of this treatment, it is more or less due to their wonderful resistance.

Quietness in the quarters, absence of draughts, rest and cool water are the essentials in nursing after battle.

Go over your anatomical card and make sure that the cock has not been hurt in any important nerve center or near the heart. If the punctures are located around the region of kidneys, observe the excreta, and if the whitish matter that covers it is bloodshot, you may expect that the kidneys are injured or otherwise inflammation of the same will follow. This you will note the next days. Apply hot fomentation to the kidneys, allow plenty of tepid water to drink and keep bird in warm, comfortable, dark coops.

When the bird has had a short rest, say two days, and you want to know if the testicles (or one testicle) has been hurt, place him on his back and rub gently aft of leg in direction of the organ. The cock will ejaculate a small amount of sperm, which normally is clear whitish. If there are traces of blood in the sperm, you may be sure that the cock is hurt. On the other hand, absence of blood in the sperm, does not necessarily mean that the sexual glands are sound.

Injuries to the renal glands may be suspected when the cock is punctured near this region, and he persists in moping around in the coop listless and dull. Adrenal glands have a strong bearing upon the general spirit, and react efficiently upon the alcoholic dose prescribed. When a cock, after sleeping a full night, shows good spirits and even crows, then feel happy. He is three-quarters on the way toward recovery.

Dull face and comb, accompanied by yellowish or greenish excreta, are due to injured liver or spleen.

Purplish face, gasping breath, swollen eyelids, diarrhoeic discharge and profuse urine, are among the worst feared symptoms of contracted pneumonia. Give a teaspoonful of brandy with sugar and inject half cubic centimetre of pure turpentine oil in the left thigh. If next day, after a thorough rest, the bird shows no improvement, it is better to dispose of him mercifully.

Punctures through liver and gizzard require a special diet. Starve the bird for 24 hours. Feed milk for three days. When the bird looks better, give a raw egg mixed with bread crumbs. After a week feed bread and milk with rolled oats. Should be sound in 10 days.

Broken bones require immediate treatment. Clip the feathers away, place ends of bones near one another; pack with cotton and support with thin wood strips or stiff cardboard. With thin tape bandage firmly but not so tight that circulation may be hindered. Recovery

should be within 14 days. Feed milk and rolled oats.

Flesh wounds need very little attention. Just keep them clean and the average game-cock will not feel any bad effects from such injuries after a couple of days.

Injuries caused by naked heels, not seldom become infected. It seems that the natural spur causes fever and infection, due to some venom on the spur. This is wrong, and the bad effect of wounds is due entirely to edematic or bruising effect of blows, while the gaff cuts a clean puncture. Juice of lemon and cold water should effect a cure within 14 days in the severest cuts.

As soon as the cocks are plainly convalescent, you should feed them liberally and allow them a portion of conditioning ration, aiding them,—this time,—with as much water as they like.

Cocks that mope in the coops, with frizzled feathers, and show no appetite after the first starvation, should be observed with suspicion and treated accordingly. At any rate do not breed from them, even if they appear to have recovered completely.

CAUCASIAN FOWLS

Though the largest percentage of poultry authorities credit the "Gallus Ferrugineus" (Bankiva) with being the only original wild ancestor of all domestic poultry, they immediately after, in the description of breeds, recognize deep differences in type, and group the breeds under typical varieties such as Mediterranean, Asiatics, Orientals and others, with rather helpless nomenclature. As everything must bear a name, the difference in type has been credited to "evolution," which stands for the common expression of "degeneracy" without the stigma that this word implies.

But there should be no doubt that many of the so-called evolutionized characteristics are frankly due to degeneration following the natural rule of regression towards mediocrity, especially evident in crossbreds or hybrids of any sort.

The expression "Caucasian" is commonly used only in reference to Game fowls, and so far as it suffers a comparison with common barndoor fowl, they represent the fraction of the poultry world, otherwise known as Mediterranean. In other words, the type is closely akin to the original Bankiva or Red Jungle Fowl. If we take a typical Caucasian Gamecock or a Mediterranean rooster and compare both in body shape with a wild Bankiva, we at once will observe that the three specimens under comparison are closely related and belong to one clearly defined species.

The Bankivoid type then, described elsewhere in this treatise, is what in Game circles is recognized as the Caucasian.

It is necessary to remark further that besides the wild Bankiva or Red Jungle Fowl there exists another wild variety, very near related in body type and habits to it, but distinctly different in minor features and color

scheme, the "Gallus Sonnerati," or Gray Jungle Fowl.

Both varieties are to be found in India, and all evidences tend to demonstrate that while the Bankiva is the original grand source of the Caucasian fowl, the "Sonnerati" has also contributed a share, in blood at least, to some strains of Game fowl.

The natives of India—up to our days—tame and domesticate the Bankiva easily within one generation, but experience some difficulty in doing the same with the Gray Jungle fowl or Sonnerati, which is extremely wild and shy. It has been observed that wild Bankiva flocks inhabiting the jungles near native villages, show signs of degeneracy, due to interbreeding with domestic fowls which are allowed to roam far and wide. In fact, the natives are gratified when their hens are fertilized by a wild cock, much the same as domesticated buffaloes are left to be fecundated by a wild bull.

As the Sonnerati is very difficult to keep confined, Bankiva hens are left to roam in jungles where such a cock has been located and actually become fecundated by the wild Gray cock. The natives emphatically assure us that the progeny grows larger from such a cross, than when bred pure. No doubt that, deliberately or not, Red fowls have been crossed with Grays, and that such crosses are fertile afterwards, has been proved with absolute certainty.

This, of course, does not mean that crossing has been resorted to regularly but only shows that it has been done, and consequently there is a reason—and a very creditable one, at that—to believe that the different gray hues in Caucasian Game fowl are due to Sonnerati or Gray Jungle fowl blood. The frequency of the wild Bankiva, and the relative ease with which it may and has been tamed, accounts for the overwhelmingly larger proportion of its type and color in the domestic varieties of fowls. It is also highly remarkable that

though Caucasian fowls were introduced in Europe long before the Christian era, they have not evolutionized or degenerated towards "Standard" types and varieties similar to the Asiatics, Orientals and others, but have retained their original Bankivoid features which identify the species throughout the world and which we shall study more closely while referring to the different breeds in forthcoming chapters. What the poultry savants account to the alleged evolution, if we observe carefully, are really specific characteristics of certain varieties and which can be followed systematically to common prehistoric ancestors.

That such characteristics appear in evidently cross-bred fowl, following the rule of regression towards mediocrity in some cases, and atavism in others, but do not show in *fairly pure* Game fowls, should give considerable matter for thought.

If the typical characteristics of evolution or degeneration are studied according to the system under which they appear, we shall see that they do not take the course of chance but resemble features which we know in birds related to the Galli species. Barring, naturally, mutations which appear spontaneously in domestication, due to frank degeneration or uncontrollable causes.

Typical features of evolutionized domestic poultry, alleged to be descended from Bankivas, are, for example the following:

1. *The Asiatic type.* Produced in all quarters of the world. Typical breeds are the Rhode Island, Plymouth Rocks, Javas, Sussex, Orpingtons, Faverolles and others, which resemble the Mongolic Langshan, Cochín, Brahma and Red Canton Fowl. Though resembling the Bankivoid fowl, they show several Oriental or Malay features. Just how this type has been produced may be deduced from the study of the history of the Rhode Island Red, which has been produced mating the com-

mon, fairly Bankivoid or Mediterranean hens of New England, U. S. A., with Red Malay cocks. Perhaps very few men know that an identical type and color existed in China during many centuries and is known as the Red Canton breed. The Asiatic type may be reproduced at will, at any time, crossing Malays and Bankivas.

2. *Pheasant features.* One has to compare the head of a modern or old-time silky cock with that of a silver pheasant to recognize a striking resemblance at once. The silky is a queer freak. The body is covered with a flossy feather texture which is similar to that forming the top knots of several pheasants. Beards, muffs and tassels come under the same heading. If once, some time ago, pheasants have been crossed with Galli and produced fertile offspring, we cannot say. At least we have no evidence to this effect, though we have been emphatically assured that such was the case in Persia, and many modern breeders assure us that such a cross is possible. We are prone to believe that Pheasant features in Galli are due to Gallus Varius blood, and their appearance in atavistic cases accountable to regression towards mediocrity.

3. *Sexual characteristics.* Differences in combs which appear with remarkable tenacity, for example: The single blade serrated Bankiva comb; the flat, broad, cushion shaped Malay comb; the finely serrated, rather short and upright Gray jungle fowl comb; the smooth edged single comb, sometimes lopping to one side of the Varius, with a single wattle like a dewlap; the small triple, pea comb of the Sumatra. Other shaped combs are generally produced by crosses. Bankiva and Sonerat hackles and the very rare one of the Varius, while the absence of same is due to Malay blood, which is supposed to be henny feathered or very nearly so. The same applies to bulk or shape of tail. The Bankiva

fanned vertically and the Malay spread horizontally. Then come the spurs, which are secondary sexual features of the male and which we have known to be either curved up, straight downwards, or multiple, as is the case in Bankivas, Malays and Sumatra respectively. Then there is the song and cackle, which is different in the diverse varieties also.

4. *Skin and feather color.* A great variety of hues of which we shall learn some day that they are responsible for certain qualities of the internal organs when color distribution comes.

5. *Mentality.* The different behavior of fowls according to habits which form the instinct. Fighting spirit and style are direct effects of the bird's mentality, and the difference of same is recognized universally by cockers when dealing with Caucasian or Oriental birds.

As already said, the term Caucasian is applied only to the Game fowls originated and evolved in Europe from Bankivoid ancestry and which are decidedly and entirely different from anything Oriental or Malayoid. Pure Caucasians were and still should be, pronounced fliers, with abundant hackles and large, high tails; their song is characteristic, loud and clear. The type has been traditional and its stance the very ideal of arrogance, courage and haughty bearing.

We have already observed how the old Bankiva was introduced in Europe from India, via Persia, Greece, Rome, Spain, France and England with greatest probability. It was scattered all over Europe, and though a large portion degenerated into tame dung-hills by lack of selection, where kept pure for the pit it succeeded in retaining the old type and stance, unchanged, up to our days.

It was so widely distributed and conspicuous that it became the most common sight everywhere and science

appropriated the type as the genuine and only one whence all domestic varieties were supposed to be descended, grossly ignoring the existence of that other fowl, that—at least—has equal rights of ancestral honors.

That the Malay should be an evolution from the Bankiva is an argument which all connoisseurs of the Gamefowl rightfully lay aside definitely and which may be excused only with the prevailing general ignorance in the matter, caused by the overwhelming frequency of the Caucasian everywhere in Europe.

We shall therefore discontinue the old way of describing Game fowl in one heap and shall treat Caucasian, Orientals and the Oceanic Slasher fighters, as what they,—by right,—are, viz.: Different varieties or classes.

ANCIENT COCKS

Mention of cock fights in old documents dates back some three thousand years and refer to laws concerned with the sport, but it may be fairly supposed that this old sport was practiced several thousand years before the Institutes of Manu were written.

Digging for information in old literary documents yields but scant booty and whenever we came across some of it, it invariably referred to a newer age. All that appears to be left from old cocking glory are some pictures or engravings that have been saved by mere luck.

We have referred already, elsewhere, to the possible beginning of taming and domesticating of the wild cock, deducting from the observation of natives in India, Philippines, etc. Many travelers along the Southern slopes of the Himalaya have seen natural cock-pits, where the wild cocks fight for their rights. Some of these travelers were lucky enough to find the dead corpse of one cock, while others have practically seen a natural fight staged without reference under the old rule of Nature.

We have historical data about old breeds and cocking nations referring to Persia, since the time of Alexander the Great, but there are evidences that cocking was practiced and in other lands many centuries before. In fact, the early beginnings of cocking cannot be traced with any degree of certainty. As a matter of logic, we may suppose that cocking started in such places where wild cocks existed, and North India appears to have been one of those places. Siam, Malaya and the Philippines, as well as Java, Sumatra and adjacent islands, were equally favoured with wild Galli, and there is no earthly reason to suppose that in the latter places the natives did not observe with the same pleasure the fights of the wild cocks of their districts.

Whether the Bankiva was domesticated for the pit prior to the wild Malay, is a matter of speculation, but logic indicates that the Malay became extinct—in wild state,—before the domestication of the small Bankiva was attempted. The latter however, became conspicuous at a very early date and became scattered all over Europe prior to the Christian era.

When Alexander the Great invaded Persia, it was to be found all over the country. We may resume what we know about the Persian cocks.

PERSIAN COCKS: Evidences show that what the Greeks named "The Persian Bird" was not a native of that country, but was introduced, already domesticated, by early Arian invasions from North India, and prior to historic times. There are excellent works about old Persia in English, French and German, but as may be expected, these works do not precisely deal with the game fowl of that country, nor do they give any information about the sport. It has been rather the work of some learned Hindu Mavlawi and Persian savants to gather old manuscripts, wherein, now and then, some remarks are made about the cocks of that land. Following such indications, it appears that the sport of cocking was widely enjoyed in the whole country, which fact we find confirmed by the Greeks, who otherwise would not have observed and admired it, as they actually did.

GREEK COCKING.

Above, from antique vases in the Vatican and in the circle from sculpture in Louvre Museum, Paris; "After the Triumph." Cocks are Bankiva type.

This history of Persia is so interesting in its ups and downs, it contributed much towards the civilization of the East, being midway on the road between the Orient and Occident.

The oldest population of Persia are the Tadshiks, sedentary people of extremely old origin, Arian in principle, but now composed of Persian, Medean and Bactrians. Nomads crossed the land, Arabs, Jews, Phenician, Turkomen and Gypsies, all interested in the rich trade that the Orient afforded. The Medean and Bactrian population (Tadshiks) were farmers and shepherds, and the old cockers of fame were naturally among them.

These sedentary peoples came down from the mountains to meet at the big fairs at the side of the high roads of commerce outside the larger towns. Here travelers and natives met at the market places and exchanged their products. All sorts of diversions were staged and the peasants had a jolly good time after a full year of labour and privation.

They brought their wool from the hills and their cocks, which apparently changed hands at fair prices, to be fought in the towns or otherwise exported to Arabia, Phenicia and Egypt. Though there are no records that in the large country fairs cock fights were staged, it may be supposed that the sport constituted a grand opportunity to wager a handful of coins.

Cock fights were arranged in the larger towns and villages at an earlier date than usual for the large caravans to pass, and cocks coming from the country appear to be reputed as the best. The peasants usual stayed outside the town in the "Ghans"; or rest-houses, installed for travelers, where cocks were kept confined under round wicker coops.

Early Egyptian pictures of cocks show the birds in natural feather and quite untrimmed, but old Persian representations of game cocks, show them apparently

trimmed and in some cases even armed with artificial spurs.

By all evidences the original Persian bird was a pure Bankiva, as may be gathered from all existing old representations. In later years and just prior to the Greek occupation, there was a vast sea traffic upon the Persian Gulf, Arabian sea, to the Sund Islands. Arab and Persian sea-farers crossed the Indian Ocean with their small sea-worthy craft. It is not casual that hitherto along the Persian coast black game fowl was found, proceeding perhaps from South India, Sumatra or Java. When the Greeks finished their Persian expedition they took Persian cocks home and succeeded in breeding these birds up to the highest standard. In old records we read, that the Greek birds were reputed as courageous warriors, while the "black strain from Tanagra, was large and the best."

OLD PERSIAN COCK.
Reconstructed from old representation.

A black strain of game fowl may be traced up to our days, probably descending from the old Persian of the coast. Black game fowl was also known in Rome, and in the Balearic islands, as well as in Malaga (Spain). Though the modern black strains of Spain are fairly Bankiva in type, they just bear a faint trace of alien blood, which may be detected observing occasional appearance of rose and multiple combs due, so far as we can judge, to Sumatra blood infusion.

That small-combed, double and triple or rose-combs, appeared in older days may be deducted from the fact,

that on mentioning the game cock, it is clearly stated that it has a large and single comb, while several early authors mention the low comb of what was believed to be crossbred fowl, as we shall learn further on.

We have mentioned also that Persia was crossed by the big caravan road to India, and the Arabs, Jews, Phenicians, etc., that traveled upon these roads, had more than one opportunity to witness the prowess of the Persian cocks and no doubt imported them into Arabia, Palestine and Egypt. The intrinsic value of a game cock must have impressed those traders who were in search of valuable merchandise which could be sold elsewhere with a corresponding profit.

When the Jews left Egypt led by Moses towards the promised land, the Egyptians had tame fowl and supposedly also game birds, but the sons of Israel, while in the desert,—and even later,—had no fowls, nor bees.

The first mention of fowl in the old Testament is to be found in the first book of Kings, 4:23; Luther translated the original word "Barburim" into "gemestetes Vieh," i. e., fattened animals, while in fact it should be "*fowl*." This mention refers to Solomon's menu, who is supposed to have imitated the Egyptians, (who kept fowl and geese), to honour his wife, daughter of Pharaoh.

It is to be supposed that during and after Solomon's reign, fowls were introduced in Israel, as the king permitted the Phenicians or Zidonites to trade in the country and actually commended the sea-trade on the Mediterranean. In the New Testament poultry is often mentioned and there is but little doubt that most, if not all fowl, came from Persia.

When St. Peter denied his relation to the Lord, at the cock's crow, it is fairly sure that the bird was a pure Bankiva, and possibly a game bird descended from the Persian stock imported by Phenicians, or Arabs. The Phenicians had a great deal to do with the progress of

Egypt and Palestine, though they did not intend to act as agents of civilization. But they traded all along the Mediterranean, and besides the Arabs and Persians had their share in sea-trade upon the Indian Ocean. They opened the secret markets to the fabulous land of Ophir and carried gold, ivory, pearls, timber and hundreds of articles that were high in value around the courts and the houses of the rich.

Phenicia was too small to maintain its independence at length, and was subdued finally by the Romans who were responsible for the scattering of them and the Jews all over the world. But the Arabs stayed on their ground up to our days, wary merchants and keen sailors. They were and are to be found always on the way, through Africa and Asia, contributing to a well set, progressive civilization.

Persia had a violent and eventful past, and as may be expected, with the invasion of foreign hordes, constant wars against their neighbors and convulsive inner revolutions, it became weak and miserable and the old past-times, reflections of a glorious past, were abandoned in the painful struggle for peace and bread.

Cocking declined, though it appears that it never came under ban. Misery and oppression forced the Tadshiks to leave the cocks and abandon their breeding, and so it came that the once famous Persian bird was almost completely forgotten in its home land where centuries ago it sang loud and defiant its challenge to the world.

ARABIAN COCKS

In our endeavors to get information about ancient Arabian Game cocks, we found extreme difficulty in obtaining reliable data. It appears, however, that the greatest percentage of the fowls kept by Arabs, came all the same way from Persia or, at least, via Persia.

A casual observer will at once make the mistake of putting all the people which we are inclined to identify as Arabs into one pot, while the people of Mesopotamia, Njemen, Nejd, etc., draw sharply delineated boundaries around racial and social differences of the Bedouins, Senussi, Arabs, Syrians, etc., etc. This will be noted especially when our study reaches the dominion of Arabian horsemanship. In Europe and America, most horses coming from Asia Minor are simply classified as Arabs, or, if there is the slightest doubt as to their originality, as Eastern horses, while the many tribes make a fundamental difference between the true, straight-faced rather large Arab, the smaller Syrian with concave face, and the Persian or Turkoman horse with a pronounced bulged forehead. The lesser Arabs and Bedouins do not care much about the stallion used for breeding, so long as the mare is straight in her pedigree. They know that there are no bad stallions used where the mares are of the highest order.

But the true horse of the Nejd and (or) Njemen, stands above all. Animals of purest blood and of commanding size, though they never reach the giant proportions of the English race horse.

Among these horse breeders of yore we find a part of the population with sedentary habits who always kept some fowl, for diversion or for culinary purposes. Mention of cock-fighting is made in some of the oldest manuscripts, and though a complete description of

their Gamefowl we could trace nowhere, it stands to reason that according to their precedence from Persia, they were pure Bankivoids.

In our present day, as a matter of fact, most of the Arabian fowls are mixed mongrels, though pure Gamefowl still are bred and kept expressly for the pit. While most cocks are fought naked heel, it is interesting to learn that they sometimes match their cocks with small slashers, which are evidently fashioned after the Javanese pattern known as "Gollok." These slashers are about one inch long and are fastened to the natural spur with wax and thread, much the same way as was the custom in Java. Some travellers have informed us of other types of artificial spurs, but in correspondence with Arabian savants, we could gather no evidence as to the truth of such statements, and consequently we are compelled to drop the matter until we come across some confirmation.

We find Malay or Oriental type Games in the South of Arabia today, where the naked Madagascar is rather frequent and may be had even at almost every small port.

In the interior, further North, a heavily feathered black fowl is known with very large and drooping wings, but the traditional Bankiva or Caucasian type fowl may be found in overwhelming proportions everywhere. Among the barndoor fowl population, we meet every sort of freaks and oddities, as is only natural to expect where all breeds and strains have been crossed with no discrimination.

Cockfights are staged here and there in the open air, under a tree or in the shadow of any wall. Bets are made and taken on the spot, universally accompanied with great noise and quarrelling. Finally the adversaries agree as to terms and the fun begins.

Higher sport is provided in the towns, where regular

cock-pits are arranged and the fights go on under well-stipulated rules.

We have reason to believe that many relations of cocks and cock-fights have been lost in the course of time and changing conditions, while many manuscripts may rest in obscurity in the libraries of Oriental societies or in private possession.

We find one of these gems, published in the "Journal and Proceedings of the Asiatic Society of Bengal," February, 1910, which we cannot restrain from reproducing herewith for the benefit of our readers. This gem is taken from the "Aja'-ib-ul-Makhluqat" or "The World of Wonders," an Arabic work by Al-Qazwini, poet, who died A. D. 1283.

Arabian Game cock, almost the same as Persian.

"The cock is the most lustful and the vainest of birds. It heralds the dawn. One of the strangest things about it is that it knows the watches of the night, and apporions the times for its night-crowing according to the length or shortness of the nights; for instance, if the night is fifteen hours in length, he crows, at stated intervals, the same number of times as he does in a night of nine hours; and this he does by a God-given instinct. It is related that the Prophet (May the Peace and Blessing of God be upon him) said, 'God the Most High has created a cock beneath His Throne, with wings that can extend beyond the East and the West; and towards dawn he spreads his wings, and flaps them,

and raises his voice in praise of Him, crying, "Glory to the Most Holy King;" and when he has ceased, all the cocks in the Earth join in returning that cry, flapping their wings in like manner. It is said that the chief caller-to-prayer amongst the cocks is that breed that has long wattles and a castellated comb (1). The cock has a sense of jealous honor about his wives, and he is generous to them, and cares for them. (2) It is a belief that, should a man rise from sleep at cock-crow, he will be fresh and bright all day. A white cock puts the lion to flight (3). The best of cocks is the game-cock (4). Its points are, a red comb, a thick neck, small and black eyes, sharp claws, (spurs) a loud cry (5). A cock is unselfish to his hens; he takes a grain in his beak and casts it to them. It is said that he does this in the time of his youth, when his passions dominate him; but when he ages he no longer does so. The cock defends his hens from the attack of an enemy, and at night collects them in a safe place and stands guard at the door.

They say, too, that the cock lays one egg in his lifetime, called in Arabic "bayzat-u- 'l-uqr" (an obscure phrase) and that it is very small (6). The following lines are by the poet Bashshar:

"Thou hast visited me but once in all this time.

Make not thy visit rare like the egg of the cock."

It is a belief that one who slaughters a white cock with a divided comb (7) will suffer loss in his possessions and in his house, and also that the Devil never enters a house in which such a cock is to be found. As for the properties of the several parts of the cock, if the comb be dried and pounded and given to drink to a piss-a-bed, the bad habit will depart from him. (8) The smoke of the dried comb of a white or of a red cock does good to a madman. The gall applied as a

collyrium to the eyes, cures dimness of sight, or a film over the eye. Some physician has said that the gall must be placed in a silver vessel and used continuously to obtain a cure. Polonias has said that the gall of a cock, mixed with mutton broth and taken in the morning on a fasting stomach, is a cure for loss of memory. If the wing-bone be bound on one suffering from intermittent fever, the fever will depart. If a rider ties that bone on his loins he will suffer no fatigue. The blood, used as a collyrium, is beneficial for film over the eyes. If the blood drawn in a cock-fight be mixed with food and given to a number of people, it will cause dissension amongst them. If you take a cock's blood and mix it with honey, and place it on the fire, and apply the mixture to the penis of a man, it will increase his virile power as well as his sexual enjoyment. (9) If you take the dried flesh of a cock and pound it with equal quantities of gall-nuts and sumach, and make pills the size of peas, and administer them with a draught of water to one that has a pain in his belly, he will be relieved on the spot. In the stomach (gizzard) of the cock there is a pebble, sometimes sky-blue in color and sometimes crystal, which, if suspended round the neck of a madman, cures him; and if it be attached to the person of any man, it increases his sexual appetite. (10)"

To this we may add the following remarks:

(1) Long wattles and castellated comb are breed characteristics of the Bankiva and that the author refers to them is a sign that they knew other breeds also which were not as loud in their crow.

(2) The care of cocks for their "wives" is merely the outcome of sensual egotism, cause of the fighting inclination.

(3) The belief that a white cock puts a lion to flight is also widespread in Africa.

(4) It will be noted that the author mentions the game-cock especially, as the best cock, and in Arabic they have special words marking a difference between a dunghill and a game-cock.

(5) The loud cry is characteristic of the Bankiva or Persian bird.

(6) Fantastic superstitions are attached all over the world to the egg of a cock. In fact the small eggs occasionally found in the nests are from exhausted hens.

(7) The protective qualities of double or shell-shaped combs is believed in by other nations also, it shows merely impure ancestry (freak).

(8) Many people in Europe and America eat the comb of a cock as a delicacy and some believe in it as especially invigorating food.

(9) Cock's blood has been used in form of injections as a powerful tonic and generally considered as aphrodisiac.

(10) This and similar superstitions are widespread in the Orient, and such "charms" are sent to friends appreciated.

The Arab cocker feeds his cocks on barley and millet, as a staple food, but during condition they are especially tonified with candied fruit, juice of garlic and Capsicum (Chili), which is relied upon to put fire in the blood. As the Persian, the Arab Game-cock is small, but extremely active, its outline resembling the Spanish Game of Minorca.

GREEK COCKS

From all that we know of antique historians, the Greeks were staunch admirers of the noble Game-cock and diverted themselves with their fights most frequently.

Tradition has it that the true Gamecocks were introduced in Greece after Alexander's death, which occurred in Babylonia, suddenly, the 13th of June, 323 B. C., while working out plans for great events to come. That this is not so, can be easily ascertained by the fact that Aristophanes, born 450 and who died about 380 B. C.—i. e. nearly 60 years before the great Alexander—mentions the Gamecock, as the Persian Bird, in his writings. Besides, Themistocles is said to have addressed his troops, when marching to the battle of Plataea, 479 B. C.—pointing to two cocks fighting,—enciting his troops to behave as game and courageous as the noble birds. Plataea was in Boeotia, near Tanagra and North of Athens, i. e. in the very center of Greece.

Still, going back to Aristophanes, we see that such an illustrious writer refers to the Gamecock as a "Persian Bird," and there is little doubt that the ancestors of the Greek Gamecock came from Persia, though not as late as some put it, i. e. after Alexander.

When Alexander ascended to the throne (336 B. C.) he assumed the command of the Greeks after the destruction of Thebes, which he conquered (335) and started his Persian campaign about one year later (334 B. C.).

He crossed the Hellespont and defeated the Persians at the Granicus the same year. Marching on, he then tackled Darius at the Issus (333) and subdued all Asia Minor, Palestine and Egypt (332), founding the town of Alexandria. He defeated Darius once more at

Gaugamelas (331) and conquered Babylonia, Susa and Persepolis, establishing his dominion over the whole Persian empire. In the years 329 and 328 he conquered Bactriana and Sogdiana, where he married the daughter of the Bactrian Prince Oxyartes, named Roxane.

That Alexander and his soldiers saw all the cocks of Persia and admired them correspondingly, there is not the slightest doubt, as is only reasonable to expect during a stay of three or four years, during which time they not only fought and conquered but were liberally amused with all sorts of splendid Oriental festivities.

But Alexander was not the man to stop his activities by any sort of amusement, and went on with admirable tenacity and insatiable ambition. In the year 327,—so to say, on his honeymoon voyage,—he broke up his camp and went in full for India, crossing the Indus and defeating King Porus at the Hydaspes. Crossed the Punjab district (326) until his troops, tired and unwilling, forced him to return.

While making great plans for organizing his empire and studying the means of conquering new nations, he died suddenly three years later.

After starting from Persepolis his route went up North to East until reaching Sogdiana, a territory where, as we are aware, the Bankiva type cock existed in large numbers. When he ventured his route towards India, and after crossing the Indus was obliged to return, he travelled south down to the Mare Erythraeum, and returned westward through Geodrosia, Carmania and Persis to the town of Persepolis. In this southern district the Greeks saw and admired that other type cock, that probably was produced by crossing the native stock with Indian Game or Javanese. Hence the predominating black Gamefowl, that was also known

on the opposite coast of Arabia from Maskat in Oman, to Aden in Hadramaut.

While Alexander returned by the land route from India, near the coast, his friend Nearchus, in command of the fleet, descended the Indus and crossing the Mare Erythraeum and Sinus Persicus, all along the coast, eventually dropped anchors in the estuary of the Euphrates and Tigris. Parts of Nearchus' journal or travelling notes, the "Paraplus," are quoted in Arrian's "Indian History" (German).

That fleet of Nearchus was composed of a mixed lot of old craft, but the larger vessels were tolerably supplied with stores and fowl. They had shipped birds for culinary purposes after leaving the Indus, but later on the crew, or rather officers, amused themselves with cock-fights. Of course all Greeks, and especially soldiers, enjoyed the sport immensely, and there is no reason to doubt that during a long voyage they should not have resorted to their favorite sport to avoid the ennui caused by the monotonous squeak of the oars in the dry locks, when the wind was foul. In those days they knew nothing of sail maneuvers or tacks, and the square sails were used only before a fair wind from aft.

The Greeks carried with them cocks from Gedrosia and India as they found them all along the Indus, as well as silver pheasants which apparently were admired for their beauty only, though some old writers, as well as modern, insist that silver pheasants are extremely pugnacious and game birds, and consequently used for pit purposes.

We have, however, no evidence to this effect and only mention this statement for the sake of completeness.

But about the cocks, we should be really perplexed, why the Greeks carried them along and back, if they

were not decidedly superior, be it in size, power or beauty, to the cocks they already knew.

It is very probable that the black Game fowl found there, and as said, was related to the South Indian and Sumatra, was in some way superior to the ordinary little black-red Bankiva. So were the black strains of Tanagra, the Black of Tarentum and the Modern Black of Mallorca, though in the latter, but for the heavy feather and color, we recognize the Bankiva type sure enough.

At the time of Alexander, and even a few centuries before, we must believe that the Gamecock was already introduced in Greece, Rome and France. We are not so sure about Spain, North France and England, but are tolerably sure that the Phenicians, who knew the value of Gamefowl, introduced or imported the Persian fowl wherever they went to trade and settle down. They did not travel as far as Scandinavia, in North Europe, and consequently the Norse had no Gamecocks, as has been evidenced from their tombs, where cattle and horse remains were found, but never a single fowl bone, so far as we are informed.

Furthermore, the Phenicians were the only seafarers that ventured through the Mediterranean and out on the Atlantic at that early age. Finally it should be very curious that Persian or Bankiva fowl were known since that age, and perpetuated to our days, in such coasts and countries where there are evidences that they were visited by Phenician traders. Parts of Prussia, North France, along the Channel, and just opposite in Britain. That the Romans already found cocks in France, Spain and England is certain, and that they were kept, not for food but for diversion, is very (and reasonably) probable.

That the cock was honored, at his time in Greece, there is no doubt, as his portrait has been immortalized

in coins, vases and pictures. Numerous legends from ancient Greece glorify the cock.

Different strains were known, some for beauty, others for their speed, courage or power. Such cocks were taken to the famous market of Angora, ancient Ancyra, where they changed hands, apparently, for a good piece of money.

According to an old account, from the early morning the countrymen arrived laden with such valuable merchandise, and those birds from Tanagra secured the best prices. Large, black, audacious with arrogant eyes, well set on elegant legs, strong with ample breasts, they are of the type and stance that never yield in battle.

Scene in a Greek cock-pit. Birds Bankivoids. Original in the Louvre.

And all those cocks that change their owner here, are already conditioned and fit for battle! They come from Rhodos, Chaicis, etc., fed on raw meat and garlic.

Those customers that come to buy and fight the cocks, get up early on such days. They offer and decline mad prices for choice cocks, as it is a point of honor and cause of indescribable pride to possess a champion cock, and the "Jeunesse doree" is not late in letting the gold nobles spring with a view to obtain an enviable bird.

In the afternoon, all those people gather around the cockpits, avid to witness the encounter of famous feathered gladiators, of which one remains on the ground.

The spectators, upon whom the gold and silver edged cloaks are abundantly represented, observe silently the preambles of the battle, according to the "bon ton" of that age; while the cocks, impatient to get into

action, meet with a powerful clash in the center and the execution begins. The battle is ghastly desperate, and the bronze clad spurs dart flashing hither and thither.

The different phases of combat are eagerly observed, and the drawing of blood commented upon. Then one of the warriors gets a blow, and another, in vital parts. The eyes lose fire, but half blind the game bird tries again and again, until completely exhausted, pierced and broken it goes down, while the triumphant opponent, taking advantage of this chance, lands the "coup de grace" and finishes the battle on the spot.

Then the joy breaks out with an uproar from those that win, and the others pay up the wagers.

The Greek's enthusiasm for cocking was so great that they continually used some pretext to induce the authorities not only to permit the spectacular staging of public cockfights, but even to have these protected by the laws. Their subtle ingenuity led them to emphasize the encouraging incident before the battle of Plataea, when Themistocles noticing two cocks fighting, halted the troops and addressed them: "Behold, soldiers, they do not fight for their nation, nor for their Gods, nor for their ideals, nor their liberty; only pride animates them to fight so far as neither would like to suffer defeat, and you,—compelled to defend so much,—would you not do likewise?"

And the legend goes that the Greeks, exalted by this address, soon found the enemies and defeated them decisively.

This is the cause of the Greek's veneration of the Gamecock, or, at least, the one handed down by tradition.

EGYPTIAN COCKS

From the pictures reproduced in this book, it is at once apparent that the stock in Egypt in those early times was strictly Bankiva. We could not yet find out when or about which period the domestic cock was introduced in Egypt, but it is fairly believed that they were introduced by the land route as soon as the Orient, India and Persia were known to the Egyptians.

Egypt was known to the Hebrews as Misraim and to the Arabs as Masr. The first historical king was Menes who governed about 3180 B. C. and founded Memphis as his residence. That is 51 centuries ago. Remnants of that age and the following dynasties, to the 4th of which belong such kings as Cheops, Chephren and Mencheres (Mykerinos) who built the huge Pyramids, do not show cocks; but geese and ducks, which were indigenous to Egypt, are rather frequently represented in ornamental works and hieroglyphs. Under the following dynasties Egypt reached the highest point of its civilization, power and wealth, culminating in the era of Amenemhet III about 1850 B. C.

Graphical and ornamental arts reached a high degree of perfection, while science was studiously cultivated. It is supposed that many secret craftsmanship, engineering and manufacturing knowledge were lost in subsequent periods of decay. Followed a period under semitic rulers, known as Hyksos, under which Egypt fell back instead of progressing.

After long and tenacious fights, the empire rises once more under the pharaonic regime, 17th and 18th dynasties, 1600 B. C. Some graphical representations of cocks, apparently used for the pit, are from this age. We have reason to suppose that Gamefowl was intro-

duced in Egypt about this time, 17th or 16th century B. C.

Egypt had a splendourous period under Sethos I and Rhamses II, of the 19th dynasty,—from 1348-1281 B. C.,—and which were known by the Greeks as Sesostris. At this time there were decidedly barndoor and Gamfowl widely distributed in Egypt, and it happened that under the successor of Sesostris, the king Meremphah, the Israelites abandoned Egypt as described in the Old Testament. Though there were fowls in abundance in Egypt, the Hebrews took none with them, and in fact no mention of fowl is made in their records, until the time of Solomon, the Wise.

At the time being, Memphis was abandoned as residence while Thebes was the seat of government; but after Menemphah, matters went constantly bad and Thebes lost its grand splendor. Once more Memphis became the royal seat. Came Sesonchis I, who was the first king of the 22nd dynasty, and under which Palestine was conquered, though he could not stop the growing ruin of the empire which fell into the hands of the Ethiopian conqueror Sabakon. This king and his successors, Sebicos and Tarakos, referred to as Schebeck and Tirhaka in the bible, formed the 25th dynasty. The latter were supposed to have protected the poultry industry which became a national source of income. But very few modern fanciers will have failed to hear about the famous Egyptian hatcheries of those times.

About 672 B. C. the king Tarakos was defeated by the Assyrian, who implanted a regimen, called the Dodekarchy by old Herodotus.

Again Egypt rallied from the Assyrian oppression and attained new splendor in the 26th dynasty, about 610 B. C.

Then the Persians under Kambyzes subdued Egypt from 525 to 405, got their independence once more and

lost it again to the Persians under Ochus, in the year 340 B. C. The growing power of other nations became an Egyptian problem and we see the land conquered by Alexander the Great, eight years later, now to become a Macedonian province.

Under the Ptolemaean (305 B. C.) Egypt rose once more under the Greek influence, but the subsequent moral decay ruined the stability of the state under the cute Cleopatra and after the battle of Actium (31 B. C.) Egypt became a Roman province. That settled the matter.

What the western countries owe to Egypt in the matter of cocking is a problem, but with all probability in the course of cocking history Egypt represents nothing but a dead sitting. It got cocks and fowls from the Orient, decidedly knew and practised the sport, but did not pass any tradition on to later ages.

It is a matter of speculations how and when cocks were introduced in Egypt, but all traces point to the restless Phenicians as responsible for this end. Much progress in science, scripture, manufacture, etc., was due to the trading people of Zidon, Tyre and Ptolemais who steered their craft round Cape Carmel, southward bound towards the Nile Delta, where eager buyers paid good prices for the rare merchandise coming from Asia Minor, Palestine and Persia.

The invention of phonetic signals or letters is credited to the Phenician Taaut, a mythical personage, as the old mistook him for the God of science, Thot. The old Egyptians defended Thot from any mistake, alluding

EGYPTIAN COCKS.

Ancient Egyptian representation of cocks.
(Bankivoids.) Originals in the Museum
of Berlin.

that he was never a living man, but a God, and the Egyptian Gods were powers, not beings.

Formerly the Egyptians knew only signals and hieroglyphs, and it was Taaut, whom the Greeks called Kadmus (the Levantine) from Zidon, who introduced single letters from Canaan to Greece. The Israelites knew alphabets already and it was an easy matter to learn writing and reading from any Israelite priest, while in Egypt this art was studiously kept secret by the religious castes.

How good and nice the Egyptians could draw their figures, is a matter for the admiration of anybody who has anything to do with pictorial arts. We have seen several hundreds of different hieroglyphic patterns, and have searched for a single cock sign, but up to the present with no success.

Cocks and cocking never appear to have commanded such attention in Egypt as they did in Persia, Arabia, Greece and Rome.

PHENICIAN COCKS

So far off are we from the Phenician era, that it looks utterly hopeless to gain any information about their fowl, that has not already been thrashed out by earlier authors. Yet, patience and reasoning power may lead the modern investigator to find several pointers of highest interest that will throw some light as to how the Persian cock was introduced into Europe before the Roman era.

The author has maintained for several years prior to this publication, that most, if not all Caucasian Gamefowls were introduced into Europe from Asia, and consequently the supposition that they descend from wild European ancestors, since extinct, is wrong. The hypothesis of the existence of wild Galli in Europe does not bear the scrutiny of thorough investigation from the geological, nor natural history point of view, though it would carry us too far to go into details here.

How far the Phenicians were responsible for the scattering of Game fowls in some parts of Europe, has been questioned now and then, but if we study the history and enterprises of those early Semites, we come to the conclusion that Game fowl was to be found along the Mediterranean, in some places of the North coast of Europe, England and Ireland, before any Roman conqueror ever set foot on that soil. That the Romans did import fowls to those countries afterwards, there is not the slightest doubt either, as we shall see further on.

The land Phenicia was a strip of coastal district in Palestine, about 230 kilometers long by 4 to 20 kilometers breadth. About the richest and most fertile portion of Syria, but utterly insufficient for a grand nation. Geologically, the strip of land extended between the river Eleutheros (Nahr el-Kebir) in the North and the

Mount Carmel in the South, while here the river Kishon formed a natural boundary. The Phenicians were also known as the Zidonians or Caananites by the Hebrews, and Puni by the Romans. No doubt the mixture of tribal blood referred to above, made out of the Phenicians that sharp-witted, clever, enterprising nation that moved the world a giant step towards civilization. Travellers par excellence, they were constantly on the move in search of lucre and new trading possibilities. They crossed old Asia, through Asia Minor, Persia and India to China. They went back to Egypt, and followed the coast westward along the Mediterranean. Willing or not, they imparted some of their individual color to all people that came in contact with them. Cunning and sly, clever and wary, they never mixed with foreign religious affairs, and though they had their national cult—which culminated in the sexual principle with outstanding figures as those of Baal (Bel) and Astarte,—they were too careful to bother foreigners with their own views. Hence their mercantile success. Of course, they had a mighty reason to keep their cult and credoes in secret, being as it was that the Israelites held them in abhorrence, charging them with the stigma of child sacrifice at the throne of an abhorrent Baal. And true it was too. But the Phenicians did not care, and as it was prohibited to the children of the chosen folk to marry Zidonians, the latter found a loathsome market for human flesh,—white and black slave girls,—that were bought or rented to the rich at any larger town. They knew every form of vice, and knew better still how to convert their wits into cash. Migrating rats, spreaders of civilization, vile in their efforts of heaping gold, they represent the spirit of unscrupulous mercantilism, so old, so vast and so fatally strong in their race, even up to our days, when their offshoots, spread all over the world, exert

the same spirit ducked under the cloak of the laws.

The Arabs were close followers in the same race, but did not travel as far and wide as the Phenicians, who were renowned as the cleverest traders and manufacturers of antiquity.

800 years B. C. the Phenicians ventured out of Gibraltar on the Atlantic and plotted their course along the coast towards England.

The Phenicians constructed seaworthy ships and chose cedar for their planking, hard wood in the skeleton, and were about the first to use metal nails and rivets. The Egyptians had seaworthy craft in the Red Sea as early as 4700 B. C., but there is every reason to believe that those hulls were rather frail. On the rivers the Egyptians used large boats, under sail and oars even about 6000 B. C., but it took long centuries until they ventured on the rough sea. Egyptian ships about 1600 B. C. were mere casks, built of planks, but without keel or ribs, though they had elaborate rigs, and supported the boat lengthwise with overhead trusses spread on gable-end posts.

There is no certainty about just when the Phenicians ventured out on deep water, but it is fairly sure to everybody who knows the coast of that particular piece of land that every boat launched on its shore must be to a certain extent seaworthy, and reasoning further, we come to the conclusion that as the boats developed, so seamanship evolved step by step.

Small voyages were followed by longer ones, the specifications of larger craft grew with the exigencies of travel, and though supplies may have been taken while en route, there is certainty that for extended cruises large craft, with holds, decks, storage rooms, etc., were necessary and built. The history of such ships is very meagre and the only representation of an early Phenician ship that we have met is of a date not over 800 B. C. As the Phenicians ventured further along the Mediterranean, they found it necessary to establish colonies, of which the best known was Carthage. As seafaring people they ruled the Mediterranean, until at about 2000 B. C. they were forced to the West by the growing Greeks. Since 900 B. C. the Phenicians came under the Assyrian rule, and since 700 under that of the New-Babylonians.

Their enormous sea trade was destroyed in the 6th century B. C. by the jealous Egyptians who had received so much from the Phenician civilization. Later on Phenicia was conquered by the Persians, and later still by the Great Alexander, as referred to in previous chapters.

Finally Phenicia fell under the power of Rome, who considered it simply a part of Syria, and the land's history finished there and then.

There are evidences that the Phenicians kept fowls and even enjoyed a cockfight, no doubt having learned its thrills during their travels in the East. In such cases they must have known pretty well where to pro-

cure the best fighters to play and gamble at the safety side, though all Hebrew men are fond of betting, besides.

The acquired sport may have led many a trader to try a hand in the selling business, just the same as they did with race horses and other animals. It should be very strange, otherwise, to account for the fact that wherever Phenicians settled in colonies or simply went to trade, we find the type of fowl that was conspicuous in the North of India and Persia, whence the Phenicians got theirs, extant up to the present age. Such was the case with Palestine, Egypt, all the Mediterranean lands, North France, Belgium, Ireland and England. It is sure that the Phenicians went as far as the Canary and Cape Verde Islands, where also we find the common Bankiva fowl known ever since as indigenous fowl, but marking a difference between the true Game and the common barndoor birds.

The Phenicians went to trade tin in England, and as they must have possessed fairly large craft to carry the metal back, they must have had the same storage space filled with cargo from their own land, and fowls are easy to store on board even in small craft, it being very reasonable to suppose that they shipped and exported same as they did in previous centuries to Egypt, Spain, etc.

In the Phenician era no compass was known, the whole navigation being along the coast on dead reckoning, guided by a star, by soundings and the currents.

Apparently the Phenician craft was fairly fast, propelled by oars and sail. The sails were apparently made of flax or some woven material, and the disposition of sheets, halyards and braces would seem to indicate that the Phenicians knew the art of sailing beyond merely running before the wind. At least, the Egyptians could tack from side to side, as far back as 1600

B. C., as may be gathered from the representation of early rigs, and there is no reason to doubt that the Phenicians, who were masters of seamanship, should not know it before the Egyptians, or at least, have imitated them. Every motion and maneuver of a ship was familiar to them and must have caught their attention deeply.

The same thing happened with their experience in flotation and consequent ship design, and that the Phenician craft was superior to that of the Egyptian, we may gather from the fact that King Senoferu of Egypt, 4780 B. C. imported nearly fifty large ships built of cedar. Though there is no evidence to this end, it is only logical that these ships, built of cedar, came from the shipyards of Tyre, Zidon and Aczib in Phenicia, as there was not great competition in that age that we know of. We know further that Senoferu constructed about sixty ships in Egypt, smaller, and apparently destined to the rivers, for which cedar and other timbers were constantly imported. Flotation in a hull means an ample waist, decking and watertightness accomplished by pitch, which also was used in the alleged ark, constructed about 2800 B. C. The result was ample cargo room, without which trade was very problematic indeed.

The Phenicians used poultry for the table also, as has been evidenced in early excavations in Zarephath and Kanah, on the road leading along the Lebanon. Here also pieces of furniture were found made of cedar and preserved with a wax preparation.

No doubt, so far, that besides the true Game fowl, the Phenicians also kept dunghills for domestic consumption. In the chain of presumptive evidence of importance crediting the Phenicians as the chief agents in scattering Game fowl all over Europe, there are but very few links missing and besides the horrible sides of

their unscrupulous trade, we must admit that they opened a wide path to civilization;—and that this path became subsequently covered by weeds, after their scattering in the world, was none of their fault.

ROMAN COCKS

When the thoughts wander back two thousand years and entangle in the confusing events of Roman history, our imagination is at once vividly impressed with the vision of Roman legions, iron-clad, marching formidably towards the conquest of the world. Names that caused commotion in the whole world of yore, ideas of intransigent imperialism, intrigue, women, fire and blood, stained Roman history that the flare of its light pursue us in our dreams and obliterate the remainder of peaceful days between the war events, and under which epoch the expansions of happiness and fortune took about the same form as they take today. The Roman civilization and culture was completely modern. Life, a bit slower and less harsh than in London, New York, Paris or Berlin, but otherwise very much alike from the intellectual point of view. With the culmination of Roman culture, civilization seems to have reached a pinnacle, and though in our times we are overburdened with scientific and technical progress, we cannot see that the world has changed much since.

Of course, History does not stop to tell us anything of the peaceful life at home or on the streets, but marks commotional events and builds the time around such deeds as identify the political realm in dramatic fashion. It is that interest of history that causes us now to look back to early epochs as though a blurred curtain of tragedy stained with blood, smoke, fire and desolation.

But if we are logical, we may look back through sun, blue sky and a grand brilliant landscape which was enlivened by happy people in pursuit of ideals the same as we have today.

And so was the landscape near and around that great metropolis that was once the center of the world.

Farming was a pleasant and lucrative occupation, and besides, offered rare opportunities to enjoy life. What wonder that the people cherished their cattle, horses and cocks. And they bred very fine cocks around Rome. It has been said that the Romans took cocking and cocks from the Greeks, and though there is no evidence to the contrary, it would appear that cocks—Game cocks—were extant along the coast of Italy prior to any Grecian influence. It is only natural that the Phenicians in their coastal navigation, centuries before the foundation of Rome, touched the Italian coast for supplies and repairs, and later on we find the cocks of Tarentum and Syracuse reputed for their quality.

Phenician craft rounded the promontories before Capua, while tired rowers threw their heads back to get a glimpse of the country before landing. No Greek Penteconter followed the Phenician vessels so far, during the bitter persecution that took place about 2000 B. C., and no Greek pilot knew as well as the Phenician every cove of the Italian coast, that the latter had navigated several centuries.

And just opposite Sicilia Carthage was founded, whence aided by that Phenician colony in Spain, one of the ancient warriors arose and marched towards mighty Rome,—Hannibal!

Where the Phenicians settled, there were cocks and cockfights. No doubt that many may have been introduced from Greece, but in the main, the Romans had cocks from an era prior to any Greek influence, and no doubt introduced by early Phenician traders.

Many are the pictures, vases and mosaics saved from old Rome that skilfully depict those early cocks. Such records were found in Pompeii, Syracuse and Capua. One of those early birds, from Syracuse, in Sicilia, is a black Game cock, different from the traditional bird in that it carries a large tail. The head is lost.

Black fowls were later scattered all over Italy, which has several black breeds of dunghills, among which rose and pea-combs are frequent. An Italian scientist, Professor Chigi, even found vestiges of Varius cock in common barndoor fowl.

But the Romans knew not the Malay or Oriental breed. The greatest part, if not all, of the Game fowl were decidedly Bankivoids. And they could not well be otherwise, knowing as we know, whence the birds hailed from and how they were scattered all over the ancient world.

All those pictures, vases and mosaics referred to above, show Bankiva cocks, somewhat lofty, and very strong in wing. In fact, most of the Game fowls reared around Rome were strong flyers and were allowed to roost upon trees.

Evidently the Roman cockers fought their birds armed with a brass or silver weapon, the "tellum," fashioned after a natural spur, and doubtless after the old Persian pattern.

Cocking was a grand sport with them and not only a poor man's one, as we have plenty of records that opulent patricians engaged in cockfights, and in fact, sometimes appear to have quite overdone in gambling. In many a country tavern cockfights were staged where soldiers, traders, peasants and rows of foreigners staked money on their favorite cock. Birds were

Roman cock of about the year 75 A. D.
From representation supposed to be
from Antium.

brought to Rome from Syracuse and Tarentum with a great reputation for their courage, speed and gameness, and not seldom matched with the best birds of Rome and vicinity.

We have, further, records that many Roman noblemen reared and kept cocks in their villas and country residences, and it is strange that modern novelists, who otherwise have depicted Roman life in a masterly form, should have, at instances, completely overlooked the general affection for cocks and cocking.

At the time towards the end of the Republican Administration, Caesar conquered Gallia, the country of the cocks, so that there is evidence further that cocks were already spread in Europe. At the same time, cocks were also known in Spain (the country of rabbits).

When the Romans set foot on England, Caesar found that they had cocks,—not used for food, but for diversion,—and that this diversion was cocking. There is but little doubt, knowing as we do already, that the Phenicians most probably imported those early cocks with the definite intention of creating an interest in the sport.

Roman history is too well known to warrant a repetition in this place, but we fancy that the cocks were there already prior to the foundation of the city by Romulus, just as they were known in Gallia that succeeded in destroying Rome about 390 B. C. after having developed constantly through nearly four centuries.

Highly developed as the sport was in Rome, at some time or other it declined and at the abdication of the last emperor, Romulus Augustulus, A. D. 476, only the lower population seem to have practised it to any extent. There is a seal from that time belonging to a Greek trader, showing a traditional Game cock, a pure Bankiva, so that through more than twelve centuries,

that comprised the old Roman era, the cocks had not changed to any extent, as they have neither changed up to our days.

There is no doubt that while the Roman legions fought under the sign of the eagle, from the first Romulus 753 B. C. to the last Romulus A. D. 476, the whole history of Rome stood under the sign of the Bankiva cock.

ENGLISH GAME FOWL

Most all authorities agree that the origin of the English Game fowl is unknown. Since the beginning of historical Britain, the game cock was there already, that is to say, twenty centuries ago. So old is the breed! We have referred already, elsewhere, to the possible Phenician influence in connection with the introduction of Bankiva type fowl in pre-Roman days but at the same time we have to consider that before the Phenician, the Britons had some sort of domestic fowl, apparently of Mongolic type.

When the Romans under Caesar set foot on Britain for the first time they found cocks here used for diversion, and judging from analogy of the birds found in Spain, Canary Islands and Mediterranean Europe, there should be little doubt but that those British were also introduced by the Phenicians. In the subsequent epoch of Roman occupation, it is also nearly sure that Roman fowl was introduced, as it had been done in all other Roman provinces. That those early game birds were strict Bankivas,—we feel sure,—nobody will deny.

Now and then, some poultry writers have tried to set forth a theory according to which the English Game is supposed to descend from original native wild stock, but whoever happens to be familiar with European Ornithology will have no difficulty in ascertaining that such theories have no foundation. The species *Gallus* has been introduced in Europe, domesticated, through immigrating people and by the trade. We have referred to a probably existing Mongolic type of fowl, but have reasons to believe that such were solely common barndoor birds, never used for fighting. The game fowl, evidently coming from Persia as set forth in former chapters.

We know that the game fowl of Southern Europe and

Persia, with few exceptions, were small Bankivas and there is not the slightest reason to assume that the early British birds were otherwise. Where Bankivas were kept pure either in the North or South of Europe, they have remained fairly small, but have changed in type and size wherever crossed with Orientals or Asiatics. Thus the small Italian Leghorn has become in England a large fowl. The small Spanish became also large when crossed with Cochin, etc., etc.

The large size of certain Bankivoids is sometimes credited to care in selection and breeding, and we quite agree that a reasonable increase of size and weight is admissible under the possible variations, but cannot be convinced that a formerly small bird of about 3 or 4 lbs., could be got to evolve towards gigantic size of treble that volume and weight, without the infusion of another gigantic breed's blood. Such is the case with some English and French fowl.

Cocking was a great sport through centuries in England, and the care bestowed on the birds would be scarcely conceived in these days, where the sport constitutes an offense to the laws. It left its marks though, and the English language is so full of terms and words derived from the pits and adjuncts that the evidence of its universality, once, is found daily everywhere.

That cocking had a decided influence upon the once warlike population of England, there is no doubt. British sailors and soldiers fought their way to the first rank of the world by fierce fighting. The gameness and fighting spirit of the game cock saturated the minds of English Noblemen; Drake, Grenville, Raleigh, Cook and scores of others that went out to conquer a world, that fought the Danes, the Dutch and the Spanish with unprecedented courage. The same spirit took the British gentry and the cream of armed men, on frail ships to the Orient to fight the heathen Turks and Saracens. The audacity and cour-

age of the game cock was in Nelson, St. Vincent, Collingwood, in their superb battles that became milestones in history.

English pugilistic marvels astonished the world, and among noteworthy champions such names as that of James Belcher, Bristol, or that of Henry Pearce, the Game Chicken, who succeeded Belcher as champion of England, and "de facto" of the world. Those champions fought with bare knuckles to a complete finish, and nobody will doubt that it required an immense amount of gameness to go through a mill of sometimes several hours.

When cocking was suppressed, British supremacy in the pugilistic realm faded away, so far, that as then but few foreigners dared to challenge a British champion, now the position is quite the reserve.

British soldiers that fought with dogged courage and tenaciously charged the German unbreakable lines in Flanders, complained bitterly, that while they were upholding the British tradition of gameness, their politicians at home squawked lamentations to the world when National interests were hurt by German activities.

Up to the reign of Queen Elizabeth, it is supposed that the original British game cock had not changed in type and size. Whatever records we have, induce us to believe that the bird was rather small, very active and a perfect flyer. Then came the time of great commercial expansion following Sir Francis Drake's voyage round

Old type English Game of the time of good Queen Bess.

the world, and during which, sure enough, all kinds of foreign animals and birds were brought to England. In that time cocking was largely practiced in England and references to the game cock, its courage and indomitable gameness are far too numerous in contemporaneous literature to warrant a special mention in this place. There appeared to be known only just the country's game cock, while the diversity of colour nomenclature, now so in vogue, was then fairly unknown, or, at least ignored. References, however, are not infrequent alluding to the "fiery red" plumage of the British cock, and showing the "white feather" is a common expression for either impure origin or cowardice. We know at present, that white feathers in tail and wing are far from being the outcome of cowardly disposition, but in those times, perhaps very justly so, they were marks of degeneracy in highly bred black-red Bankiva fowl. With the admixture of foreign game blood, (not always Oriental), a vast generation of henceforth unknown colour hues ensued, and in following periods we see off-coloured birds, and strains of them raise to great size.

That game fowl from India and elsewhere were used in the makeup of local strains is fairly sure and it is, by far, not merely chance, that evolution in type, size and colour started all along the coastal district while inland the old strains remained fairly pure.

Now, some are feign to believe that most, if not all game fowl of England, has been liberally crossed out and hybridized past redemption. This, however, is not entirely so. In those early times but very few breeders, among thousands all over the country, may have had a chance of getting hold of foreign stock and that is why in succeeding days many strains of Old English Game remained pure in blood, colour and, smaller in size. But that crossing has been resorted to so as to affect the game fowl of whole districts is borne by authentic reports of many

early writers which have been reproduced in the American edition of Mr. Harrison Weir's "Poultry Book" and Mr. Wright's "Book of Poultry." As they refer to our assertion we may cite some remarks for the sake of completeness:

"Take Cornwall, in England, as an instance. It is said that the poultry bred and grown there, more particularly game fowl, were all of a white-legged breed, and that until late years such a thing as yellow-legged bird was not to

ENGLISH GAME FOWL.

Contemporaneous English cocks. 1. Yellow-legged, light red cock bred by Mr. Herbert Atkinson (1926). 2. Yellow-legged, black-breasted red stag, best cockerel at Oxford Game show 1925, bred by Mr. W. A. Tinstall.

be seen. Another curious fact is that the hens were mostly "spurred" like the cocks, as are many of the five-toed hens of Kent, Sussex, and Surrey farm fowls to this day. Those in Cornwall, called "the Persian bird," may possibly have been brought by the Phenicians, and perhaps bartered for tin and other metals from the mines. However this may be, there are plenty of the white-legged breed still to be found in Cornwall, though as John Harris, of Liskeard, informed Mr. Weir, now that the yellow-legged fowls have been imported (sic!) breeders are not so particular, but at one time they would not have been tolerated."

It will be noticed that Mr. John Harris refers to the

yellow-legged birds as "*imported*" and that before the local breed was "white-legged," his description of the game cock being as follows:

"The beak big, boxing (i. e., close fitting mandibles) crooked, pointed and hawklike; eye bold, fiery, large, fearless; head small and tapering; throat and face very loose and flexible; neck large-boned, round and strong; back short, broad at the shoulders, and tapering to the tail; breast broad, full and prominent, with well-developed pectoral muscles to give the necessary action, power and force to the wings. Breadth and fullness of breast are most essential to game fowls, whether regarded from a sporting or edible point of view. In a table fowl it is indispensable. The wings should be large and long, with the quills strong and of a powerful description, so as to impart additional force in action; tail large, up and spread. Belly small and tight; thighs very short (!), round, and muscular, not 'straddling,' but the thigh crooked or bent, following the line of the cone-round breast; this would make the cock as he stands close-heeled. No one with knowledge of the true game shape would approve of a cock standing with his legs wide apart. Legs strong, clean-boned, and not at all gummy like some other fowls, or stiffly upright, having small spurs set very low down, and having a good bend or angle at the hock; color black for black-reds, whitey yellow, or carp for other black-breasted reds. Feet flat, thin, with long taper nails; in hand evenly balanced, what 'cockers' term 'clever'; firm but corkey and light-fleshed, mellow and warm, with strong contraction of the legs and wings to the body."

As to colour and size of the birds we quote the following, according to Mr. Robert Howlet's book (1709):

"As to the colour of the cock, that is best which you fancy most—black, white, red, dun, gray, or piled, or any other colour whatever; for, though Captain Markham makes a great difference in the colour of the cocks, there

is nothing in it, for the world affords no better birds for the game than many of your duns and white prove.

“Having obtained a cock that is hard, sharp-heeled, and handsome shape, it remains then for you to pitch upon a fit size for your purpose, otherwise you will still be at a loss. Now, though there are as many different sizes as there are several cocks, yet are these birds reduced to two sizes only, and distinguished by these two general terms—that is to say, the great game cock or ‘shake-bag,’ and the little match cock or ‘battle-cock,’ which last is now called ‘the Old English Game.’”

Notice that though Markham is particular about the colour, Howlet is no more, and while the small birds are termed “Old English,” the large ones are called “shake-bags” after the Dutch fancy admiring big cocks, which, evidently, were imported from Malaya.

Old English black henny cock of about
1830.

In England, shakes were at one time known as the breed of His Grace, the Duke of Leeds, and referring to them Mr. Harris . . . “remembers that the Duke of Leed’s breed, as it was called, all of which he says had much of the unmistakable Malay stamp about them; but, according to the statements of old men, especially Smytherum, who fed for Lord Rodney, and Bidgood, feeder to Admiral Duckworth, the original breed of ‘the Leeds’ shake-bags had pure white legs, with the flesh

and skin as white and delicate as any game fowl, though some had carp legs and coloured skin, which showed evident traces of Eastern blood."

We have quoted the old manuscript to illustrate the uncertainty of their origin in those years, while we do not nurse the slightest doubt that Oriental blood had really been used for crossing, and one of the items of inheritance due to Malay blood, was big size and weight, which showed up, even though that blood had been diluted, as was their "mode of attack and general demeanor in the pit."

Besides the usual full-feathered birds, the British have a henny variety which is considered by many authors as a mere sport or freak. Reasoning from the fact that the masculine feathering is the outcome of a perfect organism and the expression of sound glandular integrity translated into vigor we would have to accept that the appearance of henny characteristics in a cock must necessarily be the sign of some degree of degeneration.

If such were the case henny varieties of game fowl must show inferiority in the pit, but that such is not the case has been fully evidenced by thousands of examples. It is much more plausible that the henny character of some fowl is due to ancestral crossing, a fact borne out in different fighting style and general demeanor in combat, however influenced any henny specimen may be by pure Bankiva blood in his makeup.

England also has crested, tasselled and bearded varieties which all have been judged by the lot considering them as mere sports. Observation, however, leads us to the firm belief that such characteristics are not merely due to any sort of mutation but are warranted by ancestral blood of distinct varieties. If this blood was already present in the first importations, i. e., in the birds introduced by Phenician and Romans, or has been introduced

at a later age, we are utterly unable to say, but that it is there, nobody can deny.

Many breeders stick to purity of origin with desperate efforts and will not have it that the English stock is anything but absolutely pure, whereas the history of the breed shows clearly that however good many so-called pure strains were, others of distinctly crossed origin showed so much the better, that it appears to justify the general inclination to experiment along the lines of crossing.

Colour may not be always relied upon as a sure sign of

Muffed, tasseled and plain English Game heads.

pure blood, though it is highly desirable to keep a strain uniform in the "livery" and we have far too many examples showing that pure strains change colour according to different climates, soil and surroundings, to give too great importance to the colour schemes, but type is all important.

There is no physiological reason in a pure strain to

change in type and we do not accept a theory that admits that the general type of a Bankivoid may be transformed into Malayoid by mere selection, feed and care.

We agree, that under varying conditions a low-stationed and weakly flyer may evolve into a larger, high stationed or powerful bird, but do not grasp how science could admit that the change effected be so deep as to efface completely the original features of a specimen, both anatomical and physiological. Type may evolve but not change radically.

The appearance of Bankivoid and Malayoid characteristics in a determined local or national breed of birds, as is the case in Asiatics, is due to frank hybridization, recent or ancestral and to which we have referred in a former chapter.

That the type of the British game cock has changed in the course of the last three or four centuries, beyond mere evolution, is a fact that cannot be ignored. We all agree that the present type of bird, so far as beauty is concerned, is second to none, though many fanciers allege that its utility for the pit is far beyond the high standard of the birds of yore.

Prohibitive laws, fashions and the show coop have doubtless spoiled numberless, once famous strains, though it were unjust, lacking a standard measure of comparison, to assume that all birds are on the decline. There are, we are sure, many strains of most excellent quality kept in the hands of true fanciers, who have been wise enough to form clubs to perpetuate and protect the old breed and keep the tradition unsullied.

The reputation of the English stock throughout the world, in former years, has been enviable, going so far, that even in Spain and her colonies the best game fowl were termed "Gallos Ingleses" (English fowl). In later years American and Spanish, and more especially the Irish game have wrung the high prestige from the British

cock, but formerly a good Caucasian cock, and even some Orientals, was termed "English," which expression ranged equal with the term "game cock."

We must admit that according to English laws, the cocks and cockers faced a dangerous position, and that they have not altogether disappeared, but instead have succeeded in maintaining some of their once powerful prestige, is an accomplishment that must be highly appreciated and thoroughly respected all over the world.

Men of soundest intelligence and tenaciously patriotic, though generally law-abiding, have had the courage to ignore the corresponding law and saved the British cock, once emblem of English gameness, from

humiliating oblivion. Of course, hundreds of cocks of the so-called Old English breed, are bred and exhibited as any other barndoor variety, but the real warriors seldom, if ever, face the spectators through the slats of the show coop.

The English game cock has a heavy time to face; scarcer in numbers year by year, spoiled by fashions and shows, with no publicity, facing adverse laws he must endure heaviest adversity in universal competition, and so it may have come that part of his prestige was lost.

How wonderful then, is the work of the staunch English breeders that in spite of all adversity and odious prosecution have not only saved the birds from deteriora-

Old English Game hen, bred by Mr. Geo. A. Fairecloth, Norfolk.

tion, but have even succeeded in forming strong clubs that defend the interests of the breed.

The English gentleman always stood by the poor man and as of yore we see today the gentleman cocker sharing diversion with the poor round the pit in perfect harmony, and standing at his side in defense of his interests when necessity arises.

The history of the Old English Game is packed full with names of prominent British men of historical celebrity. Kings, Princes, gentlemen and humble Plebeians have been supporters of the breed and very few races of domestic animals have enjoyed such a world-wide popularity. It would lead too far to even make a passing reference of them, but it would be rank injustice to mention the Old English Game without referring to his most decided advocate of recent time. Not for the fun of cocking alone, but for the sentimental National value, for the love of the breed, its history, its treasured qualities, Mr. Herbert Atkinson has fought a lifelong, desperate battle on behalf of the English cock. A fine gentleman, judicious artist, interesting writer and unquestionable authority on game fowl matters, we can say that he has revived the breed and with incessant pluck he contrived to help found the O. E. G. Fowl Club that will take care of the breed, we hope for many future generations. Mr. Atkinson's book on the O. E. G. Fowl, the Asil and other Indian breeds are standard works on the subject, while his numerous pictures of game fowl are universally popular, in fact so much so, that the writer found specimens in the most forlorn huts of South American Indians. Though we are aware that such an intelligent man as Mr. Atkinson will have gathered long ere since that his work on behalf of the game cock is of transcendental importance, we may assure also that it is of universal interest and that it will secure him a standing remembrance forever.

Another of the many staunch supporters of the breed is

Mr. F. W. Morris, of Bardon Mill-on-Tyne, who writes interesting and educative notes on the breed in "The Feathered World," London, another, Mr. W. A. Tunstall the enduring secretary of the club, who succeeded Mr. R. J.

Mr. Herbert Atkinson, Life President of the Old English Game Fowl Club. England's foremost breeder, artist, judge and authority on Game-fowl matters, known and reputed pile cocks.

Verney in office, the secretary that carried gamely on his work on behalf of the breed until death.

A great breeder, Mr. A. L. Pulford, Cock Green, Felsted, Essex, who, though blinded by accident, carries on his work with admirable tanacity. It is the spirit of the old breed that keeps so many supporters firmly on the path, and there must be legions that do their share in the pres-

ervation of the cocks and the sport,—silent and ignored!

We have referred already to the type of the English cocks which we find changed as the years went on, but there is no way to judge whether this change has been beneficial or the contrary. Modern authorities maintain emphatically that the birds of today, though apparently slower, have gained considerably in bottom and endurance while their gameness has not been impaired. Comparing with American stock, which also has been influenced this way or the other by Oriental blood, there seems to be no difference in quality, though many American breeders consider their stock superior to the best of England's. Many English birds have proven failures in South America when tried against native games, but justice demands we explain clearly that most importations of latter years have been made from shows where the birds have obtained prizes in exhibitions, i. e., not proven pit fowl at all. That imported Irish and American birds have shown better is obviously due to the fact that they were not exhibition fowl, but real pit birds. There should be no mistake however, that the British "*cocker*" really has the genuine, pure Old English bird, bred and reared to fight, and to win or die trying.

Many are the strains of Old English Game that have attained celebrity in years gone by, such as the black-reds of Lord Derby, the Cheshire pyles, and many others. It is always the strain that carries off the honours winning the mains, while the single cock seldom can score more than a single battle.

As Captain L. Fitz-Barnard, in his wonderful book, "Fighting Sports" remarks: "The game cock has not the advantage of other fighting animals in that he may become the hero of a hundred fights. He is armed with deadly weapons, and his first fight is generally his last. Also one cock does not fight for his master's honour and glory, also his cash—he is one of many. One superlative-

ly good cock is of no use to win a main; you must have many good cocks. For this reason it is the strain that becomes famous, not the bird."

However, many individual cocks have become famous despite this handicap, and in the same book of Captain Fitz-Barnard, the author delineates the history of many such super-cocks. It is fascinating to follow the history of such birds and to note that certain qualities or characteristics are peculiar to a given colour. For example, the Cheshire plyes were noted for their bloody heels and some Hennies for their dashing speed and ferocity.

The style and peculiarities of certain colours of the Old English Game have created a fancy and induced breeders to bestow skilled discrimination in the mating of breeding stock, with the subsequent display of mere colour in the fashionable shows. In fact, some enthusiasts carried their fancy so far as to pay no attention to the birds pit utility, succumbing sadly to the general colour craze, which up to the present keeps the English fancier and the cocker shunning each other like fire and water. Besides the gorgeously feathered and coloured variety that constitutes the typical English bird, there are several others to which we may give a little attention ere we finish this relation.

HENNIES. These have always been a matter of controversy among game savants and while some consider them as rank degenerations, their demeanor in the pit, their generally commanding size—7 to 9 lbs.—their ferocity and many intrinsic qualities among which speed ranks highest, tend to show that they are derived from a distinct variety altogether. If the lack of masculine feathering were a token of degeneracy—following the same course—their spurs would indicate the same degree of physical decay. This however is not so, as the Hennies are reputed for very strong spurs which they use in combat with admirable dexterity. Plumage, size, strength

and ferocity remind us of some Oriental varieties which have a queer resemblance to them, and to which, possibly they owe these peculiarities. Such are the slender game fowl once to be found near or around Singapore and the Henny Malay of Ceylon, the "Kikilia" which is still to be seen there.

As a matter of fact, if the English Hennies are related and owe these characteristics to such Oriental ancestors, the dash of blood has been extremely diluted in the course of centuries, but otherwise it would square perfectly with our theories set forth in the first part of this treatise.

MUFFED GAME. The outstanding characteristic of this variety is a growth of feathers under the throat which appear to be brushed back towards the nape. This muff is simply spoken of as a mere freak, perpetuated by selection, but as no freak is liable to ensue from mere chance, and as this peculiarity may be found in breeds that obviously have Oriental blood, as in the Faverolles, the Orloffs and others, we are rather inclined to see in them a new proof of ancestral crossing. In the relation of Mr. Harrison Weir about them, we find the following remarks: "It differs much in form, carriage, weight . . . heavier-framed bird, stouter and broader; the head is thicker and shorter, the base of the skull wider and rounder; the eye is usually dark, full and fiery; the comb is stout, and in some cases semidouble. If anything, they are the most hardy of all the varieties of the different races of game fowls."

The reader well acquainted with Oriental and Sumatra characteristics—the Muffs are generally heavy feathered—will at once grasp the relation that doubtless exists.

TASSELED GAME. The same Mr. Weir says about this variety, which we quote as set forth in the American edition of "The Poultry Book" the following: "The crested game fowl is not a modern creation, but of ancient, though unknown, origin. It is one of the birds mentioned

in 'The Treatise on Poultry,' 1810, thus: 'The English tufted fowl does not surpass ours (French) in size, but it stands higher on the legs. The cock—is superior to ours for fighting.' Other writers, both ancient and modern, have referred to it as being a distinct breed. The lark-crest at the back of the comb is small, and about one inch and a half in length; the feathers are hard, crisp, narrow, with loose web and rounded at the ends. In their style and habits they are bold, active and vigorous, and have the reputation of being of the warrior blood that fought for life and limb in the old pit days."

Almost all ancient and modern authors and connoisseurs of game, agree that they are a distinct variety. We have observed tasselled and muffed game fowl of all imaginable nationalities, Indian, Japanese, Javanese, Brazilian, Chilean and Spanish and have almost invariably found that they are related to a variety or breed described elsewhere as "Black Game," heavily feathered, sometimes silky, black face and eyes and probable ancestor of the breed now known as "Black Sumatra Game."

There is a missing link in the history of game fowl which doubtless bears some relation to that "Black" ancestor, and this would explain also why in the English black-breasted, black-red fowl's face, eyes, legs and beak are black. One would be inclined to classify those English "Blacks" as a distinct variety also, but being otherwise identical in type to the traditional Caucasian, the queer coloration has been considered as a mere freak.

Yet all these characteristics, muffs, tassels, peculiar feathering and black skin colour are the specifications of an ancient breed known in our day as "Silkies" and which we suppose to be derived from that enigmatic breed, on the tracks of which we have been so eagerly labouring for many years.

The Old English Game breed has had so many and excellent describers, so much influence upon the racial spirit

of the English, that we can only add our personal opinion, humble enough, to the grand literature on the subject and this is that Cock and Cocking have evidently been popular and generally practiced in England during her way up to the sun, just the same as the sport was popular in other nations during the epoch of prosperity. Cocking was on the decline or even abolished when nations were on the Toboggan down hill; Rome, Greece, Persia . . . and it is sad to note that in England, so far as the law can be enforced, cocking is under ban. Not that cocking will raise or down a nation, but certainly it is a reflection of the National spirit. At least so we learn from history.

As stated before, colours are a great item in the Old English breed; we have referred to it, however, on purpose. We maintain that it has been to a great extent a factor of ruin to the breed and a curse to the once grand warrior, the Old English Cock.

FRENCH GAME FOWL

Since the dawn of civilization, Gallia has been known as the land of cocks. Prior to the Roman era the natives of France kept fighting fowl and all indications tend to emphasize that the sport of cocking was widely distributed all along the Western and Northern districts near the coast. But just how the Gauls obtained their stock is a question surrounded by impenetrable mystery. Several theories have been set forth, and we do not hesitate to comment on them herein, as both point to a probable origin of the French Game fowl as derived from the Persian bird.

We have already considered the possible influence of the early Phenicians in the scattering of Game fowl all along Western Europe. In the history of navigation and naval construction it is believed that the Phenician craft was rather small and unable to carry big cargo, but this statement is based on the assumption that "all" Phenician rcaft was modeled after a doubtful illustration of a small boat, carrying one square sail and besides equipped with a row of oars. We have reason to believe, however, that the Phenicians constructed fairly large, decked, craft. They built such boats for the Egyptians and were thoroughly familiar with all knowledge of early seamanship. They knew the fashioning of all time-honored knots and splices, the double bowline and others. They used blocks, purchase tackles, etc. With such craft they could trade and travel far and wide, and that they did it has never been doubted.

Now many people, when reading about the scattering of Game fowl by the Phenicians, believe that they introduced the fowl by direct travel from their land to England,—whereas it is only logical to assume that this scattering of fowl was slow and progressive and

as they advanced in their commercial conquest, they started from the last colony or settlement, i. e. Carthage, Italy, North Africa or Spain without falling back to their original home port in Phenicia. From this point of view their travels are reduced considerably, and though not proving the fact, the theory of their influence becomes more plausible. There is another strong point of this theory in that Bankivoid or Persian fowl were long since perfectly known and kept in all those countries and wherever Phenicians had settled or traded and especially along the coast.

We have been rarely lucky in corresponding about this item with Dr. H. P. Clarke of Indianapolis, universally recognized as an authority on all Game fowl matters, who expresses his views according to the following theory, which has great probabilities to be exact:

“So far as we can judge from the scant history on the subject, the sport of cocking came from Persia to Greece, to Rome. It may have been taken to Spain by the Romans, or may have existed there before Roman times. It seems to have been among the Gauls of Northern France and England before the Romans. How did cocking get there? I believe it was old John Harris who first suggested the Phenicians, but I never could agree with him. What have been considered cocking remains (leg bones, spurs, etc., in urns) of a pre-Roman date, have been found in England, but always in middle or towards the East coast where dwelt the tribes of highest civilization, and not in that section which came in contact with the Phenicians.

“Remember that the latter came only to Cornwall and Wales so far as known, where dwelt a people more backward in civilization and possibly of a race older than the Gallic tribes, who then, occupied the greater part of England. In fact, it has been thought that cen-

turies before Caesar's time the wilder tribes had been driven back by Gauls or Britons just as the latter were themselves later driven back by Angles, Saxons and

Monsieur Henri Cliquennois, born in Lille the 24th June, 1850. France's most prominent figure in the Game-fowl world.

Jutes. Think too that the Gauls of Britain in Caesar's time were closely affiliated with the Gauls of France, with same religion, customs, habits. In fact, it seems that Caesar went to Britain not merely for the fun of conquering more territory,—he could have done that more easily across the Rhine—but to strengthen his

hold upon Gallia, to whose rebellious people the Britons had been sending reinforcements.

"How about the Gauls as carriers of the sport of cocking? In some prehistoric time they had come from that part of Asia near whence the Persians sprung, and had had same opportunities as the latter.

"The Gauls were wanderers, too, and so continued long after they had adopted France as their home land. This wanderlust is even yet marked on the map by the name 'Galicia' just north of Hungary, and another province of the same name in northwest Spain, also by 'Galatians' to whom our old friend the Apostle Paul once addressed a letter.

"As to the carriers of cocking, whether the Gauls by land or the Phenicians by sea, I believe I'd bet on the former. Especially since the latter are not known to have been devoted to this sport."

The reader will notice at once that Dr. Clarke's observations are based on plain logic and intelligent observation. As to the Phenician's devotion to the sport of cocking, there is really no evidence to the effect, though we have insistently pointed to the fact that wherever Phenicians settled in colonies or only temporarily, we easily could trace the cultivation of Persian or Banki-void fowl. That they came along the sea route is evidenced by the fact that poultry was plentiful all along the coastal districts of their preference, but scarce in the hinterland. In the African coast, alien blood may be detected corresponding to Oriental traces and consequently dunghill varieties emerged, it being a well known fact that no Oriental crossing can be perpetuated and bred indefinitely to the high standard of pit efficiency as obtained with the first few generations. This degeneration being due to reversion towards mediocrity, which sets in in most if not all hybrids. Incidentally, we may mention that this reversion towards

mediocrity is due to failure in the glandular system, Orientals and Bankivoids being fundamentally different in their anatomical details.

As to the theory of the scattering of Game fowl in Europe through the wandering and warring Gauls, the field is left open to discussion, but it will be noticed that Dr. Clarke's clever remarks fit very well into the frame of possibility, at least, as well as the Phenician theory. Introduced the cocks and the sport were, and that, with all evidence from Persia. As such we deduce logically that in type size and color the early French cocks were identical with the Persian birds described elsewhere. The modern French Game cock, however, is a large and powerful bird and as all authorities on Game fowl agree that they are pure and true Bankivoids we are naturally puzzled to account for the evolution in size, which seems incredible if we compare the ancestor of 3 to 4 lbs. with the modern offspring tipping the scales at from 9 to 12 lbs., i. e. three times the original weight. In type, character and behavior, however, the modern French cock is a true Bankivoid. Further south, Italy, Spain and Mediterranean islands, the bird has retained its reduced size in spite of favorable climatic conditions, while just over the English Channel again the Game fowl is, or rather was, small as the original stock. Thremmatology shows that changed conditions, climate, food and soil effect changes that give origin to variation, and, in fact, these items are credited to have produced the gigantic size of the French Game fowl, but we fail to grasp why this change has effected some Game and barndoor fowls only, but otherwise has left many dunghills and some Game varieties unaffected. Selection, then, must be the clue to this puzzle, aided by food, climate and environs. It is queer also, that the French cock transplanted to England, Spain or America loses vim and activity after a few generations.

We had always suspected that a certain amount of Oriental blood was the real cause of this gigantic size, the more so, as Oriental blood *really has affected some varieties* of Belgian Game fowl, but there are apparently some objections to this supposition.

1. Oriental crosses, when the Malay blood has been used directly on Bankiva fowl, fail to perpetuate the high fighting characteristics for indefinite time, and the French fowl is today even better than of yore.

2. In England Bankivoid Games have been crossed with Orientals, producing shakes, but which have failed to perpetuate pit excellency, and also never reached the gigantic size of French fowl.

3. Oriental blood infusion shows tenaciously in forthcoming generations by total or partial reversion, yet the French fowl never seems to. However, we mention our suspicion, for the sake of completeness and for historical reference.

COCKING. The sport of cocking was always prominent in France and the average devotion to the Game cock so generalized that the cock became the emblem of the nation. Of course, it was originally meant to be a *Game* cock; but that some artists persist in depicting a dunghill caricature on the country's coat of arms is not a fault of the cocks but of the ignorance that pervades the people since the dunghills have attained such prominence as egg-layers or purveyors of savory national dishes.

One would believe that there was much literature about the French cock, but in our efforts to get enlightenment through the works of past masters, we learned that printed matter about such famous birds was surprisingly scant. Not that authors and thorough connoisseurs were lacking in France, but the cocks were originally such a daily occurrence that nobody seems

to have taken to the task of describing the sport and the birds.

It is different in modern times. The cocks have their historians, critics and judges, among which the venerable figure of Monsieur Henri Cliquennois, born in Lille, June 1850, ranks in the highest place. A grand judge of cocks, devoted to cocking and breeding over 60 years, this gentleman has attained an enviable reputation throughout the fraternity. His position among his own and subsequent generations of adepts to the sport is that of a patriarch, while his connections with Dr. Clarke of U. S. A., Mr. Atkinson, Tunstall, of England, has generated a friendship that neither time nor changing conditions have been able to dull.

Combattant du Nord. The pride and emblem of France, prototype of the "Coq Gaulois."

Most of the interesting remarks about modern cocks and cocking in France we owe to M. Cliquennois' personal information who is, as we stated, a prominent judge, historian and thorough savant. His collection of cock-spurs and oddities ranks among the most important of the world.

Dr. H. P. Clarke of Indianapolis went over to France in the early nineties of last century and introduced his famous Transatlantic cocks and American gaffs that

revolutionized the manufacture of gaffs in France and eventually caused the revision and resetting of the rules, which since became definite and uniform. Dr. Clarke's cocking campaign was an unparalleled success and not even approached by any other foreigner who attempted to fight the "Coq Gaulois" at his own quarters.

English cockers crossed the Channel with the pick of English birds, and after having actually defeated the French in their first attempt, were since hopelessly defeated year after year, until giving up definitely. The choicest English shakes were no match for the Gallic cocks.

THE COCKS. Large, powerful, very active, full of life and stamina the type of the French, large, Du Nord cock resembles the Old English in many points, though despite their relationship they bear the peculiar local or national expression. Fairly high stationed, sound on legs and feet, and a pair of generous proportioned wings, with abundant tail. Rich glossy in color, black-reds, duckwings, brassbacks, they come in many color hues. Their beauty has led legions of fanciers to breed the cocks for show purposes, and truly they surpass any other variety in elegance of stance, resplendent colors and nobility of origin. No shake in the world comes near the French Du Nord in its elegant and proud bearing, haughty mien, bold and arrogant stance. Very rightfully he is the center of attraction in any fashionable French Exhibition.

One must make a difference between the birds bred for the show-coop and those reared expressly for the pit. The latter is carried on extensively in France and Belgium. Cockers try to obtain a bird ranking between 4 to 5 kilos (say between 8½ to 11 lbs.) with the true characteristics of the fighting cock: power, speed and above all,—dead gameness.

A century ago and perhaps more, the Belgians had a breed of Game fowl different from the French, the *Flamand*. Since then the Flemish and the Nord fowl have been crossed, becoming, consequently near related in blood. The French cock is similar to the English in color and stance, but double as large and strong.

Besides the large Du Nord, there is another variety averaging some 5 lbs. and which M. Cliquennois considers identical to the large breed.

While the large cocks are matched "poids libre" (shakes) the smaller ones are carefully weighed, just as the English. Dr. Clarke considers that these small Nords are similar to the Scottish Game in type. They are generally kept and fought by peasants in their village pits, while in the large centers the "Grand Du Nord" is universally preferred. These "Petits Combattants" are extremely active, vicious and deep game birds. Absolutely of first order.

France has also a game bantam breed, known as "Coqs de Barbarie." Tiny little warriors, true game and grand flyers taking to wing like pigeons. They were matched with diminutive gaffs and fought generally to a finish in the true sense of the word. They have since become rare and as in so many instances the fancier has appropriated the breed for the show, spoiling their pit utility. However, they are not likely to become extinct. These "Coqs de Barbarie",—we fancy,—are the truest little Bankivas, and may be met with in the Orient, Persia, Arabia and Egypt as well as in the countries where the Persian cocks have been introduced. They are known in North Africa, Spain, Canary Islands and many South American countries. They were at a time also frequent in England, but apparently the fancier has "improved" the birds beyond recognition.

Thus France has a true little Bantam, a medium

sized, and a gigantic Bankiva. It is queer that any breed crossed with the large du Nord—even small English and American—produce offspring that comes up to Nord weights within a few generations. M. Cliquennois tried also Asils from Mr. Atkinson for crossing on Nord hens, producing offspring of gigantic size, even in the first generation. A proof that size and weight are inherent characteristics of the large fowl of France.

Another game, or near so breed, was introduced from the French settlement of Madagascar, and known as “Malgache” or “Denude” from the bareness of the skin. These were, of course, true Malayoids, such as are found in the island referred to. Too slow for anything but naked heels, they seem not to have gained popularity and are looked upon as mere curiosities.

GENERALITIES. French breeders have, of course, resorted to occasional crosses with a view to freshening up blood or improving some intrinsic qualities.

We give here space to some remarks of M. Cliquennois:

“It is more than 60 years that I fight cocks, and I have always preferred the ‘Combattant du Nord.’ I had some relations, while quite young, with some good English amateurs, who procured for me several true game, extremely fast and dead game cocks, of about 6 lbs. weight. I have introduced a dash of English blood in my French breed, and have obtained thus, from time to time, fighters of from 4 to 4½ kilos, of absolute superiority.

“It is about 35 years ago, my excellent friend Dr. Clarke, came to Lille to learn for himself what cock-fights were like, here. He gave me several different American types, which have been of great service to me for crossing on my good du Nord pullets.

"Up to the moment when Dr. Clarke came to Lille, the gaffs used were of English model, imported about 1830, slightly curved, of about 35 to 45 millimeters length. The fights were staged without specifications as to gaffs or weights. I enclose you herewith a sketch of the gaffs used up to 1830 and since Louis XV. about 1750.

"When Dr. Clarke arrived, he initiated me into the use of the American weapon, long and above all, strongly curved, with drop sockets.

"I knew the use, in Flandres, Hazebrouck Somer, Bailleul, about 100 years ago, weapons, short sabres, $3\frac{1}{2}$ cms.

'a double tranchant,' (double edged slashers) but which since have been abandoned and even forgotten. Those ancient weapons were not comparable with the Mexican slashers which are placed upon only one spur-stub.

"At that time, 1893, du Nord and Belgian cockers jested about those American gaffs. I have seen immediately how they were terrible and much more deadly than our French weapons. Several years later gaffs were regulated according to length and curvature. At the time being, gaffs must be straight and 50 millimetres long. Incidentally, one can fix under the gaff, upon the leg of cock, a wedged bolster, which raises

Petit Combattant du Nord. The small match cock of North France.

the point of spur. Enclosed find a sketch of such bolster, made of aluminum.

"After 36 years of breeding I have made some crosses with American Games upon du Nord and Flamande. The 'Hoosier Beauties' gave me very good results. The Asil, coming from Mr. Atkinson, assimilates good with our breed: the first generation is already heavy enough for our sport.

"Once I obtained an excellent cross between a Malay cock, imported, and a Nord hen weighing $3\frac{1}{2}$ kilos. One of the offspring won 22 fights and in his 23rd match got a thigh broken after a mill over 55 minutes.

"At that time the duration of a fight was not limited; at present the time limit is 15 minutes.

"Almost all fights are staged at shake weights (poid libre), with equal gaffs as per regulation. It is stated if stags or cocks. Stags are allowed to carry full spur and are examined before the fights by one and the other party. Gaffs are also revised before turning each cock loose in the pit (parc). You can fight your stag against aged cock, but not allowed to do the reverse.

"All cocks are dubbed; when ready for the pit the big sickles of the tail are cut away but severe dressing (la toilette), cutting away neck and saddle hackle, as in England, is not practised; neither are wing points cut.

"Fighting of small cocks, weighed, as in England, still are staged in the villages round Lille, in the Pas de Calais and mining districts; the usual weight is about 5 lbs., say $2\frac{1}{2}$ kilos. Stakes on such fights are less important as usual than with shakes."

The above description by M. Cliquennois covers almost every important point on the matter. It is specially gratifying to note that cocks are not so severely trimmed in France as is, or rather was the custom elsewhere. Another accomplishment is the adaptation

of one type and length regulation heel, while the problem of weights, in larger cocks, is completely eliminated.

PITS. The Pits (pares) are oblong in shape, fairly elevated above the ground and closed in by thin wire netting. Steps lead to the opposing doors at the side of which are boards bearing the corresponding inscriptions of each party. The French rules of the pit are given in detail in Dr. Clarke's book, "Rules of the Cock Pit," published by *Grit and Steel*, Gaffney, S. C.

MAINS AND TOURNAMENTS. The fighting season extends from December 25 to June 25. Ordinary mains are fought with odd numbered pairs, 5, 7 or 9, and won on the odd, 3 from 5, 4 from 7, or 5 from 9 battles. When the main is finished, by-battles are staged according to prefixed stakes, but which are entirely independent from the main. Time limit for a single battle is 15 minutes, though it used to be 20 minutes years ago. The reader will be aware that for finishing within the bells, it requires dexterity and speed for huge shakes to kill or win a decision with the straight two-inch French spurs, alleged to be rather inoffensive. Yet, these French shakes most always kill, or at least win, in due time, proving that they are able and high class birds.

After December up to March, mains are fought under artificial light, incandescent gas or electric, according to locality. Mains take from two to three hours and start generally at about 6 P. M. Admittance is about 5 to 50 francs, according to the importance of the stakes. Fighting days are Sunday, Monday, Wednesday, market days in Lille. In great towns as Lille, Roubaix, Tourcoing about 20 mains may be fought in one day in different pits; in the villages two or three mains are fought on Sundays.

Besides the mains (combats a l'impair) there are

tournaments (concours). For these tournaments the number of participants is fixed in advance, generally from 24 to 60 entries. Each entry pays a fee ranging from 50 to 100 and even 200 francs.

Suppose we take a gathering of 40 entries at 100 francs, as example. That will make 4,000 francs inscription. Head or tails designate the adversaries falling in, in 20 pairs which are fought in the first round (premiere (tour), after which 20 cocks are eliminated. Again the 20 winning entries toss for adversaries and 10 pairs fall in which fight the second round (deuxieme tour) eliminating 10 cocks more but with one victory to their credit. Important for the distribution of prizes. The ten remaining winners are matched as above, so that 5 pairs fight the third round, eliminating 5 entries but with 2 victories to their credit.

Now the remaining cocks being uneven in numbers, one is decided by lot to be left out, but is credited with three victories, even without fighting. The other four cocks are matched to fight the fourth round, after which two more entries are eliminated with three victories to their credit. The remaining pair of winners fight for the final championship and second place. Prizes for these tournaments are accorded at 3,000, 2,000, 1,000, and 500 francs. Gate money covers amply the expenses of the management. Several cockers organize such tournaments, especially after the great war, merely for speculation. The sport that in M. Cliquennois' time from 1865-1907 was carried on truly disinterested, now becoming a matter of commercial enterprise, after the war. One may well understand the gentleman's grief to see his favorite sport suffering such indignity.

FINAL REMARKS. If we take everything into consideration, we cannot fail to admire the French Game fowl for many reasons. True shakes by size and

weight, splendid in type and color, arrogant and noble, active and fast, possessed of savage spirit and perfectly dead-game, they have no match in any other Caucasian breed of fowls. How justly the French breeder of this specific national bird of a gallant nation sees with pride his prime favorite heralding the spirit of France in her coat of arms.

BELGIAN GAME FOWL

Judging from the close proximity of Belgium and France, their old friendship and common interests, one would believe that their game fowls were alike. To a certain degree this is the case, but there is evidence that originally, at last, their fowls are entirely distinct. Such an authority as Monsieur Henri Cliquennois enforces this statement.

There are different varieties of pit fowl in Belgium, which, though they may hail from the same original source, developed along different lines.

THE FLEMISH. Referring to the Combattant Flammant, M. Cliquennois, states verbally the following:

"About a century, or even more, ago, the Belgians had a breed of games different from ours (French). The Flemish had cocks, larger, stronger but slower than ours which were at that time called 'Pheasant cocks.' Our cocks were, and still are, in their great majority very brilliant in colour; they have the characteristics of the Old English, but almost double as strong. The Flemish, Belgian cocks, were, as they still mostly are, of very dull colour, light or pale gray, dark-red, blue, mottled or 'milefleurs,' small rose-comb (*crete courte a fraise*); legs black, dark slate or dirty white. Those cocks are colder in blood, less fast, than ours.

"At the shows, 'coqs de Bruges' as well as 'Liegeois' are indistinctly registered as "Coqs Belges." The standard, excepting that for the "Bleus de Bruges," is vague enough, and tolerates everything that is Belgian game, without having a definite type.

"The proximity of the North of France with Flanders and the Wallon country has encouraged cross-breeding, in many places, our French breed and the Belgians, especially the Flemish, which, like ours, are fought in steel. The cocks so-called Liegeois (from Liege) found

commonly in the provinces of Charleroi, Namur, Hasselt and Liege, fight in natural heels or with horn spurs applied over the natural stubs, like we do with steel gaffs. It is more than 60 years that I fight cocks and I always preferred the Nord game to any other."

The Flemish averages fully one pound heavier than the French Nord, and as M. Cliquennois states, is less active and alert than the latter. It is strange that though the smaller Nord is single-combed, the Belgians Flamand and Liegeois are generally, though not always, rose-combed. As is the case with the Nord, Flemish and Liege game are not suitable to be bred elsewhere and after a few generations lose their most precious qualities.

THE LIEGEOIS. This breed, again, is larger than the Flemish and consequently heavier. Somewhat sluggish, they are too slow for anything but naked heels, and it is this way that the sport is carried out in his abodes.

The Liegeois is a true game variety and though many fanciers tried to create an interest for them at the shows, the customers rather prefer either the giant Bruge blue or the sprightlier Flamand. But in the realms of naked-heel fighting the cog Liegeois holds its own against all comers. One pound or two heavier than the steelfighting Flemish, the Liege or "coq du pays" has many ad-

BELGIAN GAME.
Flemish Game cock. The largest steel-fighting shake of the world.

mirers and as cock-fighting is prohibited he serves his place well, being fought without long preparation in any improvised pit. Such giant shakes have been fought in the States, Canada and South America and seldom fail to knock their opponents down and out unless matched with some tough Oriental of about equal weight. The Liegeois are exceedingly interesting fowls and many times better value than many of the so-called standard varieties. We fail to grasp why the hunters of sensational breeds have not taken up the breed to satisfy eccentric tastes in the show coop. Their size alone would be an attraction, and besides they are quite easy to keep and rear.

THE BRUGES. This is not anymore a game variety, being probably a Malay cross of the Liegeois. They are now recognized as "Bruge Blues," according to their colour which

is Andalusian blue, slate or any shade of gray. They are preferably bred blue, very heavy and large and though profusely feathered are fairly Oriental in features.

No doubt that this breed, like the Cornish Indian of England, was originally produced for the pit, but following that old curse on the Oriental crosses,—reversion towards mediocrity,—became dunghills in the long run, and now are not anymore used for the pit.

They are, however, cherished in many quarters, largely

BELGIAN GAME.
Bleu de Bruges.—The heaviest European fowl.

for exhibition, and as the blue colour throws many wasters, the latter are fattened and constitute a most excellent table fowl which many Belgian "Gourmands" consider insuperable. So far as our experience goes, we can strongly endorse the latter statement.

Besides the Bruges there are many barndoor varieties, giant and small in Belgium, which all serve the purpose of exhibition and the more substantial one of culinary satisfaction. We just touch the subject of the latter, as well as that of the Bruges, to show that *there is* or was Oriental blood infusion in Belgium. As in France, the fowl show a tendency to grow large, apparently also *without* Oriental blood. Many American varieties that have been crossed with either Flemish or Nord;—Trans-Atlantics, Hoosier Beauties and others,—have grown progeny of standard pit size (French) and so have Malays and Asils also. Of course those Americans, except the Hoosier Beauties, had some Oriental blood, so that measure of comparison rather limps.

Authorities that know French and Flemish breeds from A to Z, emphatically state that the Nord and Flemish are perfectly pure Bankivoids. Bowing to this recognition from people who know things infinitely better than we do, we want to state that this gigantic growth is a mystery, apparently accomplished by climate, soil, food and selection.

IRISH GAME FOWLS

One would naturally believe that the Irish and English Game fowl are identical in every respect, but if we compare the birds and more especially if we investigate the opinion of breeders of both, we learn, surprisingly, that in many respects they are entirely different.

No doubt that Irish and English are of identical origin, either from the alleged Phenician importation, or scattered by the early Gauls in pre-Roman periods.

At present they differ considerably in type, carriage and spirit. The Irish is less refined in exterior points and less homogeneous in racial characteristics. Full feathered, it exhibits a wealth of plumage that is now rarely noticeable in any British strain of fashionable pretension. The Irish, on the average is about one-half to fully one pound lighter than the English.

Apparently no attention is paid to fancy points and color, the Irish cocker aiming at highest pit qualities, wants his birds to come desperately savage, fast and dead-game, beyond the slightest doubt. And so they are!

Intrigued by apparent contradictions, we approached an outstanding authority on Irish Game and since years we have had the pleasure to correspond on the subject with Mr. John Pressley, Courtville, Tipperary, Ireland, who not only has studied the matter from the practical side of the sport, but has bred most any strain of famous Irish Game through numberless years. Mr. Pressley's verdict is final and authoritative.

His opinion is expressed in the following lines:

"Not having been selected for show purposes but for what they were able to do as fighters in the pit, Irish Game are at the present time perhaps the best pit birds in the world. Originally they were doubtless English, i. e. *Old English Game*, from England, but they have

been in Ireland now for many centuries, and although 'Pat' may have been a bit careless as regards their appearance, he has retained the main characteristics of the breed, viz: *gameness*, whereas, the English breeder, with a few exceptions, has been breeding for show points and paying little or no attention to the *gameness* or fighting qualities of his stock.

"Most of the Irish Game, although of good shape and handle well, carry too much feather, and are rather deep in keel. The English bird, on the other hand, does not carry enough feather as a rule and has apparently, in some cases, been crossed with Aseel or Cornish Game. There are a few English cockers, however, who have the real thing, and not only are their birds good to look at and to handle, but they are fast and good fighters which in proper hands would probably come up to the standard of the best Irish.

"The breeders of England of any kind of live stock are second to none, and it is only because cock-fighting is not legal that the breed has deteriorated generally and is now only in the hands of a few who kept them pure all the time and paid no attention to the winning of prizes in the show pen.

"It stands to reason that if the English racehorse were only bred for appearance points and not tested on the turf, that he would in a short space of time cease to be the fastest and best horse in the world.

"Any quality in anything living will deteriorate through disuse. It is the same in the case of the Old English Game cock. Those who have retained him in his purity and surreptitiously tested him at his natural work, still have the right article, but those who have been breeding him to look at only, possess an article that is simply a painted lathe that *looks like steel*. I have never seen any Irish birds fly the pit, but I have seen many English, so-called game cocks, do so; birds

that in appearance *looked* to be far gamer than the Irish. An English cock pitted against an Irish one, in the regulation way, may prove the winner, but unless the Englishman wins his battle early, there is no hope for him, as the Irishman in a long gruelling battle is surely the winner. There are bad Irish, of course, as 'Pat' is a careless man sometimes and mistakes may be made in lifting eggs for setting, and dunghill blood introduced, but on trial this is soon wiped out, as if a bird does not act properly he soon gets his head cut off, as well as all his relations. On account of the long feather, a lot of Irish game look rather common in appearance but handle or test in fight and you will find they are right. Many English cocks handle well, look well, and up to a certain point fight well, being fast fighters and good heelers, but, when tested for game-ness—*fail!* Signed, John Pressley."

Typical Irish Game cock. Many of this type are to be met with in the States.

In his endeavors to sing the praise of the Irish Game, Mr. Pressley runs the English down summarily, but makes "exceptions." We have observed both breeds for about a decade or more and have stated elsewhere that so far as Chile is concerned the average English stock was a failure (in naked heels), while the Irish proved excellent under the same conditions. It is gratifying to correct this statement, in so far, that almost recently, Chilean bred Old English birds, properly acclimatized, have proven to be desperately game and as good as any Irish and Spanish birds. In some instances even ex-

celling them. These birds, however, came from unsuspected yards and from real Game breeders. We have said already that in Argentine, Old English proved their value long ago.

Ireland contributed a large share of blood in the make-up of the most reputed American Game strains. In fact, numerous strains kept their repute, names, etc., from original Irish importations, even after the latter had become inconspicuous. But so have English also.

According to Dr. H. P. Clarke, whose authority has been invoked repeatedly: "The pure American Games, as distinguished from crosses of the Jap and Aseel, are mostly made up from Irish, English and Spanish elements, the proportions being probably as in the order named, for the land of 'Kelly and Burke and Sheay' has contributed to us much of its fighting blood in cocks as well as men."

It is striking that through the absence of exhibitions the Irish has retained and evolved many original characteristics of the original Persian or Bankiva cock, much the same as the Game fowl of Spain, and stands in the scale of evolution midway between the English and Spanish, constituting a different breed.

The Irish have bred and kept their fowl merely for cocking. Gameness, energy, speed and lasting qualities being the only standard bred to. They expect their birds to fight decidedly savage to the last beat of the heart, take and give punishment—desperately game—under every and all conditions, and the true Irish Game, the full blooded birds emphatically respond to this expectation at every call.

SPANISH GAME FOWL

The origin of the Spanish Game fowl is unknown, so far as historical evidences have a bearing on the subject. We have already pointed to the Phenicians as the probable introducers of Game fowl in Western Europe. There is not the slightest doubt that they knew Spain perfectly well, having already established colonies along the Mediterranean coast. But if they introduced Game fowl at a very early date, or if the latter was scattered along the Mediterranean by other means is difficult to ascertain.

Many vestiges point to the Spanish as being originally descended from the Persian bird and closely related to the Greek, Roman and the British Game fowl. Most probably early seafarers, wanderers and settlers that came from the East brought fowls with them, and it is queer to note that wherever early nations came in contact with the Phenicians, they henceforth cultivated fowls of evident Persian or Bankivoid type. Lacking evidence of other nature, we must therefore assume that they were originally introduced by the much-vaunted Phenicians.

The Spanish Game is a tolerably pure Bankivoid and perhaps the only modern breed that in fundamental characteristics runs close to the old-time Persian bird. Both in type and fighting value, the Spanish is a supreme fighting breed!

Rather small and light, from 3 lbs. 4 oz. to 4 lbs., it is a perfect flyer with wonderful wings and full deep breast. Strange to say, they are fought in natural spurs and bred so strong that they define a bout with greatest determination in naked heels. Being fundamentally an ideal steel fighter, the Spanish has a strong punch and sufficient accuracy to win naked heel.

The type of the birds may be better judged from the illustrations herewith, which all are after photos of typical birds. They come in all colors; blacks, reds, brassbacks, duckwings, blues, mottled and pyles. Some very good birds and noted as superior spurrers were the blacks of Mallorca, which since became widely popular in the Spanish mainland.

The Spanish Game are known in two principal varieties: the full feathered or *Gallo Real* and the henny "Gallo Gallino." Some freaks are also recognized: muffed and tasselled, just the same as in England, giving further evidence as to their common origin, and the rumpless,—"*Gallos reculos*",—known in Cuba and colonies as "*Bolos*" or "*Boleros*." The latter, however, are rather scarce and the common fowl is generally either "*Real*" or "*Gallino*."

Many writers have credited Andalucia as the chief center of Game production; the same territory whence the barndoor Andalucian hails from. This, however, is not so. Large numbers are bred and reared to the highest mark of quality in Bilbao, Gijon, Oviedo, Santander, Palma de Mallorca, Barcelona, Madrid and especially Valencia.

For some reason or other, the Game cocks were formerly termed "*Gallos Ingleses*," English Game, though our esteemed friend, Don Pedro Laborde Bois, for long years editor of *Espana Avicola*—a noted writer and Game savant justly protested against this misnomer, having proved by evidence that their name "*Combatientes Espanoles*" is their unique and right cognomen.

The Spanish Game has been carefully selected along a well and intelligent standard of pit efficiency during many decades, and at present really is a bird of highest order. Fought in almost every quarter of Spain, it is estimated that about five to six thousand are consumed

yearly in the pit. Large numbers are also exported to Cuba, Mexico and many points of the world, so that we can speak of a veritable breeding industry.

According to age the birds are classified in stags (Pollos) and cocks (Jacas). Apparently the word "Jaca" is nearly related to the English "Hack" though in horse-lingo, jaca rather is applied to denote something like "pony" i. e. a small horse. Stags are all young stock up to one year or even one and a half the limit of either class being ascertained by the length of spur. Anything above 20 millimeters is a cock. As a matter of fact aged cocks may be shortened considerably to appear young, but such "bishops" are generally detected. Stags and cocks may be matched, how-

ever, according to agreement, and in such cases the cock is shortened, an operation known there as "Rebaje." On the other side a slip or a stag may be armed with artificial spurs from another cock, which are glued and tied in place with perfect skill. Such operation is called "Montaje." Formerly "zapatones" were in use; a cockspur with a metal socket furnished round the base—but at present never used and even prohibited in many pits.

As a matter of fact, slashers were in use in Andalusia, but now definitely dropped as any artificial spur made of metal. Cocks are required to fight with

SPANISH GAME.

Black Mallorca cock. Specimen of the ancient strain that can be traced back to the famous Blacks of Tanagra and South Persia.

natural weapons only, and though naturally fliers, they do their work with remarkable accuracy.

MATING AND BREEDING: The Spanish Game hen is a very small and light bird of elegant Bankiva appearance. Two or three are generally mated to a noted winning cock, while they themselves are selected with extreme care. Full sisters or mothers of superior males are used only, and not the slightest care is bestowed on fancy points of color or appearance. Performance is the slogan. The average breeder is well aware of the importance of the hens in breeding, and a good specimen will not be sold and saved at any rate. Outcrossing is the rule, but in the case of a superior hen, becoming old, she is bred to her son or grandson and the pullets from this mating saved as breeders. This operation is termed "Requintar," a word impossible to translate. Literally to raise in tone by one-fifth. Aged hens are mated to stags, and pullets to old cocks. Surplus hens are killed and eaten, but very seldom sold.

The excellency of Spanish stock would appear to be a factor in favor of outbreeding, but if we take the antiquity of the breed into consideration we must admit that fowl of any locality is strongly related to each other, and cocks are seldom introduced, even from neighboring districts. Thus, strict outcrossing does not take place.

The Spanish hens lays one or two batches of eggs and becomes broody. When the eggs are removed from her nest, she generally changes the place. If allowed to sit on her own eggs, no further care does she need but a fair supply of corn and water and a place to wallow in the dust.

REARING: The eggs of the Spanish are small, pure white or delicate pink in color. The yolk is very large and, consequently, the white small. The chicks creep out apparently too weak to survive; small and tender.

They grow long wings and tails, at once, seemingly as if sick. If allowed to roam at ease, they are well taken care of by the cluck, who is a careful and excellent mother. They are allowed to hunt for bugs and worms and will not thrive well without a good supply of grass. After a few days they get some canary seed and especially millet—of the smallest size—which is about the

SPANISH GAME.

Fig. 1. Cock trimmed, ready for the pit. 2. Typical Spanish head (Valenciano cock). 3. Stag foot armed with zapaton. 4. Zapaton.

best chick grain available. Soon they become strong and begin their chicken fights as most all game chickens.

At three months of age the sexes are separated and the males given a run for themselves in the orange garden. They keep in good health and order and give no trouble unless excited to fight by the presence or proximity of female element. These walks or runs populated by the growing chicks is what is termed the "Criadero" (breeding yard).

In proper time they are dubbed, as is usual through-

out the world. The Spanish cocker leaves a small knob at the base of beak which is supposed to reinforce the latter. This peculiarity gives a condor-like expression to the face, which is further marked by the severe clipping of the neck, previous to conditioning.

TRIMMING: No fowl undergoes such a severe trimming as the Spanish cock. The head is clipped completely bald, and the neck very nearly so. Thighs are also partially shorn, as is the abdomen and great part of the saddle. On the tail all feathers are taken down with the exception of the large and straight ones. In fact, trimming appears quite to be overdone. The idea is to get the birds light and cool, and to check excessive flight, the wing points are not seldom cut. It is believed that this trimming was adopted after the introduction of English cocks during the Peninsular war, more than a hundred years ago, as the English carried on this practice to an excess forced by the hot weather. On the other side, it appears that trimming was practised in Spain years ahead of the discovery of America. At any rate, the expression "El Gallo pelado" (the shorn cock) was used to denote poverty or robbery at the colonial courts as early as 1500.

TYPE: We have already stated that the Spanish, in its vast majority, is tolerably pure Bankiva, in fact so much so that the photos of a wild Jungle cock and a young Spanish may be confused. With advancing age, the Spanish grows a wealth of feather that is rarely seen in the wild species. We have somewhere alluded already to the Black strains of Game fowl that were always to be found in early Persia, Arabia, Greece (Tanagra), Italy (Tartentum), and finally in Mallorca. Our suspicion that these black strains were different from the ordinary Bankiva and probably related to the Black Game fowl of old time are further enforced by the fact that such strains attained an ancient fame for

their savage spirit, dead gameness, which went hand in hand with the color, and wealth of plumage. Some authors say they are mere freaks, but the consistency of repetition of these freaks, not at all unknown in some oriental varieties, give food for thought, and we shall come back to this item ere long.

The Bankiva is a single and straight combed fowl. There is no reason for freakish combs, so long as the sexual apparatus is all right. The Spanish is generally single combed, though multiple combs do appear and which specimens are termed "Crestellados." We mention as a queer fact also, that such "crestellados" generally are long spurred and body punchers. A quality intrinsic in the Black Game fowl (alias Sumatra). Without these exceptions the Spanish, (sometimes high stationed,) are true Bankivoids and as such fully representative of the average Caucasian Game type.

COLORS: They come in all colors; black-reds, reds, grays, gold and silver duckwings, blues, duns, mottled and dead black. We have been referred to the latter almost universally as a special strain and apparently were indigenous to the Balearic island group. From here the British got their Minorcas, corrupted from Menorca (the smaller) while the larger island is Mallorca. The black Mallorca strain attained special fame, when the famous Braganza, Pirate of the Mediterranean, defeated with them the pick of English fowl brought over by British men-of-war, again and again. They fought at Palma, Mallorca, for heavy gold; and the old pirate generally knew how to win the stakes from the British. which fact constituted his greatest satisfaction. No wonder,—as during his pirating career he had to show a pair of heels more than once before the dreaded guns of seemingly invincible British sailors.

It is queer also, that in those days, almost every ship

that put to sea had a few Game fowl on board, Spanish as well as British.

It is believed by old cockers, that the custom of trimming birds severely was with the object of making them appear smaller to the adversary and at the same time making their color indiscernable, so that cocks that were once bossed by one of certain color, in their walks, may not be recognized as such in the pit.

MOULTING: When the hot season begins in May or June the fights are discontinued. Quite apart from the fact that the warm weather suffocates the cocks, they begin to loosen their feathers and, as is the case with all heavily feathered birds, they become dull and sometimes sick. The general weakness is aggravated by the fact that the cocks are severely trimmed and get rid of the stubs with difficulty.

They have two methods in Spain to overcome this critical period:

1. Cocks are taken out to country walks and allowed to roam far and wide and generally get over the moult with ease. On the other hand, many get lost through lack of attention or fall victims to predatory beings, both animal and human. True, when they weather the crisis they come back as strong as ever and need little training and conditioning.

2. They are coop walked. In this case they are carefully nursed and tended and there never appears any bird going wrong, as the average cocker is a lover of his birds and generally wide-awake in his profession. Of course, when coop walked, a cock needs a lot of conditioning and working before again being ready for the pit.

Both systems have their supporters.

CONDITIONING: Cocks are conditioned in adequate places prepared expressly for the purpose. Such a place is termed "La Gallera," and is in charge of a

skilled and reputed "Gallero" or conditioner. The latter feeds and exercises the cocks, which operation is termed "La Postura."

In a "Gallera" are different apartments. One is impressed by the sight of dozens and dozens of coops, 2x2 ft., made of wood slats used for sunning and giving the birds dust baths. These coops are in the yard out of doors. There is also a cock-house in the "Gallera," well ventilated and sun flooded. Rows of porch-type cages all along the walls, the "taquillas." Cocks cannot see each other. Metal is never used. The floor is covered with sawdust, rice hulls or a reed mat.

Food and water troughs are of wood or earthenware; sometimes glass, as it allows one to control and see the water consumed, at a glance.

There are also small pens in the house or just outside, large enough to give standing room. Such pens, "estiros," are used for giving the cocks exercise by scratching and wallowing.

There are also canvas covered small coops for transportation, and others completely enclosed in which to place sick and injured cocks.

The principal instrument is a scale, which consists of a beam with needle at the center. At one end hangs a cylinder coop with door for the cock and a plate for the weights at the other extreme. No patent scales are

SPANISH GAME.

Full feathered Spanish cock of Central Spain, under 4 lbs., probably influenced by English blood. (Giro Real.)

used. Cocks are weighed almost daily and the conditioner generally knows the weight of each bird instantly.

No cock house is complete without a small ring or pit, the "tentadero" where cocks are sparred and observed as well as worked. It is placed so that the other cocks cannot see nor hear what is going on, for fear they start a revolution in the cock-house.

Sick and injured cocks are kept in warm closed coops. Of course many cockers also keep a medicine box with sundry mixtures and tools to perform all kinds of operations. Generally, however, lemon juice, water and brandy are used to tend to wounds, and injured cocks usually recover soon, apparently "in spite" of all treatment.

Early in December the cocks are picked from their walks after having finished their moult and recovered therefrom. They are placed in their respective coops nicely ordered according to category, capacity and natural condition. Did you ever notice how order generates for itself in all good cock-houses throughout the world? It is of paramount importance, and you can tell the experienced cocker by the order he keeps things around himself. It is half the work.

Stags come in earlier, as being hatched in the first months of the year, they cannot be kept a-walking a lot later than October. These stags are placed in the sun coops in the open yard and are picked up several times a day to break their natural shyness and make them accustomed to being handled. Very soon they are perfectly quiet in hand, as the finer the game bird the more docile and tame he behaves. The Spanish cocker is always suspicious of wild stags. Stags are dubbed and after this operation they will readily fall on either brother or friend from the walks and will not recognize even the boss of the lot. This is only natural;

as a Bankiva, Spanish orientate themselves merely by eyesight, not by the ear, as is the case with most Orientals. Therefore, the latter are single walked from earliest infancy.

As soon as the stags and cocks are well in flesh, either from the walk or from condition, they are entirely shorn as described elsewhere. The spurs are nicely cleaned and polished and the beak filed to requisite length, as if unattended the upper tip grows very long and may be torn during a spar fight.

Some cockers advocate that their birds ought to fight very thin, others want a bit of fat. In either case the right point is attained during the condition period or "postura," and the clever cocker knows exactly when a particular bird is ready and in its prime. In Spanish cocks, required to fight very fast in naked heels, condition is all important, and nothing but the judgment of the cocker decides when a particular bird is fit. The methods used for conditioning cocks, as Don Pedro Laborde puts it in his exacting way, "is very easy to describe and very difficult to apply." The first thing to do in the morning is to ventilate the room without creating currents, as the shorn cocks are very prone to catch a cold. Then the coops are cleaned and dressed by the assistant, while the cocker examines every bird to see how they have disposed of their last meal—to act accordingly with the next. The general health is diagnosed according to the droppings. Cocks are then washed and fomented.

At noon the cocks get their wheat ration and water, and the cocker observes the appetites if at all satisfactory. If not, wheat is supplanted by corn or millet, very seldom soaked bread and a few leaves of lettuce, the latter as remedy for cocks becoming hot or stale. The vitamins in the lettuce soon brings them round. There is no fixed rule concerning watering, and while

some give it "ad libitum," others only scarce and some none. The birds are weighed prior to feeding and when night comes, each gets a roost placed in the coop and—Good night!

The work of the cocks consist in:

1. *Sparring*. Called "La tienta" (test), for which the cocks are muffed with sparring muffs, "Botanas," and left to work a few minutes, as the case may be. They are washed and nursed afterwards and get no more food than bread soaked in either milk or water. They are sparred once or twice during conditioning, though there is some abuse of this method also.

2. *Sunning*. After the morning wash, the cocks are sunned in the respective coops to make them thinner and to improve their health or keep it.

3. *Dust Bath*. They are allowed, when necessary,—and that is mostly the case,—to wallow in soft earth. Very important. They get dust baths after a sparring session and after a fight, when healing from their injuries. They also get it when becoming stale or when it is necessary to prevent staleness.

4. *Exercise*. They get it by scratching and wallowing in the pens, or "Estiros" mentioned above. Slug-gish cocks are not fed at all in their coops, but must dig and scratch for food in these "estiros."

5. *Footing*. Termed "El Paseo." It depends upon the judgment of the "Gallero" if a cock is improved or spoiled by this footing. A cock is loosened on a special ground and made to walk, run, sing and flap with wings. The cocker guides him with a sapling or kerchief. In some parts the cocks usually were made to run after a cock held in hand in the "tentadero," or was made to run by driving with a flag or any contrivance. No doubt many Spanish cocks known as wheelers have learned their traits in this way.

THE FIGHTS: "Peleas" are held in the pit, which is

universally round, bolstered at the inner side ("bata-yola") and surmounted by metal railing. The floor is simply rolled earth or covered with a woven carpet.

SPANISH GAME.

Top, undubbed stag (full Bankivo). Bottom, a henny cock (Gallino), at left, and a rumpless (reculo) at right corner. Scales in center.

In the middle hang the scales which are raised or lowered through pulleys. Doors lead into the pit. The seats are arranged round and behind the pit in convenient elevation insuring a good look at the center.

Cocks are matched ("casar los gallos") by weight. The president (referee) judging the contest. Each

cocker presents a list of his cocks and weights and the president proceeds to select the pairs. Alternately the cockers are allowed to challenge each other, naming their weights aloud. After some discussions, the pairs are arranged and fought. At the time of matching the stakes are named and agreed upon. Custom has established that this betting is carried on gradually, which allows one to appreciate the value of the birds to be fought, either for one duro, two, ten, or twenty-five.

Stags must not only be alike in weight but also in length of spur, which is measured by a sliding instrument called "Escantillon." A blinker is allowed two ounces.

In the fighting days the president and vice-president regulate the proceedings and summon the cockers to show the birds matched according to the list. Both officials are absolute authorities, within the rules, and their decisions final. If a cock weighs more than stipulated in the list, he loses right away.—No kidding!—Cocks are washed with brandy solution and the spurs stuck in a lemon. Stags are measured on their spurs and equalled.

Preliminaries finished, each pair are let loose and each setter sits before his door, and are the only ones that have anything to say concerning the fight. Their observations are responded to immediately by the presidential decision.

During the fight the spectators show their enthusiasm by offering and taking bets aloud, forming a veritable chorus.

In the midst of this noise bets are sometimes taken and respected by a simple nod. The fight over, the president's decision is final, and bets paid or cashed. It is notable, that any agreement made during the fight is paid without protest, and foul play or crookedness is entirely absent. A clean lot of straight people,—these cockers,—as in most parts of the world.

Fights are won or lost by: (a) direct kill, (b) by prolonged knock-down. In some localities at the minute a cock is down, he loses, and (c) by running. The latter is esteemed the most abhorred disgrace, and cocks that so do are immediately after sacrificed, as well as all his next line.

By the high standard of quality that modern Spanish cocks are bred to at present, running has become a very rare incident.

When both cocks are down for two minutes, and neither fights, it is a draw. When both setters (*defensores*) esteem that their cocks have had enough and none has gained any advantage, they may agree to call the bout a draw. No handling nor nursing allowed.

The referee (*presidente*) is the only one to proclaim the finish of a fight, won, lost or draw, his decision being final.

INFLUENCE OF SPANISH ABROAD: Spanish cocks have been scattered far and wide, as is only natural, in the once wide and proud dominion of the crown of Castilla. The average Game cock of Spanish South America is of Spanish descendance. So are those of Central America, West Indies, Philippines, etc. Of course, many have been crossed, with varying success, but the average cock is Spanish. It has been a matter of speculation when the first cocks were imported, but the old documents that we have been allowed to peruse, all indicate that Game fowl must have been imported in the very early days of Colonial regime. It is our guess that as soon as the Spanish settled in South America, and could take things easier, they imported Game fowl from the Motherland. So it was in Mexico, La Guayra and Peru, while in wilder territories, as in Chile, where the valiant Araucano Indians never were entirely subdued, in Argentina, Uruguay and Paraguay, Game fowl was introduced much later.

Spanish fowl found their way into the Spanish territory of the United States and contributed their share towards the production of many American Game strains. Spanish conquerors carried their national fowl on board while in search of gold and land, and difficult it is now to tell whence they landed them. We know of Cook that he landed fowls in several points of the South Sea Islands, and so did many a Spanish Don.

The Spaniards have been criticized severely for many of their past deeds and punished in constant warfare, but nobody can deny them admiration for the way they reached out all over the world with the sword and cross.

Wherever they founded important colonies they implanted their manly and spectacular sports. The Bulls and the Cocks!

And with such sports they erected a monument to their own spirit which has endured over four hundred years!

AMERICAN GAME FOWL

Westward Ho! Four hundred years ago the British Carracks set their course across the Atlantic and pounded their way over the restless waves to the birth of a grand Nation!

In the literature of those days, amusing, intriguing and

ED. H. DeCAMP,
Publisher, Grit and Steel.

confounding, we frequently come across mention of the British cock.

Those early sailors were particularly fond of the game cock, and no doubt that in desperate fights against the dominating Spaniards they more than once resourced

mentally to the high spirits of the game cock to fight game battles against heavy odds. The names of Sir

A Grist Champion. F. W. Motlow,
Lynchburg, Tenn.

Francis Drake, Richard Grenville, Walter Raleigh and a host of others pass before our mind while in fancy we hear the report of the carronades pouring a hail of iron, under fire and smoke upon the traditional foe.

Daring deeds of the sailors of yore, from the Carrack with their queer mediaeval rigs up to the fine clipper ships with tall moon-raking masts, the British sailor went to sea

to weld diamonds and gold for the British Empire crown.

The United States is a diamond broken out of that crown.

However, America, inherited the spirit, the best she has, from Old Britain and the best cocks of England thrived admirably in the new country.

As time went on, numberless Irishmen found a new free home in America and settled in the States. With them,

A Campbell Blue Boone. Alva Campbell.

their cocks. It is highly probable that the most prominent early cockers were Irish and that the greatest per-

centage of cocks fought along the Atlantic coast States were also Irish. As cocking progressed and communica-

A Knobcomb Blue, 5:08. Joe Mason, Chattanooga, Tenn.

tion was fairly established with the hinterland and Pacific coast, there is no doubt that Irish and English cocks were scattered all over the country.

In the South, of course, Spanish settlers had introduced their national fowl, and so we fairly may conceive the idea that what goes at present as American game fowl, is, as Dr. Clarke stated, originated from

Irish, English and Spanish fowls. Red Malays were introduced in Rhode Island, but if these birds were ever used as game fowl it is doubtful, as the birds imported were generally picked up in the East ports with a view to provide grub rather than anything pertaining to the pit.

About 1842, the first Sumatras were imported. Apparently these fowls proved of great value, but lacking fresh blood

they showed traces of degeneracy by too close inbreeding and obvious indiscriminate crossing. It was only half a

A Raggio Blue, owned by F. S. Salinas, Austin, Tex.

century later that Sumatras, or their remnants, were exported to England, where the birds caused admiration and were acquired for the show pen.

A most important item in the history of American game fowl, was the introduction of Oriental breeds, Japs and Asils, giving origin to a controversy in the game press known as the "Oriental Problem."

The Asil, pure, was unknown in America prior to 1887, though peacomb fowls from England were imported now and then. So far as our researches show, the first Asils were imported by Dr. H. P. Clarke, Indianapolis, Ind., about 1887, who subsequently made several importations and crossing the famous Indians on his American, Irish and English fowl, produced strains of cleverly combined crosses that were invincible in the pits of America, Europe and Mexico.

These birds were probably the first American games that crossed the Atlantic with a definite program to show in the old world the high degree of excellency attained by American game fowl. Dr. Clarke's great success in France with American fowls and gaffs, against the best birds of Europe, was an unparalleled achievement, never equalled by any other American. We have referred to this historical incursion while dealing with French game fowl, and may only add our opinion that nobody, probably, better deserved this triumph, as Dr. Clarke has devoted to the game and the birds more intelligence and deep study than anybody ever since.

Those Asil crosses of Dr. Clarke's were subsequently known and reputed throughout the Western cocking world as Trans-Atlantics. Perhaps not very uniform in type and colour, they were deadly dangerous in any sort of heels, profound game, fast and clever as no other American fowl up to that date. The doctor's success induced many clever and well-versed American fanciers to try an equal cross and subsequently Asils (?) and Japs

were deliberately used upon American strains, producing numberless strains of so-called Roundheads. Some ex-

tremely good, others indiffer-ent, they contributed to scatter pea-combed fowl all over the country.

A Tate Claiborne. Note Tassell and the similarity to Silky, indicating different blood from pure Caucasian or Bankiva.

about all types of cock spurs. His collection is as nearly complete as any in the world and the reader may judge it comparing the photo inserted in this treatise, illustrating a small assortment of Dr. Clarke's cock spurs. America has been surprisingly prolific in the production of noted game men, the enormous population being possibly the chief cause, though hardly an explanation for the outstanding virtues of many of them.

We consider ourselves extremely lucky in becoming acquainted with Dr. Clarke and fully ap-

An Allen Roundhead, four times winner.

preciate the wide stream of information that came flowing from his immense wealth of knowledge, that we hon-

estly believe to be the vastest in the whole world. No item concerning game fowl, practical or theoretical that

Typical Walker Blue Falcon from Cantie Biel Farm, Hattiesburg, Miss.

the Doctor could not speak of with full knowledge on the subject. His publications in the poultry press through several decades, are pleasant to read and as fresh today as they were forty years ago.

His experience reaches far and wide, having been personally in contact with the past generation and having seen and studied, as well as handled cocks in Europe, North and Central America.

Man of vast education, great-hearted, generous and born gentleman, his opinion on game fowl topics assume the character of revelations and as such are quoted all over the world with the best deserved respect.

The game fowl fraternity extends all over the world and through the cocks and their sport a large rope of communication extends backwards through past milleniums

A Miner Grey. Lloyd B. Miner, Cornell. Ill.

to the very beginnings of civilization. And this rope is pulled forward, generation after generation, from year

to year, into the future. History is too poor to register the thousands of names lost in the centuries gone by. We merely see or note the hands that have pulled this rope forward through the darkness of forgetting. At present we see our own generation at it, names as that of Mr. Herbert Atkinson, England; Mr. Henry Cliquennois, France; Mr. Pedro Laborde Bois, Spain, and 'a host of Americans at the head of which we fancy to see, calm, sure and trustworthy Dr. H. P. Clarke.

No country since the beginning of the world has offered to the game fraternity such generous protection as the United States, which fact is evidenced through its game press, now as good as ever. Poultry journalism of the tame sort supports itself by immense commercial values, but the game press has always struggled against the lack of support. So in years gone by, we have seen magazines and journals appear and disappear. Few seemed able to stand the test of time, and from these few it is merely a matter of the man behind the gun to show gameness and stand adverse conditions.

We believe that the average reader does not fully understand the amount of energy that is necessary to bestow on the work to give him his game fowl paper punctually each month. We have been in touch with several and have seen Grit and Steel coming sure and reliable month after month. And behind the paper the Editor, Mr. Ed H. DeCamp and his staff.

Nobody could blame a business man for abandoning a job that does not throw a margin big enough to make it profitable, but Mr. DeCamp has stuck gamely to the paper, weathering adverse winds and tides to give to the fraternity his, month after month. He is another of the good Americans pulling on that rope of tradition. Forward, always forward, game as the cocks they work for. Should the press slacken, the whole sport would come to grief. This is too short space to give even a slight description of

game journalism, but we trust that some worthy man will take up the matter soon. At present the American fancy is represented by four monthly publications,

Dr. H. P. Clarke, Indianapolis, Ind. America's foremost authority on Game-fowl matters. A great breeder, writer and connoisseur, he is one of the mightiest mile-stones of Game history.

Grit and Steel, Knights of the Pit, Game Fowl News, and The Feathered Warrior.

Game fowl literature is fairly abundant all over the world but especially so in America where the vastness of the territory and the abundant population created a fertile soil for specialized literature. We have come across

some remarkable good books, but as "different artists, different skill display," there is no uniform opinion even concerning the fundamentals of cocking and conditioning. Matters have been improved of late and it would be sheer injustice not to name especially a booklet issued by Colonel Sol P. McCall, entitled *Conditioning Cocks Correctly*, copyright August, 1926. The secrets revealed by Col. McCall are primarily no-secrets, as he has used his observative powers and logic, rather than invent any wrinkles and recipes. This is a good booklet and no cocker should omit having a copy. If you think the price too high to suit your purse, club for the price with some friends and let all have the benefit of sound advice. Col. McCall has also issued a set of rules widely used all over the country. Somewhat different is Dr. H. P. Clarke's compilation of Universal rules, an attractive, extremely clear book, well illustrated, which besides giving you the rules of several nations, gives you a handful of experienced advice from a man who knows what he says. On reading through its pages the cocker has the feeling of receiving the benefits of a handful of gold nuggets strewn among its pages.

The most recent publication is got up in a very modern style by Grit and Steel, a compilation of historical articles concerning most American game strains. This book "*Histories of Game Strains*" is a volume that constitutes a credit to any library, both by its contents as well as elegant makeup.

So much has been made, and more, on behalf of the American game cock, and yet all the literature is insufficient to describe *what* the American game cock is. Warhorses, Shufflers, Roundheads, Mugwumps, Cubans and hosts of names are of the American game strains, yet no breeder consents that they are alike. Originally the names went to real strains as derived from some remarkable breed, but today the names of strains cannot be

taken seriously, it being more or less a trade-mark and fancyful rather than a guarantee. Not that the cocks

SHORT HEEL FOWL.

may be in the least lacking quality, but their strain name is just as important if we call them "tornadoes" or if we call them 'whales' or "sharks." There is no uniformity in breeding, type nor colour. And yet, the average American game cock is as good or better than any cock in the world and we quite fancy that they can

meet successfully any cock in Ireland, England and Spain.

The name of the strain has no bearing on the high quality of the individual and in most cases, if not in all, the man behind the strain is the real and unique cause of superlative quality. In this connection we could name legions of American breeders of the past and present generations that have produced phenomenal

HALF BLACK JUNGLE, HALF SHUFFLER.

strains that had no rights nor any relation to the name of the strains they were sailing under. No harm meant, but apparently the American game cocks are about a

thousand strains with no intrinsic importance to what they are called, but what they really are. No credit to

A GRAVEL ROOD GREY.

strain but full credit to the man behind it, whether Warhorses, Roundheads, Mugwumps, Cubans and the hundreds of others just as good.

To suggest a remedy to this indiscriminate fancy for strain naming is not the task of any single man alive. Perhaps the foundation of a game breeders association and the adoption of the generic name of American game, would be as simple as effective, as well as difficult to achieve, knowing as we know, that the trade stands under the banner of the name of strains. Neither in England, Ireland, France, nor Spain exists the strain boom. It would be, at instances, inconceivable, and yet in the practical United States any man may be fooled by a strain's name.

Of course, there really are different types of cocks. We have pointed out that according to prominent authorities the American game

strain but full credit to the man behind it, whether Warhorses, Roundheads, Mugwumps, Cubans and the hundreds of others just as good.

To suggest a remedy to this indiscriminate fancy for strain naming is not the task of any single man alive. Perhaps the foundation of a game breeders association and the

PIT RIVER WARRIOR SHAKE.

fowl is primarily based on Irish, English and Spanish fowl. A very acceptable combination. Then, there are hundreds of alleged pure strains which carry a dash of Oriental blood, either Indian or Jap and some a very diluted pinch of the Sumatra. Other breeds have been imported and used for crossing, but in lesser degree.

We have already referred to the inconsistency of Oriental crosses in the long run. Phenomenal performers when bred rightly, after some generations, five, ten or twenty, suddenly lose their outstanding quality and seem unable to win. It appears, from observation, that this happens when less expected, not caused by feeding, climate nor management.

Nobody can see the cause, though few may go to the trouble of examining the interior organism and find the revelation of the secret in the glandular system. We have pointed out insistently that Orientals and Caucasians are fundamentally different anatomically and that nature tries tenaciously to eliminate undesirable hybrids. One of the chief methods employed by nature is eliminating the fighting and resisting powers of such hybrids. We see that in human races. The first crosses and offspring thereof are eminently pugnacious and where white-Indian population exists in America we see the respective countries in constant revolutions. In subsequent generations, the once warrior spirit goes out and the average is tamer than either original parent.

Animal hybrids are sometimes unfertile from the first generation, and though there is no apparent reason for this, we gather without difficulty that a reproduction of the hybrids "inter se" is at once stopped. Other hybrids, being of closer affinity, interbreed and produce a vigorous and prolific offspring, but as time goes on, the high spirit is blown out and they are easily dominated by pure races.

The law of warfare and the meaning of the fighting

spirit in Nature has been merely touched in Science by alluding to the struggle for life and survival of the fittest. Human life is too short to permit a profound observation of cause and effect and the scientific man of today is too much intellectual to derive the deep satisfaction from fighting sports as does the more physical and athletic in-

A MINER BLUE.

clined individual, without scientific training. Oriental crosses last longer in some countries than others, but in the States they seem not to last much over ten to fifteen generations, unless fresh blood is administered occasionally.

It is very difficult, even to an American devoted fancier, to follow the makeup of the different strains that constitute American game fowl as can be witnessed by an occasional controversy that arises in the press.

Many of the so-called strains have been consistent winners and appear to justify a detailed description. But it is not so much the strain as the man in back of it. Observe and you will gain the same opinion. What an array of brilliant breeders in the past and present, names as Means, Walker, Hammond, Campbell, Miner, Taylor, Clarks, Thrasher, and dozens of others just as successful. It would take several volumes to do them all justice, and we confidently hope that we may see more books like "*Histories of Game Strains*" in the near future.

We have referred already to a certain trade in the game fowl. This is certainly so, and none so great and well organized as in the States. The chief cause, of course, is publicity as any breeder instead of eating up his surplus will rather advertise and sell for a couple of dollars what he, otherwise would consume for a few cents. That this trade is generally beneficial and perfectly legitimate nobody will deny. It tends to soften the contrasts of certain localities also, as many breeders from the South travel northwards and vice versa, so that after a few generations it is safe to expect a very homogeneous lot of fowl in the whole country. Without a lively trade and consequent advertising no press could subsist. Both sustain themselves.

Naturally the dollar-rolling of the sport has a beneficial effect on the genial gaff and supply manufacturer, and one must wonder how the excellent American gaff of to-day can sell at such cheap rates while probably, in some instances, surpassing the old ones in quality. One seldom hears of a gaff breaking, though there must be more of that than generally reported.

In the States there are gaff-makers second to none in the whole world, and every exotic contrivance from the

gigantic slasher to the short Brazilian "puon" can be reproduced to exacting quality and even improved. As we write our notes about this item, we have before us the list of Gorman and Miller, Indianapolis, showing *twenty-two different patterns* of high class gaffs. Grand photos and catalogue, from F. R. Glover, Cortland, N. Y., who handles the best and largest supply stores in the world. One must wonder over the wealth of display of high class cocking utensils offered even at wholesale principles. How far from this mark the British dropped, and to believe that they practiced the sport for nearly or more than twenty centuries.

With all the progress in the sport in America, excellent breeders, great magazines, fine cocks and the best of supplies, nowhere is perfection accomplished. It sounds rather queer, but is so; different length and patterns of gaffs, different rules in some territories and different opinions sounded the death knell to any approach towards unification. We do not see, if the fans did associate, why they should not agree at the first meeting to adopt one universal type and length of gaff. They have the short $1\frac{1}{4}$ inch regulation, straight, round blade, in some parts, but many cockers never would accept that as an ideal gaff, alike for strong and fast cocks. It is more likely that a $1\frac{1}{2}$ inch either straight or full drop would meet all tastes better as an ideal weapon for the fast as well as the enduring cock. It provides about the best sport and levels the chances of all cocks. It is equally suitable for small and shake cocks and once universally adopted, even if it were not an ideal gaff, it would take all the guesswork out of the sport. Only good cocks could survive and all the strainers would be ultimately condemned to the pot. In France they have only the one and unique 2 inch straight gaff, they have one breed of cocks and only one set of rules. Every cocker may become a sound judge, and all crookedness would be finally kicked out of the pit. Give

the crook a chance and he will try to gain an advantage on you.

The chief cause why cockers have attempted a well organized game fowl association, is that unlike the barn-door breeders, they are not professionals but are amateurs of the cleanest sort (E. & O. E.) keeping and fighting fowls as a hobby. Their general income is derived from any profession except cocking. The financial interests of the cockers are not specifically hurt under restricting laws. For that same reason the English accepted the ban without protest, but would have fought for their rights up to the last if the law had injured their pocket books.

Other sports enjoy some protection and legal regulation though perhaps are less clean and at least as violent as cocking, even in England. Just think of the horses, football, boxing, wrestling, etc. We are very much in favor of more such spectacles, but do not conceive why cocking should be put aside. It is as stated, professional pursuit, defensive organization and social or political power of same organization. Suppose a prominent cocker in America meets another and these two call on another pair, these then meet an equal lot of another state, and all together start the association by meeting hundreds and thousands.

Thousands and thousands together are organized in districts, and these in States and the States in localities. That association would create a power, social and political, and that power would create the basic condition for a recognized profession—professional breeders, conditioners, and handlers. And with the time going on, professional training in the association's schools, competitive tournaments, and cocking once more in the history of times a recognized national institution.

The point to start is that one and only gaff for all cocks, either the $1\frac{1}{4}$ regulation, the nearest approach, or the $1\frac{1}{2}$ full drop which is more likely to become the all-round

American National Gaff. And then let the cocks crow
loud and clear!

CANADIAN GAME FOWL

As a British colony and former French settlement, one would expect an interesting native game fowl population in Canada, but this is obviously not so. But its proximity to the United States and some inexpressible sort of isolation from the English Motherland, the game fowl of Canada has been much more influenced by American game cocks than anything European. The French settlers have continually imported game fowl from France but seem to have given up their attempts to perpetuate the "Coq Gaulois" in Canada. As mentioned under "French game fowl" these birds seem unable to accommodate themselves to any other climate and after a few generations lose their valuable qualities for the pit. The influence of the French fraction of cockers is felt in their habit of fighting the cocks naked heel, as in some districts of Belgium. For the rest of Canada, the Old Western American rules are in vogue, and seem to satisfy the adepts better than anything else.

We see sometimes publication concerning Canadian, Irish and Asil-Canadian in the press, but careful investigation shows clearly that these birds are nothing different from the average strains of America. Some breeders state emphatically that Canadian are superior to any American strain and will not have it otherwise, but that their fowls are strictly Canadian, just as Americans are Americans.

Of course no discussion is possible on this ground, but even with the best will and eagerness for detecting some new or distinct feature on this Canadians, we came to the conclusion that they resemble the American fowl, much like one egg the other. And much the better so, for the sport for the cocks and for the grand land Canada.

AUSTRALIAN GAME FOWL

Different from any other British colony, the fifth continent harbours some varieties of game fowl which are distinctly evolved according to the natural medium of that country.

In our efforts to get reliable information from Australian correspondents, at instances where we could not go and learn for ourselves, we were sometimes deliberately fooled and many of the most interesting reports were obviously fakes.

Sometimes articles and letters concerning Australian game fowl are published in the old reliable "Feathered World" of London, but never has an attempt been made to classify and study different varieties of birds that have been imported into Australia.

In former centuries Australia was absolutely void of "Galli," whatever exists there has been imported, the same applying to New Zealand and New Guinea.

English and some Irish game fowl have been imported and while the latter have been expressly acquired for the pit, the former are, as in the homeland, regarded more suitable for the show coop.

Some writers have now and then launched high stepping articles concerning the Australian's gameness and show perfection, but if properly boiled down we find that neither in Australia nor elsewhere can they do any sort of miracle.

The true game breeders are sparsely distributed, silent and just the same good bunch of fellows that constitute the fraternity all over our globe. They keep the best they can afford and so long as the cocks go at it in regular style to land the bacon, they care a fig for any of fancy points that turn some queer folk crazy in the shows. Besides the English type fowl, there were lots

of Orientals in Australia, Tasmania and New Zealand, years ago.

It appears that in more recent years the general tendency is to fight in steel so that the typical naked-heeler became more and more scarce. We have seen a lot of game fowl from Australia, closely akin to the slasher-fighting Sumatra in type and general demeanor, and it was perhaps these birds that influenced us strongly in our belief that the original Sumatra sprung from the Moorish or Black Game fowl, that actually existed in the East Indies not so many centuries ago. The birds were clean dubbed, but the progeny showed very scant comb approaching a multiple or peacomb, completely dark faces, large black eyes and beak like the "Gallus Varius"

of Java. These birds were high stationed, fairly horizontal and while carrying their feathers close to the body they could fluff them out appearing plump and short. Their voice was different from any other variety and though carefully managed were extremely shy.

On investigation about these fowls, our correspondent wrote such blunder that we decided to use none of his information in our publications. We hoped to be able to go and see for ourselves, and this hope has not been dropped yet, but pressing business and the queer path of destiny has kept us away from the Australian shore after having been three times with the luggage ready to

Australian Game cock, 10 lbs. 8 oz.
Bred by Ike Tutty, Orange, N. S. W.
Never beaten. Evidently Oriental.

ship. We still have some descendants of these birds, though crossed, that show *in youth* the characteristics of their ancestors, but which disappear with advancing maturity.

A similar experience was made by Dr. Clarke, who in

Australian Games. 1. Black Oriental of the strain imported to America by Dr. H. P. Clarke. 2. An Australian pheasant type, referred to in text. 3. Australian Malay hen which proved a great breeder of superior naked-heeleders. 4. Pile O. E. Game from New Zealand.

years gone by, secured a strain of Australian black Orientals that were excellent pit birds and besides extremely handsome. Though Jap in type, they resembled

in tail and long wings the Sumatra of yore. One of these birds was shipped to Monsieur Cliquennois in France, and did very well there. They became since extinct through lack of fresh blood, though Dr. Clarke tenaciously searched, but in vain, for the original source.

We feel sorry to be unable to relate more about Australian birds, and it looks like sheer irony of fate that from our correspondents we could get no reliable and scientific information while the scientific authorities we approached for the same purpose cared nothing and knew nothing about game fowl.

So, from Australia as hunting grounds for our researches, we only remember, with mixed feelings, her shape like that of an upturned face and, terminating in cape York—a long nose!

SOUTH AMERICAN GAME FOWL

When the Spaniards established their colonies in South America, they brought with them the bulls and the cocks. A large bull ring still exists in Lima, Peru, the residence of the "Virreyes."

No authentic records have we seen, referring to early importations, though the mention of "Gallos" in early documents is not so rare. Formerly, and even a few decades ago, the breeding of fowl, as a matter of fact, referred generally to game fowls only, as nobody paid any attention to the breeding of barndoor chickens.

We have been able to establish that the bulk of early importations came direct to Mexico and from here chickens were sent out to the south, Peru principally, Bolivia, Ecuador and Chile. For the same reason they were not known as "Spanish Game," but simply were termed "Gallos" (cocks).

Not the slightest attention was paid them with regard to type, colour and weight, and with the time rolling on, they evolved to a natural nondescript type, closely resembling the Spanish, but generally larger. Many became dunghill through indiscriminate breeding and became the common country fowl which was to be found alike in the tropical forests of inner Ecuador and the wind-swept "pampas" of southern Patagonia and Magallanes.

The first "Galli" that ever came to Chile, were a lot of dunghills brought from Peru by Madame Ines Suarez, the beautiful companion of Captain Pedro de Valdivia, prominent explorer and conqueror who succumbed—tortured to death,—upright and gallant. It appears that the first game fowl was imported in Chile from Peru, also, at the time of the government of Hurtado de Mendoza,—though not sure.

Likewise, Ecuador, Bolivia, Paraguay and Uruguay got their first game fowl through Peru. Argentina got some

fowl direct from Spain about 1750 as certain Juan Albados (apparently from South Spain), saying: “. . . trujo consigo tres gallos i dos perros . . .” (brought with him three cocks and two dogs). No reference made to hens, but the average breeder considered only the cocks under the apparently dubious belief that having a game cock, chickens for the pit could get out from any hen.

The enormous proportion of dunghill in the poultry population of South America appears to justify the as

SOUTH AMERICAN FOWL.

Argentino shake of yore, on left. Peruvian slasher-fighter in the center, and small Paraguayo on the right.

sumption that the Spanish criollos were notoriously poor breeders, but we quite believe that there was a lot of malice among the educated Spanish breeders of yore, which would sell a good cock readily but would not part from a breeding hen.

The ignorant “criollos” bred their fowl just how they could, while the Spanish “caballeros,” farmers or officials, handed their knowledge down to their sons in heirloom. From a letter in the chronicle of an old Chilian family, whose name we have to omit, we find some directions which the writer gave to his son, advising “. . . use only two year old hens from our reputed strain with the stag of

Ramirez, and do not let you be influenced to use any foreign hen, however nice she might look, as the "mediope-los" (lower caste half-breeds) only have "gallinas brutas" (dunghill hens), sometimes nice but not game enough for our "Gallos finos" (game cocks). Further on the same gentleman asks his son to respect tradition and never sell any female for any price, and if they become too numerous to control, to eat them up.

The same letter has many parts of highest interest, but for sake of discretion and respecting the "tradition" we must refrain from inserting it here in full.

The different South American countries have developed different sports and rules which shall be mentioned separately.

MEXICO. The land of Hernan Cortes while under the Aztec regime, had no cocks, but since the Spanish succeeded in destroying the once flourishing empire, feeling at ease, they implanted their bull and cock pits. We have no authentic records of early cocking history of Mexico, but trust that many data could be got through family chronicles, many of which are there from remotest time.

Cocking has been carried on to our days in Mexico, apparently with no serious interruption, unless we call such the many wars and revolutions to which that unlucky land fell victim.

Slashers and naked heels are there in vogue and apparently the slasher which would otherwise be suspected to be an Eastern heir was adopted after the Andalusian custom. Andalusians brought over many of their cocks and horses, strains of the latter still existing in modern Mexico. The cocks used today, in Mexico, are so closely akin to the American—due to constant importation,—that we feel it needless to attempt any description.

The Mexican rules may be consulted in Dr. H. P. Clarke's set of rules, who studied the cocks and the sport at the very source.

CENTRAL AMERICA. The cocks and sport are more or less equal to that of Mexico, the slasher prevailing in favor. We have perused one slasher from Guatemala sent us over by that leading game breeder, Don Carlos Aparicio, of Ciudad Vieja, Guatemala, which shows distinctly that it is equal to the pattern used in Mexico. These weapons differ from the Peruvian in so far as they are much lighter and weaker. Rules allow the replacement of

SOUTH AMERICAN FOWL.

Chilian cocks. A Spanish-Irish giro, a "Pasion"-bantam, and a modern Oriental naked heeler, trimmed and heeled for the pit. Note leather boots to protect shanks.

spur when broken, and adversary's cock may bleed to death while a new slasher is tied on. That is the idea of having the blade thin and fragile.

We fancy that throughout Central America, the old-time cocks from Spanish origin, introduced via Mexico, are more or less extinct and replaced by American stock.

CUBA. Due either to the insular character of the land, or due to proximity to the American mainland, the sport is there slightly different from that in Central America and naked heels far more favoured.

Previous to the war, far back in the nineties, the Cuban stock was purely Spanish, and the importation from the motherland more or less constant. "Liborio" the Cuban

"Uncle Sam" has ever since been partial to cocking and so he is depicted on horse-back, smoking, tail of horse tied to the saddle rear and a game cock in the hand. Many of the cocks used and fought in the States as Cubans, are naturally tolerably pure Spanish.

A few years ago a queer law was passed in Spain prohibiting the exportation of cocks (pit fowl), to Cuba. We were interested to know more about this law, but found out very little beyond the evidence that Spanish cocks were exported in great lots. In fact many Spanish breeders had special equipment and accommodation to attend the export for that grand sugar and tobacco island.

VENEZUELA AND COLOMBIA. In both lands cocks are fought, but no great difference from Mexico and Central America. They keep up the tradition in the large and small farms, where the "caballero" or owner keeps a good stud of game fowl. In some parts, as is only natural, they are yielding to modern practices and cocking is giving place to more commodious entertainments. Many of the farmers, as is the case in Mexico, are becoming "absentists," and while the farm is producing whatever it is able to, the owner passes a "great life" in Paris.

ECUADOR. Slightly different from the above, in so far, that this land got its original stock from Peru, not from Mexico. Liba was the seat of the vice-roy and consequently the fashionable centre of the Southern continent.

Whoever has travelled along the Ecuatorian-Peruvian boundaries, especially along or among the "Sierras" (mountain-massives) will understand how difficult it was, and still is, to transport goods. Mules and Indians are the transport means and not seldom the traveller meets a small caravan and may feel blankly surprised to see that the accommodated whites are carried up and down hill sitting on a cradle on the back of an Indian. The latter are accordingly strong on legs and proud of their over-muscled thighs, which is borne out by the custom of their

painted, but otherwise nude women, to bind their legs under the knee and above the ankles, to add plasticity to their calves. In the Ecuatorian Hinterland, climate, geology and customs are genuine Amazonic. All depends on the river and its canoes carved and burnt out from solid logs. Now and then one sees a canoe loaded with a couple of coops with fowls, but very seldom game.

Whatever there is of game fowl in the Hinterland is

The prettist pit in all Mexico. Aguas Calientes. Photo by Dr. H. P. Clarke.

strictly Spanish and much purer, as such, as the bulk of Peruvian game fowl from which they originally descended. The old Ecuatorian game fowl is forcibly very closely inbred but we dare not attempt to trace the history of any strain though assured that some are over a hundred years old.

PERU. This was the seat of Spanish government before the Independence. Bulls and cocks, much in evidence, even up to our days. What Mexico was to the North, Peru was to the South. As in Mexico the Spanish succeeded in the rule of the country after cowardly slaying a great part of the population. Pizarro and Almagro, the conquerors of Peru, sowed terror among the once mighty

and fairly civilized Incaic Indians by bold cruelty,—at the mention of which we stoop,—and going so far as considering themselves worthy of establishing a new dynasty mixing their cur-blood with that of the Royal Inca ladies.

Hordes of Spanish adventurers followed the bloody trail of Pizarro and Almagro in their insatiable thirst for gold, and so it came that owing to the enormous wealth of Cuzco and Lima a vice-roy was installed who henceforth ruled the southern region; Chile was a very small and hard bone for the Spanish and instead of finding gold there, they found a manly race of Indians that made their progress sour.

For many centuries, practically up to 1835 in Peru they knew no other than the Spanish cock of yore. The sport advanced and developed until it became a much refined affair that overshadowed the Mexican from which it derived. We find mention of frequent cock fighting in the writings of Paul Marcoy, who, for long years was in Peru and eventually crossed the continent from the Pacific at Ilo to the Atlantic, via Amazonas.

At one time, they had in Peru a breed of cocks, for which we find no other explanation but that they were brought over from the Dutch East Indies. Many of these cocks were imported by Dutch pirates who settled in the Gulf of Arauco, Chile, and apparently from here they found their way to Callao, Peru. These birds were larger than the Spanish Peruvian, and we suspected at one time that they as well as the slashers used, were entirely due to the Dutch Indies. We learnt, however, that the Peruvian slasher was patterned after the Mexican, though their weight and size apparently was influenced by the Javanese.

Early writers, Buffon and followers, never could account for the strange Oriental type fowl which was perpetuated

in Peru, merely for pit use. In Arauco, Chile, they were not used for the pit but the Indians crossed them indiscriminately upon the native stock producing freak dung-hills that have misled many good-intentioned writers. At one time, nobody knows exactly when, the early Orientals and their crosses began to fade away and eventually became extinct. Their traces may be still detected among the common barndoor poultry.

The Bankivoid came once more to its right and though many importations were continually made from Chile, the

A corner of Sr. Atilio Rossi's breeding yards. Buenos Aires.

old Eastern type remained extinct. Peru was known in Natural History by having, among the mountain natives a race of mute dogs, different from the European canine, but this apparently also vanished with the advent of the Spanish under the sign of the cross and its blessings.

For the reason of so many game cocks imported from Chile, the fighting stock was once generally termed "Chilenos," but today they scarcely deserve that nomination as Peru has and breeds cocks that if not equal are at

least very similar to the best of Chile. Peru is one of the countries where cocking is legalized and carried out under control of the law in public, well kept cock pits.

The rules are firmly established and even the betting is controlled by municipal officials, one small share of all the moving money going naturally into the arks of the State. There is no reason, we fancy, why the sport could not be equally legalized in other countries. The presence of police and the absolute absence of any sort of rudeness makes the Peruvian cock pits, "Coliseos de Gallos," so particularly attractive. Cocking is a clean affair in Peru.

Slashers are the rule; some of them of considerable size, five inches and as we gather, even six, at instances. Cocks carry only one on the left foot and by means of a leather wrapper, cleverly manufactured, and wax-ends they are firmly applied. Everything has a legal measure, even the strings, so that faking and foul play are radically ousted from the pit. With such steels, it only stands to reason that a fight cannot drag and in many instances the whole bout is over after a few dashing buckles.

Excellent wingwork, keen eye and flashing speed are primordial requisites for this style, but after all the Peruvian cocks that we have seen, many of which, noted winners, we are not satisfied that the pinnacle of perfection has, by far been attained. We believe that the fast American strains should do remarkably well in Lima, far better than the average Peruvian stock. From this we would not like to impress the reader that the game fowl of Peru is anything like mediocre. Quite to the contrary some appear to be good average pit fowl, for slashers, though most lack bottom and gameness when compared with Southern stock.

The ideal slasher bird should be a flyer and a hurricane for kicking, fundamentally a body puncher. Fairly long legs but not necessarily over-muscled. Their initial virtue should be determined aggressiveness and back-fight-

ers studiously avoided. All the defensive work should rely on mere wingwork. Such birds need not be deeply

Calcutta Asil, bred by Sr. Atilio Rossi,
Buenos Aires.

game as these are most generally too slow for sword fighting and injuries rendered with Peruvian or any other slashers leave no margin for any bottom qualities to show up. We have gained the impression that the remarkably good slasher fighters that once were bred in the East have been spoiled in our modern times and neither the Peruvian nor the Java-

nese game fowl can be considered ideal fencing birds, lacking in the most essential feature,—speed.

We feel much obliged to our friend Don Cristobal de Armero, Lima, Peru, for much interesting information concerning the sport there. A prominent publican and writer of distinction, his devotion to the sport from long years, place him in the category of the most reputed authorities. We believe that with such supporters and the ideal conditions pre-

Peruvian Oriental cross, 9 lbs., persistent winner in slashers.

vailing in Peru, the land is a rampart of the cocking sport and connections with it should prove highly profitable.

CHILE. The beginnings of cocking are clouded in dense mystery but there is not the slightest doubt that the sport and the first cocks were introduced from Peru. Cocks and cocking were things of the country side and in early years no farmer could pride himself who had not a specific strain of cocks and horses. The average horseman may be well versed with the famous breeds of England and the East, but has yet something to learn about the famous old strains of Chilian horses that for endurance and compact strength stand unique in the whole world. No endurance test where Chilian horses competed against English and Eastern horses that they did not carry off chief honours. In saying Eastern, we do not want to impress that the Arabian is meant, which in plain desert may be better, while the Chilian in a hilly and stony field is superior. Such were the horses that besides the cocks constituted the pride of the Chilian Gentry. Since time immemorial the Chilian cocks were fought naked heels. Once let go it was a matter of the cocks to fight it out, without seconding and no handling at all until things came to a stop.

Those early cocks were naturally Bankivas, from Spain, and as such were not ideal naked-heelers. It is a feature of these cocks, that while they can kill easily with steel almost the whole year round, they fail to carry, but exceptionally, the mortal punch in natural spurs when out of season. This means that the cocks are very good near-ing or during spring time, but drag in fights, however dead game, the rest of the year.

Oriental have that advantage, that even through the moulting period can kill quite easily and we had no difficulty in foretelling a winner in due time. But for certain reasons, we believe it is purely sentimental, the great

majority of Chilian cockers always prefer the Bankivoids, and so the greatest percentage of fowls are of this type and average from 3 lbs., 10 oz. to 4½ lbs.

During the last half century of Spanish domination, Irish came to Chile, among which Ambrose O'Higgins became notable by his own public work as well as being the

Don Cristabal de Armero, Lima, Peru. A leading man in sporting circles.

father of Bernardo O'Higgins, el "Pardre de la Patria," who fought gallantly for Chile's independence and became the first president (Director Supremo). With Ambrose O'Higgins many other prominent and lesser Irishmen came to Chile, also English and Scotch.

With them came Irish and English fowl, and so good were these that they defeated the common Spanish fowl almost on every occasion. Every cocker wanted them, about a century ago, those famous "Gallos Ingleses" and no Chilian dared sail to Ireland and England, to learn the military and other sciences, without being pestered by friends and relatives to bring home a couple of game fowl. In a few decades the whole game population became deeply influenced with Irish stock and some English and many strains have retained their reputation up to our days. Particularly the breeds of the "Frontera" near Chillan and Concepcion.

In the following years, from 1830 to 1860, many English, American and Irish engineers came to Chile. Also prominent pedagogues and scientists from Germany and France;—but the importation stopped. Chile had good games aplenty and thousands were used yearly in the pits.

From the earliest beginnings of Chilian history a friendship was established with the British and many were the active list fighting against the traditional enemy, the "Popish" Spaniard, for Chile's independence.

Among these was Mylord Thomas Cochrane, distinguished Admiral, who had the Spaniards at bay in Callao forcing them to sign articles according to which they should pay a large part of their immense treasure to the Chilian, whereupon they should be allowed to sail away. The Lord was so scarce in ammunition and stores that he dared not fight an open Spanish Armada, but he would have done it at any rate, gallantly, had the Spaniards ventured their nose out of the defense of Callao.

It is said that the Argentine General San Martin, who was conducting the land campaign, either misguided by jealousy or by mere intrigue, cancelled the agreement and let the Spaniards carry away the gold of which poor, sucked out, patriotic Chile, was so badly in need. The war over and the land free, farming came to its rights once

more with it, the horses and the cocks. As stated, during long decades not a feather was imported worth speaking of, and the Irish-Spanish game fowl of Chile became fairly homogeneous in type.

Shamo Ainoku, from Buenos Aires.

When the great agricultural boom came forth about the seventies, the interest in poultry was revived and many great farmers imported then as of recent date, fresh stock from England. Being absolutely ignorant that game fowl could be winners otherwise than

in the pits, many imported show-coop winners and suffered a great deception seeing their imported stock, and their offspring thereof, badly beaten in the pits.

By and by, English stock became ill-reputed until it was a sure bet that any second-rater country cock could beat the finest looking English game. We were puzzled at this statement until we found out, upon several occasions, that our re-

Argentino "puon." Nickel-plated socket and steel point.

cent importers were grossly misled by English show-men

cutting the trade stone-dead at the very beginning.

Not very long ago American fowls were imported, and the American breeders, Graham and others, on learning that the sport was naked heel in Chile, sent out Oriental crosses which at instances proved enormously superior to any fowl known, as was only to be expected. Such fowls were here known as Wanfords, a corruption of some strain name, but henceforth the trade-mark of quality.

Pure Orientals, Asil and Japanese, also some Brazilian came in reduced numbers and being better suited for naked heel, though lacking the spectacular style of the Bankivoid, are slowly but steadily gaining in popularity. For certain reasons and experience gathered in several centuries of cocking, small birds are preferred and we fancy that it will take its time until regular shakes are fought the grand old style in naked heels.

Cocking, for long years under ban, is now allowed under certain restrictions and we hope to see the day when open municipal cock pits will function in some of the lovely surroundings of which Santiago de Chile, is so remarkably abundant.

BOLIVIA. What has been said about Peru, counts also for Bolivia, but in a lesser degree. There is nothing particularly interesting in Bolivia that has not been taken over either from Peru or Chile.

PARAGUAY. Neighbor to Bolivia. They have tolerably pure Spanish there, in all imaginable colours, sprightly birds, entirely game and of good order. As usual in many South American countries the cocks are trained and walked made fast to a pole. Almost every land worker arrives at his job, cock under arm and while the master works for the larder, the cocks get all their exercise jumping and straining at the leash, their beaks muzzled so that they cannot take up any deleterious matter. They are fought on Sundays, and the killed specimens come to a

rest in their master's intestines the same day. Glory and death, sublimity and ridicule one step aside. What do the cocks care for it, let loose they fight it out to the bitter end, these game little Paraguayos cocks.

URUGUAY. The Uruguayans say that between the gold

Sr. Atilio Rossi, Buenos Aires, the prominent South American breeder and judge of Game-fowl.

of Argentina and Brazil and the silver of the Rio de la Plata, Uruguay lies encrusted like a diamond. They may be fairly true, the more so that anybody is allowed to express his opinion, according to his reasoning powers, and what we have learnt about Uruguay seems to give the lit-

tle and important country full reason. As for the cocking sport, it has no originality to show and merely reflects the activities of its great neighbours.

In the sporting world, Uruguay has made the whole earth look up while its football eleven defeated the whole world in Paris. In the Pan-American amateur boxing contest the black Uruguayan welter-weight Gomez won the title knocking out all opponents. So much for a small nation.

ARGENTINA. For many reasons Argentina is a grand land and though she started her career at about the same time as most other Southern countries, she has attained now a fair lead. Great wealth resources, yet unexploited, enormous plains and a constant avalanche of immigrants have made out of the Republic the Yankeelandia of South America. Buenos Aires is the most important town of South America and there is no saying where it is going to stop.

To the average foreigner, who has a faint idea that wealth and physical development have overtaken the spiritual and moral evolution of the South American, it will come as a surprise to learn that though, without, or very meagre tradition, the aspiration of South Americans and Argentinos in particular is perhaps greater and deeper than that of the average Northerner.

Apparently there is no reason for this statement, but actually the facts are these: As there is only a small or very reduced home-market for the enormous output of the land, the producer must endeavour to get this market through much more spiritual stress than is usual in a land with an extensive home-trade. In thickly populated countries any sort of junk will come into trade easily, but where the population is reduced the same junk will require very careful and skillful management to come in circulation. With one word, competition and sanction are very keen in small countries.

As to the cocks, Argentina is probably second in importance only to Brazil and keen observers do not even consent to that, alleging that the specific and basic knowledge is more vastly divulged in Argentina than in Brazil. With all due respect to the Brazilian cocks, we fully agree with the latter view. One finds keen sportsmen among the higher educated Argentino much more frequent than in Brazil, and though this would only appear as an eulogium to the cocker, it is well to state, that understanding the art and science of cocking, its history and its adaptability to an honest practice socially, it requires a vast open mind and a good deal of education. This education is obtained through mental training and may be absorbed by men who have sufficient brains to this end.

In Argentina you will find many,—though not as many as in the States,—men that besides practicing some Academic profession feel inclined to the cocks and are capable of discussing scientifically cocks and cocking, as what it is, an exceedingly interesting and time-honoured, decent sport. Conventionalities and frenzied laws have stigmatized cocking in its very Western country of cultivation and no amount of retaliation seems to be apt to dignify in England the sport once so highly cherished.

To many it appears queer that in South American countries such things as anti-cocking laws pass. They do not know. Laws pass much more rapidly than in many other countries but happily the effect is much sooner realized. So we have seen in Chile under the government of such a logical president as General Ibanez, progress has been made in great leaps, and do not doubt that such illogical laws as cocking prohibition in Argentina will be cancelled at the first effort of united resistance.

Under this prohibition, especially in Buenos Aires, cocking has lost enormously in popularity but is still carried on secretly. It is not so bad in the provinces where farmers usually run good studs of cocks. As to history of

the Argentino cocks, it is similar to that of all other Spanish countries, with the difference that being in constant touch with Brazil and Uruguay, the stock was influenced by Oriental blood at an early period. In the North, where such is the case, we find a great percentage of large shakes, some Bankiva others Malay in type. Many became dunghill by careless breeding and countless are the strains of fame, only a few decades ago, now completely extinct.

Cocking is practiced both in naked heels and "puones." The latter are practically short steel "haips" and a most effective means of equalizing chances in naked heelers. Since we learnt this weapon it appeared to us to be the most logical and natural steel ever seen, and less chanceful than even the shortest American regulation.

It requires speed, power and endurance. A poor cock has no chance to win, unless by accident, the same as occurs in the "squared circle" when a chance leather-pusher may land a lucky punch and knock a good adversary down for the fatal count. Accidents will happen, but in the long run, with Argentino spurs or "puones" only good cocks can win, and so good cocks are there in Entre Rios, San Juan, Corrientes and Buenos Aires that cocks are known to have won twenty-one battles in a single year. At all lights, these "puones" are excellent weapons and we have been favourably impressed in seeing them introduced in Chile, where no kind of gaffs gave entire satisfaction.

Slashers were used some decades ago, introduced by Andalusian cockers, but have been discarded and at instances entirely forgotten.

The rules of Argentina are visibly derived from the Spanish, and once the cocks are let to travel, they are not touched until both are down or the fight definitely over.

Handling and nursing is a practice that would hardly suit South Americans and the laws providing that no cock

shall be touched during the contest has had for result most efficient cocks in naked heels.

At the yearly shows in Buenos Aires and provinces, a class is provided for pit fowl and pit crosses (*Cruzamientos de combate*), and the judging left to practical breeders and cockers, among which our dear friend Atilio Rossi, Arcos 2849, Buenos Aires, has gained a noted reputation. Rossi is a grand man and leading game breeder, full of interest, high spirited, generous beyond limitation, exceedingly well versed and the best all-around game judge that one can imagine. He started breeding game and particularly good Orientals early in the nineties and has not yielded for a minute, gaining in patience, skill and experience as the years went on. His wealth of knowledge is respectable and his anxiety for more, insatiable like that of a young man, which he is at heart. Well deserves Rossi his reputation as authority, breeder and judge of game fowl to which he has dedicated his entire life.

SUNDAIC GAME FOWL

Very little known throughout the world, Sundaic fowls are also identified as Oceanic, Polynesian, Javanese and Sumatra. Never very numerous, they seem to be passing away fast, though at one time they were justly appreciated in the Sunda Islands and Indian continent.

We have referred to these mysterious birds in the text as "Black Game" from a peculiarity unknown in other breeds, according to which the black color predominates not only in feathering but also in the skin, flesh and even bones. Some authorities and early writers attribute this coloring to a freak, and at present there seems to be tolerably good reason to see it as such, but at one time, they were not freaks. Black was a generality in this breed, and black they stained all other breeds that came in contact with their blood.

We have bestowed considerable time and effort in the investigation of its history but feel sorry to state that owing to the general ignorance of the average naturalist in everything concerning Game fowl, our researches proved exceedingly poor. However, we want to say what we have found out if it was only to bid farewell to a rapidly vanishing race of fowl. It appears that the Black Game was a peculiar small breed, with long wings and tails, abundantly feathered, and each feather sticking out of the body, unlike as with either the smooth Bankiva, or the flat feathered Malay. These feathers were movable, but much more so than in any other breeds. Skin color was black, with black face, shanks and vivid, large eyes. The comb was very small, set well forward and composed of a triple row of small spikes, i. e. a true small pea-comb. Just behind the comb grew the hackles, and no doubt that his disposition as well as the feather-covered throat gave rise to

muffs and tassels, which have become a distinguishing mark of so many modern Game varieties.

Black fowl, so called Moorish or negroes, still exist but they do not seem to be used as Game fowl anywhere any more. Their modern offshoots are the so-called silkies, known in three different colors, white, black and brown. Silky fowl was last used for the pit in Brazil, crossed upon the Malayoid Games of that country, and apparently the dash of black blood added considerably to the fighting spirits of the slower Oriental.

Many old game-breeds of the Orient owe their excellence to a dash of Sumatra blood.

The outstanding qualities of the Black Game fowl appear to have been extreme speed and aggressiveness and a disposition to strike at any part available, i. e. body punchers.

Some observers believe that such birds were crossed with the "Ayam Alas" or Varius cock of Java and Sumatra, which is the nearest Gallus relation of the pheasant. Certainly they have been crossed with Indian Game and with Bankivas, either in their pristine purity or already improved in the form of Sumatra.

The black blood streak runs through many modern breeds. There are black skinned Orientals showing also other features of the Moor and also black faced and colored Bankivas.

We just remind the reader of the Black fowl of Southern Persia, the Black Game of Tanagra, Black Egyptians and black Mallorca.

In the Old English Game there are tasselled and

muffed varieties and the superior quality of the black-breasted Black-reds, with gypsy face and black shanks, again reminds one of the Old Black Game.

We have bred some Sumatras and black faced Orientals, the females of the latter showing distinct pheas-

Crested fowls are frequent. Fighting cocks constitute the prized pets of the Balinese natives.

ant features in early youth. Traces, nothing but traces, of the mysterious Black Game fowl which has stamped ghostly marks in his descendants through countless generations.

One of the Black's offshoots stands firm in our memory, though becoming scarcer year by year, the Sumatra. Whether original or manufactured, this outstanding breed exists and was introduced in the United States about 1851.

It appears that the Sumatra was once bred in large number in the island whence it got its name and attained large popularity before the Dutch ruled the Sundaic Archipelago.

Java had also peculiar Game fowl, doubtless derived from the Bankiva with occasional infusion of the north-

ern Sumatra. They crossed also with Malay and Singapore game and it is so, that the average game fowl of Bali and Madoera responds to no specific type.

The oldest artificial spur used in the Sundas is a small slasher which is attached to the natural spur. The long slasher fastened to the foot, so much in vogue in Bali and Madoera is of newer age and was doubtless adopted after the advent of the large Malayoids.

The sport is now generally followed by the Mahometans, who were partly responsible for the introduction of alien blood and new customs. Arabs and Persians travelled over the country as they did in the Indian mainland before the coming of the white man, but before, and perhaps for many centuries, since the early beginnings of a meagre civilization, the natives of Sumatra and Java fought and knew no other than the little aggressive and flashing Black Game cock.

SUMATRA GAME FOWL

Just how difficult it is to get reliable information about the Black Sumatra Game may be appreciated by the official letters which we reproduce further on. In our efforts to get such information we approached the Right Honorable Dutch Consul General for Chile, Mr. Henry van Oordt van Lauwenrecht, a gentleman who not only has travelled far and wide over the Dutch East Indies, but besides has a marked interest and great knowledge in Natural History. Mr. van Oordt called upon the corresponding scientific authorities and in due course communicated with ourselves, as follows:

"I received today (9th September 1927) from the Director of the Rijksmuseum van Natuurlijke Historie in Leiden, the official writing dated 25th July, which follows in translation:

Answering your letter of the 6th June I have the honor of communicating you that the so-called Sumatra fowl (*Gallus Sumatrensis* or Black Sumatra Game) is a black domestic breed which, as is born by their name, is supposed to have been originally bred from the wild bush fowl, *Gallus Bankiva*, in Sumatra.

So far as I have been able to research, this breed does not exist in wild state in Sumatra and if it become locally feral, I am not able to learn from the available literature. It is a typical pit fowl, the same as the Asil-fowl and the Malay Game, but it differs from both having much shorter legs and a longer tail. The number of spurs appears to be sometimes larger, as in other breeds, but originally the cock had but a single one. In the work of R. Hoewink, "The Breeds of Poultry," I find the mention that the breed has been introduced in America in 1851 (from Sumatra) and only about 1900 in Europe."

From this letter we may learn that even in the im-

portant Museum of Leiden the available literature is surprisingly scant.

Another letter from the Department of Agriculture, Industry and Commerce, No. 10.119|A, dated Buitenzorg (Java) 21st October 1927, we learn the following:

"To the Right Honourable Mr. H. van Oordt van Lauwenrecht, casilla 46, Correo 10 (Nunoa) Santiago, Chile.

"With reference to your letter of the 6th June I have the pleasure in communicating Your Honour, that neither in the Zoological Laboratorium of the country Botanical Garden, nor in the Veterinary service (which has a division for poultry breeding) are reliable data available concerning the 'Gallus Sumatrensis' (Black Sumatra Game) so that it is not possible to state positively if they belong to a true race or not.

Meanwhile a copy of your inquiry has been sent to the Governor of Atjeh and dependents and to the Resident of Benkoelen, with the request to communicate if they can give any data related with this request.

Should communications follow granting further correspondence on the matter it will be taken up again in due course.

I have to remark in this connection, that according to the information of the director of the Botanical Garden, only one species of the Genus Gallus exists in Sumatra, viz. the also in Java commonly met with wild fowl "Gallus Gallus."

The only wild, completely black fowl that exists in Sumatra, but which does not belong to the Genus Gallus, are:

(a) *Acomus Erythrophthalmus* (in this variety the female is black, the male with much red.)

(b) *Acomus Inornatus*. (in this variety just the male is black and the female red colored.)

For literature refer to the "Catalogue of the Game

Birds of the British Museum, London; Vol. XXII.

The Director of Agriculture, Industry and Commerce.

In his name, the Administrator: (signed) Pieterse."

To this we may observe that as the Sumatra is a pure pit breed, and that cockfighting is formally under ban in Sumatra and Java, it is very likely that upon inquiry among the natives, who are naturally shy of falling victims to the Dutch laws, they will conceal any data and keep whatever fowl they have well hidden. With the inexplicable means of communication of the Sumatran natives, all cockers will soon be warned that the Dutch authorities are interested in their most prized birds, and in due course will deny any knowledge on the subject.

These Sumatran natives, especially the Atjeh or Achinese in the North have fought heavily against the Dutch conquerors, and it was found necessary by the Dutch authorities to keep a heavy hand upon them ever since. While it is perfectly safe for any white to travel in Java, it is not so in Sumatra, where the old subversive, wild temperament of the once desperate warriors still survives.

Our hopes to get information was based on travellers and hunters who following the experience of earlier pioneers have found it more profitable to deal with the natives from a friendly neighbor point of view. From such information we learn of the existence of a partly black or Moorish fowl, very much like silkies but firm feathered and good fliers and occasionally, but very seldom such fowls as the *Sumatrensis* are seen. Despite the information now and then published in the poultry press concerning the wild Sumatra, no such wild fowl has yet been found, though many agree that black "Bosch Hoenders" (bush-fowl) are positively to be found feral and with all the adjuncts and characteristics of fowl that have bred with true wild ones.

There is one striking omission in both official communications inserted above. None mentions the typical Sumatra and Java wild "Ayam Alas" or "Gallus Varius" which is a specific Sundaic fowl.

We have referred to it elsewhere and need not repeat the statement. The Varius, either intermixing with the Bankiva in wild state, which we find very problematic, or bred to domestic Bankiva hens, has produced a hybrid species which was to be found wild not many decades ago or otherwise became feral.

We cannot refrain to reproduce here a chapter as it appears in the Spanish work, *Historia Natural*, based on Buffon and other writers. Edited in Madrid, Spain, by Gaspar y Roig, 1854.

The Brassy Cock. Gallus Aeneus. (Cuv.-Temm.)

"It was discovered by Mr. Diard in Pitat-Lanoago, in the neighborhood of Beincouleen (Benkoelen) in Sumatra, and the specimen represented by the Dutch naturalist and preserved in the galleries of Paris is, according to Mr. Temminck, the Ayam Barugo of the inhabitants of Sumatra. This cock has a big comb, smooth on its edge and has two small appendices in the commissure of the beak, having a completely bare throat; the feathers of the neck are fairly long, though less so than in Bankiva or the domestic cock, and rounded at the points. A bright green with purple metallic luster may be seen on his head, neck and saddle hackles. All these feathers are fringed with velvety green. Black, fringed with purple and violet covers the neck, breast, and all inferior parts. The long feathers of the back and wing coverts are tinted vivid purple and spangled broadly with red bows. All other coverts, and the tail feathers are purplish with metallic sheen according to the reflections of light. Shanks and beak of ashy brown. Feet armed with robust spurs.

This cock, the females of which we have not had,

frequents the boundaries of the large swamp forests of Sumatra."

The Gallus Aeneus is known to be hybrid of the Various and has been produced in confinement in London and Antwerp, but all experiments to produce a Sumatra have proven failures. Most all wild fowl and hybrids from Sunda are gorgeously colored and it seems incredible that the all black Sumatra should have been produced by mixing such joyously colored specimens. This, however, is not the most striking feature, it is the decidedly pheasant type and fighting traits that make the Sumatra an outstanding specimen among all breeds of fighting fowl.

And that the Sumatra existed, pure and perfectly game, nobody can deny. Black Game and Sumatra were introduced in India, where carefully or accidentally crossed it finally contributed its share towards the production of the most perfect fighting fowl of the world, the Asil. Nobody can say in which proportion the Sumatra was used, but probably in a very small dose and that the breed survived up to our days is a credit to both the paternal factors of the breed and the breeders that produced such a marvelous bird.

Sumatras were introduced in the United States, now nearly eight decades ago, and traces of their blood may still be detected in several strains, though in that valuable book, "Histories of Game Strains," by "Grit and Steel," apparently no credit is given them.

In England the Sumatras are kept merely as a hobby for show purposes. The breeders strongly commend them as very elegant and profitable fowls, while their beauty cannot be disputed. One of the most prominent breeders is Dr. T. W. E. Royden, Fleggburgh, Norfolk, owner and importer of the specimens illustrated in this book. It is queer that originally introduced from America, breeders in this country resort to England for

fresh breeding stock. In late years we have not been able to locate any importation from Sumatra either for England or the States, and the purest specimens we have come across were birds imported from Bali, different entirely from the English birds, but we quite fancy also impure, though good ring performers.

The original Sumatra Black Game were small birds, very sprightly and active, and though densely feathered and long tailed, fall short of any English specimen. The tails are rather horizontal and wings very long and drooping. An outstanding point is their black skin and face and very large, bold black eye. Their throat is fully covered with small feathers and also part of cheeks; comb, wattles and earlobes very small and neat. Their movements are flashy and startling and in their voice and scale of sounds they are midway between some pheasants and South American Hokkos.

We find it very difficult to agree with some Oriental informants that they were produced from pheasant hybrids, in fact we cannot believe it, though we decline any authority capable of denying this statement in a rotund form.

Sumatras, as all Sundaic fowls, is the weak point of all game authorities, and we are very likely to err in making any statement concerning them. They, as the Black Game fowl of yore, constitute a mystery in poultry breeding.

BALINESE AND MADOERA GAMES

The islands of Bali and Madoera appear to be pieces broken off the great island of Java, and are separated from the latter by a few miles of water. Cocking is practiced in these small islands to a great extent and almost every traveller sends home a card or photo depicting natives with fighting cocks. Most of these photos are fakes staged expressly for the white tourist.

In Java the sport is officially forbidden, consequently no great booty can be expected there by the investigator.

In Bali and Madoera, however, cocks are fought extensively and supported by the native aristocracy many of whom are of royal blood, deported by the Netherlandish authorities.

Cockpits and adjuncts are erected temporarily or permanently, and become fairly crowded when great fights are staged.

All sorts of cocks are used, while muffed, tasseled and oddities are not at all common among the higher ranks, but fairly frequent with the lower castes. Short and long slashers, described elsewhere, are used.

One would naturally expect to find a fair percentage of Sumatra type fowl used in the pits, but this is not so and a mixed lot of Malay and Bankivoids, large enough to carry the long foot-slasher in vogue, are generally met with. The scarcity of the Sumatras, their small body, have barred them from Balinese and Madoerese cockpits.

SUMATRA FOWL. RECENT RESEARCHES

As the notes on Sundaic fowls were finished, we were extremely lucky to be honored by the visit of Mr. Henry Van Oordt, who just had received extensive reports concerning the "*Gallus Sumatrensis*" from the Netherlandish scientific authorities, Buitenzorg near Batavia, Java. Mr. Van Oordt was kind enough to supply us with authenticated translations of these reports, which we insert further on, with the footnotes that appeared necessary.

Upon our inquiry,—through the courteous and disinterested aid of Mr. Van Oordt, the Netherlandish authorities in the Department of Agriculture, Industry and Commerce in Buitenzorg directed a circular to the Hon. Resident of Benkoelen, Sumatra, and subalterns, who in their turn will not leave a single stone unturned until the Sumatra riddle is well nigh solved.

One of the oldest characteristic virtues of the Netherlanders, tenacity and thoroughness, is a grant that what there is about the Black Sumatra Game, these officials will unearth, even if buried deep in the darkness of oblivion.

Any news concerning this most interesting fowl will be published in Grit and Steel, Gaffney, S. C., U. S. A., in forthcoming editions.

The reports, as submitted kindly by Mr. Van Oordt Van Lauwenrecht, are as follows:

No. 2755|A. Annex.:8. Buitenzorg, 15th March 1928.

To H. Van Oordt van Lauwenrecht, Esqr. Santiago, Chili.

As a continuation of the letter from this Department, of Oct. 21st, 1927, No. 10.119|A, I have the honor to convey to you the enclosed copies of the communications, received since then from the Governor of Atjeh (1) and

Dependencies, as far as mention is made in same of the existence of a wild woodcock (2), and of a letter from the Resident of Benkoelen, dated February 29th last, No. 1797|20, treating that subject.

For the sake of shortness, I beg leave to refer to the contents of those letters.

The acting Director of Agriculture, Industry and Commerce.

In the name of same:

for the Administrator:

(Signed) J. van Benthem.

No. 1797|20.

Benkoelen, 29th February, 1928.

Subject: Gallus Sumatrensis.

In reply to your service note of the 2rth, inst. No. 2036|A, I have the honor to inform you, that the Gallus Sumatrensis in question has not been found till now, notwithstanding the great trouble which has been taken by the population to that effect.

On the other hand, all sorts of other fowl-like specis exists here indeed, but is very rare and difficult to catch, (3) in the rainy season.

Therefore the possibility exists, that this Gallus Sumatrensis may be found later on, when the dry season will have come, in which case it will be reported upon.

The Resident of Benkoelen,
(signed): Zieck.

No. 6370|35.

Subject: Information about Gallus Sumatrensis.

Koetaradja, 28th December, 1927.

Complying with the request contained in your postscript of November 3rd, 1927, No. 513|35, I have the honor to inform you that wild fowl are found in the

woods, but that the cocks are never used for fighting purposes.

It is not known to me whether the Latin name of those animals is "Gallus Sumatrensis."

The Assistant Resident of Great Atjeh,
(signed) : van Prehn.

No. 5075|35.

Takengeun, 24th November, 1927.

Subject: Information about the Gallus Sumatrensis.

In compliance with your superscription, dated November 3rd, last, No. 513|35, I have the honor to inform

However, some people declare that the said animal mens have been shown to me.

you that I only know about the bush-cock (4) referred to by Mr. H. van Oordt van Lauwenrecht, that this bird exists in wild state in these regions. (5)

I cannot give a reply to the query whether same is a real wild bush-cock, or a descendant from a tame race (6).

The Assistant-Resident of the Gajo and Alas-Lands,
(signed) : Kriebel.

No. 1898|35.

Meureudoe, 14th November, 1927.

Subject: Information about the Gallus Sumatrensis.

In reply to your superscription, dated November 9th, last, No. 3696|35, I have the honor to inform you that I have received no information of the same tenor about the Gallus Sumatrensis. Some Atjeh people pretended that it is a kind of fowl grown wild (7) ; others, that they were originally wild fowl. However, the bush-cocks are not caught and not used as fighting cocks.

For fighting cocks only the tame kinds (8) are used and reared.

The Controller,
(signed) : K. H. de Boer.

Gedong-Biara, 28th November, 1927.

Air Masim.

To the Controller of Tamiang, Kwalo Simpang.

Sir: With reference to your circular letter concerning "Gallus Sumatrensis," I have the honor to inform you that according to information, furnished to me by an Achinece, late armed policeman, it occurs sometimes in Great Atjeh (9), that cocks, caught in the bush, are used in clandestine cock-fights. Questioned about the color of these animals, I was told: red or black (10). He had "heard" sometimes of cocks with more than one spur, stating that in such case the second spur is smaller than the first one (11); but personally he had never seen such an animal.

I give you these particulars for what they are worth.

I have the honor to be, Sir, Respectfully,

Gedong Biara Estate,

(signed): Joh. Buyn.

No. 2753|35.

Sigli, 18th November, 1927.

Subject: Information about the Gallus Sumatrensis.

With reference to your communication of November 9th, last, No. 3696|35, I have the honor to inform you that, according to information received, the Gallus Sumatrensis is a wild bush-cock. Whether the said bush-cock is a descendant from a tame race and thus grown wild, could not be communicated to me. But it was stated that this kind of fowl is exceedingly shy (12) and is not used for fighting purposes.

The Controller,

(signed): Maier.

No. 2343|194.

Oelee Lheue, 21st December, 1927.

With reference to your letter of November 3rd, last, No. 513|35, I have the honor to inform you that I have

received the following information about the *Gallus Sumatrensis*:

In the division East coast of Atjeh cock-fights are prohibited and therefore there are no fighting cocks.

The bush-cocks encountered there have only one spur at each leg.

In the sub-division Singkel the bush-cock is not frequent. It does not descend from a tame race, is rather small, very shy, and has a great power of resistance.

The feathers are red, with black on the tail. (13)

In name of the Upper-Forester of the East coast of Sumatra, c. a.

The Upper-Forester of Atjeh and Dependencies,
(signed) : F. Swart.

No. 1472|35.

Padang Tidji, 1st December, 1927.

Referring to your dispatch of November 9th, 1927, No. 3696|35, I have the honor to inform you that it has not been firmly ascertained whether the *Gallus Sumatrensis* exists here in wild state.

Some military men thought sometimes to have heard the cries of bush-fowl in these regions, but none of the persons questioned by me,—the population, military men and hunters,—can declare with certainty, to have seen one. The bush-fowl should occur more in the eastern part of this region. (14)

The Controller,
(signed) : Plasmans.

The aforementioned reports are duly credited and authenticated by the Administrator of the Department of Agriculture, Industry and Commerce, Buitenzorg, Java, and signed by Mr. J. van Benthem.

REMARKS: We cannot expect from every reporting gentleman to be fully aware that between the ordinary Jungle cock, *Gallus Bankiva*, and the *Sumatrensis* there

are specific differences in type and habits, so that occasional slight confusion of both are perfectly excusable. But we cannot doubt for one minute that the reports of above mentioned gentlemen are true and trustworthy to the point, according to the old Netherlandish proverbial honesty.

FOOTNOTES: Several points must be borne in mind, as marked by the following footnotes.

1. Atjeh or Achin, is in the North of Sumatra.
2. The term woodcock is applied with the meaning of Jungle-fowl and has no bearance to the English Woodcock (Tetrao).
3. It is true characteristic of the Sumatra to be difficult to catch in the rainy season, being a dusk-dweller. Benkoelen is a port on the West coast of Southern Sumatra.
4. Bush-cock equal to Jungle-fowl. In Netherlandish "Bosch-hoenders" has the same meaning as Jungle-fowl.
5. The fowl referred to by Mr. van Oordt is the Black Sumatra, which in the report is stated to exist.
6. Whether original or feral, further researches will probably show.
7. Grown wild is applied equal to feral, i. e. wild birds descended from abandoned tame or domestic poultry.
8. Apparently cocks are reared and fought in Meureudoe, and to which type they belong will be ascertained later. Importers kindly note.
9. It would appear only logical for the bird to appear in Southern Atjeh, though this statement contradicts a later one stating that wild cocks are too shy to be fought.
10. While red is the color of wild Bankivas, no wild black fowl is known other than the Sumatrensis. Red is too prominent to be overlooked.

11. Double and treble spurs indicate pheasant ancestry, some of which have regularly multiple spurs. It is quite natural that secondary spurs are much smaller than the main ones.

12. Extreme shyness applies perfectly to Sumatra characteristics.

13. No doubt that these references point to the common Bankiva rather than to the black Sumatra.

14. There is no doubt that if the Sumatra is originally a wild bird, it should be rather more frequent in the East and South of that island. The occurrence of similar, though domestic fowl near Singapore and Hinterland would indicate that the corresponding ancestor was indigenous to that region prior to the separation of Sumatra from the mainland.

ORIGIN OF SUMATRA: Whether the Black Sumatra Game originated from the tasseled Black (*Gallus Morio*) or this descended by degeneration from the Sumatra nothing can be said at present. Evidence seems to be in favor of an original (or similar) Sumatra, as it has maintained fixity of type and evidently yet exists in wild state, whereas the *Morio* decidedly is a mixed blood fowl and what still remains of it bears the visible marks of frankest degeneration.

In Malacca still exist two interesting races of men, which according to Blagden, in his work, "Pagan Races of Malacca," are the Semang and the Sakai. The former are negroids with black woolly hair like the Papuas and flat-nosed. The late Mr. J. F. van Oordt, Capetown, classified the Seman as Proto-Turanian race, and so far as we have found out they were able fishers and hunters, probably being the first men that tried the domestication of fowl. They resided in Malacca already 10,000 years before our era. The Semang apparently were hard pressed from the South by the more powerful Sakai. The latter are entirely different in type, with

soft waved hair, thin nose and slender built, i. e. Dravidian. The Sakai are fond of poultry and said to enjoy cocking, but whether they learned it in Sumatra or Malacca or were so originally is difficult to say. As they came from a region void of fowls, it is probable that they acquired the sport further north.

New Guinea and all the islands that are rich in parrots are void of Galli. Positively cocks and cocking is Asiatic, and to all evidences the Bankivoids, once mighty in India, were replaced by Malays and very much later influenced by the black fowl of Sunda.

FILIPINO COCKS

At one time the Filipinos trapped and tamed the wild Jungle cocks and set them to fight. They were reported to be fairly game in season, but could not be kept in confinement for any length of time, so after being fought, if surviving, were again set free. Travellers and hunters report that many of the Jungle fowl bear indications of being feral.

Not all domestic fowl, and especially pit fowl, there are pure Bankivas. Great numbers of Malays are there, probably introduced many years ago. Under the Spanish rule, Balearic and Spanish Game-fowl were introduced, and of later years apparently many American fowl were also imported. A friend of ours, for long years stationed in the islands, states that every kind of fowl, Game and barndoor, may be found in the islands today.

Slashers, typical of the islands, are universally employed.

The natives are naturally fond of cocking and it may be noted that they have contributed to send star-fighters to the States, one of which, the late Pancho Villa, succeeded in winning the Bantam World Championship from the British marvel, Jimmy Wilde.

ORIENTAL GAME FOWL

We have dealt somewhat extensively with the constituents of racial differences between the Caucasian and Oriental in a former chapter and have expressed our views that anatomically and mentally both groups have to be considered as entirely different species. To use a measure of comparison, we can say that both groups differ as much,—and perhaps more so,—as the Asiatic and African elephant. It remains to explain the difference between Bankiva and Malay from the fighting point of view.

The Oriental type is unique. More or less corpulent it distinguishes itself by its intrinsic weight. A given volume of Oriental carcass is about 45% heavier than anything Bankivoid. If we consider further that this weight is marked by muscle and bone, with surprisingly little offal, we can estimate how much stronger the Oriental is.

While the light Bankiva is provided with large and efficient wings, the Oriental has very short ones, incapable to allow the bird to raise from the ground to any appreciable height.

This constitutes a world of difference for the pit bird. While the one is a spectacular high-flying and fast fighter, the Oriental is a slower ground fighter, and as the heavy weight is constantly supported by the legs, it follows that the latter must be exceedingly strong. Density of muscle, bones and nerves are the cause of the Oriental's ruggedness which is expressed in its most marked ability to absorb a tremendous amount of punishment. They are notoriously hard to kill. Their mentality is also extremely different from any Bankivoid. Sullen, vindictive and vicious, they fight with marked coolness and are reputed for their clever tactics and general good judgment. With their power and mentality they go at it with fierce determination to carry on to the last with greatest tenacity.

Lacking wingwork, and consequent noisy flutter, they appear to be slower than is really the case. All that there is in speed and power is served out in well-calculated blows that carry an abnormality of power. Their punch is generally nothing short of marvellous.

We have explained already in former chapters that they are preferably monogamic in habits and that they breed almost the whole year round, consequently their fighting spirit is well developed and we deduct that their gameness is intrinsic, so to speak. Good Orientals are fundamentally dead game and take their death in the form that has set the highest standard in the pit.

From all the foregoing we deduct that Orientals are birds adapted for a slow, tenacious and enduring style of fighting, consequently naked heelers par excellence. As soon as they are matched with birds based on wing and speed, *armed with steel*, they are naturally at a disadvantage, being unable to make use of their physical and mental qualities.

The speed of the Bankivoid and the physical properties of the Oriental has lured cockers to try crossing, with varying success.

Phenomenal cocks were produced this way, that seemed to reach the pinnacle of perfection, being perfectly invincible. Some of these crosses survived up to our days in the Orient, though we do not know of what blood they were formed, but in Europe and America such crosses lose their excellence after several generations. There must be a secret known by early breeders how to perpetuate such hybrids, which we Westerners have forgotten or never learned.

The most natural explanation is that almost all Western cockers start with an Oriental male cross and dilute the blood down using Caucasian fowl of either sex, without giving the Oriental fraction a sexual counter part.

In other words, only "*one*" Oriental sex is used in the

cross, and the hereditary matter of the succeeding hybrid offspring is not altered for a change, which seems necessary. We have crossed Orientals on pure Bankivoids and Oceanic fowl, forming two strains of different sex, i. e., male and female Oriental, with a view of establishing an Oriental cross strain with both elements present in the hybrid offspring. We have, however, not lived long enough to experience extensively on this line.

The degenerated Oriental crosses of English and American fowl, become dunghill with advancing years, and there are strong reasons to believe that most, if not all barndoor fowl are mere pit fowl degenerations.

That they proved to be very lucrative from an industrial or standard point of view, makes no difference in this statement which is not intended to belittle the merits

of barndoor fowl, other than their use for the pit. The lacking pit abilities of degenerated Oriental crosses, does not imply that they are physically or otherwise unfit to live. It means simply that the Orientation of the hereditary sexual matter has been lost, hence such birds lack the fighting instinct that made their ancestors famous. The behaviour of the hereditary matter in degenerated Oriental cross shows, once more, palpably that Orientals and Bankivoids are radically different species.

Oriental crosses on Oceanic fowl, either Black Sumatra or the original ancestors of such birds, do not seem to be

Typical Oriental naked-heeler with pea-comb. A knob-combed head, in circle.

liable to deterioration in the same sense as Bankivas, or, at least, last longer. That Oceanic fowl blood infusion upon Bankivas, apparently also has not had destructive effect, as many modern Bankivoid seem to carry an infinitesimal amount of that blood, and when it is evidenced by occasional regression, it does not mean lacking fighting properties. Oceanic combs, skin colour, eyes, tassels and muffs, feather structure and colour, appear in English, Belgian and Spanish fowls, and the specimens are greeted as superior fighters as we have mentioned elsewhere. Blues and duns are noted as such and we have several varieties, both among Orientals and Bankivas that seem to bear the evidence of this statement.

We have mentioned already that Orientals and Bankivas differ also in their basic senses, ears and eyes, and while the flyers are primarily full day-birds, the Orientals seem able to see in the darkness or dusk, what is evidenced in the fact that the latter go later to roost and get up much earlier. We have referred to the Oriental's excellent auditory capacity in a former chapter.

We see most Oriental game varieties of today pea or irregular triple combed. There are strong reasons to believe that originally they were purely knobcomb and have acquired the peacomb through crossing with Oceanic and subsequent selection.

Any game fowl with pea or knobcomb, fairly large and heavy, high stationed, short winged and feathered, with massive head bearing the features of true naked heelers, are at present generally classified as Orientals. Their outstanding qualities are, power, tenacity, toughness and endurance. In the following chapters we shall refer to them—such as they are known—as breeds or varieties.

INDIAN GAME FOWL

Almost all trails of cocking lead back to India, and at instances it appears that here stood the cradle of the sport. On further investigation however, we find that the birds that gave India such a prominent position in the cocking world, were introduced from foreign countries with a possible exception of the Bankiva. The latter, though, was at one time entirely neglected while the fancy adopted the foreign Malay and Black Game as better suited for pit purposes.

India was the ancient source of wealth and education, the centre of the world and was to the Orient somewhat the same thing that in far later centuries Rome was to the Occidental world. Chief centre of trade and industry, thousands of caravans from China, Persia, Arabia and Egypt travelled yearly to the mysterious land in search of high class merchandise turned out by that most productive land. The Phenician knew the land very well and there are indications that they as well as the Hebrew even established themselves permanently in several parts in India.

There are white and dark Jews in Cochin, Mysore and Deccan, in fact in almost every populated region of India. We cannot speak of an Indian population in the true sense of the word, there being so much different races and castes of men, that we leave one problem to face another. Though cocking was and is still practiced by many castes and tribes, the sport has been developed to what it is, or was, by the Mahometans. They probably contributed 90% to its high standing and introduced, mostly through their ever shifting traders, the foreign birds that today form the typical Indian game fowl.

In India we find three different wild Jungle-fowl. The *Gallus Ferrugineus* or Bankiva, the *Gallus Sonnerati* or Gray Jungle cock and the *Gallus Lafayetti* or Ceylon fowl.

There are no traces of the *Gallus Varius*, the forked Jungle fowl of the Sunda islands. We may mention further that many of the animal species common to India are also met with upon Sumatra and Java indicating that the archipelago and the Asiatic mainland were at one time solidly connected. Not so with the wild bird species, many of which have evolved quite locally and while some pheasants and Gilli are typical of the mainland others are mainly of insular character.

The bird migrates with considerable speed, consequently suffers the variation of climate, food, atmospheric conditions, etc., almost suddenly, having no time to acclimatize itself as the mammal which travels slowly following the sources of comfort and appropriate food. Birds are also permanently affected by atmospheric density and temperature and consequently less liable to change environments if not forced to by geological accidents. They fly and live in an atmosphere best suited to their intrinsic weight and power, just as a dirigible keeps itself balanced in the air. Atmospheric changes may upset the physical means of moving so seriously as to impair considerably their success in the struggle for life. That is why certain bird species may be found at given altitudes and lack completely farther down or up their naturally possible atmospheric haunts.

What happened to the Galli, we believe, nobody can say with any certainty. We find the Bankiva near or in the same districts of the Gray, but both are specifically different and do not interbreed under normal conditions. We have tried to explain how different fundamentally the flyer Bankiva and Sonnerati are from the typical ground dwelling Malay and have also dedicated a full chapter to the discussion of the influence of crossing and its probable consequence. With this in mind we shall try and describe the Indian game fowl and other Orientals under an aspect, not yet attempted, so far as we are aware.

✓ We have mentioned already that we consider the small Asil of India a composite breed, i. e., obtained through crossing. Early writers refer to it as the purest and oldest breed and no doubt that either moved by sentiment or lacking better information, their statement appeared to hold good so long as records are concerned. Our study of the Asil gives us the assurance that the breed is manufactured, and that besides the undoubted Malay factor in its blood there is also some of the Black Game or Sumatra in it that shows now and then in the offspring with marked tenacity.

Asil, Khan. Positively the rarest and strongest of all Asil strains.

We have further noticed Sumatra features in numerous Asil offshoots and crosses, some of which came also black-skinned. This statement is not meant to belittle the pure Asil in the least, but quite to the contrary, the Asil as we know it, is a marked improvement above all game Malays.

Western cockers apply the term Asil to the specific small Indian cock also known as Lucknow or Rajah fowl, but in India Asil is the term applied to all *true game fowl*. As such the Haiderabad and Calcutta games are true Asils in the full meaning of the word and Asil are all cocks that fight dead game to the bitter end. But we are wrongly accustomed to apply that word only to the small Rajah fowl or as it is sometimes termed in India the "Raja-Murgh." Murgh being the term for cock.

Even the finest pieces of poultry literature make some

blunder when dealing with the Raja-Murgh, the cause being apparently the scarcity of the birds so termed. When a Western fancier asks in India to be shown a true Asil, he is in 99 cases of 100 shown any fine India game, but not a true Asil Murgh. The latter was never so abundant as to become common and many hundreds of noted Indian cockers never saw one and perhaps did even ignore that besides the medium and large stationed cocks there were these Raja-Murghi of from 4 to 5 lbs., used almost exclusively by the Princes of Royal blood and high Indian officers.

The history of the Raja-Murgh is wrapped in the densest mystery. About 1000 B. C., it appears that the average game cock of India in the north and central region carried a streak of the indigenous Bankiva, while the cocks of Kashmir, Indus region, Baluchistan, Afghanistan and Persia were fairly pure Bankivas. Along the coast there appears to have existed also a black strain, to which we have referred previously. Many of these blacks became dunghilly and some of the same are still kept as ordinary barndoor fowl, giving more probabilities to the theory that they were from crossed stock. In some fighting strains of the Orient Black Game blood is still to be found, and in the Raja-Murghi we find occasional indications of it in the plumage, skin and black tongue of many crosses produced with him. The Kal-Katiya or black-spurred game of Singapur is a further evidence.

↓ We have already said that the Asil Rajah Murgh is a wide improvement above all other Malay game breeds. It has been bred for the highest standard of pit efficiency by the most patient and skilled cockers of the world. The Rajas of Oudh in former centuries kept superb studs of cocks and several professional cockers to attend to breeding operations and the training of the cocks. The hens were selected with such care through their offspring, that in spite of the high mark of quality of their breeding,

about 75% of the stags produced annually were either killed off or very seldom disposed of elsewhere. Some of these, of course appearing yet too good to be killed found their way to the yards of lesser breeders and contributed a good lot to form a caste of second raters. Prominent Indian cockers of yore sometimes gave away also very fine cocks, knowing perfectly well that without a superb game mother hen the breeding of highest class Murghi was well nigh hopeless.

Asil, Sona-tol, or "Gold in Value," as their name implies, are a valuable Indian strain.

A learned Indian Mawlavi, close student of the breed's history, wrote us that the Raja-Murgh or his ancestors rather, came from Burma or Siam and that the black-spurred Singapur game proved this statement. We cannot agree fully with this view and while we are certain that the Malay ancestors really came from Siam and that the Black Game was imported from Malaka thru Siam, it is almost sure that the Raja-Murgh was produced in India. The Singapur breed was probably produced there along similar blood-lines and is positively the source of origin of the small Japanese Tuzo. Both the Singapur and the Tuzo, though similar to the Rajah Murgh, are different breeds, the former being characteristic Malay, and not seldom shows strawberry or knob comb.

The game cock is not seldom called "Kulang" in India, though this term is applied generally to the larger breeds but it means a fine thoroughbred Asil and the lower pop-

ulation when prone to belittle a dubious member of an ordinary caste, report:

“Man teni, bap kulang
jin ke bachche rang ba-rang.”

Which means: “Father game cock (kulang) mother dunghill (teni) product mix-blood.”

The true Raja-Murgh is, as stated a small cock, from 4 to 5 lbs.

It is very difficult to describe the type and carriage of the Raja fowl, as there are several high-bred strains which vary considerably in station and minor details. In the average they are heavy for their size, all concentrated muscles, sinew and dense bone, though not feeling in hand as lead, such as is the case with the English Cornish and show Asil. The Rajah Murgh has a peculiar spring and when cast to the floor they bounce like if of massive rubber or steel spring. Their movements are fast and measured; their countenance serious and dignified.

When they go into action, especially if trained after the Indian fashion, they do it spontaneously in a business-like fashion and never let go the slightest opportunity from the beginning to the end. We are fully convinced that they are about the most intelligent birds alive and during a hard fight resort to different tactics according to circumstances. To tackle a big antagonist they will fight in a different style than if dealing with a small one, and can fight naked heeled with a large flyer in a most spectacular way.

Rajah Murgh are notoriously tough and hard to kill, as most Orientals, but we fancy that no Malayoid is capable of retaliating and serving out so deadly strong punches when mortally hurt, as the average small Asil. Somehow they seem perfectly indifferent to any amount of punishing and generally heal from their injuries in half the time required for any other. They are desperately

game! Emphatically known as such by all who have tried them out in the most cruel way. In Buenos Aires, Argentine, a cock was cut down with the Argentine short "puon" for nine consecutive days and every day the Asil responded with savage determination. During this execution the Asil cock, a gray second rater, succeeded in killing three cocks and was blinked the ninth day, owing to his movements badly impaired by a n abnormally swollen throat, and he could not dodge as usual. Blinked, swollen, black in the face from suffocation, falling

constantly on his tail, he offered battle and managed to run his antagonist down and out. His last battle and his last kill!

In India the cocks are tested severely and no amount of sparring appears to be able to break his spirits. True his sparring partner is rendered almost inoffensive by tape muffs, but one has to witness the power of Indian Game shanks to be impressed that even the sparrer may break his antagonist's neck, as it actually happened, to gain an idea to what kind of test a cock is submitted constantly. There seems to be no amount of punishing that will cause a true Rajah Murgh to quit. He is the most desperate true game cock of the world.

His power is immense. Broad chest, remarkably flat; short back with high inserted wings standing out of the shoulders, very broad hips and slightest inclined rump

serving as base to a pair of enormously powerful thighs, one sees at once that all there is in weight and muscles is put behind the bony, dry and massive shanks, which are darted out and round in flashy speed.

The cock's judgment and appreciation of distance is marvellous and he uses neck and head to the best advantage. The neck is fairly long and strong, but carried curved appears to be much shorter than is really the case.

The feet are strong with stout toes. Spurs generally of liberal dimensions and while some exhibit the pointed down straight spur of the Malayoid others have them curved. In Asil more than in any other breed may be seen the relation between spur and wing. The longer the wings the more curved the spur. Some Indian cockers dislike curved spurs and will not breed from a cock thus armed, alleging that accuracy and judgment are adjuncts of the straight, stout spur. Some Asils have spurs of triangular section and not seldom this one appears to be a twin spur grown solid.

Generally the Asil are scantily feathered showing bare spots on legs, breast, neck, shoulders and near the vent, though profusely feathered specimens with long wings and tails, ample neck and saddle hackles do occur. Such specimens are decried as unable to stand a hard fight,—being much softer.

The Rajah Murgli have a carriage and station quite their own, very difficult to depict satisfactorily. They lack completely the stately elegance of the English cock and are obviously bad posers. In our breeding career we have fancied lots of especially beautiful Asils and though well trained with the camera, never could obtain a satisfactory picture of a bird as is evidenced by the photos inserted in this book. The truth is, that the type is not borne only by a mere outline of body, it is a veritable volumetric symetry which is brought out when the bird is in full action. As soon as the bird stands motionless

he seems to lose something. Very strong specimens appeared frail in the plate.

There are many descriptions of Indian Game fowl in India, some of the manuscripts having been properly translated but many more still await this revelation to Western enthusiasts, lying buried in the collections of numberless Persian, Arabian and Indian houses.

Generally speaking the Indian fancier does not adhere to any particular method of description and when doing so does not care to

bring out the points of vital in-

Kaptans, also known as the Singapur Kal-Katiya, are higher and slenderer than other Asil strains. Also the lightest.

terest lacking a measure of comparison. In an Urdu work on sport is a description of cocking: "Murgh Nama," from the "Sayd-gah-i-Shawkati," written by the Nawab (Nabob) Yar Muhammad Khan of the State of Rabpur and written in the year 1883. This extract was translated by Lieut. Colonel D. C. Phillott, F. A. S. B., Secretary, Board of Examiners, Calcutta, India.

We give parts of this work at several instances, as the original is so complicated and disorderly arranged that it is difficult to get a fair picture of the whole subject. It describes the birds of India thus: "The cocker must know that there are in Hindustan, by which the natives generally mean the United Provinces, four breeds of fowl. First there is the "*Teni*" or common barn-door fowl kept for

domestic purposes. "*Teni*" is a Hindustani term applied to a breed of small fowl and bantams.

Second, the "*Ghagas*" or cross between the game fowl and the "*Teni*." These "*Ghagis*" are a large breed, fairly Malay but with feathered shanks.

Third, the "*Karnatak*" or "*Karaknath*," a breed in which the skin, bones, tongue, eyes and blood are all black; this breed is useless for fighting. These fowls are probably from the Karnatak, Deccan, just as "*sabzwar*" is the name of a breed of fowls from Sabzwar in Persia. The test of this breed is the colour of the tongue, which should be black.

And fourth, the "*Asil*" or Indian Game fowl, which is kept for fighting only. (It may be mentioned again that in a manner of speaking, *Asil* is applied to all game varieties, *Kulangs* and *Rajah Murghi*).

The manuscript gives then some points of the *Asil*, thus: "The points of the Indian game cock are, beak white, shanks white, eyes white, and blood-shot (if the white of the eye be slightly yellowish it does not signify). In one Persian manuscript it is laid down that the shanks must be completely free of red marks."

(Note: The Indian cocker does not allow pink or rosy colour of shanks, considered to be a defect of fleshy feet; a capital defect).

"The comb of medium size (never loped), the jaw and cheeks ("*Kalla*," little "head" is by some cockers applied to the "jaw and cheeks" only), large and hard and with little flesh, the bones of the neck small, the whole neck being like an iron bar, the pope's nose large, the tail-feathers small, the head and wings not fleshy. Its crow is not as long as that of the barn-door cock the end of the crow,—"*azan*" or "*bang*" especially, is not so long drawn out.

The best breed is obtained from Haiderabad, Deccan. The Singapur cocks are also famous: they are called "*Kalkatiya*," as they have black spurs. In an Indian

Persian MS. without name or date, it is stated that the "*Chatgami*" (Engl. Chittagong) breed, though fine and large, is not equal to the former.

So far the manuscript. The "*Teni*" is a small Bankiva with traces of all sort of crossing. Some Asil-bred, others silky and some decidedly with traces of the gray jungle fowl. Fair layers of small eggs. It is said that they descend from the Jungle fowl, and were once fighters.

The "*Karnatak*" are rank dunghills but also from game fowl, probably the hybrid refuse from the once famous Black Game. Other informants know nothing about the "*Chagas*", especially cockers.

The "*Chatgami*" are sometimes fairly Malay

in outline and general demeanor, and are sometimes matched in blunt heels until one invariably runs. Such were the progenitors of the English standard-bred show Malays.

Game Malays are to be found in the Deccan and South India and referred to as "*Culm*" or "*Kullum*," doubtless from "*Kulang*" title of the game cock. Nawab Yar Muhammad Khan does not even mention the small Rajah Murghi in his MS. other than referring to it in the general term of Asil. He states that the best breed is found in Haiderabad, and though the latter are emphatically game and good fighters, they fall far beyond the Raja cock.

Of course the latter became so scarce, that at one time

White sport from black Rampur Asils.
Bred in Chile.

it was believed to be extinct. We are glad to inform, however, that many Mahometan breeders still breed and stick to them, as was evidenced by the noted lady-secretary of the United Provinces Poultry Association, Lucknow, Mrs. A. K. Fawkes. This lady has been very keen and successful in unearthing many points of the Asil's history and eventually brought a collection of Asils to the World's Poultry Congress, Ottawa, 1927. She is further constantly on the move to revive interest in the breed and to give it a foreign market.

Many Western cockers have been stunned by the prices asked (which range from 50 to 200 pounds sterling per specimen), but if we consider the extreme difficulty to obtain and rear birds, we may well pay the patient Mahometan gentleman a fair price for his favourites. Asils are not grown by the dozen as the average Western cocks, they are jewels of cockdom, selected, reared and trained individually under the greatest care and vigilance;—they are worth the price asked.

Of course, use your judgment. Every Indian cocker will tell you that his birds are the best, and worse still, believe it. If not sure let yourself be guided by some who knows. Mrs. A. K. Fawkes, Sultanpur Road, near Dilkusha, Lucknow, India, will lend a hand to the importer in her character of Secretary of the Lucknow Poultry Association.

COLOUR: The Rajah Murgh, being a bird so severely selected for its performance and physical points of excellence, comes in several shades of black-red and completely black. Only four or five strains are accorded the option of supreme quality and purity. These are:

(1) *Black, Siyah Rampuri.* Some of the birds are black from tip to toe with dark face and sometimes completely black eyes. They are not as uniform in type as one would wish, as their breeding region extends very far down South. It is believed that from this strain originat-

ed the Haiderabad Kulang, and varying in size and carriage they are sometimes confounded with one another. The true Rampur Game, should be of medium station, and as completely black as possible, though white nails and occasional white feathers in flights and tail are permissible. They are very short feathered and often nearly henny. Some specimens, especially females, show white or pearl eyes. Stout head and very short beak. They are good all-round fighters, quick, active and the best finishers imaginable. This variety as all pure Rajah Murghs are void of wattles but the males have ample dewlap. The hen's throat is covered with feathers to the base of beak.

Black Rampur Asil hen, 4 lbs., a grand breeding hen. Chile.

The Siyahs sometimes throw albino offspring, which in India are invariably killed off. To the Westerner it would be hard to kill them and eat, and we have had many specimens of these to experiment with. In a common naked heel fight they proved excellent, but for an Indian endurance test they would lack toughness and go down very soon.

One choice cock of ours was always very silent and never crowed during the winter. As all Asils they are fairly monogamous, and it is very difficult to keep them in flock as the hens will invariably fight to death if put together, even after accustoming them in coops for many months. They are very tame and comely in appearance, but when pairing season arrives it is good to keep them separate mating them only after sure signs indicate mu-

tual affection. If mated strange, it is possible that cock and hen may fight instead of pairing. If two or three hens agree to keep company in a pen, one will invariably boss the lot, but should not be depended to breed right if not kept single penned and the cock allowed to run with each hen for half a day. Eggs should be carefully removed and replaced by addled ones, though we rather prefer to get less numbers and best quality by not touching them at all.

(2) *Kal-Katiya*, sometimes also called Kaptans in India. This breed or variety is a native of Singapur. They are noted good spurrers, rather more slender than the average Indian Game, and higher in station. In the main dark-red in colour, with white or yellow skin, sometimes are found even nearly black with purple sheen. Extremely hard in feather, they are not so angular as the Malay which they resemble in their general make-up. The comb is longer and thinner than in any other Asil breed though a strawberry or knob is not at all rare.

They have black spurs, hence their name (Black-spurred). Thighs fairly long with powerful shanks. Some of these birds fight sideways with a peculiar position of legs and neck which make them appear as willing to run. Suddenly they dart their shanks out. They are tenacious and clever fighters, apparently not as strong as the heavier birds but most efficient and satisfactory birds. Their resources, like those of the Black Rampur are enormous and they impress the cocker with their marked intelligence. Kaptans are the lightest of Asil, seldom coming heavier than 4 lbs., 4 oz. (In Singapur one pound heavier).

They are of more joyous and sanguine character than Siyahs and may be kept in lots, though not two cocks may be kept together after showing red in face. They are very prone to fight it out from earliest youth. These Kal-katias breed more and better than any other Asils

and in this again they resemble the Japanese Tuzo.

All Asil fowl when lifted to a table and touched under the vent, start to preen and oil themselves with all signs of greatest delight. When kept far from hens for a long time they dance and wheel around as if courting a hen when the fingers are snapped or encouraged by hissing. Many believe that they are trained to do so, but all Asils do it alike. Some Japs also.

(3) *Jawa*, or gray and silver duckwings. When occasional white cocks are saved from very good strains bred to black or red hens, the offspring are "*Jawa*"

Snapshot in an Indian yard, Lucknow, with cocks under the basket-like coops while a pullet is running among them.

cocks. Sometimes exceedingly good birds but are never considered as first raters. They are commonly used in lesser pits, and as the white, prove soft in a long tape fight for which reason they are not considered as *Raja-Murghi* by the first class cockers. Some specimens of the *Jawa* are highly interesting from the experimenters point of view as they generally display foreign features, due to regression by crossing out. In other points they differ very little from the higher caste *Murghi*, their gameness and fighting spirit falling nothing short of that of its parents. It is only in the supreme test that they fail, the same as the white, which are invariably soft in a long fight. While the white are generally finer in constitution than the darks, the *Jawa* apparently come large and beefy. It appears, at all lights, that odd coloured Indian Games, *Calcuttas* and other Asil-bred fowl have been produced as the *Jawa* or with it.

(4) *Sona-tol* or *Sonatawal*. So-called because one of

this breed was once scaled and sold to a Nowab for its weight in gold, hence their name which means "gold in value." They are generally light-reds and orange reds, exceedingly beautiful and their colour does not suffer by the presence of white feathers in wings and tails. Incidentally, most all Asils occasionally show white in flights and sickles, and the Kaptans even show it in irregular spots on the body. Their legs are either white or yellow though the latter is obviously a Malay heir, while the white shanks are present in many pheasants, turkeys, etc.

Sona-tols rank among the highest reputed small Asils and are considered as good as any, being often crossed with the most appreciated strain, the 'Khans.' These birds are surprising in their fighting traits and never-ending efforts to run his adversary down. Just a trace more slender than the Khan and a bit higher in station, they appear to outwit and outguess them to make for the lack of punch; because the Khan is positively the strongest of all strains.

Formerly, five decades or more ago, the best cockers of India never could agree as to the superiority of either, and while the Sona-tols are, or rather were, more frequent, the Khans were higher valued. It appears that at present it is almost impossible to get either of the strains. They have become extraordinarily scarce and the few old-timers that still breed them may not be tempted to sell them for any amount of money.

They are a rich man's fowl and unluckily the rich are scarce that still adhere to the old sport. We have some notes concerning a famous cock for which a brand new Crossley car, worth 900 pounds, was blankly refused.

The Sona-tol hens are lighter in colour than any others, from dark-red to wheaten, but always with dark tails and hackles. As all Asils, they rank among the worst layers. and the Indian breeders, though knowing better, do not

encourage them to lay just a few eggs more. A few chicks seldom more than ten are got from a hen per year.

(5) *Amir Khan*, or simply *Khan*. The latter word means a heavy or sledge hammer and the name was given them for their notorious mortal punch. If we take into consideration the fact that all Asils are extremely hard hitters, it may be judged how these fowl strike to earn such a name.

They are very dark-red and breed true to colour; more so than any other Asils. Legs white or yellow approaching orange. Shanks, though massive are remarkably dry and hard, armed with a stout spur. Hens are dark-red with black lacing and glossy black hackles, a colour known as "bejra."

English-bred Game Asils from the strain of Mr. Pulford, the great Game man.

Khans are the stoutest of all Raja fowls, with thick but lean heads, necks like iron rods; broad chests, short backs and wide rounded rumps. The thighs are standing well out and heavily muscled; abdomen short, abruptly cut off behind the legs. Wings very short.

Eyes bold, but rather small, well protected by the brows and cheeks. Comb small and thick; earlobes hanging, characteristic of Malayoid; wattles none, but a marked dewlap. Beak is short and stout.

Feathers extremely short, showing bare spots in neck, wing butts, breast, thighs and vent. Hackles short and wiry, saddle feathers pointed straight aft and sickles slightly curved more or less long. Some cocks of this strain appear henney when the sickles are removed. They are the rarest of all Asils, very tame and gentle towards

the keeper but quarrelsome among themselves. They are mated in pairs, it being extremely difficult to keep two hens together. They will tear themselves to pieces, and never yield in battle.

The amount of punishment either hen or cock can absorb is somewhat incredible. These cocks are prime favourites for the "Dora Dirza" or tape fight of India, and when two great cocks met, in years gone by, it always meant a test of several days to decide the battle. At some instances after the fifth day both cocks were so badly injured that neither could see the other, but they clinched and fought it out to the bitter end. What cocks they bred in those days!

No amount of punishing, never mind how broken and torn they are, they never quit and are so strong, staunch and game, that they can punch fiercely even with the death rattle in the throat, in their last second of life.

HAIDERABAD, MADRAS AND CACUTTA FOWL

To do all Indian Game breeders and strains full justice, it would require a large book. We can only just mention the chief features of each. We have learned already that all Game fowl in India are termed *Asil*, not

A white Calcutta veteran, once a grand naked heeler, born the same day as the little girl stroking him. Still going strong. Chile.

as identification of their strain or variety but more perfectly applying to their game quality. As such Haiderabidi Games are in the true sense of the word *Asil*.

From a racial point of view, they are strictly related to the small Rajah Murgh, but show more than the latter their Malay origin, being in many points similar to the Shamo Japanese Game.

The Game fowl from the Deccan was always reputed as dead game and enormously strong. Every year, from

December to February, they are "tested" i. e. fought, naked heel or taped.

They are not, however, submitted to such a severe test as the small Murgh—one day being a good average. But consider how these large birds strike and try, to understand that it takes a very staunch game cock to go through a milling of this sort. No Western cock is asked to fight under such stressing conditions, their equal being perhaps only in vogue in Japan, and formerly in Malaki and Siam.

Old white Calcutta cock.

Asil Calcutta cock bred in Argentina.

At present it appears that Haiderabadi are widely preferred to all other breeds in India, as it is not everybody's business to keep and train constantly Rajah Murghi. Besides, the great size, the obvious power and general behaviour of the Haiderabadi seems to gain considerable favor among the cocking fraternity in India.

In fact they are large

Asile in type, high stationed, broad in front and narrow aft, the whole configuration viewed from above resembling a heart. The points of the Indian Game cock, with special reference to the Haiderabadi, Kulang or Asil, are given by a well educated Indian gentleman as follows: (Translated by Lieut. Colonel D. C. Phillott) :

"The beak is thick but short, the white of the eye like powdered pearl, 'Moti chur' (not red or yellow), the comb thick and very low (knob or pea), the wattles very small, the region below the ears red (in domestic fowls generally white), the cheek-bones protuberant, the head large and square, the neck long, the wings held apart from the body, the chest thrown out, the tail small and drooping from the base, the back flat and not 'fish-backed,' back and wings viewed from above shaped like a 'betel' leaf, the flesh hard and the body compact, the stalk-bones (shanks) thick and square. In fight the game-cock is staunch till death.

HENNY GAME OF CEYLON OR
"KIKILIA."

Powerful naked heelers, perfectly savage fighters and true game fowls.

"If tickled lightly by the finger on the stomach about an inch below the vent, it should begin to oil itself (this is a sign of familiarity with men and of fearlessness. Common fowl do not preen, however tame); it should be very free and familiar with man. Its crow

is short and deep. If the cock is young and has been parted for some time from hens, it should 'dance' when the fingers are snapped.

"There are many breeds of game, viz.:

"1. *Shaykh Buddhu*. The latter is a name given by the vulgar to a son born on 'Buddh' or Wednesday. Is the largest fowl.

"2. *Kal-Katiya* or 'black-spurred.' This is the lightest breed—a famous breed in Singapore—is noted for its activity.

"3. *Patti-Tuta*. Two cocks of this breed were once fighting. A man separated them by inserting between them a 'char-pai,' or Indian bedstead. The spurring cock struck the bedstead and split its 'patti' or frame.

"4. *Sona-tol*. (Described as Sonatawal under Rajah Murghi.)

"5. *Amir Khan*, and

"6. *Muhammad Ali Beg*.

"The Shaykh Buddhu is never the aggressor in fight. The best birds of this breed will stand on the spot they are placed without advancing an inch towards their antagonists, and therefore cocks of this breed can be turned out loose together.

"Game-cocks are never white, yellow, nor 'bandhnu' (regularly speckled throughout).

"The game hen lays one, or at the most two, clutches of eggs in the year."

The Madras is a different bird from the average Haiderabadi, lower in station, broad and powerful. Apparently Asil bred Haiderabadi, or crossed from the Rajah Murgh and the more Malayoid Kulang.

Reports of Madras blues appeared in Wright's book of poultry, and we fancy that they are somewhat related to the henny Malayoids of Ceylon, for which reason many specimens are likewise henny.

The Calcutta games, are large Kulangs, mainly de-

rived from Jawa Murgh and Haiderabadi. There appears to be no uniformity, but most of the India Game fowl that came to South America and many that are known elsewhere as Asils (Raja fowl) are plain Calcutta fowl. Very good for naked heel fighting, they sometimes prove disappointing, due no doubt to careless breeding.

CEYLON HENNIES

The native word for a hen is "Kikili" whence this breed gets its name "Kikilia."

These are large, henny feathered Malays, with knob or strawberry comb, very active and vindictive fighters. The cock is fully one-third larger than the hen, and, as most Orientals, is very prone to monogamy.

They are a most interesting breed and are believed to be in Ceylon from time immemorial. Very few specimens have been exported to Europe, but there is not the slightest doubt that the birds referred to by Stonehouse, in his book, "Breeds of Poultry," are Kikilias.

They are fought naked heels and are perfectly game, strong and enduring. The Japanese have a similar variety and perhaps introduced from Ceylon as they introduced other Indian Game fowl.

COCK FIGHTING

INDIAN MALAYS

Found almost everywhere in Central and South India, Malays have in some instances become rank dung-hills, though always keeping a savage fighting propensity from earliest youth.

These Malays are unlike the English birds that go under that name, and though with slightly inclined rumps,—not noticeable by the hackles,—one never sees roach backed birds, nor so high stationed as the English show birds.

At several localities there are strictly dead game Malays, that are extremely good fighting fowl with all the features that characterize the grand old race of Orientals. We have said elsewhere that they

have probably been introduced in India by

trading cockers and cocking traders several centuries before our era, and have since been considered as national fowl.

Strong, hard feathered, lustrous, vicious kickers, they are typical naked heelers, though sometimes even fought with slashers. One should note that there are varieties and strains of strictly *dead game* pit Malays, unlike the Malay barndoor or the English.

Indian Malay Game, large and powerful, are typical naked heelers.

JAPANESE GAME FOWL

Japanese Game birds constitute a veritable force in the realm of feathered warriors. They have established a formidable repute, second perhaps only to the English birds of yore and to the very fountain of cocking,—India!

We are very sorry to have to confess, that in spite of doing our best trying hard to get the very best information, we have advanced very little in several years of investigation. We have approached scientific authorities whom we strongly believe to be fully cognizant of the matter questioned and we have corresponded with reputed breeders and cockers, but have not been able to learn from them anything that we did not already know. The greatest bulk of this correspondence, official and private, form a collection of very polite,—extremely polite,—letters but no specific information.

It is one of the Japanese national virtues to learn and know everything from abroad but to close their chest of knowledge before foreign inquiries. Should these remarks hurt the tender feelings of some of our Japanese friends, we would like to state that, while we deplore the situation, we fully admire their patriotism and as such our criticisms are to be taken as what they are—a compliment!

But what we did not learn in theory, we have been lucky to have learned from a practical side. Japanese fowls have been scattered all over the world and have contributed their large quota towards the production of highest class pit birds.

We are indebted to Count Casimir Selor, who stayed a long time in Indo-China and Japan, for information

on cocks and cocking in Japan, and with his aid we were able to trace many data which otherwise would have been very difficult to obtain.

EARLY HISTORY. A few hundred years ago, Japan was very poor in horses and cattle, but they had cocks which contributed a great lot to the diversion of the natives. Prolific Japanese artists have depicted scenes of cocking, centuries ago, and the queer fact is that the cocks that appear to have been fought then were small Bankivas;—at any rate small cocks. Some are depicted with very long and flowing tails suggesting the Sumatra, but we quite admit that possibly those long tails, thin shanks, etc., were mainly intended as decorative adjuncts, not really as representative characteristics.

To the highly developed artistic tastes of the average Japanese, the grand stance of the fighting cock was an incentive for the production of decorative figures and drawings, and many are the art gems where the splendid hues of pheasants and cocks have served as prototypes for coloristic orgies.

Breeders have gone a step further and with endless patience and admitted skill, have produced a great variety of ornamental fowls, which though mere freaks, have in Japan a "real"—not a fancy value. In the West we admire and smile at such fancies and are quite willing to pay a few shillings for our hobbies, but in Japan they constitute an effective piece of possession which we fail to grasp.

Such are the small Chabos and other fancy bantams, many of which are also fought. Such also are the famous Phoenix or Yokohama fowls, known as Sino-waratao and other names. We have studied the latter and come to the conviction that they were made up from Bankiva and Sumatra blood.

Somebody once stated that a Sumatra can easily be

manufactured through Asil and Yokohama blood. The product must be in the neighborhood of the Sumatra though, as both have its blood, but never can be compared with the real Sumatra pit fowl which is decidedly different. We cannot well nigh judge pit breeds by the conventional exhibition standard. Cockers know that too well already.

Typical Shamo, Tuzo and Ashura cocks.

The old time Sumatra, though it had a peculiar type, was not bred to this type but to its performances in the pit. That European fanciers constructed a fancy standard round this unique type, does not change the facts in the least.

There were Sumatra Game fowl in South Japan, and so far as our information goes, still exist there and are fought in slashers. Many pictures and photos of Yokohama fowl that we have studied carefully also show distinct Sumatra features. Of course the method of

breeding such decorative birds must break their pit utility, but the fighting spirit has not vanished altogether. There were also Bankivas in Japan, native and imported, and that they were used in the pit is shown in many Japanese pictures. Besides, many of the Japanese decorative varieties are plain enough Bankiva.

It is a matter of speculation when the Malayoid was introduced in Japan; for introduced it was. Our researches show that it can have been between just one century ago and the year 1200, when Japanese sailors and traders had regular contact with the Siamese.

Shamo is the name given to the ordinary game fowl of the country, derived from "Siam," and the average Japanese knows nothing of the Malay, because of the reason that that term is naturally ignored. Shamo, then is the name of any Malay or Oriental type fowl, from the gigantic Ainoku to the smallest Tuzo. As in India, the average Japanese cocker does not identify the different varieties of fowl by their type, but by their specific pit qualification. It is by this method that the Western investigator is puzzled and confounded. You may know the small Seki or Tuzo and believe that it is a standardized breed, but in Japan possibly very few may know anything about it. On the other side, you may know a gigantic Shamo strain and while referring to same in Japan, for ordering or investigating you may be shown or referred to a dozen varieties which go under that banner just the same.

We had an adventure in earlier days when asking more concise details regarding certain fowl, and our Japanese informant could answer no better than stating that those fowls were "Very good, very nice; fight like hell!"

You will not meet many cockers in Japan who can give you a satisfactory relation of their fowl, but sure

they are that they "fight like hell." Those early Siamese fowl introduced in Japan were not always of a definite type and size, as they had been in domestication from time immemorial, and subjected ever since to pit uses, changed type and proclivities according to their breeding. They founded a new cocking era in Japan and were bred tolerably pure until Indian fowl was introduced with the advent of long-shore navigation. Apparently the first Indian specimens were introduced from Singapur, small black, Asil-bred cocks of unquestionable gameness and grand ring generals. They contributed their share towards the production of the most reputed and aristocratic Game fowl, the "Tuzo."

Gentlemen of high position, Samurais and princes took up the Tuzo as their favorite. They became rare and scarce like the true Asil of India, and is one of those breeds that cannot be easily bought for any amount of money. Occasionally a few specimens came into the hands of poorer breeders who soon learned that they were highly valued, causing them to breed as much as possible. The true little Tuzo is black, of a brilliant purple and green sheen, with white eyes, but black tongue and spurs. The lesser popular edition, the Plebeian Tuzo, comes in all colors, even white, and though they are not valued like the Royal bird they were those birds referred to above which could "fight like hell." In type they are fairly Malay, rather stilty, drooping tails, large heads, short parrot-like beaks, strong necks. Comb small knob or pea; face generally fiery red, but not infrequently very dark. Some specimens, especially the lesser ones have small wattles like a ridge under the lower mandible. The better ones have no wattles, but ample dew-lap.

In this connection we may mention that, contrary to the opinion of some Japanese authorities who maintain

that the dewlap is an anatomical commodity to allow the birds to breathe and swallow with ease, it is to be looked upon as a true sexual characteristic, ranging in importance, equal with comb, lobes and wattles. That it is an anatomical commodity besides nobody may deny, but in the chief it is one of the secondary sexual tokens of Malayoids. We base our statements on the following observations:

1. It is large and developed in mature males, but small in females;
2. Entirely absent in young stock which have a plain throat; and
3. It makes its appearance with progressing sexual development.

We have pointed to the fact elsewhere that it is a Malay characteristic so far that in pure Bankivas a genuine dewlap does not exist, who in change have fairly large wattles and Sumatras are partly if not entirely feathered up to the lower mandible. Of course, in Malays, the throat is fairly bare, and the dewlap shows vivid red during the pairing period. We have discussed already in previous chapters that the large earlobes, sometimes hanging, the dewlap just mentioned, take the place of the visible facial appendices of Bankivoids, comb, lobes and wattles.

Now, in Tuzos as also in the larger Japs, it is remarkable that black-faced specimens, like Sumatras, have a very small comb and dewlap. After the Singapur black Malay (Kalkatiya) had been introduced in Japan, it appears that some Malays and Indian Game were likewise imported with a decisive view of improving the fighting stock. Up to the present they knew only the Siamese varieties, but soon got hold of the gigantic Malays of the mainland with which fowl they crossed their larger hens, also fairly Malayoid,

producing the variety known locally in Japan as Ainoku, a word that means "mestizo" or "crossed."

These Ainoku, reputed as hard kickers, but not very lively, also termed "Hooh-nah-ku-rit" (large birds that strike with force) are generally used by the lower population for improvised fights in blunt heels. Sometimes game to the last, sometimes indifferent and not seldom dunghill in disposition, they are kept for the large price obtained for them as culinary delicacy, but the true breeder and cocker does not recognize the Ainoku as the real Shamo pit fowl, though in blood-lines it is a near relation to it.

The Shamo Game fowl is entirely different and a true pit bird from tip to tail. Its blood has been changed with advancing years and the type is not fixed after

Shamo Japs. Cock 2 years, 10 lbs. 8 oz.
Bred by Dr. D. S. Newill, Melcroft.

a standard fashion. In the main, it is a Siamese-Indian bird in blood, selected merely for the pit, and as such has no match in his weight category, throughout the world, fighting in naked heels. Some birds of the Shamo breed are the prototype of bold aggressiveness, dead gameness and endurance. They are perhaps not so perfect generals as the small Raja Murghi of India, or the small Tuzo, but on the other hand they can stand such a tremendous amount of pounding that we believe a decent Shamo cock can outwear three ordinary game-cocks in naked heels.

BREEDS AND STRAINS. In the main, the Japanese cocker and breeder will recognize no more than four principal groups, their chief difference residing more

in their weights and capacity than in the type. The English bird has been bred to a standard of type and color, losing considerably in its pit utility, but the Japanese has been bred, as most American strains, to a standard of quality for the pit, with little or no attention as to its general type and color.

The four groups or varieties of Japanese Game fowl, such as we consider them, are as follows:

1. Ainoku or crossed. Large powerful birds, slow and heavy. Pets among the country population who raise them as turkeys and fight them occasionally. They are now seldom seen in any place with pretensions to be considered as cock-pit. They may be classed as the current Japanese Malay.

2. Shamos. Middleweights, from 7½ lbs. to 9½. Fairly Malay in outline, they not seldom resemble the "Kulangs" of India, the Madrassi and Haiderabadi Games, to which they are related. Bred entirely for the pit, dead-game, hard and enduring, moderately fast, aggressive and grand executors, they are the prototype of what is generally known among cockers as "Japs." They are not, by far, homogeneous in type and color, while some varieties resemble each other, just as much as an American Roundhead will resemble a Cuban or any other strain. Some strains are large winged and fairly rich tailed, others compact and perfectly Oriental. It requires care and judgment to select the right sort, though most all are dead game and tremendously strong.

For crossing on Caucasian fowl care is needed, and specimens showing characteristics of hybridization should be avoided, as their blood is not so reliable in the perpetuation of crossbred strains.

These Shamos are the best all-round naked heelers that one can imagine, and with due respect to the fine Indian fowl, we have come to appreciate them just as

high. They are generally valuable and hard to obtain as most any high class pit-fowl, but much more frequent than the lighter varieties.

3. Ashuras. We take this name in a generic form. In fact it belongs only to a restricted strain, such as we would use in America to denominate Warhorses or Roundheads. Their weights range between 5 to 7 lbs. Generally carefully bred. Very tight in feather, angular and high stationed. They lack the elegance of the Caucasian or Sumatra, though in their tight suit of feathers and peculiar gait, they are in their way nice and interesting. The best birds are dark, though blues, grays and even white are not rare. Combs, small buttons, triple or very seldom, rose. These birds have no wattles, but fairly large earlobes. It appears that they are slowly vanishing, as the population rather prefers the larger Shamos or the small Tuzos. Apparently these Ashuras were produced by crossing the Shamo with the small Singapur or Tuzo Game. As pit fowl, they are excellent and leave nothing to be desired for fighting in naked heels or short steel. They are noted dodgers and side-steppers and carry on the fight without hate until they can place their spurs in a most effective way. So good wind have these birds that they can carry on for hours of fighting and wearing an adversary out. The larger birds are very often hopeless billers and when distressed seem unable to strike without beak-hold. Ashuras kick free and do not resort to billing more than strictly necessary. They are most interesting birds and sure to give entire satisfaction. In their tactics they resemble the Asil fowl of India, over which they have the advantage of reach.

4. Tuzos. The name is also used as vaguely identifying the smallest tribe of Oriental fighting fowl. They are smaller even than the Raja Murgh of India, which they otherwise resemble in value in gameness.

The few specimens we have been able to observe were exceedingly interesting and proved their value in breeding true to feather and type, with very little difference. A brood of 17 chicks, of one age, just feathered, were so much alike, that it was exceedingly difficult to identify each chick. We used to grow our birds very close to our home, deriving the greatest pleasure in their observance. Dewlap is not noticeable until completion of 6th month, and from then on grows gradually. It is good policy to separate the males, as they are very prone to fall on each other upon the slightest provocation. Atmospheric depressions, change of weather, or any external cause influence their mind, raising their pugnacity and rage. Queer enough, they do not take much notice of other breeds, and quite willingly give way to any mongrel, duck or peafowl. But against their own kin they are superbly intolerant and fight from earliest age to a fatal decision. We left two tiny chicks fight it out when not older than five weeks, and both chewed and kicked without a chirp until the night. Other chicks squeal and cry, but these go at it silent as the grave. No hope that they will let loose.

Hens fight as well as the cocks, and even fight with stags to a desperate finish. There is only one hope to accustom them to a pen with two or three hens in a group, and that is letting them run free during moult and pen in just prior to completion, but without cock. To let the cock into the pen, it is better to have him placed before the hens in a coop for a couple of weeks, when they will establish friendly relations in a neighborly mood. As soon as the hens show signs of wanting to lay, let the cock in, but observe closely. Between love and war they are always undecided, and we fancy, with a strong inclination towards war. Of course, with an aged cock, and young hens or pullets these precautions are not necessary, as the cock is arrogant and

admits no discussion. A cock is man enough for three hens and will produce fertile and strong offspring. As in all Game birds, however, it is wiser not to let chance creep in, and single-mate each hen to a cock or stag. Then you know which hen is mother to each egg and evade any guesswork.

These Tuzos run from 3 to 4 lbs. and in appearance are overgrown Bantams. In fact they are not, as most Bantams grow normally, i. e. like full-size birds up to feathering stage, and then hang back. Tuzos grow up exactly as large breeds, it being

Ainoku, Japanese cock, 13 lbs.

extremely difficult to differentiate between the sexes until the secondary sexual characteristics show up.

Noted Oriental cockers, to say nothing of the Japanese, prefer Tuzos to any breed alive, and place them higher than any of the Indian breeds, not excluding the Asil Rajah Murghi. Very upright in carriage, their tails point straight downwards. Wings very short. Spurs not always straight but generally good size. In their characteristics they resemble the small Asil, being higher in station, rather more slender, long and strong thighs, remarkably flat and broad chested and very strong neck, round thick heads, with short beaks and diminutive combs, eyes deeply set in, protected by heavy brows and prominent hard cheeks.

During a fight they do not stop for a second and go at it in a desperate effort to get the enemy down and out. They try incessantly and kick,—small as they are,—

with horrible power. They are generally head-fighters but land their blows where they can. They appear perfectly unaffected by any amount of punishment and do not even stagger under the fiercest blows. They have been bred to it from time immemorial, resembling also in this the true Raja Murgh of India. Of course, they are profoundly game and gallant, and will as soon fight any cock their own size, as they will any shake, turkey, lion or elephant.

THE FIGHTS. The Japanese have an institution like the Indian Dora Dirza or tape fight. The fundamental rules of the Dora Dirza is to cut tails clean, shorten the spurs and after healing, bandaging the spurs with nine folds of tape. During a fight, which may drag for several days, you can pick up your cock whenever you like and call for a "parni" or pause, but you are not allowed to pick up your cock more than ten times during the whole fight.

It requires judgment to pick up your cock at the right moment and not become nervous when the cock is having the worst of it. If you pick the cock too soon you lose an opportunity later, and if you pick him up too late he may be so hurt that no amount of nursing will bring him back. Of course in the Indian Dora Dirza the gray matter of the cocker (clever seconding) plays a great role, and more fights are lost by defective handling than is the case in Western countries.

The Japanese authorities maintain that cocks are not given even chances with bandages and the possible seconding of a stupid handler. A very good cock may lose against the lesser one, but better managed. Very rightfully, we believe, Japanese let the cocks fight it out their own way. Small cocks are invariably fought sharp heeled in their natural spurs, or armed with some eastern contrivance of deadly mortal effect. They

are weighed and evenly matched and let loose at a fair distance. From then on the cocks are not touched until one or both are carried out. Two strong and clever cocks have fought for hours until both sank down; generally in a close clinch. For Western cockers this would mean the end, or a good opportunity to call it a draw. In Japan just at this minute the fun begins, and watches are pulled out to note when one of the birds lifts the head again. Many bets are based upon this important second, the first one raising the head and striking, being the winner. So hard and enduring are these little Japs that after a minute or two of deep rest they raise, punch-drunk or not, and go at it with renewed bitterness. Game, exceedingly game birds, well worthy to be so highly patronized by the choice of the Japanese Samurais, reputed all over the world for utmost gallantry.

The Ashuras are fought almost the same way as the little Tuzo, and for wearing qualities they earn their great reputation. When they land their blows, due to their tight feathers and absence of wing flutter, you do not seldom hear the thud like the report of a big drum. It is said that the onlookers grin in broadest delight when this happens. You see the same in any boxing contest, and the result is alike. The well-versed knows better that the silent massive punch on vulnerable spots is less noisy, but the more effective.

Shamos are not seldom fought blunt heeled, in fact, it is the rule in the highest class fights. The idea is to lessen the injury by a cutting pointed spur so that the birds show their remarkable staying powers, punishment absorbing qualities and deep gameness. For Western cockers such a mill would appear cruel and tiresome, but to the Japanese it is a true proof of the highest desirable qualities.

Not seldom the bouts drag for several hours and the nearer the cocks are to complete exhaustion, the greater the enthusiasm in the audience, then now comes the supreme moment of witnessing which cock is better, well knowing that nothing tests gameness better than extreme exhaustion. A clean kill early in the session is rare, considering the enormous strength of the cocks, but such a fact is better known as chance or accident than a desirable feat. The best reputed cocks of the country are considered those that have finally won in a heavy drag against all odds and chances.

Japanese fights are a supreme test for gameness and endurance.

Extreme speed is consequently not primordial,

in fact, at some instances even undesirable, as nothing requires more muscle-work and wind than the development of speed.

It stands to reason that for effective performance in Japanese cock-pits several points are of highest interest, to wit:

Weight. Should be medium, as too heavy cocks cannot possibly stand the heavy exertion of a long drag fight. Wise breeders state that the best birds of Japan are from crossed origin, due to the efforts towards re-

High-stationed Shamo cock. Born in Japan. Rossi, Buenos Aires.

ducing the natural heavy weight of the giant Malay. The same breeders believe that most of the extremely heavy birds, not seldom over 15 lbs., are examples of regression to the original prototype. These birds are mostly Ainoku, and when fought are not seldom matched in short slashers—as in Southern India—with a view to shorten the contest.

Heavy birds are also slow to mature, taking from 24 to 36 months to reach full maturity. The Jap crosses, due to the flyer blood, Bankiva or Sumatra, mature at from 18 to 24 months.

Accurate Cutting. This is a notable feature of the best cocks, which could not reach the pinnacle of ring performance without a perfect sense of time and distance. We gather from all our data that birds of the Ashura type, for some reason or other, probably by selection, are the most accurate cutters of the Orient, surpassing in this feature even the best Asil fowls. Accuracy is a paramount condition for Japs.

Dodging. Also a grand quality of Japs and most Orientals. Fighting against heavy punchers, it is not only necessary to be able to absorb a lot of punishment, but it is obvious that it is of advantage to avoid it. The long neck of Japs comes in handy, and it is remarkable to note how some Japanese cocks dodge, side-step and shift to avoid blows. Some cocks, by deficient training or bad breeding rather overdo this point, but is invariably admired by the Japanese.

Aggressiveness. When accompanied by power and accuracy is a great feature, and when two cocks are evenly matched it is a sure bet on the most aggressive cock. Tactics go hand in hand with aggressiveness, and while some clever cocks are decidedly back-fighters, returning blow by blow, others are on the initiative side, attacking constantly. Naturally the back-fighting cock has a big advantage on a savage charger. Many

Japanese cocks also overdo this feature, being on the slow, back-fighting side.

Gluttony. Oriental cocks are universally reputed as gluttons for the heaviest punishment. The average steel fighting cocker has no idea of the amount of punishment a Jap can absorb, and probably never will have an opportunity to learn it under steel fighting rules. This feature makes the Oriental such superior naked heelers. They can stand the most severe mill and weather any storm. Even punch-drunk and staggering, they can recover and retaliate most effectively. The best cocks of Japan are perfectly indifferent towards any sort of execution, and even mortally injured are extremely dangerous opponents.

Strength. It is only reasonable to expect in Japs of high order a terrible muscular strength which preferably is located in thighs and rump. As they generally do not strike with wings as some flyers do, they appear poor in breast, though very broad. The quality of muscle is of highest order, dense and dry. Hence their standing power. They require less water than flyers, which point is borne out in their endurance and good wind. Many Japs are scantily feathered, appearing thin and even weak, yet with a small bundle of muscles they can perform astounding feats. No human measure seems even approximate in comparison with the power of Jap Orientals.

GENERAL REMARKS. Following Western customs we have classified the Japanese Game-fowl in four groups, but would like to point out that this classification would not hold good in Japan. The cockers there recognize just the Game fowl as such, but pay no attention to these groups, matching any variety of fowl which strikes their fancy. Strains are known locally or credited to some special breeder, but no strain-craze is known, such as is evident in the States. For breeding

they will readily mate an Ashura on any type hens, for example, if they are just good enough and promise of throwing good offspring. This is the rule, but some breeders are not only careful about the quality of their stock, but will consider some type and color features, i. e. strain characteristics, before attempting any breeding at all. It is to such breeders that we owe the preservation of several different types.

Besides the average Oriental, we may find in Japan also some tolerably pure Bankivas, Filipinos and Javanese. We have referred already to the Sumatra, whose type may be traced in several varieties, but whether due to direct Sumatra infusion or if the blood crept in through the many Indian importations nobody can say. Pure Sumatras, or very near in type to the old-time pheasant fowl, are to be met with in Southern Japan, and though not at all frequent at present, it appears that once they were bred in fair numbers and fought, as in the Sundas, with slashers.

This would partially explain the appearance of Black blood in several strains. They also knew and had dead-black Silkies, in fact, Japan was once credited with being the original country of the Silky, though we now are prone to doubt it.

Muffed Japs are also known, as well as bearded Malays, this being only natural in fowls, that from their ancestors have inherited partially feathered races.

Some Japanese fowl, also pit-birds, are partially bare or naked neck, being very similar to, if not identical with, the naked necks of Madagascar and Siam.

Conditioning cocks for the pit is an art highly developed in Japan as in the whole Orient. It would take us too far to go into the minute details that complete the Japanese program of conditioning. There are books in Japan dealing with this fact, but most of the pro-

cedure is done according to tradition or as taught by actual practice.

Perhaps very few readers will ever have heard of the strange fruit or berry known in India as "Lukutate" and on which sick and aged elephants and Sambar-deer feed. The medical properties of this fruit appears to be of highest interest, and by des-intoxicating the organism causes rejuvenation of the individual. We want to point to this fact with a special view of inducing interested investigators to gather more information. The "Shuriagati" people of India, it is reported, enjoy by its use perfect health and attain high age. "Lukutate" is used by some cockers for conditioning cocks, many of which have established phenomenal records in the pit, as well as healing rapidly from the most severe injuries. Of course most Malayoids have an astounding healing flesh, attributed to their glandular function, but whether the latter is only naturally acquired or has been stimulated by the berries they get, no one can say with any exactitude.

Most all orientals or pea-combed Malayoids have been liberally termed Japs in the last decades, and under this banner travelled many dunghills which had done better to stay at home. They have done some discredit to the grand pit-fowl of the Orient, but the wise breeder will know that the real Japanese Game fowl are pit birds of highest order and repute.

AN AMERICAN'S EXPERIENCES. We have pointed out at several instances that among contemporaneous authorities on Game fowl, Dr. H. P. Clarke's judgment ranks as one of the best founded. His experience and great knowledge covers a lapse of time in cocking history that is highly interesting for being an era of transcendental importance in the scattering of Game fowl over the globe. Concerning Japanese Game fowl, he writes, April 1928:

"If one could only visit Japan and look for fighting fowls, he would doubtless find several breeds heretofore unknown to the Caucasian world. I have even heard of steel fighting (possibly with slashers) in some places. As I wrote once before, all the Jap cocks that I have seen in this country in recent years have been decidedly on the Malay order, whereas my old line secured in the 80's through a friend in San Francisco—who had a relative missionary in Japan—those birds were elongated Asils in type, tall and rather slender in build but pretty well feathered, with strong wings and good spurs. I do not remember any downward pointing spurs as in Malays. Those cocks could fly well, for Orientals—of course not like Bankivoids—were very quick and used heel rather than beak. Cocks from 7½ to 9½ lbs.,—small for Shamos.

"Some 20 years later I got another bunch of Shamos similar to preceding in many respects but coarser and not quite so well feathered. Size about the same. It was from this stock that I raised one stag, hatched in winter, stunted by the cold, developed into a 4 lb. cock. Sent him to a friend near Cienfuegos on south coast of Cuba. That cock bred to small 'fina' hens produced cocks the most uniformly successful that Cuba ever saw. And in only a few years that Jap-Cuban cross had run out and disappeared entirely.

"About that same time I got pure white Japs from the West. Much like the Ashuras on page 31 (*Grit and Steel*, April 1928) but more heavily feathered. These were stolen before I had a chance to learn much of their pit qualities.

"At different times I had individual Jap cocks of various Pacific Coast (more than one from Anthony Greene stock) and Hawaiian strains, some very large, but none that compared in pit qualities with the 'missionary' importation mentioned above. This is the

stock that I introduced in France and Belgium. Two stags ($\frac{1}{2}$ Jap, $\frac{1}{2}$ T. A.) I fought in France in 1894, and left them with Cliquennois."

We may add for the benefit of the reader that Mr. Anthony Greene, of California, a great Orientalist though not really introducing Japs into America first, imported very often and contributed to the scattering and credit of high-class Japs throughout the States, more than any other Western cocker. We have a record published by Mr. Greene, with the names of numerous Eastern and Southern cockers of repute, who got breeding stock from him in the last decades, which shows clearly that many American strains generally considered of true Caucasian blood have the Oriental streak and doubtless derive some surprising qualities from this blood infusion.

Mr. Greene's experiences must be both extensive and interesting, and it is deplorable that the grand Orientalist did not publish a review of his work, which would fill a large gap in American cocking history.

The experiences of Dr. Clarke show once more that besides the typical Malayoids there exists many other varieties in Japan. On the other hand, it is quite possible that his early stock was the product of recent importations to Japan of Southern fowl.

SIAMESE AND MALACCA FOWL

There are several reasons for believing that if the Malay existed in prehistoric times in a wild state,—and all probabilities emphatically point to this end,—its natural haunts stood in Siam, Burma, Assam and Malacca. Its existence and conspicuity in other countries, India, Japan, Madagascar and Brazil is due to its introduction there by the aid of man, as we have pointed out repeatedly.

Siam, Malacca and Burma have always been thickly populated and it is only logical to suppose that the wild bird, which probably was a plain and grass jungle dweller, being unable to fly, became extinct long ago. Logical deduction will make it clear, that as the flyer is represented in its wild state by several distinct varieties, so also the runner or Malay may have existed in several varieties. With the data at hand we are unable to get a clear vision on this item but sincerely hope to be able some day to study this fact at the very source of information.

Siamese Malay Game. Black. Grand naked-heeler.

Our assumption of several varieties of the Malay is based on the geological difference of its natural haunts, different food and climate. It appears further that in the irregular plains of Central Siam the smaller variety was

to be found, while on the coastal districts very large specimens may have been met with. From the same cause we may deduct that the higher up the bird was to be found, the more rich in feather it was.

The Malay in its wild state must have been exceedingly easy to catch and hunt, and besides trapping birds alive for the pit, many must have been hunted to provide meat for the National rice pot.

At all lights, Malay fowl domesticated and bred for the pit, surely have traveled East and West by the land route. We know that it was introduced in Central India and that it was fairly frequent along the Indian desert, on the left bank of the Indus.

Most all countries within easy reach from Siam have Malay fowl, and though evidently many of them are visibly crossed, so tenacious show the characteristics up again and again, that we cannot, for a moment, accept the theory that they are derived from the same source as the Caucasian.

Among the best pit strains of Siam very few are pure Malays, though very strong in Oriental features—and show alien blood infusion either due to the queer Black Game fowl of the Sundaic Archipelago or traces of the universal Bankiva.

Pure Malays are more common among the barndoor fowl of certain regions of Siam and among these sometimes giant specimens are found of which Western fanciers have only a faint idea. We do not want to impress

English Sumatra, showing Oriental features and dewlap, absent in original Sundaic black fowl.

the reader that these barndoor fowl are rank dunghills; the Malay being naturally a fighter, many of the common land fowl are matched in blunt or sharp heels. But they are not specific game fowl in the full sense of the word as the term is applied in the Western world, i. e., bred especially for pit purposes. Pit varieties are bred there also, but,—as stated,—seem to carry a dash of alien blood, though they otherwise have many of the characteristic features of the Oriental bird upon them.

We have been able to gain only a very superficial knowledge of the wild and domestic breeds of fowl of this part of the world, but as the years go by, we become more and more convinced that the cradle of the Malay stood in or very near Malacca and Siam.

Naked-neck Madagascar Malay.

Unfortunately most travellers and hunters who go there in search of scientific information are not interested in fowls at all, and so it is that we get to hear more about the delicacy of the birds as a culinary addition to the daily grub, than of their racial and fighting value.

It appears queer that while in the Orient almost every native has some fowls, the cocks do not play a role in their religious feelings.

In Persia, Greece, Egypt and Rome as well as in Arabia, where cocking was practiced the cock played a great role in their legends and superstitions. There is a good reason for this fact, the Bankiva is a noisy bird of elegant and

grand stance, while the Oriental is silent and lacks entirely the sprightly and proud bearing of the former. There are knob and pea-combed fowl in Siam and Malacca, while the diverse varieties or breeds are so numerous that one can hardly get a true picture of the conditions from abroad. One thing, however, is sure. The true, large, powerful Malay may be found there just as pure or even purer than in India, the weights ranging from over 15 lbs., in the North to the diminute Kalkatiya or black-spurred game in Singapur.

It has been even stated that the latter was introduced in India, and that it is to be considered as the progenitor of all small Asil strains. That the Kalkatiya has some strange resemblance with the old-time Sumatra nobody will deny who has seen them, and if the

Black Game blood came into the Raja Murghi strains through such a source, perhaps nobody can state with certainty, but it appears highly probable.

A photo from Dr. D. S. Newell, Melcroft, Pa., a noted breeder of Orientals, given in these pages, show the Sumatra features of an Asil cock which otherwise is identical with the Kalkatiya of Singapur game.

Other Malay games of Malacca and Southern Siam, some stilty, others low, show the same Black Game features evidenced in feather structure, wings, tails, and

Modern white Brazilian, from a reputed pit strain.

particularly the head. This has small pea-comb, long beak, small lobes and, notably, *absence* of a pronounced dewlap. Otherwise, legs and thighs are peculiarly Malay.

It would seem only reasonable to expect Sumatra features in the fowl of Southern Malacca, being so near to the island of Sumatra, that traffic between the peninsula and the island can be established even with the most primitive craft.

They fight in Singapur and environs with slashers of exactly the same pattern as the small "gollok" used in Northern Sumatra, in fact, in the whole island. The large slasher fastened to the foot of fowl, is more particularly used in Java, Bali and Madoera, where they have fowl suited for the purpose.

From all information we have gathered about Siam, it appears that the type most closely resembling the original wild Malay may be found among the jungle-dwelling natives, among which are many specimens which are partially and even totally naked with scarcely any feathers on the back wing and tail. The specific pure Malay has a big head, short and curved beak, ample dewlap, not seldom hanging, and very prominent thighs with long and strong limbs.

The stout, straight, pointed down spur is characteristic as the facial appendices, so different from that of the flying Galli of India. The remarkable tightness and scarcity of plumage, as we have pointed out, is the outcome of very dry and dense muscles and skin structure, which in their turn are so affected by the specific glandular secretion of the typical Malay, prototype of all Oriental fowl.

MADAGASCAR FOWL

Finding typical Oriental or Malay fowls in the island of Madagascar, off the coast of South-east Africa, and there extant from time immemorial, one would believe, at the first impression, that they were indigenous to that island, being extremely far away from the original country of the Malay,—Siam and Malacca.

In fact, many writers believed that the island was to be considered as the last portion of a sunken continent, and the fowl on them, closely related to that of India and Siam, a further evidence of that theory. There are strong evidences, however, that the fowl was introduced from India by Dravidian settlers over three thousand years ago.

The Madagascar fowl referred to are typical Malays, some of which show the peculiar nakedness which we have known in Siamese and Jap fowl. Such fowl were introduced in France, as described by that authority, Dr. H. P. Clarke, Indianapolis, and known there as “denudes” or “Malgaches.”

The reasons that assist us in believing that Malays were introduced in Madagascar,—which apparently prior to that epoch was void of any Galli,—are as follows:

The ruins of Great Zambabwe in Rhodesia, especially the most ancient ones, show distinct Dravidian origin as is borne by the monumental central tower, representing a “Lingam”; and many other architectural designs, carried out on the principle of the circle, the sun-wheel of Dravidian origin (Cakra).

The names, Zambesi, Sansibar and Zambabwe are of Mongolic-Dravidian origin. Zambesi is a corruption from Zamberi and is derived from the Dravidian Sambu-Arru, according to Mr. J. F. Van Oordt, Cape-

town,—which means: Sambu-Gold and Arru-river, i. e. gold river. Zambabwe, where the great gold mines of ancient fame were, is also Dravidian from Sambu-Gold and bye-work (byed-pa in Tibetan means “to work”).

In his study, “Who were the builders of Great Zambabwe,” Mr. J. F. Van Oordt gives us a convincing demonstration that the Dravidians, from the sides of the Indus, built original Zambabye, and no doubt that the enormous wealth of gold that characterized the Indian Lords of yore, came from that land,—“Ophir” of the bible,—now Rhodesia.

Those Dravidians had emporiums and settlements at Sokotra in the Gulf of Aden and Madagascar.

In both places we find native Malay fowl. In Sokotra, later on the Arabians almost effaced the footprints of the Dravidians, but in Madagascar they did not. It appears that Zambabwe (Ophir) was taken by the Arabs in later centuries after a long and tenacious struggle and subsequently abandoned when the green flag of the prophet led the tribes along the Mediterranean to Spain, and to a stop at Tours.

It would carry us too far to give here even an extract of the convincing facts,—there are so many of them,—that the Dravidians were the builders of Great Zambabwe. It is sufficient to know that they had a large settlement in Madagascar, in fact so large that they got reinforcements from here in their tiresome defense against the Arabian intruders, who after centuries of investigation got news of the exact location of the mythical land of Ophir.

So it came, with all probabilities, that the Malay was introduced in Madagascar about 1100 B. C., “and perhaps a good deal earlier.”

BRAZILIAN GAME FOWL

It would be very rare indeed to find in such a wide territory as Brazil only one kind of fowl, and so it is that whatever has been introduced in South America as Game fowl may be found in Brazil, logically located where it belongs. So, near the "cordillera" influenced by the Spanish settlements and colonies of Peru, Ecuador and Colombia, down the river we find only Mediterranean type fowl, mostly Spanish,—Game and Dunghill. Slashers are used in Peru, are used down the Marañon and Ucayali up to Para. The Spanish or Bankiva was scattered from the West to the East all along the large Amazonas coming down with the water.

Some of the native millionaires of rubber rank in the conjunction of the numberless tributaries to the great river, kept fowl of Bankiva type, introduced from the Pacific coast. As a curiosity we may mention that these fowls are mute, not by nature but by an operation performed on the vocal strings to render them silent. It is said that predatory beings, both animal and human, leave the birds alone, while not hearing them.

It is a hopeless enterprise to search for information concerning Game fowl in this picturesque but forlorn forest world. Many of the once rich rubber hunters are glad enough to keep a few miserable dunghill fowl, which are fed on bananas almost exclusively.

Near the larger towns (for mere politeness we call them towns) some Peruvian officers and traders keep a few Game fowl and fight them on Sundays, on which occasion bets are made and the whole is washed down and out with liberal libations of native "Taffia" or cane Rhum.

It is different in the coast districts, where life circulates in a lively mood. Here we find a native fowl

which is true game and perfectly Oriental in features. It has been a riddle to all Game fowl authorities how this Malayoid, which is identical with many Japanese, ever got there. Some Brazilian poultry writers believed that it was indigenous to the country—in all good faith—as these birds were there, already, several centuries ago.

Knowing that America was a Callus-void continent, we soon deduced that they were introduced, and as these particular birds were true Malays it was not far guessing that they were imported from the Orient.

The most approximate theory being, that as the Malays were scattered in Madagascar by early Dravidian settlers, Portuguese sailors shipped then on board there to provide for fresh meat for the quarter-deck while on the long voyage from the Cape to the Brazilian coast.

Brazil was formerly a Portuguese colony, and its staple export good coffee. The Portuguese ships on their voyage homeward from the East, restored at Tamatava, refitted and overhauled their rig before crossing the Atlantic, loaded with jute and empty bags from India destined to Brazil to take the annual coffee crop.

It is a well known fact that most of the deep-sea ships, from the Carrack to the Clipper, took live-stock on board, pigs and poultry, when on a long cruise. Many were the captains, on traders and warships that carried Game fowl with them. English cocks travelled this way all around the world, and many were landed in the South Sea islands and colonies. It is almost sure that those early Portuguese carried Madagascar and Chinese pigs and Malay fowl with them, and not the slightest doubt, further, that the ship masters and officers earned a few extra Gold-nobles selling these

animals in the Brazilian ports, where money was aplenty.

So it came that around the Atlantic Brazilian ports the breeding of Oriental Game fowl flourished, and only a couple of decades ago cocking was a grand pastime all along the coast.

Many birds were taken inland as far as ships could go, along the Amazonas. In the lonesome places (years ago) the cocks were matched in natural heels, while along the coast the development of cocking exacted some more elaborate rules and a weapon that has been conspicuous in Brazil and Argentina.

The heels used there are of steel, sharply pointed, conical in shape, hollow sockets and fastened to the leg and natural spur by leather and wax-ends. A photo of one of these steels, termed in Argentina "puones" from "pua"—a pointed instrument—is given in this issue.

They are used in several lengths or sizes to suit all sorts of weights, and in our honest belief, is one of the weapons best suited for all sorts of naked heelers. In later years such weapons came over the cordillera to Chile, where they are beginning to use similar patterns in the best cockpits.

To describe the average Brazilian Game fowl, it is best to compare them with the Japanese. In weight they come between 5 to 9 lbs., and the best all-round fowl average 7 lbs. In type they are like the Japanese, but since the advent of the Balearic Game fowl, long heads, single combs and marked wealth of feathering is not seldom.

Queer enough, in Brazil they had, about the nineties of last century, a type of fowl closely akin to the Silky; brown or black. It is said that pure they were not good enough to fight, being too soft, but crossed on Orientals they produced remarkably clever birds.

In Brazil the Orientals are termed "Tamatavas," a name derived from the Madagascar port of same name, and the naked necks are called "Africanos." There exists also tufted and bearded Orientals, as well as crosses produced by the admission of Spanish and Balearic blood, imported mostly in recent years.

So far as we have found out, many vocables and cocking terms were also introduced, apparently of Dravidian origin, but not being through with our study we decline to go on further with the matter at present.

Some Brazilian fanciers insist that the weapons were also introduced from the East, but we never found evidence beyond the "Tellum" like spurs used in Persia, Greece and Rome. There is no doubt that the "puon" slightly resembles the "Tellum," but the latter is known to be Persian or Greek and not of Dravidian origin.

Our guess is that the Brazilian and Argentine "puon," though fairly old, was evolved in those countries after the unsatisfactory results obtained with the Andalusian slasher,—used in Buenos Aires, Sao Paulo and Rio,—forced the cockers to adhere to something more in the nature of naked heelers. Those early cockers were not ignorant as many assume. In fact, we have found evidences of their great knowledge in Game fowl affairs and of perfect logic in the application of rules and cocking appliances. We believe further, that many wrinkles have been forgotten and lost as time rolls on and when theatres, movies and "facile pleasures" have supplanted the time-honored diversion of fighting cocks. Brazil was once a grand cocking country, what is left today of it, though always interesting, is a mere shadow of the past.

THE END.

GAME LITERATURE

APPENDIX BY DR. H. P. CLARKE

Books

Commendation of Cocks and Cock Fighting, George Wilson, 1607, is believed to be the earliest work on this subject in our language. It was followed by several others somewhat more practical, copies of which have been shown me by friends in England but the titles forgotten. The earliest of any real worth seems to have been Sketchley, listed below.

Among the volumes formerly in my library which have somehow gone astray in the course of years I can recall: An early edition of Hoyle's Games with two Game Cock paintings by Proctor as inserts; Royal Pastime of Cocking, by R. H.; Cocking and its Votaries, S. A. T. These three presented by my old Cornish friend, John Harris. Then there was another edition of Sketchley, a paper copy of Atkinson's first edition and the following American publications: Game Fowls by Ayers and a plagiarised reprint of same by Hayes. My Way of Feeding for the Pit, by Dr. Trask, from whom Bentley copied. New Era in Heeling, by Mason. Original edition of Dick Lee's Keep, earlier than the one listed below.

Although cocking has always been a popular sport in France and Belgium, no book on the subject, very curiously, has ever appeared in either of those countries. The nearest approach to such a thing is a French work somewhat on the order of Fitz-Barnard's Fighting Sports, with one section devoted to cocks.

The list below is made up almost wholly from my own library.

1. American Game Cock, Francisco, 110 pp., cloth, 1890.
2. Same, Third Edition, 190 pp., 1898.
3. Art of Walking Cocks, E. A. Walker, 68 pp., 1928.

4. Artificial Cock Spurs, H. Atkinson, 12 pp., about 1919.
5. Book of the Games, Stoddard, 64 pp., 1886.
6. Breeders' and Cockers' Guide, Flock, 150 pp., cloth, 1904.
7. Same. The later edition I do not have.
8. Breeders' and Cockers' Guide, Glover, 96 pp., 1913.
9. Brood Yard to Pit, Gleezen, 70 pp., 1908.
10. Same, Second Edition, undated.
11. Cockers' Guide, R. K. Fox, 62 pp., 1888.
12. Same, 80 pp., 1889.
13. Cockers' Guide, W. J. Carroll, 16 pp., 1913.
14. Cockers' Manual, F. H. Gray, 146 pp., cloth, 1878.
15. Cocking Guide, Glover, 26 pp., 1908.
16. Conditioning Cocks Correctly, Sol P. McCall, 36 pp., 1926.
17. Conditioning, Heeling and Handling, Dr. Geo. Conderman, 48 pp., 1899.
18. Dick Lee's Keep, Derby Edition, 156 pp., leather, 1898.
19. Feeding, Heeling and Handling, Pease, 8 pp., 1908.
20. Feeding for the Pit, Bentley, 16 pp., 1888.
21. Same, 18 pp., 1894.
22. Same, 18 pp., 1923.
23. Fighting Sports, Capt. L. Fitz-Barnard, 292 pp.; Cock Fighting has 127 pp., with 8 color plates of cocks, cloth, London, 1921.
24. Gallos Ingleses, Cuesta, 48 pp., Madrid, 1899.
25. Game Chickens, "Tan Bark," 64 pp., 1924.
26. Game Cock, Ed. James, 46 pp., cloth, 1873.
27. Game Cock from Shell to Pit, Geo. W. Means, 150 pp., cloth, 1911.
28. Game Fowl, Proud, with Sketchley reprint, 2 color plates, 148 pp., cloth, 1903.
29. Game Fowl, McIntyre, 254 pp., cloth, about 1904.
30. Game Fowl, Harrison Weir, English Edition from "Our Poultry," 130 pp., color plates, paper parts,

cloth bound, 1903.

31. Same as above, abridged. American chapters by Dr. H. P. Clarke. The game section of Poultry Book, American Edition, 110 pp., color plates, paper parts, cloth bound, 1904.
32. Game Fowl, P. W. Carew, 74 pp., about 1894.
33. Game Fowl for the Pit or the Spit, Burnham, 56 pp., color plate frontispiece, boards, 1877.
34. Game Fowls, Dr. J. W. Cooper, 96 pp., cloth, 1859.
35. Same, Standard Edition, two color plates, 304 pp., cloth, 1869.
36. Same, complete reprint without plates, Fleming, 2 Vols., paper.
37. Same, abridged reprint by F. E. Grist, 122 pp., No date.
38. Games for the Pit, Carew, 20 pp., 1880.
39. Same, 24 pp., 1889.
40. Handling and Nursing the Game Cock, A. C. Dingwall, 66 pp., cloth, 1928.
41. Histories of Game Strains, Grit and Steel, 414 pp., cloth, 1928.
42. Indian Game, Babcock, 24 pp., 1891.
43. Indian Game Fowl, Whitfield, 38 pp., London, 1892.
44. Ley de Gallos, Luis Inclan, Mexico, 28 pp., cloth, 1888.
45. Life and Letters of John Harris, Cornish Cocker, by H. A., 78 pp., cloth, 1910.
46. Line Breeding and Perpetuating Game Fowl, Gleezen, 22 pp., 1902.
47. McCall's Pit Rules, 18 pp., undated.
48. McCall's Revised Rules, 24 pp., no date.
49. McCall's Modern Rules, 40 pp., 1928.
50. Management of Game Fowls, Benseman, 102 pp., about 1896.
51. Same, Third Edition, 104 pp., 1906.
52. Old Cocking Poems and Prints, Walker, 98 pp., 1927.
53. Old English Game Fowl, Herbert Atkinson, Edition

- de Luxe, cloth and gilt, 66 pp., 1891.
54. Same, Second Edition, 72 pp., paper, 1899.
 55. Same, Fourth Edition, 80 pp., paper, 1924.
 56. Reglamento de Coliseo de Gallos, 16 pp., Lima, 1906.
 - 57-68. Rules of the Cock Pit, compiled by Dr. H. P. Clarke, twelve editions, 32 to 56 pp., 1900-1925.
 69. Sport in Ye Olden Time, (all cocking), Sir Walter Gilbey, 118 pp., cloth, London, 1912.
 70. The Cocker, Sketchley, 154 pp., boards, 1814.
 71. The Family Pocket Book, Peregrine Montague, Gent., 162 pp. Ten pages devoted to Cocking, mostly (except one "keep") copied from Gervase Markham. Undated but from internal evidence apparently printed in London soon after 1614. Rebound.
 72. Treatise on the Game Cock, McDougall, 54 pp., 1879.
 73. Same, 32 pp., 1882.
 74. Same, Updegraff Edition, 36 pp., 1885.
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Journals

1. Game Fanciers' Journal, F. H. Gray, Battle Creek, Mich., February 1879-May, 1888; Geo. S. Barnes, June, 1888-May, 1910.
2. Game Breeders' Record, G. B. Duvall, Louisville, Ky., Jan.-Apr., 1882.
3. Game Breeder, P. W. Carew, Toledo, Ohio, July, 1885-March, 1886. Carew's Game Breeder, April, 1886-May, 1897. Game Breeder, W. F. Lane, Montrose, Pa., June, 1897-March, 1900.
4. Game Fowl Monthly, C. L. Francisco, Rushville, N. Y., August, 1885-March, 1887; Sayre, Pa., April, 1887-April, 1910.
5. Game Fanciers' Standard, S. S. Hull, Cumberland, Wis., 1886.
6. Dog Fanciers' Guide and Game Pitters' Journal, Luther, Mich., 1887-1889.

7. Game Herald, C. F. Palmer, German, N. Y., 1889-1891
8. Game Bird, Alex P. Moul, York, Pa., 1892-1894.
9. Southern Game Breeder, A. C. Bostic, Atlanta, Ga., 1892-1894.
10. Derby Game Bird, Alex W. Cummings, Derby and Tell City, Ind., September, 1892-November, 1916.
11. Southwestern Cockers' Journal, F. V. Daniel, San Antonio and Houston; H. B. Savage, Belton, Texas, 1893-1898.
12. Game Journal, Philip Heck, Cannelton, Ind., 1893-1895.
13. Tennessee Game Fowl Annual, 1891-1894. Dixie Game Fowl, March, 1894-December, 1902. T. E. Lipscomb, Columbia, Tenn.
14. Southern Pit Games, Jeff Fleming, Blakeley, Ga., 1894-1914.
15. American Game Keeper, (weekly), A. L. Shampayne, East Bangor, Pa., and Woodglen, N. Y., 1894-1899.
16. American Game Breeder, C. M. Williams, Chattanooga, Tenn., 1894-97.
17. Western Game Bird, J. T. Camp, W. J. Rupert, Williams Bros., Scribner, Neb., 1895-97.
18. Gamester, McBride and Robertson, Cannelton, Ind., 1896.
19. American Game Fowls, J. H. Church, Anniston, Ala., 1896-1905.
20. Southern Games, S. D. Dement, Meridian, Miss., 1897-98.
21. Game Pointer, John Corkhill, Jr., Pittsfield, Mass., 1897-99.
22. North American Game Cock, G. S. Garber, Madison, Ind., 1898.
23. Illinois Pit Game and Poultry Journal, Lincoln, Ill., 1898.

24. Northwestern Game Fowl Journal, Wm. Belond, Seattle, Wash., 1899.
25. Grit and Steel, Gaffney, S. C., J. L. Sherrill, May, 1899-September 1901; Ed. H. DeCamp, Oct. 1901, to date.
26. Chanticleer, P. W. Carew, Toledo, Ohio, 1900-1903.
27. Texas Game Journal, Jan Byrd, Mineral Wells, Texas, 1901.
28. Game Gazette, J. J. Knisely, New Phila., Ohio., 1901.
29. Feathered Warrior, W. M. Storrs, Lisle, N. Y., July, 1904-October, 1921; J. H. Wendler, Winter Park and Hialeah, Fla, January, 1922-December, 1925; Keavey and Kaufman, N. Y. City, February, 1926; E. W. Rogers, Goshen, N. Y., October 1926 to date.
30. Arena, A. P. O'Connor, Norfolk, Va., 1910-1912.
31. National Game Fowl Journal, H. L Carroll, Washington, D C., 1913.
32. American Cockers' Review, Harry X. Yount, Inver Grove, Minn., November, 1922-June, 1923.
33. Game Fowl News, R. S. Meroney, Asheville, N. C., March, 1925 to date.
34. Knights of the Pit, M. L. Walker, Sand Springs, Okla., October, 1928 to date.

Outside of the United States there have been no periodicals devoted exclusively to cock fighting except three in France. Before the great war, *Le Coqueleur*, (The Cocker), and *Journal des Coqueleurs*, (Cockers' Journal). Not long after peace was declared there started *Le Coq Gaulois*, (The Gallic Cock), which is still published, weekly during the cocking season and monthly the rest of the year.

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