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SYNOPSIS

OR

GUIDE BOOK

TO THE

BRITISH MUSEUM.

PART I.

ZOOLOGY.

PUBLISHED BY ORDER OF THE TRUSTEES.

LONDON, MDCCCXLIII.

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LONDON:
GEORGE WOODFALL AND SON,
ANGEL COURT, SKINNER STREET.

ZOOLOGY.

THE ENTRANCE HALL

contains the following Animals:—

Before the window on the left, ^{near the staircase} adjoining the messenger's small room, is a Hippopotamus. *Presented by the Trustees of the Hunterian Collection of the Royal College of Surgeons.*

By the side of the staircase, in the passage leading to the Gallery of Antiquities, are three specimens of the genus Rhinoceros, from Southern Africa,—viz., R. Ketloa—R. Africanus, young—and R. Simus.

On the first

LANDING-PLACE

is a Llama from South America, where it is used as a beast of burthen. *Presented by Charles Darwin, Esq.*

Above the Llama is a specimen of the Stag (*Cervus elaphus*, Linn.). *Presented by the Earl of Derby.*

On the *second* landing-place are a Musk Ox, from Melville Island, and a Polar Bear; procured during the Arctic expeditions, and *presented by the Lords of the Admiralty.*

Over the Musk Ox is a specimen of the Striped Antelope of Penant, from the Cape of Good Hope; and on the Polar Bear's case, the Elk from Sweden. *Both presented by the Trustees of the Hunterian Collection.*

On the *upper* landing-place are a male and female Giraffe, or Camelpard, from South Africa, *presented by W. J. Burchell, Esq., LL.D.*; and a smaller Giraffe, *presented by the Trustees of the Hunterian Collection.* The last mentioned Giraffe was brought to England by Mr. Paterson, and is the first ever seen in this country.

MAMMALIA SALOON*.

THE collection of ANIMALS is contained in two Galleries, and for the convenience of exhibition is arranged in two series. The BEASTS, BIRDS, REPTILES, FISH, and the specimens of the other smaller animals kept in spirits, are exhibited in the Wall Cases. The hard parts of the Radiated, Annulose, and Molluscou animals, as SHELLS, CORALS, SEA EGGS, STAR FISH, CRUSTACEA, and INSECTS, are arranged, as are also the SKULLS of the smaller beasts, and the EGGS of BIRDS, in a series in the Table Cases of the several rooms.

In the WALL CASES of this Saloon are arranged the specimens of Rapacious and Hoofed Beasts, and OVER THE CASES are the different kinds of Seals (*Phocæ*), Manatees, and Porpoises (*Delphini*); and on the FLOOR of the room are placed the larger hoofed beasts, which cannot, on account of their size, be arranged in their proper places in the Cases.

WALL CASES 1—28. THE RAPACIOUS BEASTS.

Cases 1—7. The various kinds of Cats, as the lion (*Leo*), from South Africa; tiger, from India; the jaguar, and the different kinds of ocelots, from Central America; the wild cats of Europe; the chaus, from North Africa and Asia; the booted cat of the Cape of Good Hope; hunting leopard of India and Africa; the lynx, from Sardinia and the South of Spain, and from Canada; and the caracal of South Africa and India.

Case 8. The *Hyænas*, as the striped hyæna (*Hyæna striata*) of Egypt; the spotted hyæna, from South Africa, with its young, which is blackish brown.

Case 9. The true Civets, as the African civet, from the warmer parts of Africa; the zibet of India and China, and the spotted zibet, or tangalung, from Sumatra. These animals all yield the secretion that has long been esteemed by some as a scent. The hyæna civet, or *Proteles*, from the Cape of Good Hope, and the slender ring-tailed *Prionodon*, from Malacca. The lower shelves contain the various species of genets, from the Cape of Good Hope, Abyssinia, and Western Africa.

Case 10. The different species of Ichneumons or herpestes, the Mungos, from Asia and Africa; and the Suricate, from the Cape of Good Hope and Central Africa.

Case 11. The different species of *Paradoxurus*, *Paguma*, *Hemigalea*, and *Benturong*, which inhabit India, Sumatra, and the other Asiatic islands; the *Cynogale*, from Borneo; and the *Nandina*, which comes from Western Africa; and the *Bassaris* or house marten of the Mexicans.

* For an explanation of the method on which the Zoological Collection is arranged, and a list of the genera, see a small work called the "Guide to the Zoological Collection," sold in the Hall; where may also be had a "List of the Species of Mammalia," with their Synonymes.

Case 12, 13. The different species of Dogs, as the Newfoundland dog; the wolf of North America and Europe; the wild dogs of India, Africa, and North America.

Cases 14, 15. The different kind of Foxes of Europe, America, Africa, and India.

Case 16. The four-toed hunting dog of South Africa and Abyssinia, and the large-eared dog of the Cape of Good Hope.

Case 17. The various species of Martens (*Martes*) of Europe and America; weasels from Europe and America; the masked weasel of Mexico, the Siberian weasel, the Himalayan weasel, the pole cats of Europe and America, the False Sable of America, and the Vison or lesser otter, of North America and Northern Europe; and the Zorilla of the warmer parts of Africa.

Case 18. The Gluttons, from North America and Europe; the ratel, from the Cape and India; and the tiara and the grisson, from Central America and the West Indies. Then follow the helictis or musk weasel of the Chinese; the skunk of North America; the marputio and conepats of Central and Southern America; the stinkard, or mydaus, of Java; the sand bear (*Arctonyx*) of India; the badger of Europe; and the Labrador badger, or taxidea, of North America.

Case 19. The Otters, as the common otter of Europe, and the species from America and Asia; the muffled otter of North America; the clawless otters of the Cape of Good Hope and of Java and India; and the seal-like sea otter of the west coast of America.

Case 20. The Bears, as the Malay bear of Sumatra and Borneo; the white bear of the Arctic Ocean; and the sloth bear of India.

Case 21. The kinkajou of Central America; the wah (*Ailurus*) of Nepal; the different varieties or species of coati mondi, and of racoons, from America.

Case 22. The INSECTIVOROUS BEASTS, as the moles of Europe; the marsh mole of Canada and North America; the golden moles of the Cape; and the star-nosed Mole, with its long thick tail, from North America; the Tupai or insectivorous squirrel of Java, Sumatra and India; the elephant shrew of North and South Africa; the shrew mice of Europe, Asia and America, especially the large blue shrew of India and the Cape of Good Hope; the desman, or musk shrew of the Pyrenees and Russia; the naked-tailed weasel (*Gymnura*) of Malacca; and the various kinds of hedgehogs, from Europe, Asia, and Africa, as the tenrecs of Madagascar and Western Africa.

Cases 23—31. The different sorts of Marsupial Animals. Those in Cases 23—30 are only found in Australia, and those in Case 31 are from America.

Case 23. The different kinds of Phalangiers, as the white-tailed opossums; the New Holland bears from Australia; and the true Phalangiers, which are only found in Amboyna and New Ireland; the tarsipes of South Australia, and the wombat of Australasia.

Case 24. On the left half, the Flying Phalangiers, as the Petaurus; the Norfolk Island flying squirrel, and the flying mouse, or acrobat. The right half of this Case contains part of the Kangaroos.

Case 25. The different kinds of the true kangaroos of Australia, and the tree kangaroo of New Guinea.

Cases 26—28. The various species of wallabees, (*Halmaturus*); the long-nosed kangaroos, and the rock kangaroos.

Case 29. The jerboa kangaroos, and the rat-tailed kangaroos; the kangaroo hares; and at the bottom the koala of Australia.

Case 30. The Australian Opossums, as the bandicoots (*Perameles*); the pig foot opossum; the daysures, the zebra wolf, and the Australian devil; the phascogales and the banded myrmecobii.

Case 31. The Opossums of America. And below, a few of the smaller specimens of Seals, as the young of the harp seal, with its white fur, as it is when it is first born; and the young of the eared seal, from the Cape of Good Hope.

CASES 32—52. The HOOFED BEASTS.

Cases 32, 33. The Yac ox, from Thibet; and two specimens of the small Indian humped cattle.

Cases 34—41. The various genera and species of Antelopes.

Cases 42, 43. The various kinds of Goats.

Cases 44, 45. The various kinds of Sheep.

Case 46. The Llamas, from Peru, as the brown wild llama, and the more domesticated varieties, called Alpaca, which differ in colour, some being black and others variegated. In this Case is the black fawn of one of the black specimens.

Cases 47—50. The different kinds of Deer, as the roebuck of Europe, the axis of India, the ahu or tailless roe of Siberia.

Case 51. The Musks, as the musk from Thibet and Siberia; the small kanchil and pelandor, from the islands of the Indian Ocean, as Singapore, Java, and Sumatra; the meminna, from Madras.

Case 52. The ant-eater of South America. The pangolins of Africa and India. The armadillos of South America.

Case 53. The sloth of South America. The water-mole or mul-lingon, and the echidna or spiny ant-eater of Australia, which have beaks like birds.

ON THE TOP OF THE CASES are arranged the different kinds of seals, porpoises and dolphins, as the common seal and the great seal; both found on the coast of England. The flat-haired seal; the leonine seal, or maned eared seal, from the Southern Ocean. The manatee, from Western Africa. The Cape porpoise, and the Cape dolphin; and the platanista, or long-beaked dolphin of the Ganges.

ON THE FLOOR, on the west side of the room, are placed the specimens which are too large for the Cases, and of the hard-skinned animals which are not injured by exposure; as the black antelope, from Central Africa. The equine antelope; the brindled knoo; the impofo or eland; the water buck; the koodoo, from the Cape of Good Hope. The wild ox, from Chillingham Park. A young giraffe, from Central Africa. On the other side is a large giraffe from the Cape, the skeleton of an elephant from India; the skeletons of a wolf from the Arctic regions; of a kangaroo from New Holland; a seal, from the British coast; an American deer; and of an Indian tapir, to exhibit the peculiarities of the bones in the animals of the different orders. A young hippopotamus, and the male, female and young of the wart-nosed pig, from South Africa. The Ethiopian hogs, from South Africa and Abyssinia. The brown tapir, from America; and the black and white tapir,

from Sumatra; the collared and white-lipped peccaries, from Central America.

IN FOUR TABLE CASES in this room, is arranged a series of the skulls of the smaller mammalia, to explain the characters of the order and families; as, the skull of a monkey; of the slender loris; of the different kinds of fruit-eating and insect-eating bats; the various species of dogs, cats, weasels, mice, rats, squirrels; the capybara; and the musk, from Thibet.

EASTERN ZOOLOGICAL GALLERY.

The *Wall Cases* contain the collection of BIRDS; the smaller *Table Cases* in each recess contain BIRDS' EGGS, arranged in the same series as the birds; the larger *Table Cases*, in the centre of the Room, contain the collection of SHELLS of MOLLUSCOUS ANIMALS; and on the top of the Wall Cases is a series of HORNS of hoofed quadrupeds.

Cases 1—35. The RAPTORIAL BIRDS.

They are subdivided into the following great divisions. The DIURNAL BIRDS of PREY are contained in Cases 1—30.

Case 1. The Bearded Vulture of the Alps and Himalayan mountains. These birds live chiefly on carrion.

Cases 2—7. Various species of Vultures, as the Alpine vulture, from North Africa; the black, carrion, and king vultures, from North and South America; the Californian, and condor, or great vulture of the Andes; the fulvous vulture, from Europe and Africa; cinereous vulture, from Northern Africa; sociable vulture, from South Africa; and the Angola vulture, from Congo.

Cases 8—30. The falcons, which are further divided:

Cases 8—17. The different Eagles which prey on living quadrupeds, birds and fish, as the golden eagle of the British Isles, &c.; booted eagle of Egypt; crested goshawk, of South America; Brazilian eagle; laughing falcon, from British Guiana; harpy eagle of South America; bacha eagle of India and Africa; Jean le Blanc eagle of Europe, Java, &c.; marine eagle, from Indian Archipelago; osprey, from various parts of the world; short-tailed falcon, from the Cape of Good Hope; and the Pondicherry eagle, from the continent of India, which bird is worshipped by the Brahmins.

Case 18. The different species of Caracaras, which are peculiar to South America, as the red-throated falcon, chimachima, and the Brazilian kite.

Cases 19—24. Specimens of Buzzards: they are sluggish, and pounce on their prey on the ground, as the craxirex, from Galapagos; Buzzard; and the rough-legged falcon of the British Isles.

Cases 22, 23. Various species of Kites: the weakness of their bill occasions some of them to feed principally on insects; as the cohy falcon of India; honey buzzard, from various parts of the world; swallow-tailed falcon of North America; kite of Britain; and the spotted-tailed hobby of North America.

Cases 24—26. The true Falcons, which are the most courageous in proportion to their size of all the birds of prey; as the jer-falcon, peregrine falcon; hobby, and kestrels, &c., of Great Britain, &c.

Case 27. The Sparrow-hawks: these birds skim the earth with a rapid flight, seizing their prey upon the wing; as the goshawk and sparrow-hawk of the British Isles, and others.

Cases 28—30. The Harriers: these birds generally fly very low over the marshes, and strike their prey on the ground; as the chanting falcon of the Cape of Good Hope; Madagascar falcon; secretary, of the Cape of Good Hope; hen harrier, ash-coloured falcon, and moor buzzard, of the British Isles, &c.

Cases 31—35. The NOCTURNAL RAPTORIAL BIRDS,

Which are subdivided thus:

Case 31. Hawk-owls, as the Canada owl; snowy owl of Orkney and North America.

Cases 32, 33. Eagle owls, as the scops-eared owl of England, &c.; ketupu owl of the Indian Archipelago; great-eared owl, from various parts of the Old World; and the Virginian eared owl, of North America, &c.

Case 34. Howlets: as the brown owl; long-eared owl of Great Britain and other parts of the world; barred owl of North America; little owl, and the Tengmalm's owl of Northern Europe.

Case 35. The true Owls, as the barn white owl of various parts of the world, and the bay owl of Java.

Cases 36—83. The PERCHING BIRDS.

These are divided into five divisions, each of which embraces several families.

Cases 36—42. The WIDE-GAPED PERCHING BIRDS.

Cases 36, 37. The goat-suckers, which are solitary birds, living on moths, &c.; as the Trinidad goatsucker, or fat bird; New Holland goatsucker; wedge-tailed goatsucker; great goatsucker; Carolina goat-sucker of North America; Leona goatsucker of Africa; and European goatsucker.

Case 38. The Swallows and Swifts, as the common swift of Europe; aculeated swallow of North America; esculent swallow of the Indian Isles; chimney swallow, sand martin, and martin swallow, of Europe, &c.

Case 39. The Todies, Rollers, Broad-bills, and Mot-mot, which live on insects, berries, &c., as the garrulous roller of Europe; Abyssinian roller; green today of the West Indies; Javan today; Brazilian motmot, &c.

Case 40. The Curucuis: they live in low damp woods in the tropical parts of America and Asia, and feed on insects and berries; as the red-bellied curucui of South America; Narina curucui of Africa, &c.

Cases 41, 42. The Kingfishers; they are generally of a brilliant colour, and live on fish, which they catch by diving, also on crustacea and insects; as the spotted-bellied barbet, and great pied barbet, of South America; great brown kingfisher, of Australia; ternate kingfisher of Philippine Islands; and common kingfisher of Britain, &c.; green jacamar and great jacamar of South America; common bee-eater of Europe; Javan night bird, &c.

Cases 43—47. The TENUIROSTRAL BIRDS,

Which are divided into several families: as

Case 43. The Hoopoes and Sun Birds, which feed principally on the nectar of flowers; as the common hoopoes of Africa, sometimes found in Great Britain; twelve-wired paradise birds of Molucca; rifle-bird of Australia; red-billed promerops of Africa; and grand promerops of New Guinea; hook-billed red honey-eater of the Sandwich Islands; and numerous species of sun birds of Africa and South America.

Case 44. The Humming Birds of South and North America and the West Indies; their food consists of insects and spiders; as the topaz humming bird; garnet-throated humming-bird; tufted-necked humming-bird, &c.

Case 45. Honey-eaters, which are peculiar to Australia; as the New Holland creeper; Poë honey-eater of New Zealand; wattled honey-eater; black and yellow honey-eater, and black-headed honey-eater of Australia, &c.

Cases 46, 47. The Creepers, Nuthatches and Wrens, which live on insects, chiefly obtained by striking the bark of trees; as the Patagonian warbler; Guiana red warbler; climbing grackle, and the picoid grackle of South America; common creeper of Britain and Europe; thorn-tailed warbler of South America; wall creeper of Great Britain; nuthatch of the same place, Europe, and North America; also various species of wrens, &c.

Cases 48—61. The TOOTH-BILLED PASSERINE BIRDS. They live generally on insects, worms, &c. These birds embrace several families.

Cases 48—52. The Warblers, which are solitary in their habits, feeding on insects, worms and berries.

Case 48. Tailor birds; they live on insects, and mostly form very beautiful and artfully dome-shaped nests; as the bush warbler of India; Dartford warbler of Great Britain and Europe; superb warbler of New Holland, &c.; and the superb menura, of Australia.

Cases 49—52. Warblers; which are small birds that have an agreeable song, and are continually flitting about in search of insects and their caterpillars, &c.

Case 49. The true Warblers, as the black cap warbler, lesser pettichaps, grasshopper warbler, fire-crested wren, &c., of Great Britain and Europe, &c.

Case 50. The Wheatears. These inhabit barren places in various parts of the Old World, and are lively birds, which subsist on insects; as the wheatear warbler, redstart warbler, red-tailed warbler, blue-throated warbler, redbreast warbler, whinchat warbler, sedge warbler, &c.; and the Titmice, which are very active in flitting from branch to branch and suspending themselves in all kinds of attitudes whilst seeking for insects on the trees; as the great titmouse, blue titmouse, and the long-tailed titmouse of Great Britain and Europe, &c.

Case 51. Wood Warblers, which mostly inhabit North America, where they are seen in the low bushes flying from branch to branch in search of caterpillars, &c.; as the red-headed warbler, spotted yellow warbler, yellow-throated warbler, and numerous other species; and various specimens of Wagtails, which are found on the banks of rivers

or marshes, feeding on insects and small seeds ; as the white and yellow wagtail of Europe and Great Britain, &c.

Cases 53—55. The Thrushes, which family of birds inhabit various parts of the world, and feed on insects and worms ; they are divided into several subdivisions : viz.

Case 53. The Ant-thrushes : these birds inhabit the tropical parts of the world, where they all feed principally on ants and insects ; as the white-faced manakin ; grisly warbler of South America, &c. ; mountain warbler of Java ; rufous-naped thrush, alarum thrush, and others of South America ; king thrush of Brazil ; short-tailed crow of various parts of the Old World ; and several species of rock thrushes of Europe and India.

Case 54. Various species of true Thrushes. These are solitary in their habits, feeding on fruits, worms, and snails ; some are well known for their song, and others for their imitating almost any sound, as the lunulated thrush of Australia ; missel thrush, song thrush, fieldfare, red-winged thrush, and blackbird of Great Britain and Europe ; and others from various parts of the world ; mimic thrush of North America, &c.

Case 55. Babbling Thrushes of the warmer parts of the world, where they are peculiar for their chattering noise ; they feed on insects, &c. ; as the black-headed thrush of South America ; Chinese thrush ; spectacle thrush of China, &c. ; grey thrush, mountain creeper, and pileated thrush of India ; the orioles are invariably of a bright yellow colour, and found in the warmer parts of the world, feeding on caterpillars and insects, and also frequent orchards during the fruit season ; as the golden oriole of Europe ; (this is sometimes found in Britain ;) Cochin China oriole and other species. Short-legged thrushes are also in this Case : they are peculiar to Asia and Africa, where they are found generally in the woods, feeding on caterpillars, insects and fruits ; as the Cape thrush, golden-vented thrush, importunate thrush of Africa.

Cases 56, 57. The Fly-catchers, which are peculiar to the warmer parts of the world, and feed solely on insects captured during flight. They form several subdivisions : viz.

Case 56. The pikas, which are peculiar to South America, where they pursue insects in flocks in the forests ; as the red-necked fly-catcher. The water-chats are inhabitants of South America, and are generally found in the vicinity of water, where they pursue insects on the ground ; as the grey shrike, spectacle warbler, white-headed tody, cock-tailed fly-catcher. The Tyrants are also peculiar to South and North America ; insects and even small birds sometimes form their food ; as the tyrant shrike, whiskered fly-catcher, and fork-tailed fly-catcher ; the black caps are found only in South America, where they are seen perched on the high branches of trees, ready to plunge at the passing insects ; as the Cayenne shrike, &c.

Case 57. The true Fly-catchers that are mostly found in the Old World ; their food consists principally of insects ; as the collared fly-catcher of Africa ; broad-billed tody, white-eared thrush, king tody of South America ; fan-tailed fly-catcher of Australia ; spotted fly-catcher, cold-finch fly-catcher of Europe and Great Britain ; black-headed fly-catcher of North America, &c. The fly-catching warblers, which are peculiar

to America, where they feed on insects and fruits; as the solitary fly-catcher, &c.

Cases 58, 59. The Chatterers: they are divided into several families: viz.

Case 58. The thick-heads, which are found in the forests of Asia, Australia, and South America; they generally live in pairs, seeking insects and fruits; as the guttural thrush of Australia, &c. The manakins are remarkable for their small size and showy colour; they feed on fruits and insects; as the red chatterer, red and black manakin, white-capped manakin of South America, and speckled manakin of Australia, &c. The chatterers are found in most parts of the world; they inhabit the low grounds or forests, generally in flocks, feeding on the berries of various plants, sometimes upon insects. Most of them are remarkable for the beauty of their plumage during the breeding season; as the purple-breasted chatterer, purple-throated chatterer, carunculated chatterer, variegated chatterer, and rock manakin of South America, &c.

Case 59. The Caterpillar-Eaters are found in South America, India, and Africa, where they feed upon caterpillars, which they collect upon the highest trees; as the grey caterpillar thrush of Africa, Javan thrush, ash-backed thrush of India, &c. The drongos are inhabitants of India, Asia, and Australia, and live on insects. Some species are remarkable for their power of song, which is as sweet as the nightingale's; as the Malabar shrike, fork-tailed shrike, crested shrike, and drongri shrike of Africa.

Case 60. Shrikes, or the true Butcher Birds. They are found in most parts of the world, pursuing grasshoppers, insects, young frogs, and small birds, which they impale on thorns, pull to pieces, and devour at their leisure; as the cinereous shrike, red-backed shrike of Europe and Great Britain, frontal shrike of Australia, Ceylon thrush of the Cape, and the grey-headed shrike of South America.

Case 61. The Bush Shrikes, which are inhabitants of Australia, Asia, and especially South America; as pied shrike, lineated shrike of South America; hook-billed shrike of Madagascar; and the Hot-niqua shrike of Africa, &c.

Cases 62—73. The CONIROSTRAL BIRDS.

These feed chiefly on grain and fruit. They form several families: viz.

Cases 62, 63. The Crows, which are divided into the following divisions: the *Phonygaminæ*, which inhabit Australia, New Guinea, &c., where they pursue small birds, and are very noisy and clamorous; as the piping roller, noisy roller of Australia; the jays, which generally live in forests of various parts of the world, as the jay of Europe and Great Britain; blue jay and cinereous jay of North America, &c. The true Crows, which are inhabitants of various parts of the world, and are generally seen on the ground, searching for carrion, worms, &c., as the raven, carrion crow, rook, hooded crow, and jackdaw of Europe and Great Britain, &c.

Case 63. The *Callæatinæ* are inhabitants of Africa, Asia, and Australia; as the changeable crow of Africa, rufous crow of India, cinereous wattle bird of New Zealand, &c.

Case 64. The *Gymnoderinæ* are very singular birds of South America; they feed on fruits; as the bare-necked grakle, fetid grakle,

&c. The Choughs are found in the elevated mountains of the Old World, and prey on insects and berries; as the red-legged crow and Alpine crow. These are occasionally found in Great Britain, &c. The Birds of Paradise are natives of New Guinea; their habits are perfectly those of the crow, as the greater paradise bird, king paradise bird, magnificent paradise bird, &c.

Case 65. The Shining Thrushes are found in Africa, Asia, and Australia, and they feed on fruits and insects; as the satin bower bird: these birds form artificial arbours of twigs, which they decorate with shells, bones, stones, and other articles, and through which they run in playful chase after each other; also the splendid thrush, brilliant thrush, &c., of Africa and India. The Grakles live in troops in the islands of the Indian Archipelago, searching for insects and fruits among the banana; as the minor grackle and bald grackle. The beef-eaters are inhabitants of Africa, where they live on the larvæ of a parasitical insect which they compress out of the skin of the rhinoceros by means of their bill; as the African beef-eater.

Case 66. The Starlings are found in both hemispheres, and they feed on the larvæ which attack cattle; they fly in large and crowded flocks; as the rose-coloured thrush of Europe, occasionally found in Great Britain; and Malabar grackle, pagoda grackle of India, &c.; cockscomb grackle of South Africa; common stare of Europe and Great Britain; Sardinian stare of Europe, &c., and the Louisiana stare of North America, &c. The *Quiscalinæ* inhabit New Guinea, but especially North and South America; as the gorget paradise bird of New Guinea, purple grackle and boat-tailed grackle of South America, &c.

Case 67. The Icteric Orioles are also peculiar to America, and live in flocks, feeding on grain and insects; as the black and yellow oriole, crested oriole, icteric oriole, and banana oriole, &c. The *Agelaiinæ*, like the preceding series, are also found in North and South America, generally in flocks among the cattle. Some of the species have a peculiar habit of laying their eggs in other birds' nests, as the cowpen oriole, red-winged oriole, &c.

Case 68. The Weavers, which inhabit Africa and India, and feed on grain. They form their nest of interwoven blades of grass; as the Philippine grosbeak, weaver oriole of Africa, &c. The hawfinches have a powerful bill, which enables them to feed on hard fruits, &c.; as the haw grosbeak of Europe and Great Britain, blue grosbeak of North America, crimson-breasted grosbeak of Africa, ground sparrows of Galapagos, and widow birds of Africa, &c.

Cases 68, 69. The Tanagers, which are peculiar to the New World, are remarkable for their beauty of plumage, and feed on grain, berries, and insects; as the red tanager and summer tanager of North America; red-breasted tanager, bishop tanager, golden tanager of South America, &c.

Cases 69, 70. The True Finches, which generally live in small flocks, feed on grain, and sometimes on insects; as the house sparrow, tree-finch, goldfinch, linnet, siskin, greenfinch, chaffinch, &c., of Europe, and found in Great Britain; wax-billed grosbeak, fasciated grosbeak of Africa; cowry grosbeak, white-headed grosbeak of India, &c.; sea-side finch, yellow-winged finch, song-finch of North America,

&c.; the buntings are found in the world generally, and feed on seeds; as the yellow bunting, foolish bunting, ortolan bunting, snow bunting, &c., of Europe, and found in Great Britain.

Case 71. The Larks have the power of singing while rising from the ground perpendicularly in the air; as the skylark, woodlark, &c., of Europe, and found in Great Britain; the bullfinches have very thick bills, which enable them to feed on hard grains and seeds; as the bullfinch, rosy-finch of Europe, pine grosbeak of North America, &c. The crossbeaks have the points of their bill crossing each other; as the common crossbill, greater crossbill of Europe, and parrot-billed grosbeak of the South Sea islands, &c. The plant-cutters are inhabitants of South America, and are said to feed on vegetables; as the Chili plant-cutter. The colies are peculiar to Africa and India, and live in flocks, feeding on fruits, and are remarkable for sleeping in companies, suspended by one foot, with the head downwards; as the Cape coly, white-backed coly, &c. The plantain-eaters inhabit Africa, and live in pairs, feeding generally on fruits; as the violet plantain-eater, Touraco plantain-eater, &c. In South America the crested pheasant is found.

Cases 72, 73. The Hornbills, which are peculiar to the Old World. They feed on fruits, mice, small birds, and reptiles, which they swallow whole, throwing them in the air and catching them in the throat; as the rhinoceros hornbill of Africa, helmet hornbill, Pannayan hornbill of India, &c.

Cases 74—83. The SCANSORIAL BIRDS.

They are divided into several subdivisions: viz.

Cases 74—76. The Parrots, which are inhabitants of all parts of the world except Europe. They live chiefly on fruits, and build in the hollow trees; as the racket-tailed parrot of the Philippine Islands; Pennantian parrot, ground parrot, &c., of Australia; horned parrot of New Caledonia; Alexandrine parrakeet, &c., of India; blue and yellow maccaw; hyacinthine maccaw of South America; Papuan lory; purple-capped lory of the Indian Archipelago; hawk-headed parrot, yellow-headed amazon's parrot, passerine parrot of South America; great white cockatoo, &c., of Indian Archipelago; red-crowned parrot, and Banksian cockatoo of Australia, &c.

Case 77. The Toucans, which belong to the New World, are similar to the hornbill in habits and also in food; as the yellow-breasted toucan, Aracari toucan, Janeiro toucan, &c.

Cases 78—80. The Woodpeckers, which inhabit various parts of the world, and are divided into several subdivisions: viz.

Case 78. The Barbets are inhabitants of India and its isles, South America, and Africa. Their food consists of insects, fruits and small birds; as the groove-billed barbican of Africa, &c.; Cayenne barbet; grand barbet of India. The *Picumninae* are found in South America and India; as the minute woodpecker, &c. The true woodpeckers inhabit North America, India and Europe; they traverse the bark of trees in every direction, and insinuate their long tongue into chinks and crevices to draw out the larvæ of insects, on which they feed; they also subsist on soft fruits; as the northern three-toed woodpecker, white-billed woodpecker of North America, &c., and greater spotted woodpecker of Europe, &c.

Case 79. *Dryocopinæ* principally live in South America, and feed chiefly on fruits and eggs of small birds; as the great black woodpecker of Europe; Cayenne woodpecker; red-headed woodpecker of North America, &c. The *Celeinæ*, which feed chiefly on insects and ants; as the green woodpecker of Europe and England; yellow-crested woodpecker of South America; Carolina woodpecker, &c.

Case 80. The ground woodpeckers are peculiar to America and Africa, live principally on the ground, and feed on ants, &c.; as the gold-winged woodpecker of North America, and crimson-breasted woodpecker of Africa. The wrynecks are inhabitants of Europe, India, and Africa, feeding chiefly on ants, which they secure by means of their long tongue; as the wryneck of Europe, also found in England.

Cases 81—83. The Cuckows, which are migratory birds, and are divided into several divisions: viz.

Case 81. The Honey Cuckows are found in Africa, where they are celebrated for guiding the natives to the nests of wild bees, enticing them to the spot by fluttering before them, and reiterating a peculiar cry; as the honey cuckow, and lesser honey cuckow, &c. The rain cuckows are peculiar to South America, where they live on snakes, fruits and insects, which they search for on the ground, as the long-billed rain cuckow, &c.

Cases 81, 82. The Coucals are inhabitants of the warmer parts of the world, and are generally searching among reeds and grass for grasshoppers, lizards, and fruits; as the giant coucal, variegated coucal, &c., of Australia; bubut coucal of Java, &c., and the straight-heeled coucal of Africa; Cayenne cuckow; spotted cuckow of South America.

Case 82. The Anis inhabit South America, the West Indies, Asia, &c., where they are found on the ground seeking for insects, and others feed on fruits; as the greater ani and lesser ani, &c., red-headed malkoha, and tricoloured malkoha of India.

Cases 82, 83. The True Cuckows are only found in the warmer parts of the world; their food consists of insects and fruits; the European bird deposits its eggs in the nests of other birds; as the great spotted cuckow, and white-crested cuckow of Africa, &c.

Case 83. Common cuckow of Europe, and also found in England, Dunnum cuckow of Africa; gilded cuckow, cupreous cuckow of Africa, &c.

Cases 84—106. The GALLINACEOUS BIRDS.

Case 84. The Tree Pigeons are found in Asia, Africa, Islands of the South Sea, and Australia, where they reside in the woods, feeding on fruits and berries; as the parrot pigeon, aromatic pigeon of India, &c. black-capped pigeon of Java, &c.

Cases 85, 86. The True Pigeons and Turtles: these inhabit most parts of the world; their food consists of grains and seeds, as the antarctic pigeon of Australia; nutmeg pigeon of the Indian Isles; ring pigeon of Europe and England.

Case 87. The Migratory Pigeon of North America, and common turtle of Europe and England.

Case 88. The Ground Doves, which are mostly found on the ground, seeking for grains and seeds, in most parts of both hemispheres; as the bronze-winged pigeon of Australia, &c.; the ground turtle;

Talpacoti pigeon of America; partridge pigeon of the West Indies; Nicobar pigeon; and great crowned pigeon of Indian Isles.

Cases 89, 90. The Curassows, which are peculiar to South America, where they live in small flocks, searching the ground for worms and insects, they also feed on fruits; as (Case 89) the marail guan, motmot guan; (Case 90) crested curassow, razor-billed curassow, cushew curassow.

Cases 91—103 embrace the series of Pheasants: viz.

Cases 91—93. The Peacocks, which are inhabitants of India and its isles, where they are found in the woods and jungles, feed on grains.

Cases 91, 92. The crested peacock of India, Japan peacock.

Case 93. Iris peacock, &c., argus pheasant, &c.

Cases 94, 95. The True Pheasants: these are found wild in various parts of Asia, but some of them have become naturalized in Europe; they feed on grain, roots and insects; as the common pheasant, painted pheasant, and the Reeves's pheasant of China.

Cases 96—99. The fowls which are inhabitants of the jungles and woods of the continent and isles of India; their food consists of grain and fruits, &c., as (Case 96) the pencilled pheasant of China, coloured pheasant of Himalayan Mountains, &c. Case 98. Rufous-tailed pheasant, and fire-backed pheasant of Sumatra, &c.; Sonnerat's wild cock, superb pheasant, Javan cock, &c. Case 99. Horned pheasant, black-headed horned pheasant of India, &c.

Cases 99, 100. The Turkeys and pintados are found in America and Africa; they feed on grain and other vegetable substances; as (Case 99) the Guinea pintado, crested pintado of Africa; (Case 100) American turkey, &c.

Case 100. The Impeyan pheasants are peculiar to the northern parts of Asia, where they feed on bulbous roots, which they dig up by means of their bills; as the Impeyan pheasant, Pucras pheasants, &c.

Cases 101—103. The Partridges are found in both the New and Old World, where they generally inhabit the plains; their food consists of grain and other vegetable substances; as (Case 101) the sanguine pheasant, currie partridge of Nepaul, &c., cape partridge, bare-necked partridge of Africa, francolin partridge of Europe and India. Case 102. Red partridge of Europe, olive partridge of India, common partridge and quail of England, Andalusian quail of Spain, &c. Case 103. Crowned partridge of India, Californian quail, and crested quail, &c.

Cases 104, 105. The Grouse, which are peculiar to the northern parts of Europe and America: viz. the True Grouse, which are natives of the forests of the high northern latitudes of both hemispheres, and of the highest mountains of central Europe; they feed on grain, buds and fruits; as the wood grouse, which is sometimes taken in the North of Britain, as well as the ptarmigan grouse and willow grouse; sharp-tailed grouse, ruffed grouse, both of America. Case 105. Sand grouse are only found in the deserts of the hottest parts of the Old World, as the pin-tailed grouse and sand grouse, &c.

Case 106. The Sheathbills have all the appearances of grouse: some inhabit the plains of South America, and others are generally seen on the sea shore, or far out at sea; as the white sheathbill and

black-billed sheathbill, &c. The Tinamous are inhabitants of the warmer parts of the New World, where they are seen among the low brushwood or tall grass; their food consists of fruits and insects; as the great tinamou, variegated tinamou, &c. The Megapodius is peculiar to the Asiatic Islands and Australia, as the megapodius, and the New Holland vulture, &c.

Cases 107—134. The WADING BIRDS.

Cases 107—109. The Ostriches, which are in flocks, and subsist on grain, fruits and herbage; as the ostrich of Africa; American emu, New Holland cassowary, and galeated cassowary.

Case 108. The Dodo, which is only known by remains, as, for example, the foot in this Case (presented by the Royal Society), and a head (of which is a cast in this Case) and foot, said to have belonged to a specimen which was formerly in Tradescant's Museum, now forming part of the Ashmolean Museum of Oxford. The bird represented in the painting, in the shortness of the wings and colour, has much analogy to the ostrich, but its foot greatly resembles that of the common fowl; and the head, from the cere and the position of the nostrils, is most nearly allied to the vultures; so that if these remains really belonged to one species, and that the one here represented, its true place in the series of birds is not as yet satisfactorily determined. An original painting of this bird, presented to the Museum by George Edwards, (and copied in his works, plate 294,) who says it was drawn in Holland, from a living bird brought from St. Maurice's Island, in the East Indies, is placed on the back of the Case. The Apteryx is peculiar to New Zealand, where they are nocturnal birds, and feed on worms and insects.

Cases 110, 111. The true Bustards, which are peculiar to the Eastern Hemisphere and Australia; they feed equally on grain, herbage, worms and insects; as the great bustard, of Europe, but occasionally found in England; Arabian bustard; white-eared bustard of Africa; ruffed bustard of North Africa.

Case 112. Coursers that live in the sandy deserts, where they run with surprising speed if disturbed; they feed on worms, &c.; as the cream-coloured courser of Northern Africa, which has occasionally been found in Britain; double-collared courser of Africa, &c.; the thick-knees are found in the uncultivated open country and dry deserts, searching for worms, slugs and insects, &c., as the thick-kneed bustard of Europe and Britain, &c.

Case 113. The Plovers inhabit Europe and various parts of the world; their food consists of worms, insects, &c.; as the golden plover, dotterel plover of Europe, and found in Britain; spur-winged plover, wreathed plover of Africa, &c.; ringed plover of Europe, and common in Britain; noisy plover of North America, &c.

Case 114. The Turnstones obtained their name from the habit of turning stones over to seek for the small shells and crustacea that are hid under them; as the turnstone sandpiper of the English shores and of other parts of the world. The Oyster-catchers seek their food on the sea-shores of England and other places; it consists of shell-fish, which they are enabled to wrench out by inserting their bill between the valves, also of other marine productions; as the pied oyster-catcher, black oyster catcher of Australia, &c.

Case 114. The Trumpeters, which are peculiar to South America: as the gold-breasted trumpeter, and Brazilian cariamá.

Cases 115—117. The true Cranes, which are found in most parts of the world, on the borders of rivers and inundated places, seeking for small fish and reptiles: as the common crane of Europe; Siberian crane; Indian crane; crowned heron; demoiselle heron of Africa; caudate snipe of South America. Cases 117 and 118. Common and purple-crested heron of Britain; great heron of North America; pacific heron of Australia. Case 120. Great egret, little egret, &c. Case 121. Demi egret, and blue heron* of America, &c. Case 122. Bittern of Europe, &c.; lineated bittern of America; squacco heron of Europe; and little bittern of England, &c. Case 123. Night heron of England and America, &c.; tufted umbre of Africa; cinereous boat-bill of South America, and the spoonbill of England and Europe, &c.

Cases 124, 125. The Storks, which frequent the retired marshes and borders of pools in various parts of the world, where they prey on reptiles and small fish. Case 124. The white and black stork of England and Europe; American stork, &c. Case 125. Gigantic crane of India, &c.; American jabiru; Senegal jabiru, &c.

Cases 125, 126. The Ibises, which are inhabitants of the inundated places of various parts of the world, seeking for frogs, snails, and worms, &c. Case 125. The wood ibis of North America, &c. Case 126. Ethiopian ibis; black-headed ibis of India; New Holland ibis, &c.

Case 127. The Godwits: these birds migrate according to the season to various parts of the world; their food is composed of small molluscous animals, worms, &c.; as the common godwit, red godwit of England, terek snipe of Australia, &c.

Case 128. The *Totaniæ*; these birds search among the gravel and stones of the banks of lakes and rivers for worms, insects and molluscous animals, as the stagnile snipe of Europe; greenshank snipe, common sandpiper of England; and Bartram's sandpiper; semipalmated snipe of North America. The Avocets are remarkable for the extreme length of their legs, which enables them to search the muddy shores or mouths of the rivers for small insects and spawn of fish, &c.: as the scooping avocet, long-legged plover, &c.

Case 129. The Sandpipers are inhabitants of most parts of the world, seeking their food on the sea-shore and in marine marshes; as the knot sandpiper, ruff sandpiper, purre sandpiper, lesser grey sandpiper, of England, &c. The Phalaropes are found on the sea-shores of the Arctic regions; their food consists of crustacea, &c.; as the red phalarope, grey phalarope, &c.

Case 130. The True Snipes inhabit the thickest underwood, others seek the marshy districts; their food consists of worms and insects; as the woodcock, great snipe, common snipe, jack snipe of Britain, Cape snipe of India, &c.

Case 131. The Jacanas, which inhabit the marshes of the warmer parts of the world, where they walk with facility on the floating leaves of aquatic plants, as the chestnut jacana of South America, Chinese jacana, &c. The Screamers are inhabitants of the inundated ground of South America; as the horned screamer and Chaja screamer.

Case 132. The Rails live among the reeds on the borders of lakes,

and in marshes, feeding on worms, &c. ; as the water rail, crake gallinule, olivaceous gallinule of Britain, clapper rail of North America, &c.

Cases 133, 134. The Gallinules are found on the rivers and lakes, among the reeds, seeking their food, which consists of worms and larvæ of insects, as the purple gallinule of Europe, black-backed gallinule of Australia, &c. ; Martinico gallinule of South America ; common gallinule of Britain, &c.

Case 134. The Finfoots are peculiar to South America and Western Africa ; as the American finfoot, &c.

Cases 135—166. The WEB-FOOTED BIRDS.

Case 135. The Flamingos, which are found in the warmer parts of Europe, &c., on the banks of rivers and lakes, feeding on small shell fish, which they seize by inverting the head, to employ with advantage the crook of the upper mandible, as the red flamingo, &c.

Cases 136, 137. The Spur-winged Geese inhabit Asia, Africa, and Australia ; as the spur-winged goose, black-backed goose, &c.

Cases 137—140. The Geese are found in various parts of the world, during their periodical flight ; their food consists of grain and grass ; as the New Holland cereopsis, Magellanic goose, Canada goose, barred headed goose of India, grey-legged goose, and white-fronted goose of Britain, &c.

Cases 141—143. The Swans are remarkable for their graceful appearance upon the water, and are found in most parts of the world ; they feed on roots of aquatic plants, &c. ; as the whistling swans, black-necked swan, &c.

Cases 144—148. The True Ducks : these birds are inhabitants of the lakes and rivers of the interior, but occasionally resort to the sea-shore of various parts of the world ; their food consists of vegetables, insects and shell-fish, as the red-billed whistling duck of South America ; shieldrake, widgeon, pintail duck, common teal, &c., of Britain ; Chinese teal, and others.

Cases 148—150. The Sea Ducks are principally inhabitants of the ocean or saline lakes, and are sometimes found on rivers of the interior, seeking for small crabs, shell-fish, &c. ; as the scoter duck, eider duck, tufted duck, nyroca duck, red-crested duck of Britain, &c.

Case 150. The Spinous-tailed Ducks are found in the warmer parts of the world, as the lobated duck of Australia, Ural duck, &c.

Case 151. The Mergansers inhabit the Arctic regions ; their food consists principally of fish, &c. ; as the goosander merganser, red-breasted merganser, hooded merganser, &c.

Cases 152, 153 contain the Divers : they form two divisions.

Case 152. The True Divers are found in northern regions, and are rapid divers, feeding on fish ; as the northern diver, black-throated diver, &c.

Case 153. The Grebes inhabit most parts of the world, feeding on small fish, crabs, &c. ; as the eared grebe, crested grebe, &c., of Britain.

Cases 154, 155 contain the Auks ; these are oceanic birds, inhabiting the Arctic circles, feeding on fish and other marine productions, and are thus divided :

Case 154. The True Auks ; as the great auk of Orkney, puffin auk, razor-billed auk of the British shores, &c.

Case 155. The Sea Parrots; as the parroquet auk, crested auk, Cape penguin, crested penguin, &c.; the Guillemots; as the foolish guillemot, black guillemot of Britain.

Cases 156—161 contain the Gulls: these birds are divided as follows:

Case 156. The Petrels, which are found in the high latitudes of both hemispheres, feed on fish, &c.; as the diving petrel, stormy petrel, Manks petrel, Fulmar petrel, and broad-billed petrel, &c.; giant petrel, wandering albatross, &c.

Cases 158—160. The True Gulls: they are found in every part of the world, feeding on all kinds of animal matter, fish, &c.; as the Arctic gull, glaucous gull, black-backed gull, little gull, &c., of Britain; fork-tailed gull, kittiwake gull, &c.

Case 161. The Terns are met with on every coast in the world, and occasionally inland, on the lakes, feeding on marine productions; as the Caspian tern, roseate tern, gull-billed tern, minute tern, &c., of Britain; white-winged tern, &c. The Skimmers have remarkably formed bills, that enable them to skim the surface of the sea, in which they dip the lower mandible, the upper being elevated out of the water, until the prey is felt by the lower; as in the black skimmer.

Case 162. The Tropic Birds are peculiar to tropical climates, where they catch the fly-fish, &c., as the common tropic bird, red-tailed tropic bird, &c. The Darters live in small flocks, on the trees that overhang the rivers, &c., from whence they plunge into the water, and catch fish by darting at them with their sharp bill and long vibrating neck; as the white-bellied darter, &c.

Cases 162—166. The Pelicans that inhabit the marshes and sea coasts, feeding on fish, &c.; as the gannet of Britain, &c. Cases 163 and 164. White pelican, red-backed pelican, &c. Case 165. Common cormorant, shag of Britain, &c.; and Case 166. Greater frigate bird, and lesser frigate bird.

THE EGGS OF BIRDS

are placed in the smaller Table Cases along the side of the room; they are arranged in the same series as the birds in the Upright Cases. The Table Cases, in each department of the room, contain the eggs of the species in the Cases near to them.

THE SHELLS OF MOLLUSCOUS ANIMALS

are placed in the larger Table Cases across the sides of the room, (in progress of arrangement).

Tables 1—26. UNIVALVE SHELLS,

belonging to belly-walking, or Gasteropodous Mollusca.

Tables 1, 2. The *Strombs*, as the large pink-mouthed stromb, from the West Indies. With it are some of the pink pearls which are formed by the animal; they are extremely rare and valuable when of a good shape. The Diana ear stromb; the spiders' claws, sea scorpions, &c., which are peculiar for the outer lip of the full grown shell being furnished with finger-like projections; the terebellum, which is polished like the olive, but has no groove on the suture, and the front of the shell as it were cut off. The spindle strombs, of the Red

Sea, which have the cavity of the tip of the shells filled up with crystalline matter as the animal grows.

Tables 2—8. The various genera allied to *Murices*.

Tables 2, 3. The Trumpet Shells (*Triton*), the larger species of which is often used as a trumpet by the natives of the Pacific Islands. The angulated or gadrooned triton. The gadrooned edge, so generally used by silversmiths, was taken from the finely wrought margin on the mouth of this shell. The frog shell (*Ranella*), so called because they are flattened shells, and have a ridge of spines on each side.

Tables 3, 4. The Rock Shells (*Murex*), so beautifully ornamented with the foliaceous, curled and spinous protuberances with which their shells are adorned. Among others, the *Murex trunculus* of the Mediterranean, which is believed to have yielded the Tyrian purple of the ancients. The Slit-mouthed Shell (*Pleurotoma*), with a notch on the hinder part of the upper lip, as the virgin slit-mouthed shell, from China.

Tables 5, 6. The Cone Shells, among which is to be seen the celebrated Glory of the Sea (*Conus Gloria Maris*), from the Philippines; it is very like some varieties of the cloth of gold. The setting sun cone (*Conus Vespertinus*), from the east coast of Africa.

Tables 6, 7. The Spindle Shells (*Fusus*), and the Pear Shell (*Pyrrula*); some of the shells have the whorls always turned in the contrary direction to the usual one, and have hence been called reversed; as the reversed spindle shell, from Sicily, or the Crag Rocks, and the reversed pear shell. It is commonly believed that reversed shells of this kind are only found fossil; but this is not the case, and reversed specimens of shells which have the whorls in the usual direction sometimes occur; but they are monstrosities, produced by some accident of the animal before it is hatched. Specimens of the common whelk, and one or two other shells of these kinds are to be seen in the collection, but they are rare, and hence persons have been induced to believe that reversed shells are always very valuable, but this is not the case. A specimen of the reversed spindle shell, of the reversed bulimus, or of physæ or clausiliæ, with the whorls in the common direction, would be as rare and valuable as reversed shells of those kinds which are generally of the common direction. The large Chinese spindle shell, which grows to a large size.

Tables 7, 8. The Turnip Shells (*Turbinella*), some kinds of which are very large and heavy. They are generally spotted when young and white when adult, and from their form have been called Turnip Shells or Rape Shells; these are often used as oil vessels in the Indian temples, and for this purpose are carved and otherwise ornamented, as may be seen by some in the collection. When reversed they are much sought for by the Ceylonese, and highly valued; one of these reversed clamp shells is in the collection: they are said to sell for a very large price in Ceylon and China. The Iris wave, (*Turbinella prismatica*), so called, because when the shell is wetted the periostraca gives out brilliant prismatic reflections. The tulip shells, (*Fasciolaria*), among which is a kind which is by far larger than any other univalve shell yet discovered. The ostrich foot, (*Struthiolaria*), and the pelican's foot, (*Aporrhais*.)

Tables 8—11. The genera allied to *Buccinum*.

Table 8. The helmet shells, (*Cassis*), some of which grow to a very large size, and are used to form cameos.

Table 9. The *Cassidea*. The false helmet (*Cassidaria*). The harp helmet (*Cyathura*). The tun, (*Dolium*), which are often used in tropical climates to bale boats with. And the harps, (*Harpa*), so called because the ribs left on the surface by each succeeding addition to the growth of the shell have been compared to the strings of a harp. In some species these ribs are far apart, in others close; the latter are called the double-stringed or ridged harp, they were formerly very rare.

Table 10. The purple shell, (*Purpura*), so called because, like many other of the animals of this kind, they emit a purple secretion which has been used in dyeing. The unicorn shell, (*Monoceros*), so called because of the tooth-like horn on the front of the edge of the outer lip. The planaxis, which has been confounded with the periwinkles. The limpet purple, (*Concholepas*), which was formerly arranged with the *Patella*, because of the large size of the mouth of its shells. It exactly resembles the left valve of the heart cockle, a bivalve shell, in shape, but it has the same small horn-like projection on the front of the outer lip. The mulberry shells, (*Ricinula*), which are usually covered with spines, and have been thought to resemble the fruit. The *Magillus* which, when the shell was first discovered, was thought by Guetard to be a stalactite, or mineral secretion; more lately Lamarck placed it with the worm shells, but the animal scarcely differs from the *Purpura*; when the animal is young it has a thin shell of nearly the usual form, but of a white colour: at a certain period of its growth, the animal deposits in the cavity such a quantity of calcareous matter as to produce the shell, in its subsequent growth, into a more or less elongated straight process, leaving only a small cavity for the body of the animal at its end. They exist in or on corals, and the extension of the shell is to allow the animal to keep its body level with the surface of the growing coral that it may be enabled to procure its food. The *Litiopæ* which, continually floating about the ocean, are attached to the Gulph weed. The wheelks (*Buccinum*). The needle shell (*Terebra*). The *Bullia*, which has a very large animal for the size of the shell.

Table 11. The *Nassa*. The *Ringicula*, which has been confounded with the *Auricula*, but only differs from the *Nassæ* in having the large plaits on the pillar. The *Olives*, *Annularia*, and butter shells, or *Eburna*, which are polished externally: as the camp olive, (*Oliva porphyria*), from Panama; the Brazilian olive (*O. Brasiliensis*).

Tables 12—14. The genera allied to the *Volutes*.

Table 12. The Melons, or *Cymbium*, which often grow to a large size, and are used for domestic purposes by the Chinese and other Asiatic nations: as the crowned melon, and some of the *Volutes*. The young of the melons are produced alive and of a large size, the top of the spine is of an irregular shape like a nipple.

Table 13. The *Volutes*; as the very rare courtier or red clouded volute (*V. aulica*); the gambaroon (*Voluta Beckii*); the imperial volute (*V. imperialis*), from China; long-spined volute (*V. ancilla*), from the Falkland Islands.

Table 14. The rest of the volutes, and the *Mitres*, which differ from the former in having a longer spire; as the bishop mitre (*M. episcopalis*); the abbot mitre (*M. tiara*); the papal crown (*Mitra Papalis*); the orange flag (*Mitra vexillum*); the cracked mitre (*M. fissurata*). The date shells (*Marginella*), which are covered with a polished coat, like the cowries and olives, as the spotted and lined date (*Marginella Persicula*); the robin (*Marg. glabella*).

Tables 15, 16. The Cowries (*Cypræa*) and their allied genera.

Table 15. The Cowries, as the morning dawn, or orange cowry (*Cypræa aurantium*), used as an ornament by the inhabitants of the Friendly Islands, and therefore seldom procured without having been drilled; the map cowry (*C. mappa*); the *Cypræa Valentiana*; the mole (*Cypræa talpa*); the lapwing egg (*Cypræa mus*), with scarcely any teeth; the white-toothed cowry (*Cypræa leucodon*); the money cowry (*C. Moneta*), still used as currency in Africa.

Table 16. The pig cowries (*Trivia*), which from the ribs on the back have been compared to scored pigs, from their resemblance to the animal; the China shell, or *Ovula*, as the *Ovula angulosa*, which, like the orange cowry, is worn as an ornament by the natives of the country where it is found, and where it is so valued that they sometimes cut cones or other thick white shells into its shape. These shells are called *Porcellaines*, and are supposed to have been the cause of china being called by that name. The weaver's shuttle (*Radius*), which is so called from its shape.

Table 16. The various genera allied to *Turbo*, as the pomegranate or *Turbo Sarmaticus*, from the Cape of Good Hope. The singular, or *Turbo torquatus*, with its peculiar operculum, from New Zealand. The golden sun (*Imperator occidentalis*), from the West Indies. The imperialis, from New Zealand. The Guilfordian sun (*Imp. Guilfordiæ*), from Japan. The pheasant (*Phasianella varia*), from New Holland.

Table 17. The Top Shells (*Trochus*) and their allied genera; as the pyramid (*Pyramis*). The rosary (*Clangulus Pharaonicus*). The jujube berry (*Trochus Ziziphorus*). The iris or rainbow eardrop (*Cantherus Iris*), from New Zealand. The button shell (*Rotella lineolata*). The strawberry (*Monodonta*). The gold button (*Livona aurea*), which is peculiar for the light golden colour of the pearl. The dolphin (*Delphinula*).

Table 18. The false ear shell (*Stomatella* and *Stomatia*). The true ear shell (*Halotis*), as wrinkled ear (*H. Midæ*); the iris or rainbow ear (*H. Iris*); the slender ear (*H. Asinina*); the double ribbed ear (*Padollus*). The slit limpet (*Emarginula*). The shield shell (*Parmophorus*). The key-hole limpet, or mask (*Fissurella*). The long-holed limpet (*Machrochisma*). The tooth shells (*Dentalium*). The false patellas (*Lottia*), from South America. The nerites (*Nerita*). Fresh-water nerites (*Neritina*). The crowned nerites (*Clithon*), and the fresh-water boat shells (*Navicella*).

Table 19. The apple snails (*Ampullaria*). The reversed apple snails (*Lanistes*). The purple, or floating snail (*Ianthina*). The nipple shell (*Natica*).

Table 20. The Venus' ear (*Cryptostoma*). The winkle (*Littorina*), and other genera allied to them. The pagoda shell (*Pa-*

godus). The staircase shell (*Solarium*), so called on account of the ridge round the cavity in the axis or umbilicus resembling a well staircase. The screw (*Turritella*) as the press screw (*T. bicarinata*). The milk shell (*Eulima*). The ladder shell (*Scalaria*), often called by the Dutch name, Wentletrap, signifying a winding ladder, they were formerly very rare, but are now brought from China.

Table 21. The fresh water clubs (*Melania*); the clubs (*Cerithium*); and the pond snails (*Paludina*).

Table 22. The worm shell (*Vermetus*), which are like the tubes of serpulæ. The fool's cap (*Capulus*), and the Hipponyx with its shelly under valve, which has caused it to be mistaken for a bivalve shell. The slipper shell (*Crepidula*). The cup and saucer limpet (*Dispotea*). The Trochus-like limpet (*Trochila*) and the Neptune's cap, which has a cup-shaped under valve. The carrier (*Phorus*) which has the peculiarity of attaching to the outer surface of its shell, as it enlarges in size, stones, fragments of other shells, coral, and other marine substances, from whence it has been called respectively "Conchologist," and the "Mineralogist," as shell or mineral preponderated. Some of the species have this habit only in an early stage; others retain it during the whole period of their existence; some have the margin of the whorls expanded out into a broad disk, others have this part furnished with a series of long tubular processes like the rays of the sun, hence the name of Sun Carriers. The Bubble Shells (*Bulla*), and the shelly plates found in the gizzard of some of the species. The rose-bud (*Bullina*).

Table 23. The horny shells found under the skin of the sea hares (*Aplysia*), and the shelly blade bone shell of Dolabella, from the Indian seas. The very fragile and thin glassy nautilus (*Carinaria*), and the different species of paper nautilus or Argonauts. The poetic account of the animal usually found in this shell using its dilated arms for sails, and its slender arms as oars, from whence Pope gave his well known lines,

"Learn from the little Nautilus to sail,

Spread the thin oar and catch the driving gale,"

proves to be a fiction. The dilated arms are used by the animal to clasp the shell and keep it on the body, when it passes through the water, like other cuttle fish, with the broad part of the body forwards. The flat orbicular shell of the Chinese umbrella (*Umbrella*), and the horny thin silvery shells found under the skin on the backs of *Pleurobranchus* and *Berthella*. The Limpets (*Patella*). Scaly Chitons (*Chitons*). Spiny Chiton (*Acanthopleura*). Leathery Chiton (*Tonichia*). Fasciculated Chiton (*Acanthochetes*). *Chitonella*, or sea caterpillars, and the *Amiculae*, or shellless chitons.

Table 24—30. The various genera of Land Shells, as the shelly plates which are found under the skin of the slugs and the different kinds of snails or *Helices*: as the Streptaxis, which has the axis bent on one side, as if the shell was crushed. The Grecian lamp, (*Helix Anastoma*), which has the mouth turned up towards the whorls on the upper surface of the shell. The *Proserpina*, which has the cavity of the shell furnished with large continuous folds.

Tables 27—29. Land Shells continued: as the different kinds of *Bulimi*; the puppets (*Pupa*); the closed shell (*Clausilia*), which

has a shelly valve that closes the mouth of the shell, placed behind the plait on the pillar, and the *Achatinæ*. Many of these shells deposit a large egg covered with a hard shell, like the eggs of birds. The eggs of different kinds are in the Case.

Table 29, 30. The Fresh-water Shells, as the different genera allied to *Auricula*, amongst which is the *Carychium*, the most minute of the British land shells; and the different kind of pond snails (*Limneus*), coil shells (*Planorbis*), and fresh-water limpets (*Ancylus*). The *Amphibolæ*, from Australia. The *Siphonariæ*, which so much resemble the limpets; and lastly, the various kinds of *Cyclostomæ* and *Helicinæ*.

Tables 31—45. The BIVALVE SHELLS,

Which are under arrangement into tribes.

Table 46. The LAMP SHELL (*Terebratula*); Duck muscles (*Lingula*); the *Cranæ* and *Discinæ*, the upper valves of which have been mistaken by some authors for limpets; the BONES of CUTTLE FISH (*Sepia*); the cartilaginous lances of sea leaves (*Loligo*), sometimes called sea pens. The fossil *Belemnites*, which are supposed to be similar to the small horny process at the end of the cuttle fish bone. The crozier shell (*Spirula*), and the different kinds of *Ammonites* and *Nautili*.

THE NORTHERN ZOOLOGICAL GALLERY.

FIRST ROOM.

This room may be for the present considered as an appendage to the two foregoing.

The WALL CASES. A series of the skulls of the larger MAMMALIA to illustrate the characters of the families and genera, and of the nests of birds, and the arbours of the two species of Bower Bird; the one ornamented with fresh-water shells and bones, and the other with feathers and land shells, &c.

The TABLE CASES. The tubes of ANNULOSE ANIMALS, the casts of the interior cavities of SHELLS, and various specimens of shells, illustrative of the diseases and malformation of those animals.

Tables 1, 2 contains the shelly tube formed by the *Serpulæ*, which have often been confounded with shells. The tubes of sand agglutinated together by the juices of the animal formed by the *Amphitrites*.

Tables 3, 4 contain specimens of shells, exhibiting the different size of different specimens in their adult age, the changes of form which occur in the shell during the growth of the animal, the changes which take place in the cavity of shells, the manner in which shells are mended by the animal after any injury, and also how the animal covers any excrescence which attaches itself to a shell, or removes any part which is in the way of its enlargement.

Tables 5, 6 contain a series of plaster casts of the interior cavities

of different shells of living mollusca, to assist in determining the casts of fossil species often found in rocks.

Tables 7, 8 contain a series of models on an enlarged scale, and some specimens of minute bodies, formerly called *Nautili*, but now formed into a group under the name of *Foraminifera*.

SECOND ROOM.

The UPRIGHT CASES round the room contain the collection of REPTILES and BATRACHIAN ANIMALS, preserved dry and in spirits, and the TABLE CASES the first part of the collection of the hard part of RADIATED ANIMALS, including the SEA EGGS, SEA STARS, and ENCRINITES.

THE WALL CASES.

Cases 1—7. The LIZARDS.

The Cases 1—3. The Monitors of Africa and India. In both countries they are venerated by the natives, who assert that they give notice of the approach of crocodiles, by hissing when they perceive one of those animals; hence their name.

Case 3. At the bottom are the *Heloderms* from Mexico, which, unlike any other lizard, have a groove in the back of the teeth like serpents. They are said to be poisonous, but this may be a mistake, for ignorant persons are inclined to believe that all reptiles are dangerous.

Case 4. At the upper part, the Safeguards of the tropical parts of America. They grow to a large size. The *Crocodylus* has two keels in the tail like the crocodiles. The lower part of the Case, the lizards of Europe and North Africa, and the snake lizards (*Chamaesaurus*), which have very long bodies, and small or very rudimentary legs.

Case 5. The Scincs and other allied genera, which are generally small and polished. They come from the warmer parts of both hemispheres. Some have distinct and strong legs, and others rudimentary ones; as the blind worms, which have the bones of the legs hid under the skin; they are all quite innocent. In the lower part of the Case are the *Aprasia*, *Pygopi*, *Delma* and *Lialisida*, or different kinds of blind worms from Australia, and the *Acontia* from the Cape of Good Hope.

Case 6. The Geckos, or night lizards, which have the power of walking up glass, or even to run with facility back downwards on the ceiling of a room, like a fly. They come from the warm parts of both hemispheres, and differ greatly in the form of their toes; some have the skin of the sides spread out to assist them when jumping from tree to tree. In the lower part are the various lizards allied to the Guanas. They are only found in America, and live on trees; are very quarrelsome, and often fight with great ardour when they meet; they have the faculty of changing their colour with great quickness. The Anoles have the end of their toes dilated, which enables them to walk on smooth and perpendicular surfaces, like the Geckos.

Case 7. The different genera allied to Agama. They are only found in the warmer parts of the Old World and Australia; as the *Molochs*, which are almost entirely covered with large spines; the Dragons of India, which have the skin of their sides spread out into the form of wings, held up by the ends of the ribs; when at rest these wings are folded

together on the sides, but when it leaps from branch to branch they are spread out and act as a parachute; the frilled agama (*Chlamydosaurus*), which has a large folded frill round its neck like a queen Elizabeth's ruff, which it can elevate when excited. The lower shelves contain the different kinds of chameleons, which are found in Africa and India, and the islands near them; they have been long celebrated on account of the rapidity with which they change their colours; and they are remarkable for the distance to which they can protrude the tongue in order to catch insects, which form their principal food.

Cases 8—19. The SNAKES or SERPENTS.

They differ from the lizard in always swallowing their food entire.

Case 8. The POISONOUS SERPENTS.

In the upper shelves are placed the Rattle-snakes peculiar to America, which have a rattle at the end of the tail; this rattle is formed of a series of horny joints, fitting one into the other, which the animal can shake at pleasure; there are several detached rattles, to shew their structure; the fer de lance of the French colonists in South America, and the different kinds of poisonous snakes allied to the rattle-snake which come from India. The lower shelves contain the Vipers; as the adders of Europe, the long-nosed viper (*Ammodytes*) of Southern Europe; the crested or double-horned viper of Egypt and North Africa; the nosehorn viper of Guinea, and the puff adder or short-tailed viper of the Cape of Good Hope and Western Africa. The viper is the only reptile found in Great Britain possessed of dangerous poisonous qualities.

Cases 9—19. The HARMLESS SNAKES.

Cases 9—17. The genera allied to Coluber; as the water snakes (*Tropidonotus*) and the common ring snake of England; the coral snake (*Elaps*), which is marked with alternate black and red rings; the flat-tailed coral snake, which lives in the sea and has a flattened tail; the juggler snakes (*Naja*), which have the faculty of dilating the skin of the neck so as to form a kind of hood over the head; they are found in Africa and India, and are used by the native jugglers in their exhibitions; the Indian species have usually a yellow spot on the back of the neck, somewhat resembling a pair of spectacles. These snakes have their hinder teeth larger than the rest; are furnished with a poison tube, like the fang of the rattle-snake and vipers. The tree snakes, or coach-whip snakes have very long bodies; they live chiefly on trees; one of these is peculiar for its nose being much produced.

Case 18. The genera allied to the *Boa*; they are the only snakes furnished with the rudiments of legs; they are not venomous, and kill their prey by crushing it between the folds of the body, generally at the same time twisting the end of their prehensile tail round a tree or some other fixed point, in order to increase their power; some come from America, some from India, and a few from Africa.

Case 19. The Sea Snakes, which are peculiar to the seas of Asia and New Holland, and are in some degree dangerous, as many of the species have small fangs dispersed amongst the true teeth; some of them grow to a very large size; they sleep on the shores coiled up, and are sometimes found asleep on the surface of the calm tropical seas.

On the lower shelves is the *Acrochorde*, found in the ditches of the rice-fields of India.

Cases 20—23. The TORTOISES and TURTLES.

Case 20. The LAND TORTOISES, which live on vegetable substances. They are used for food; as the gigantic Indian tortoise, naturalized at Gallapagos, from whence they are procured in large numbers for food by the sailors; and the different species from India, Africa and America, many of which are beautifully varied with yellow.

Cases 21, 22. The FRESH-WATER TORTOISES, or Terrapins, which live on animal food; they are found in the warmer parts of both hemispheres, and are eaten by the North Americans and the natives of India. Some grow to a large size, as the crocodile or snapping tortoise of America, and the thurgi tortoise of India. On the lower shelves of Case 22 are the *Chelydæ*, which differ from the other terrapins in bending their head back under the margin of the shell when at rest, and cannot withdraw it into the cavity of the shell like the other tortoises. These animals will only take their food while in the water, when in confinement.

Case 23. The three-clawed terrapins, which live in the rivers of Africa and Asia, and North America; they are strictly carnivorous, and eat their food in water; they are to be seen in the Ganges preying on the human bodies that float down that river. The lower shelves of this Case contain the Marine Turtles, which live principally on fuci, sea-weeds, shells, and crustaceous animals: as the Luth of the Mediterranean; the green turtle, and the imbricated turtle, or tortoise-shell turtle of Arabia, which furnishes the best sort of tortoise-shell.

Case 24. The specimens of CROCODILES.

The Crocodiles inhabit both the Old and New World; the alligators, only found in America; and the gavials, which are peculiar to India. The lower shelves of this Case contain the double-headed snakes (*Amphisbæna*), so called because both ends are nearly equally blunt, which has led to the idea that they could walk backwards and forwards with the same facility.

Cases 25—26. The BATRACHIAN ANIMALS.

The toads, frogs, and efts: the most remarkable are the tree frogs, which have the power of walking on polished surfaces, and of attaching themselves by their feet to, and walking with their bodies suspended on the under side of the smoothest leaves; they fix themselves directly they alight on any body, and, like many reptiles, they have the faculty of changing the colour of their skins, which often enables them to elude the vigilance of their enemies. The bull frogs of America; the horned toads of Brazil; the paradoxical frog from Surinam, the young or tadpole of which, when in its fish-like form, is larger than its parent, and has been described as a fish; and *Pipa* of Brazil, which deposits its eggs on the back of the male, who carries them a certain period, when the young are emitted from the cells; the siren of Carolina, which looks like an eel with front legs; the proteus of the dark subterraneous lakes of Southern Europe, which is of a pale pink colour,

and blushes when exposed to the light; of this there is a very accurate wax model, to exhibit its appearance when alive.

THE TABLE CASES. THE SEA EGGS, STAR-FISH AND ENCRINITES.

Tables 1—9. SEA EGGS.

Tables 1—6. The globular sea eggs. The club-spined echinus (Case 3), which has very large club-shaped spines; the tessellated echinus, which has short, broad, flat-topped spines like tessellated pavement. The spines easily fall off when the animal is dead, which makes specimens with spines on them rare in collections.

Tables 7, 8. The Sea Pancakes, which are so depressed that there scarcely appears to be any room for their internal viscera; some of them are lobed or fingered on the margin, and others pierced with slits.

Table 9. The *Galerites*, which are most abundant in a fossil state; and some of the Sea Hearts, the species of which are continued into and occupy Case 10.

Tables 11—18. The STAR-FISH.

Some have five and others many rays; some have the surface scattered with tubercles placed on the junction of a net-like skeleton, and others are formed of flat-topped pieces, like a tessellated pavement, each separate stem being fringed with an edge of minuter pieces; some of them bear on the top of each of the flat pieces a solid tubercle, which often falls off when the animal is dead.

Tables 19—23. The LIZARD-TAILED STAR-FISH,

So called because they often throw off the end of their rays when they are handled or put into fresh water, as lizards do when they are caught and cannot escape.

Table 23. The GORGON'S HEAD,

The arms of which are repeated branches, so as to end in innumerable flexible filaments, by which the animal attaches itself to marine bodies, and strains its food from the surrounding water.

Table 24. The *Comatula* or SEA WIGS,

Which are the recent representatives of encrinites, found so abundantly in certain rocks.

THIRD ROOM.

The WALL CASES round this Room contain the Handed and Glirine MAMMALIA, and the TABLE CASES the different kinds of CORALS.

THE WALL CASES. MAMMALIA.

Cases 1—28. The HANDED BEASTS.

Cases 1—4. The Apes: as the chimpanzee of Tropical Africa; and the pongo or orang outan; the siamang, and the long-armed apes or gibbons of Tropical Asia and the islands of the Asiatic Ocean.

Cases 5—7. The Capped Apes of Asia; as the *Simpai*, from Sumatra and Java; the grey-headed capped ape, and the houlman of Continental India; and the Nestor of Ceylon; the houlman lives near the houses, and is venerated by the natives.

Cases 8, 9. The Thumbless Monkeys of Tropical Africa; as the guereza, which has a fringe of long white hairs on each side of

the back, and is used by the Abyssinians and the Bobies of Fernando Po as shields for their arms.

Case 10. The Monkeys of Africa.

Case 11. The Mangabeys of Africa.

Case 12. The Makenzie or Bonnet Monkey of Tropical Asia, and the magot of Africa, which has been naturalized on the Rock of Gibraltar, and is the only monkey found wild in Europe.

Cases 13, 14. The Baboons or Dog-faced Apes from Africa: as the hamadryas, the papio, the mandril, and the drill.

Cases 15—19. The Monkeys from Tropical America; they are generally slow, and feed on leaves.

Case 15. The Spider Monkey from Brazils.

Case 16. The Negro Monkeys in the upper part of the Case, and below them the Howlers, so called from the continual loud noise they make in the woods, especially at night.

Case 17. The Sakis with prehensile tails.

Case 18. The Night Apes, with large nocturnal eyes like owls; the *Callithrix*, the hairy monkey, and the Jew monkeys.

Case 19. The Teetees, Marmosettes and Silky Monkey, which are generally of a small size.

Cases 20—22. The Lemurs and the Propithecus, from Madagascar; they eat fruit and insects.

Case 23. On the upper shelves, the loris from Ceylon; slow lemur from India, Sumatra, and Java; the indri and cheirogales, from Madagascar; the galagos from Western Africa: and on the lower shelves are the colugos, or flying lemurs, which live on the trees in the Indian Archipelago, suspending themselves by their feet to the branches with the back downwards, and thus forming a kind of hammock in which they nurse their young.

Case 24. On the upper shelves, the leaf-nosed bat from Brazils, the vampire, or bloodsucking bat, from the same country; the Rhinolophes and Megadermes, from India and Africa. On the lower shelves are placed the horseshoe bats of the Old World.

Case 25. The Nycteres of Africa, and the Petalias of Java; the Nyctophiles of Australia; the Barbastelles and long-eared bats of Europe; and the true bat and Scotophiles, which are scattered over different parts of the world, and the Lasiures of America.

Case 26. The Mormops and Chelonictes of the West Indies; the Taphozous of Africa and India; the bull-dog bats of Tropical America; and the Molossi and Nyctinomus.

Cases 27—29. The different kinds of fruit-eating bats, which from their large size are often called flying foxes; they are only found in the warm parts of the Old World and the Australian islands.

Cases 30—43. The GLIRINE MAMMALIA.

Case 30. The various kind of Rats on the upper shelves, and the different species of Mice on the lower ones.

Case 31. The *Hapalotes* of Australia, and other genera allied to the rats, on the upper shelves; the voles and jerboa rats, and the spinous-pouched rat from Tropical America on the lower shelves.

Case 32. The Beaver, young and old, of Europe and South America; the coypus rat of Tropical America, much used, like the beavers, to

make hats; the Ondatra of North America on the upper shelf; the Hydromys of Australia, and the spiny rats of America, are on the lower ones.

Case 33. The Porcupine of the Old World; the fasciculated porcupines of India and Africa; the tree porcupine, or ursons, of North America; the spiny and hairy prehensile-tailed porcupines of Tropical America are on the upper shelves: the Cavies and genera allied to them, which are only found in South or Tropical America, are on the lower ones.

Cases 34, 35. The Hares of Europe, of North America, Africa, and India.

Case 36. The different varieties of Rabbits, and the various kinds of tailless hares, from Europe, Asia, and America, on the upper shelves; and the Jerboas of North Africa and Asia, the leaping hare of South Africa, the chinchilla of South America, and the dormice of Europe on the lower ones.

Case 37. The Taguans and Flying Squirrels of Asia and its islands; the Assapan of N. America; the Polatouche of Siberia, and the spiny-tailed squirrel of Fernando Po.

Case 38. The large long-tailed Asiatic squirrel, with or without tufts on their ears, on the upper shelf; and the different species of the large North American, more or less grised ones, on the lower shelves.

Case 39. The South American squirrel on the upper, and the smaller grised Asiatic species on the lower shelves.

Case 40. The remainder of the Asiatic grised squirrels on the upper, and the striped backed Asiatic species on the lower shelves.

Case 41. The ground squirrels of Africa and India on the upper, and the striped pouched squirrels of North America and Europe on the lower shelves.

Case 42. The various kind of Souslicks of North America and Europe.

Case 43. The remainder of the Souslicks, the Marmots of America and Europe on the upper; and the different kinds of mole rats of Europe, the sand moles of the Cape of Good Hope, the bamboo rats of Malacca, the golden rats of Africa, and the Sewellel of North America, on the lower shelves.

The TABLE CASES. The different kinds of CORALS.

Tables 1—20. The various kinds of star corals or madrepores; as the sandy corticifera, the sea mushroom (Case 2); the brain stones (Case 10); the tree-like corals (Case 15); the clove coral of the Mediterranean (Case 7); the millepore, which grows extremely rapidly and expands itself with facility over all the different anomalous objects that come in its way: thus we have it covering shells, bottles, horny corals, and assuming the form of all the things it covers.

Table 21. The bright red Organ Corals, which are formed by a beautiful green animal.

Table 22. The red Coral of the Mediterranean, from which the coral beads are formed; the horse-tail coral with its jointed axis.

Tables 24—26. The different kinds of Gorgoniæ; as the sea fans.

Table 27. The different kinds of Antipathes.

Table 28. The different kinds of Fleshy Corals; the Sea Pens

and the square axis which supports them; the *Nephthya* from Sumatra; the *Nidalia* from the West Indies, which has been taken for a mineral; and the extraordinary glass rope from Japan; the glassy fibres of which this coral is formed consist of pure flint, and are hard enough to scratch glass.

Tables 29, 30. The different kinds of Horny Sea Weeds; as the *Sertulariæ* and *Tubulariæ*.

Tables 31, 32. The different kinds of encrusting Cellepores, laminar Escharæ, branching Tubulipores, and coralline-like Crissiades; many of them are natives of our shores.

OVER THE WALL CASES are placed the fish which are too large to be inclosed in the Cases; as the Herschell pike fish, from the Cape of Good Hope; the Sudis, from the rivers of Berbice; the bony pike, from North America.

FOURTH ROOM.

The WALL CASES round the Room contain the collection of Fish, under the course of arrangement.

The TABLE CASES, a few specimens of Annulose Animals, to exhibit their systematic arrangement.

The general collection of insects and crustacea are preserved in cabinets. They may be seen by persons wishing to consult them for the purpose of study (by application to the Keeper of the Zoological Collection) every Tuesday and Thursday. To prevent disappointment, it is requested that persons wishing to see those collections will apply two days previous to their intended visit.

WALL CASES 1—13. SPINY-RAYED FISH.

Cases 1—4. The perches, gurnards, the flying gurnards with their large pectoral fins, the bull heads, the hog-fish, sea scorpions, the flying sea scorpions or sea butterflies, paradise fish, and fingered perches.

Case 5. The Scienoid Fish, maigres, ombres.

Case 6. The bristle-toothed fish or *Chaetodonts*.

Case 7. The *Holacanthi*, the scombers, mackarel, tunny, the sword fish with its long pike-like nose: some of these afford a most important article of food.

Case 8. Pilot fish, horse mackarel, john dories, ponfrets.

Case 9. Dolphins, which change colour so rapidly when they are caught; the sea garters and lophotes, which are very thin and compressed; the surgeons, which have a lancet-like spine on the side of their tail.

Case 10. The sea mullets, wolf fish.

Case 11. The *Lophias* or fishing frog or angler, with their very large head and mouth; hand fish, so called because its pectoral fins are elongate, as if placed on an arm; the rock fish or *Labri*.

Cases 12, 13. Various kinds of rock fish (*Labri*). At the bottom of 13, the tobacco-pipe fish and trumpeter fish.

WALL CASES 14—19. SOFT-RAYED FISH.

Case 14. Carp, and other fresh water fish of different countries.

Case 15. The pikes: the bony pikes, from America; the garpike, which has green bones; and different kinds of flying fish.

Case 16. Siluroid fish: the callichthes, which are covered with rows

of imbricate plates like scale armour; and the loricaria, which has the body entirely covered with a hard coat formed of angular scales; the salmon, trouts, &c.

Case 17. Different kinds of herrings, shad.

Case 18. Cod, ling, whiting. Flat fish: turbot, flounders; their bodies are compressed, and they lie on the white side at the bottom of the sea.

Case 19. Remainder of the flat fish; as the different species of soles, finless soles, &c.; the lump fish, and different kinds of eels.

Case 20. The remainder of the eels; sea horses, so called because they bear a grotesque resemblance to a horse in miniature when dry and contracted.

WALL CASES 20—26. ANOMALOUS FISH.

Case 20. Spiny globe fish, which have a beak like a parrot; they have the faculty of dilating their stomach with air, hence their name.

Case 21. The balistes or file fish, which have small teeth, and are covered with a hard skin; leather jackets, with a more flexible less armed skin.

Case 22. The coffin fishes, covered with a hard horny skin formed of six or eight-sided plates, forming an even coat; the sturgeons, from Europe and America.

Cases 23, 24. The sharks; the saw-fishes, with their elongated head furnished with teeth on each side.

Cases 25, 26. The rays, the torpedoes, and the sting rays.

ON THE TOPS OF THE CASES,

Different kinds of fish which are too large to be arranged in the proper places in the Cases.

Large shad with a long dorsal ray, from Mexico; a maigre from Guernsey; a sword-fish, from Margate; a flying sword-fish, from the Indian Ocean, with two other pikes; and belonging to the same kind of fish, one which has been forced through the oak timber of a ship. These fish swim so rapidly, that if they come against a ship they pierce it. A conger, an angel fish, a short-nosed bony pike from North America; sharks; the nose of various large saw-fishes; a piraruca, from British Guiana; a sturgeon, and a large sting ray.

THE TABLES 1—12. INSECTS.

Tables 1—8. The *Coleopterous Insects* or Beetles; the leaf-beetle or mormolyce, from Java; the burying beetle (*Necrophorus*); the stag-beetle, with its long jaws like the horns of deer; the scarabæus, which incloses its eggs in balls of dung, and was esteemed sacred by the Egyptians; the rhinoceros, elephant, and bubaline beetles, which have the front of the head or the front of the thorax produced into variously shaped horns or humps.

Table 2. The buprestidæ, with their metallic colours, the hard wings of which are often used to ornament dresses in the place of spangles; the lantern spring-jack (*Elatér noctilucus*), with a spot on each side of the thorax, luminous when living; the various kinds of glow-worms, curculians or long-nosed beetles, as the diamond beetle, from Brazil; the prionii, which have very long jaws, and live chiefly in old wood; the harlequin beetle with its very long fore legs.

Table 3. The false kangaroo beetles (*Sagra*), with their very large hinder legs; and the different kinds of tortoise beetles, and lady-birds, some of which are very brilliant.

The earwigs, with their beautiful fan-like wings; the cockroaches, which have been introduced into England; the praying insects, (*Mantis*), and some of their eggs, which are formed into different shaped masses; the walking-sticks, some of which are provided with large fan-like wings, but the greater part are destitute of them and look like fragments of stick.

Table 4. The rest of the *Orthopterous Insects*. The house, field, and mole crickets of England; the monstrous cricket, with its extraordinary toes and curled wings, from China; the different kinds of locusts; grasshoppers. The *Neuropterous Insects* as dragon-flies, ant-lions, with their curious larva, which forms a pit to catch insects; the scorpion-fly (*Panorpa*); the white ants (*Termes*), so destructive in the tropics; and the cases of different kinds of caddis flies. The *Hymenopterous Insects*, as saw-flies, wasps, hornets, ichneumons, sand wasps; bees, as the wood-cutting bee.

Tables 5—8. *Lepidopterous Insects*.

Tables 5, 6, 7. Butterflies, exhibiting the different forms of their wings and the peculiarities of their colouring.

Table 8. The hawk-moths, as the privet hawk-moths, the death's head moth, the clear wings, the humming-bird, and the Burnets. The different kinds of moths, as the ghost, found in and so destructive to hop grounds; the leopard and goat moths, which feed on wood in their larva state. The Tusseh silk-worm moth, and some of the silk worked; the Kentish glory; the drinkers; the silk-worm moth, and cocoon on birch twigs, as they are kept in Siberia.

Table 9. Different kinds of moths, as the large owl moth, from Brazils.

Table 10. The *Dipterous Insects*, as the different kinds of flies, gnats, breeze flies. The *Hemipterous Insects*, bugs of all kinds: the wing-legged bug; the water scorpion; the boat fly; the cicadæ; and the lantern flies from China.

Table 11. SPIDERS. The tarantula; the nest of a spider with a moveable lid which closes the hole by its own weight when the animal leaves it; one has a door at each end, the nest having been in a clod of earth which was turned over, the animal formed a second lid at the opposite end. The scorpions of different countries: bristle-tailed scorpion (*Thelyphonus*); the tailless scorpion (*Phrynus*), which has very long claws.

Table 12. The whale lice; sand spider; galeodes; acari; shepherd spiders; the scarlet tick, from Africa. The iuli, scolopendræ or centipedes, so called from the number of their legs.

TABLES 13—24. CRUSTACEA.

Table 13. Spider crabs, with long legs and small bodies.

Table 14. Rough crabs; the common crab; two have a number of oysters growing on their backs, shewing that the crabs do not change their skin every year, or that the oyster grows to a large size in a very short space of time.

Table 15. Oval-bodied crabs.

Table 16. The fin-footed or swimming crabs, from different parts of the ocean.

Table 17. The telescope or long-eyed crab; the land crabs.

Table 18. The square-bodied crabs; the crested crab; and the Chinese fin-footed crab.

Table 19. The porcelain crabs; the corystes; the back-footed crabs; and the death's head crabs, which usually form for themselves a case from pieces of sponge or shell.

Table 20. The Bernhard or hermit crabs, which live in shells; the tree lobster, which is said to climb cocoa trees to get at the nuts.

Table 21. The sea locusts or scyllarus; the sea craw-fish.

Table 22. The scorpion lobster, which lives a great part of its life on land, and destroys new made roads in India by the excavations it forms under them. The lobster; one of the specimens exhibited was pale red, nearly of its present colour, when alive. The mantis crabs; the different species of shrimps; the glass-like alima and phyllosoma, which are scarcely thicker than a piece of paper, and nearly as transparent as glass; they are found in the ocean near the equator; the king crab, with its long stile-like tail and large head.

Tables 23, 24. The sea acorn; whale lice; barnacles, or goose shells, as they are called, from the extraordinary belief that they were the origin of barnacle geese.

FIFTH ROOM.

The WALL CASES. Molluscous and Radiated Animals in spirits.

OVER THE WALL CASES is a very large wasp's nest from India; and some Neptune's cups, a kind of sponge, from Singapore.

TABLE CASES. Sponges of different kinds, shewing their various forms and structure, and some preserved in flint, shewing the same structure.

JOHN EDWARD GRAY.

May 26, 1843.

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SYNOPSIS

OR

GUIDE BOOK

TO THE

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N
BRITISH MUSEUM.

PART I.

ZOOLOGY.

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ANGEL COURT, SKINNER STREET.

ZOOLOGY.

THE CENTRAL SALOON *.

THE collection of ANIMALS is contained in three Galleries, and for the convenience of exhibition is arranged in two series. The BEASTS, BIRDS, REPTILES, FISH, and the specimens of the other smaller animals kept in spirits, are exhibited in the Wall Cases. The hard parts of the Radiated, Annulose, and Molluscous animals, as SHELLS, CORALS, SEA EGGS, STAR FISH, CRUSTACEA, and INSECTS, are arranged, as are also the SKULLS of the smaller beasts, and the EGGS of BIRDS, in a series in the Table Cases of the several Rooms.

MAMMALIA SALOON.

In the WALL CASES of this SALOON are arranged the specimens of Antelopes, Goats, and Sheep, and OVER THE CASES, the horns of the different specimens of Oxen; and on the FLOOR, the Giraffe from North, and the Giraffe from South Africa, the latter *presented by the Earl of Derby*.

Cases 1 to 5 contain the waterbock and caprine antelopes, as the blaue bock, the black bock or sable antelope, the blossom bock, and the Cape Oryx, from the Cape of Good Hope; the addax and its young, and the algazelle, from North Africa.

On the upper shelves are the young of the Cape Oryx and the blossom bock, from South Africa; the chamoise, or gems, from the Alps; the sing-sing and the koba, from Western Africa.

Cases 6 to 8 contain the Antelopes, as the sassaybi, licama or hartebeast; and the Goats, as jaela, or Nubian goat of North Africa;

* For an explanation of the method on which the Zoological Collection is arranged, and a list of the genera, see a small work called the "Guide to the Zoological Collection," sold in the Hall; where may also be had a List of the Specimens of Mammalia, with their Synonymes. List of the Specimens of Birds, Parts I. and III. Catalogue of Reptiles, Parts I. and II. List of the Specimens of Lepidopterous Insects, Parts I. and II. List of the specimens of Myriapodes. List of specimens of Crustacea. List of Cetoniadæ. List of Osteological specimens. List of specimens and drawings of the Mammalia and Birds of Nepal presented by B. H. Hodgson, Esq.

steinbock of the Alps; Siberian ibex; thar of the Himalaya, and some varieties of the domestic goat.

Cases 9 to 11 contain the equine Antelopes, as the gnu and gorgon, from the Cape, and their young; and the different kinds of wild sheep, as the argali, from the Altai; the mountain sheep of North America; aoudad, or bearded sheep, from North Africa; the nahorr, from Nepal; the American argali, and different varieties of the domestic sheep. In the corner of the cases is the young of the Bubale antelope, from North Africa.

Case 12 contains the Prong-horn, or cabrik, from the Rocky Mountains and Texas, and its young.

Case 13. The caprine antelopes, as the goral and the Jhaar, or thar, from Nepal.

Cases 14 to 18. The true Antelopes, or Gazelles, as the chiru, of Nepal; the colus, or siaga, and the gutturose antelope and jacron, from the Altai Mountains; the soemmering antelope, from Abyssinia; the mohr antelope, from West Africa; the spring bock, and the pallah, from the Cape; the sasing, or Indian antelope, from India; the rhee bock, and the peeli, from the Cape; and the nagor, from West Africa.

The upper shelves contain the ariel, dorcas and gazelle, from North Africa; the Senegal gazelle, the Indian gazelle, or chikara, from Madras; the grysbock and steinbock, and kainsi, or klipspinger, from the Cape; the madoka, from Abyssinia; and the pygmy antelope, from the coast of Guinea.

Cases 19 and 20 contain the crowned antelope, or bush goats, from Southern and Western Africa; the four-horned antelopes, from India; the ourebi, from South Africa.

On the floor of this room are two giraffes, one from North Africa, and the other from South Africa, the latter presented by the Earl of Derby.

SOUTHERN ZOOLOGICAL GALLERY.

In the Wall Cases of this Room are arranged the continuation of the collection of the Hoofed Quadrupeds, as the Oxen, Deer, Camels, Llama, Horses, the various kinds of Swine, Armadilloes, Manises, and Sloths; and on the top of the Cases the horns of different species of antelopes; and on the floor are arranged the different kinds of elephants, Rhinoceri, and Hippopotami.

Cases 1 and 2 contain the different varieties of Llama; the wild ones are brown, and the tame varieties are black, white, reddish brown, and these colours intermixed.

Cases 3 to 16 contain the different species of Oxen and Elephantidæ. The white Scotch and Polish bulls; musk ox; aurochs, or Lithuanian bison, from Lithuania, *presented by the Emperor of Russia*; and the North American bison, from the Rocky Mountains; the impofoo, or eland, kudu or coudu, from South Africa; bosch bock, from South Africa and Abyssinia; Guibe, or bonte bock, from West Africa.

The upper shelves contain the tapirs; as the mborebi, or tapir, from South America; and the kuda, ayer or tennu, from Sumatra; boar, from Europe, and its young; the bene, from North Guinea; bosch vark; the valke vark, or emgallo; haruja, or halluf, from South

Africa and Abyssinia; the pecari, or tajacu and tagnicate, from the Brazils; the klip-das, from South Africa; daman, from North Africa; and ashkoko, from Abyssinia; the phatagin and many-shielded phatagin, from West Africa; the badgareit, or bajjerkeit, from India; and tangilin, from Java; the armadillo, apara, peba, pichey, tatouay, and tatou, from South America; the aard vark, from the Cape of Good Hope; the tamanois, tamandua, and ant-eater, from South America; the ornithorynchus, or mullingong, echidna, and brown echidna, from New Holland; the unau, gipakeiou, yellow-faced sloth, and sloth, or ai, from South America.

Cases 17 to 30 contain the Deer and Horses,—as the stag, or red deer, and fallow deer of Europe; the wapati, from North America; equine rusa, and axis, or cheetul, from India; the ahu, or siaga, from Siberia; rein deer, from Hudson's Bay. *Presented by the Hudson's Bay Company.* The elk, from North Europe. *Presented by the Earl of Derby.* Burchell's zebra, South Africa; the zebra, South Africa. *Presented by the Earl of Derby.* Wild ass, or jikta, from Asia. *Presented by the Earl of Derby.* Hybrids, between the zebra and wild ass, and between the zebra and common donkey. *Presented by the Zoological Society of London.* Giraffe, or Camelopard.

The upper shelves contain the young axis, or cheetul, fallow deer, and wapiti; kijang, or muntjac, from India; cuguaçu-ete, and cuguaçu-apara, from South America; the guazuti, from North Patagonia. *Presented by C. Darwin, Esq.* Roebuck, from Europe. Musk Deer.—The musk; white-bellied musk; golden-eyed musk; meminna, or pissay, kanchil, and Javan musk, from Asia; and the water musk, from West Africa.

On the floor of this Room are arranged the different species of Rhinoceros, from South Africa and India; a small specimen of the Indian Elephant; a very young specimen of the African Elephant; and a young, a half-grown, and an adult specimen of Hippopotamus, from South Africa.

In the WALL CASES of this SALOON are arranged the specimens of Handed and Rapacious Beasts, and OVER THE CASES are the different kinds of Seals (*Phocæ*), Manatees, and Porpoises (*Delphini*); and on the FLOOR of the room are placed the larger hoofed beasts, which cannot, on account of their size, be arranged in their proper places in the Cases.

CASES 1—20. THE HANDED BEASTS.

Cases 1 to 11 contain the Old World Monkeys: as the chimpanzee, from West Africa; adult male and young orang-otan, or pongo, from Borneo; siamang, from Java; gibbon, silvery gibbon or wou-wou, and cunka, from India, Java, and China; the simpai, chingkau, from Sumatra; the kalasie and starred presbytes, from Borneo; the cinereous presbytes, dusky presbytes, from Singapore and Malacca; the croo and negro presbytes, from Java; nestor, from Ceylon, and hoonumam, from India, Nepal, &c. *Presented by B. H. Hodyson, Esq.* Temminck's colobus; Pennant's colobus; and black colobus, from West Africa; guereza, from Abyssinia; proboscis monkey, adult male, Borneo. *Presented by Mons. Temminck;* and female and young. *Presented by Capt. Sir Edw. Belcher.* Callithrix or green monkeys, from

West Africa; grivet or tota, from Abyssinia; vernet, from the Cape of Good Hope; malbranck, from Africa; moustache, from Guinea; white-throated monkey, from India; samango, from South Africa; bearded monkey and red-eared monkey, and Burnett's mona and haucher, from Fernando Po; the mona and diana, the white-nosed or vaulting monkey, and black-cheeked ascagne, and the talapoin, from West Africa; patas, from Africa and Senegal; white-crowned monkey, sooty mangabey, and white collared mangabey, from Africa; rhesus, macaque, mungo or capped macaque, pelops, and bruk, from India; brilliant macaque, from Japan; black macaque, from the Philippines and Celebo; wanderoo, from Ceylon; papion, from Africa; chacma, anubis, and baboon, from South Africa; gelada and tartarin, from Abyssinia; drill and mandrill, from Africa.

The Cases 12 to 18 contain the New World Monkeys, from Tropical America.

Cases 12—15. The coaita, chameck, chuna, marimonda, and brown spider monkeys, from Bolivia and Brazil; the thumbbed miriki; caparro or negro monkey; the Howlers, so called from the continued loud noise they make in the forest, especially at night.

Cases 16—18. The Gabies, with prehensile tails; the Night Apes, with large nocturnal eyes, like owls; the Hairy and Jew Monkeys, with club-like tails; the Teetees, Marmozetts, and Silky Monkeys, which are generally of small size.

Cases 19 and 20 contain the family of Lemurs: as the white fronted and black and white lemur, the ring-tailed macaúco, and the propithec, from Madagascar—they live on insects and fruits; the loris, from Ceylon; the slow lemur, from India, Sumatra, and Java; the indri and cheirogales, from Madagascar; the galago, from Western Africa.

Case 20, on the lower shelves are the colugos, or flying lemurs, which live on trees in the Indian Archipelago, suspending themselves by their feet to the branches, back downwards, and thus forming a kind of hammock, in which they nurse their young.

CASES 21—52. The RAPACIOUS BEASTS.

Cases 21—27. The various kinds of Cats, as the lion (*Leo*), from South Africa; tiger, from India; the jaguar, and the different kinds of ocelots, from Central America; the wild cats of Europe; the chaus, from North Africa and Asia; the booted cat of the Cape of Good Hope; hunting leopard of India and Africa; the lynx, from Sardinia and the South of Spain, and from Canada; and the caracal of South Africa and India.

Case 28. The Hyænas, as the striped hyæna (*Hyæna striata*) of Egypt; the spotted hyæna, from South Africa, with its young, which is blackish brown.

Cases 29—30. The true Civets, as the African civet, from the warmer parts of Africa; the zibet of India and China, and the spotted zibet, or tangalung, from Sumatra. These animals all yield the secretion that has long been esteemed by some as a scent. The hyæna civet, or Proteles, from the Cape of Good Hope, and the slender ring-tailed Prionodon, from Malacca. The lower shelves contain the various

species of genets, from the Cape of Good Hope, Abyssinia, and Western Africa. The different species of Ichneumons or herpestes, the Mungos, from Asia and Africa; and the Suricate, from the Cape of Good Hope and Central Africa.

Case 31. The different species of *Paradoxurus*, *Paguma*, *Hemigalea*, and *Benturong*, which inhabit India, Sumatra, and the other Asiatic islands; the *Cynogale*, from Borneo; and the *Nandina*, which comes from Western Africa; and the *Bassaris* or house marten of the Mexicans.

Cases 32—37. The different species of Dogs, as the Newfoundland dog; the wolf of North America and Europe; the wild dogs of India, Africa, and North America. The different kind of Foxes of Europe, America, Africa, and India. The four-toed hunting dog of South Africa and Abyssinia, and the large-eared dog of the Cape of Good Hope.

Case 38. The various species of Martens (*Martes*) of Europe and America; weasels from Europe and America; the masked weasel of Mexico, the Siberian weasel, the Himalayan weasel, the polecats of Europe and America, the False Sable of America, and the Vison or lesser otter, of North America and Northern Europe; and the Zorilla of the warmer parts of Africa.

Case 39. The Gluttons, from North America and Europe; the ratel, from the Cape and India; and the tiara and the grisson, from Central America and the West Indies. Then follow the helictis or musk weasel of the Chinese; the skunk of North America; the marputio and conepats of Central and Southern America; the stinkard, or mydaus, of Java; the sand bear (*Arctonyx*) of India; the badger of Europe; and the Labrador badger, or taxidea, of North America.

Case 40. The Otters, as the common otter of Europe, and the species from America and Asia; the muffled otter of North America; the clawless otters of the Cape of Good Hope and of Java and India; and the seal-like sea otter of the west coast of America.

Case 41. The Bears, as the Malay bear of Sumatra and Borneo; the white bear of the Arctic Ocean; and the sloth bear of India.

Case 42. The kinkajou of Central America; the wah (*Ailurus*) of Nepal; the different varieties or species of coati mondi, and of racoons, from America.

Case 43. The INSECTIVOROUS BEASTS, as the moles of Europe; the marsh mole of Canada and North America; the golden moles of the Cape; and the star-nosed Mole, with its long thick tail, from North America; the Tupai or insectivorous squirrel of Java, Sumatra and India; the elephant shrew of North and South Africa; the shrew mice of Europe, Asia, and America, especially the large blue shrew of India and the Cape of Good Hope; the desman, or musk shrew of the Pyrenees and Russia; the naked-tailed weasel (*Gymnura*) of Malacca; and the various kinds of hedgehogs, from Europe, Asia, and Africa, as the tenrees of Madagascar and Western Africa.

Cases 44—52. The different sorts of Marsupial Animals. Those in Cases 44—51 are only found in Australia, and those in Case 52 are from America.

Cases 44, 45. The different kinds of Phalangers, as the white-tailed opossums; the New Holland bears from Australia; and the true Phalangers, which are only found in Amboyna and New Ireland; the tarsipes of South Australia, and the wombat of Australasia. The Flying Phalangers, as the *Petaurus*; the Norfolk Island flying squirrel, and the flying mouse, or acrobate. The right half of this Case contains part of the Kangaroos.

Cases 46—51. The different kinds of the true kangaroos of Australia, and the tree kangaroo of New Guinea. The various species of wallabees (*Halmaturus*); the long-nosed kangaroos, and the rock kangaroos. The jerboa kangaroos, and the rat-tailed kangaroos; the kangaroo hares; and at the bottom the koala of Australia. The Australian Opossums, as the bandicoots (*Perameles*); the pig foot opossum; the dasyures, the zebra wolf, and the Australian devil; the phascogales and the banded myrmecobii.

Case 52. The Opossums of America. And below, a few of the smaller specimens of Seals, as the young of the harp seal, with its white fur, as it is when it is first born; and the young of the eared seal, from the Cape of Good Hope.

ON THE TOP OF THE CASES are arranged the different kinds of seals, porpoises and dolphins, as the common seal and the great seal; both found on the coast of England. The flat-haired seal; the leonine seal, or maned eared seal, from the Southern Ocean. The manatee, from Western Africa. The Cape porpoise, and the Cape dolphin; and the platanista, or long-beaked dolphin of the Ganges.

ON THE FLOOR, on the west side of the room, are placed for the present, the specimens which are too large for the Cases, and the skeleton of an elephant from India; the skeletons of a wolf from the Arctic regions; of a kangaroo from New Holland; a seal, from the British coast; an American deer; and of an Indian tapir, to exhibit the peculiarities of the bones in the animals of the different orders. Skeleton of the Zubr or Aurochs, from the Forest of Lithuania. *Presented by his Imperial Majesty the EMPEROR OF ALL THE RUSSIAS.*

IN A TABLE CASE in this room, is arranged a series of the skulls of the smaller mammalia, to explain the characters of the orders and families; as, the skull of a monkey; of the slender loris; of the different kinds of fruit-eating and insect-eating bats; the various species of dogs, cats, weasels, mice, rats, squirrels; the capybara; and the musk, from Thibet.

EASTERN ZOOLOGICAL GALLERY.

The *Wall Cases* contain the collection of BIRDS; the smaller *Table Cases* in each recess contain BIRDS' EGGS, arranged in the same series as the birds; the larger *Table Cases*, in the centre of the Room, contain the collection of SHELLS of MOLLUSCOUS ANIMALS; and on the top of the Wall Cases is a series of HORNS of different kinds of Deer and Rhinoceri.

Cases 1—35. The RAPTORIAL BIRDS.

They are subdivided into the following great divisions. The DIURNAL BIRDS of PREY are contained in Cases 1—30.

Case 1. The Bearded Vulture of the Alps and Himalayan mountains. These birds live chiefly on carrion.

Cases 2—7. Various species of Vultures, as the Alpine vulture, from North Africa; the black, carrion, and king vultures, from North and South America; the Californian, and condor, or great vulture of the Andes; the fulvous vulture, from Europe and Africa; cinereous vulture, from Northern Africa; sociable vulture, from South Africa; and the Angola vulture, from Congo.

Cases 8—30. The falcons, which are further divided:

Cases 8—17. The different Eagles which prey on living quadrupeds, birds and fish, as the golden eagle of the British Isles, &c.; booted eagle of Egypt; crested goshawk, of South America; Brazilian eagle; laughing falcon, from British Guiana; harpy eagle of South America; bacha eagle of India and Africa; Jean le Blanc eagle of Europe, Java, &c.; marine eagle, from Indian Archipelago; osprey, from various parts of the world; short-tailed falcon, from the Cape of Good Hope; and the Pondicherry eagle, from the continent of India, which bird is worshipped by the Brahmins.

Case 18. The different species of Caracaras, which are peculiar to South America, as the red-throated falcon, chimachima, and the Brazilian kite.

Cases 19—24. Specimens of Buzzards: they are sluggish, and pounce on their prey on the ground, as the craxirex, from Galapagos; Buzzard; and the rough-legged falcon of the British Isles.

Cases 22, 23. Various species of Kites: the weakness of their bill occasions some of them to feed principally on insects; as the cohy falcon of India; honey buzzard, from various parts of the world; swallow-tailed falcon of North America; kite of Britain; and the spotted-tailed hobby of North America.

Cases 24—26. The true Falcons, which are the most courageous in proportion to their size of all the birds of prey; as the jer-falcon, peregrine falcon; hobby, and kestrels, &c., of Great Britain, &c.

Case 27. The Sparrow-hawks: these birds skim the earth with a rapid flight, seizing their prey upon the wing; as the goshawk and sparrow-hawk of the British Isles, and others.

Cases 28—30. The Harriers: these birds generally fly very low over the marshes, and strike their prey on the ground; as the chanting falcon of the Cape of Good Hope; Madagascar falcon; secretary, of the Cape of Good Hope; hen harrier, ash-coloured falcon, and moor buzzard, of the British Isles, &c.

Cases 31—35. The NOCTURNAL RAPTORIAL BIRDS,

Which are subdivided thus:

Case 31. Hawk-owls, as the Canada owl; snowy owl of Orkney and North America.

Cases 32, 33. Eagle owls, as the scops-eared owl of England, &c.; ketupu owl of the Indian Archipelago; great-eared owl, from various

parts of the Old World ; and the Virginian eared owl, of North America, &c.

Case 34. Howlets: as the brown owl ; long-eared owl of Great Britain and other parts of the world ; barred owl of North America ; little owl, and the Tengmalm's owl of Northern Europe.

Case 35. The true Owls, as the barn white owl of various parts of the world, and the bay owl of Java.

Cases 36—83. The PERCHING BIRDS.

These are divided into five divisions, each of which embraces several families.

Cases 36—42. The WIDE-GAPED PERCHING BIRDS.

Cases 36, 37. The Goat-suckers, which are solitary birds, living on moths, &c. ; as the Trinidad goatsucker, or fat bird ; New Holland goatsucker ; wedge-tailed goatsucker ; great goatsucker ; Carolina goatsucker of North America ; Leona goatsucker of Africa ; and European goatsucker.

Case 38. The Swallows and Swifts, as the common swift of Europe ; aculeated swallow of North America ; esculent swallow of the Indian Isles ; chimney swallow, sand martin, and martin swallow, of Europe, &c.

Case 39. The Todies, Rollers, Broad-bills, and Mot-mots, which live on insects, berries, &c., as the garrulous roller of Europe ; Abyssinian roller ; green today of the West Indies ; Javan today ; Brazilian motmot, &c.

Case 40. The Curucuis : they live in low damp woods in the tropical parts of America and Asia, and feed on insects and berries ; as the red-bellied curucui of South America ; Narina curucui of Africa, &c.

Cases 41, 42. The Kingfishers : they are generally of a brilliant colour, and live on fish, which they catch by diving, also on crustacea and insects ; as the spotted-bellied barbet, and great pied barbet, of South America ; great brown kingfisher, of Australia ; ternate kingfisher of Philippine Islands ; and common kingfisher of Britain, &c. ; green jacamar and great jacamar of South America ; common bee-eater of Europe ; Javan night bird, &c.

Cases 43—47. The TENUIROSTRAL BIRDS,

Which are divided into several families: as

Case 43. The Hoopoes and Sun Birds, which feed principally on the nectar of flowers ; as the common hoopoes of Africa, sometimes found in Great Britain ; twelve-wired paradise birds of Molucca ; rifle-bird of Australia ; red-billed promerops of Africa ; and grand promerops of New Guinea ; hook-billed red honey-eater of the Sandwich Islands ; and numerous species of sun birds of Africa and South America.

Case 44. The Humming Birds of South and North America and the West Indies ; their food consists of insects and spiders ; as the topaz humming bird ; garnet-throated humming-bird ; tufted-necked humming-bird, &c.

Case 45. Honey-eaters, which are peculiar to Australia; as the New Holland creeper; Poë honey-eater of New Zealand; wattled honey-eater; black and yellow honey-eater, and black-headed honey-eater of Australia, &c.

Cases 46, 47. The Creepers, Nuthatches and Wrens, which live on insects, chiefly obtained by striking the bark of trees; as the Patagonian warbler; Guiana red warbler; climbing grackle, and the picoid grackle of South America; common creeper of Britain and Europe; thorn-tailed warbler of South America; wall creeper of Great Britain; nuthatch of the same place, Europe, and North America; also various species of wrens, &c.

Cases 48—61. The TOOTH-BILLED PASSERINE BIRDS. They live generally on insects, worms, &c. These birds embrace several families.

Cases 48—52. The Warblers, which are solitary in their habits, feeding on insects, worms and berries.

Case 48. Tailor birds; they live on insects, and mostly form very beautiful and artfully dome-shaped nests; as the bush warbler of India; Dartford warbler of Great Britain and Europe; superb warbler of New Holland, &c.; and the superb menura, of Australia.

Cases 49—52. Warblers; which are small birds that have an agreeable song, and are continually flitting about in search of insects and their caterpillars, &c.

Case 49. The true Warblers, as the black cap warbler, lesser pettichaps, grasshopper warbler, fire-crested wren, &c., of Great Britain and Europe, &c.

Case 50. The Wheatears. These inhabit barren places in various parts of the Old World, and are lively birds, which subsist on insects; as the wheatear warbler, redstart warbler, red-tailed warbler, blue-throated warbler, redbreast warbler, whinchat warbler, sedge warbler, &c.; and the Titmice, which are very active in flitting from branch to branch and suspending themselves in all kinds of attitudes whilst seeking for insects on the trees; as the great titmouse, blue titmouse, and the long-tailed titmouse of Great Britain and Europe, &c.

Case 51. Wood Warblers, which mostly inhabit North America, where they are seen in the low bushes flying from branch to branch in search of caterpillars, &c.; as the red-headed warbler, spotted yellow warbler, yellow-throated warbler, and numerous other species; and various specimens of Wagtails, which are found on the banks of rivers or marshes, feeding on insects and small seeds; as the white and yellow wagtail of Europe and Great Britain, &c.

Cases 53—55. The Thrushes, which family of birds inhabit various parts of the world, and feed on insects and worms; they are divided into several subdivisions: viz.

Case 53. The Ant-thrushes: these birds inhabit the tropical parts of the world, where they all feed principally on ants and insects; as the white-faced manakin; grisly warbler of South America, &c.; mountain warbler of Java; rufous-naped thrush, alarum thrush, and others of South America; king thrush of Brazil; short-tailed crow of various parts of the Old World; and several species of rock thrushes of Europe and India.

Case 54. Various species of true Thrushes. These are solitary in their habits, feeding on fruits, worms, and snails; some are well known

for their song, and others for their imitating almost any sound, as the lunulated thrush of Australia; missel thrush, song thrush, fieldfare, red-winged thrush, and blackbird of Great Britain and Europe; and others from various parts of the world; mimic thrush of North America, &c.

Case 55. Babbling Thrushes of the warmer parts of the world, where they are peculiar for their chattering noise; they feed on insects, &c.; as the black-headed thrush of South America; Chinese thrush; spectacle thrush of China, &c.; grey thrush, mountain creeper, and pileated thrush of India; the orioles are invariably of a bright yellow colour, and found in the warmer parts of the world, feeding on caterpillars and insects, and also frequent orchards during the fruit season; as the golden oriole of Europe; (this is sometimes found in Britain;) Cochin China oriole, and other species. Short-legged thrushes are also in this Case: they are peculiar to Asia and Africa, where they are found generally in the woods, feeding on caterpillars, insects and fruits; as the Cape thrush, golden-vented thrush, importunate thrush of Africa.

Cases 56, 57. The Fly-catchers, which are peculiar to the warmer parts of the world, and feed solely on insects captured during flight. They form several subdivisions: viz.

Case 56. The pikas, which are peculiar to South America, where they pursue insects in flocks in the forests; as the red-necked fly-catcher. The water-chats are inhabitants of South America, and are generally found in the vicinity of water, where they pursue insects on the ground; as the grey shrike, spectacle warbler, white-headed tody, cock-tailed fly-catcher. The Tyrants are also peculiar to South and North America; insects and even small birds sometimes form their food; as the tyrant shrike, whiskered fly-catcher, and fork-tailed fly-catcher; the black caps are found only in South America, where they are seen perched on the high branches of trees, ready to plunge at the passing insects; as the Cayenne shrike, &c.

Case 57. The true Fly-catchers which are mostly found in the Old World; their food consists principally of insects; as the collared fly-catcher of Africa; broad-billed tody, white-eared thrush, king tody of South America; fan-tailed fly-catcher of Australia; spotted fly-catcher, cold-finch fly-catcher of Europe and Great Britain; black-headed fly-catcher of North America, &c. The fly-catching warblers, which are peculiar to America, where they feed on insects and fruits; as the solitary fly-catcher, &c.

Cases 58, 59. The Chatterers: they are divided into several families: viz.

Case 58. The thick-heads, which are found in the forests of Asia, Australia, and South America; they generally live in pairs, seeking insects and fruits; as the guttural thrush of Australia, &c. The manakins are remarkable for their small size and showy colour; they feed on fruits and insects; as the red chatterer, red and black manakin, white-capped manakin of South America, and speckled manakin of Australia, &c. The chatterers are found in most parts of the world; they inhabit the low grounds or forests, generally in flocks, feeding on the berries of various plants, sometimes upon insects. Most of them are remarkable for the beauty of their plumage during the breeding season; as the

purple-breasted chatterer, purple-throated chatterer, carunculated chatterer, variegated chatterer, and rock manakin of South America, &c.

Case 59. The Caterpillar-Eaters are found in South America, India, and Africa, where they feed upon caterpillars, which they collect upon the highest trees; as the grey caterpillar thrush of Africa, Javan thrush, ash-backed thrush of India, &c. The drongos are inhabitants of India, Asia, and Australia, and live on insects. Some species are remarkable for their power of song, which is as sweet as the nightingale's; as the Malabar shrike, fork-tailed shrike, crested shrike, and drongri shrike of Africa.

Case 60. Shrikes, or the true Butcher Birds. They are found in most parts of the world, pursuing grasshoppers, insects, young frogs, and small birds, which they impale on thorns, pull to pieces, and devour at their leisure; as the cinereous shrike, red-backed shrike of Europe and Great Britain, frontal shrike of Australia, Ceylon thrush of the Cape, and the grey-headed shrike of South America.

Case 61. The Bush Shrikes, which are inhabitants of Australia, Asia, and especially South America; as pied shrike, lineated shrike of South America; hook-billed shrike of Madagascar; and the Hot-niqua shrike of Africa, &c.

Cases 62—73. The CONIROSTRAL BIRDS.

These feed chiefly on grain and fruit. They form several families: viz.

Cases 62, 63. The Crows, which are divided into the following divisions: the *Phonygaminæ*, which inhabit Australia, New Guinea, &c., where they pursue small birds, and are very noisy and clamorous; as the piping roller, noisy roller of Australia; the jays, which generally live in forests of various parts of the world, as the jay of Europe and Great Britain; blue jay and cinereous jay of North America, &c. The true Crows, which are inhabitants of various parts of the world, and are generally seen on the ground, searching for carrion, worms, &c., as the raven, carrion crow, rook, hooded crow, and jackdaw of Europe and Great Britain, &c.

Case 63. The *Callæatinæ* are inhabitants of Africa, Asia, and Australia; as the changeable crow of Africa, rufous crow of India, cinereous wattle bird of New Zealand, &c.

Case 64. The *Gymnoderinæ* are very singular birds of South America; they feed on fruits; as the bare-necked grackle, fetid grackle, &c. The Choughs are found in the elevated mountains of the Old World, and prey on insects and berries; as the red-legged crow and Alpine crow. These are occasionally found in Great Britain, &c. The Birds of Paradise are natives of New Guinea; their habits are perfectly those of the crow, as the greater paradise bird, king paradise bird, magnificent paradise bird, &c.

Case 65. The Shining Thrushes are found in Africa, Asia, and Australia, and they feed on fruits and insects; as the satin bower bird: these birds form artificial arbours of twigs, which they decorate with shells, bones, stones, and other articles, and through which they run in playful chase after each other; also the splendid thrush, brilliant thrush, &c., of Africa and India. The Grakles live in troops in the islands of the Indian Archipelago, searching for insects and fruits among the banana; as the minor grackle and bald grackle. The beef-eaters are in-

habitants of Africa, where they live on the larvæ of a parasitical insect which they compress out of the skin of the rhinoceros by means of their bill; as the African beef-eater.

Case 66. The Starlings are found in both hemispheres, and they feed on the larvæ which attack cattle; they fly in large and crowded flocks; as the rose-coloured thrush of Europe, occasionally found in Great Britain; and Malabar grakle, pagoda grakle of India, &c.; cockscomb grakle of South Africa; common stare of Europe and Great Britain; Sardinian stare of Europe, &c., and the Louisiana stare of North America, &c. The *Quiscalinæ* inhabit New Guinea, but especially North and South America; as the gorget paradise bird of New Guinea, purple grakle and boat-tailed grakle of South America, &c.

Case 67. The Icteric Orioles are also peculiar to America, and live in flocks, feeding on grain and insects; as the black and yellow oriole, crested oriole, icteric oriole, and banana oriole, &c. The *Agelainæ*, like the preceding series, are also found in North and South America, generally in flocks among the cattle. Some of the species have a peculiar habit of laying their eggs in other birds' nests, as the cowpen oriole, red-winged oriole, &c.

Case 68. The Weavers, which inhabit Africa and India, and feed on grain. They form their nest of interwoven blades of grass; as the Philippine grosbeak, weaver oriole of Africa, &c. The hawfinches have a powerful bill, which enables them to feed on hard fruits, &c.; as the haw grosbeak of Europe and Great Britain, blue grosbeak of North America, crimson-breasted grosbeak of Africa, ground sparrows of Galapagos, and widow birds of Africa, &c.

Cases 68, 69. The Tanagers, which are peculiar to the New World, are remarkable for their beauty of plumage, and feed on grain, berries, and insects; as the red tanager and summer tanager of North America; red-breasted tanager, bishop tanager, golden tanager of South America, &c.

Cases 69, 70. The True Finches, which generally live in small flocks, feed on grain, and sometimes on insects; as the house sparrow, tree-finch, goldfinch, linnet, siskin, greenfinch, chaffinch, &c., of Europe, and found in Great Britain; wax-billed grosbeak, fasciated grosbeak of Africa; cowry grosbeak, white-headed grosbeak of India, &c.; sea-side finch, yellow-winged finch, song-finch of North America, &c.; the buntings are found in the world generally, and feed on seeds; as the yellow bunting, foolish bunting, ortolan bunting, snow bunting, &c., of Europe, and found in Great Britain.

Case 71. The Larks have the power of singing while rising from the ground perpendicularly in the air; as the skylark, woodlark, &c., of Europe, and found in Great Britain; the bullfinches have very thick bills, which enable them to feed on hard grains and seeds; as the bullfinch, rosy-finch of Europe, pine grosbeak of North America, &c. The crossbeaks have the points of their bill crossing each other; as the common crossbill, greater crossbill of Europe, and parrot-billed grosbeak of the South Sea islands, &c. The plant-cutters are inhabitants of South America, and are said to feed on vegetables; as the Chili plant-cutter. The colies are peculiar to Africa and India, and live in flocks, feeding on fruits, and are remarkable for sleeping in companies, suspended by

one foot, with the head downwards; as the Cape coly, white-backed coly, &c. The plantain-eaters inhabit Africa, and live in pairs, feeding generally on fruits; as the violet plantain-eater, Touraco plantain-eater, &c. In South America the crested pheasant is found.

Cases 72, 73. The Hornbills, which are peculiar to the Old World. They feed on fruits, mice, small birds, and reptiles, which they swallow whole, throwing them in the air and catching them in the throat; as the rhinoceros hornbill of Africa, helmet hornbill, Pannayan hornbill of India, &c.

Cases 74—83. The SCANSORIAL BIRDS.

They are divided into several subdivisions: viz.

Cases 74—76. The Parrots, which are inhabitants of all parts of the world except Europe. They live chiefly on fruits, and build in the hollow trees; as the racket-tailed parrot of the Philippine Islands; Pennantian parrot, ground parrot, &c., of Australia; horned parrot of New Caledonia; Alexandrine parrakeet, &c., of India; blue and yellow maccaw; hyacinthine maccaw of South America; Papuan lory; purple-capped lory of the Indian Archipelago; hawk-headed parrot, yellow-headed amazon's parrot, passerine parrot of South America; great white cockatoo, &c., of the Indian Archipelago; red-crowned parrot, and Banksian cockatoo of Australia, &c.

Case 77. The Toucans, which belong to the New World, are similar to the hornbill in habits and also in food; as the yellow-breasted toucan, Aracari toucan, Janeiro toucan, &c.

Cases 78—80. The Woodpeckers, which inhabit various parts of the world, and are divided into several subdivisions: viz.

Case 78. The Barbets are inhabitants of India and its isles, South America, and Africa. Their food consists of insects, fruits and small birds; as the groove-billed barbican of Africa, &c.; Cayenne barbet; grand barbet of India. The *Picumninæ* are found in South America and India; as the minute woodpecker, &c. The true woodpeckers inhabit North America, India, and Europe; they traverse the bark of trees in every direction, and insinuate their long tongue into chinks and crevices to draw out the larvæ of insects, on which they feed; they also subsist on soft fruits; as the northern three-toed woodpecker, white-billed woodpecker of North America, &c., and greater spotted woodpecker of Europe, &c.

Case 79. *Dryocopinæ* principally live in South America, and feed chiefly on fruits and eggs of small birds; as the great black woodpecker of Europe; Cayenne woodpecker; red-headed woodpecker of North America, &c. The *Celeinæ*, which feed chiefly on insects and ants; as the green woodpecker of Europe and England; yellow-crested woodpecker of South America; Carolina woodpecker, &c.

Case 80. The ground woodpeckers are peculiar to America and Africa, live principally on the ground, and feed on ants, &c.; as the gold-winged woodpecker of North America, and crimson-breasted woodpecker of Africa. The wrynecks are inhabitants of Europe, India, and Africa, feeding chiefly on ants, which they secure by means of their long tongue; as the wryneck of Europe, also found in England.

Cases 81—83. The Cuckows, which are migratory birds, and are divided into several divisions: viz.

Case 81. The Honey Cuckows are found in Africa, where they are celebrated for guiding the natives to the nests of wild bees, enticing them to the spot by fluttering before them, and reiterating a peculiar cry; as the honey cuckow, and lesser honey cuckow, &c. The rain cuckows are peculiar to South America, where they live on snakes, fruits and insects, which they search for on the ground, as the long-billed rain cuckow, &c.

Cases 81, 82. The Coucals are inhabitants of the warmer parts of the world, and are generally searching among reeds and grass for grasshoppers, lizards, and fruits; as the giant coucal, variegated coucal, &c., of Australia; bubut coucal of Java, &c., and the straight-heeled coucal of Africa; Cayenne cuckow; spotted cuckow of South America.

Case 82. The Anis inhabit South America, the West Indies, Asia, &c., where they are found on the ground seeking for insects, and others feed on fruits; as the greater ani and lesser ani, &c., red-headed malkoha, and tricoloured malkoha of India.

Cases 82, 83. The True Cuckows are only found in the warmer parts of the world; their food consists of insects and fruits; the European bird deposits its eggs in the nests of other birds; as the great spotted cuckow, and white-crested cuckow of Africa, &c.

Case 83. Common cuckow of Europe, and also found in England, Dunnum cuckow of Africa; gilded cuckow, cupreous cuckow of Africa, &c.

Cases 84—106. The GALLINACEOUS BIRDS.

Case 84. The Tree Pigeons are found in Asia, Africa, Islands of the South Sea, and Australia, where they reside in the woods, feeding on fruits and berries; as the parrot pigeon, aromatic pigeon of India, &c., black-capped pigeon of Java, &c.

Cases 85, 86. The True Pigeons and Turtles: these inhabit most parts of the world; their food consists of grains and seeds, as the antarctic pigeon of Australia; nutmeg pigeon of the Indian Isles; ring pigeon of Europe and England.

Case 87. The Migratory Pigeon of North America, and common turtle of Europe and England.

Case 88. The Ground Doves, which are mostly found on the ground, seeking for grains and seeds, in most parts of both hemispheres; as the bronze-winged pigeon of Australia, &c.; the ground turtle; Talpacoti pigeon of America; partridge pigeon of the West Indies; Nicobar pigeon; and great crowned pigeon of the Indian Isles.

Cases 89, 90. The Curassows, which are peculiar to South America, where they live in small flocks, searching the ground for worms and insects, also feeding on fruits; as (Case 89) the marail guan, motmot guan; (Case 90) crested curassow, razor-billed curassow, cushew curassow.

Cases 91—103 embrace the series of Pheasants: viz.

Cases 91—93. The Peacocks, which are inhabitants of India and its isles, where they are found in the woods and jungles, feed on grains. The crested peacock of India, Japan peacock; Iris peacock, &c., argus pheasant, &c., and the crossopiton, from Thibet.

Cases 94, 95. The True Pheasants: these are found wild in various parts of Asia, but some of them have become naturalized in Europe;

they feed on grain, roots, and insects; as the common pheasant, painted pheasant, and the Reeves's pheasant of China.

Cases 96—99. The fowls which are inhabitants of the jungles and woods of the continent and isles of India; their food consists of grain and fruits, &c., as (Case 96) the pencilled pheasant of China, coloured pheasant of Himalayan Mountains, &c. Case 98. Rufous-tailed pheasant, and fire-backed pheasant of Sumatra, &c.; Sonnerat's wild cock, superb pheasant, Javan cock, &c. Case 99. Horned pheasant, black-headed horned pheasant of India, &c.

Cases 99, 100. The Turkeys and pintados are found in America and Africa; they feed on grain and other vegetable substances; as (Case 99) the Guinea pintado, crested pintado of Africa; (Case 100) American turkey, &c.

Case 100. The Impeyan pheasants are peculiar to the northern parts of Asia, where they feed on bulbous roots, which they dig up by means of their bills; as the Impeyan pheasant, Pucras pheasants, &c.

Cases 101—103. The Partridges are found in both the New and Old World, where they generally inhabit the plains; their food consists of grain and other vegetable substances; as (Case 101) the sanguine pheasant, currie partridge of Nepaul, &c., cape partridge, bare-necked partridge of Africa, francolin partridge of Europe and India. Case 102. Red partridge of Europe, olive partridge of India, common partridge and quail of England, Andalusian quail of Spain, &c. Case 103. Crowned partridge of India, Californian quail, and crested quail, &c.

Cases 104, 105. The Grouse, which are peculiar to the northern parts of Europe and America: viz. the True Grouse, which are natives of the forests of the high northern latitudes of both hemispheres, and of the highest mountains of central Europe; they feed on grain, buds, and fruits; as the wood grouse, which is sometimes taken in the North of Britain, as well as the ptarmigan grouse and willow grouse; sharp-tailed grouse, ruffed grouse, both of America. Case 105. Sand grouse are only found in the deserts of the hottest parts of the Old World, as the pin-tailed grouse and sand grouse, &c.

Case 106. The Sheathbills have all the appearances of grouse: some inhabit the plains of South America, and others are generally seen on the sea-shore, or far out at sea; as the white sheathbill and black-billed sheathbill, &c. The Tinamous are inhabitants of the warmer parts of the New World, where they are seen among the low brushwood or tall grass; their food consists of fruits and insects; as the great tinamou, variegated tinamou, &c. The Megapodius is peculiar to the Asiatic Islands and Australia, as the megapodius, and the New Holland vulture, &c.

Cases 107—134. The WADING BIRDS.

Cases 107—109. The Ostriches, which are in flocks, and subsist on grain, fruits, and herbage; as the ostrich of Africa; American emu, New Holland cassowary, and galeated cassowary.

Case 108. The Dodo, which is only known by remains, as, for example, the foot in this Case (presented by the Royal Society), and a head (of which a cast is in this Case) and foot, said to have belonged to a specimen which was formerly in Tradescant's Museum, now form-

ing part of the Ashmolean Museum of Oxford. The bird represented in the painting, in the shortness of the wings and colour, has much analogy to the ostrich, but its foot greatly resembles that of the common fowl; and the head, from the cere and the position of the nostrils, is most nearly allied to the vultures; so that if these remains really belonged to one species, and that the one here represented, its true place in the series of birds is not as yet satisfactorily determined. An original painting of this bird, presented to the Museum by George Edwards, (and copied in his works, plate 294,) who says it was drawn in Holland, from a living bird brought from St. Maurice's Island, in the East Indies, is placed on the back of the Case. The Apteryx is peculiar to New Zealand, where they are nocturnal birds, and feed on worms and insects.

Cases 110, 111. The true Bustards, which are peculiar to the Eastern Hemisphere and Australia; they feed equally on grain, herbage, worms, and insects; as the great bustard, of Europe, but occasionally found in England; Arabian bustard; white-eared bustard of Africa; ruffed bustard of North Africa.

Case 112. Coursers that live in the sandy deserts, where they run with surprising speed if disturbed; they feed on worms, &c.; as the cream-coloured courser of Northern Africa, which has occasionally been found in Britain; double-collared courser of Africa, &c.; the thick-knees are found in the uncultivated open country and dry deserts, searching for worms, slugs, and insects, &c., as the thick-kneed bustard of Europe and Britain, &c.

Case 113. The Plovers inhabit Europe and various parts of the world; their food consists of worms, insects, &c.; as the golden plover, dotterel plover of Europe, both found in Britain; spur-winged plover, wreathed plover of Africa, &c.; ringed plover of Europe, and common in Britain; noisy plover of North America, &c.

Case 114. The Turnstones obtained their name from the habit of turning stones over to seek for the small shells and crustacea that are hid under them; as the turnstone sandpiper of the English shores and of other parts of the world. The Oyster-catchers seek their food on the sea-shores of England and other places; it consists of shell-fish, which they are enabled to wrench out by inserting their bill between the valves, also of other marine productions; as the pied oyster-catcher, black oyster catcher of Australia, &c.

Case 114. The Trumpeters, which are peculiar to South America: as the gold-breasted trumpeter, and Brazilian carriama.

Cases 115—117. The true Cranes, which are found in most parts of the world, on the borders of rivers and inundated places, seeking for small fish and reptiles: as the common crane of Europe; Siberian crane; Indian crane; crowned heron; demoiselle heron of Africa; caudate snipe of South America. Cases 117 and 118. Common and purple-crested heron of Britain; great heron of North America; pacific heron of Australia. Case 120. Great egret, little egret, &c. Case 121. Demi egret, and blue heron of America, &c. Case 122. Bittern of Europe, &c.; lineated bittern of America; squacco heron of Europe; and little bittern of England, &c. Case 123. Night heron of England and America, &c.; tufted umbre of Africa; cinereous boat-bill of South America, and the spoonbill of England and Europe, &c.

Cases 124, 125. The Storks, which frequent the retired marshes

and borders of pools in various parts of the world, where they prey on reptiles and small fish. Case 124. The white and black stork of England and Europe; American stork, &c. Case 125. Gigantic crane of India, &c.; American jabiru; Senegal jabiru, &c.

Cases 125, 126. The Ibises, which are inhabitants of the inundated places of various parts of the world, seeking for frogs, snails, and worms, &c. Case 125. The wood ibis of North America, &c. Case 126. Ethiopian ibis; black-headed ibis of India; New Holland ibis, &c.

Case 127. The Godwits: these birds migrate according to the season to various parts of the world; their food is composed of small molluscous animals, worms, &c.; as the common godwit, red godwit of England, terek snipe of Australia, &c.

Case 128. The *Totaniinæ*; these birds search among the gravel and stones of the banks of lakes and rivers for worms, insects, and molluscous animals, as the stagnile snipe of Europe; greenshank snipe, common sandpiper of England; and Bartram's sandpiper; semipalmated snipe of North America. The Avocets are remarkable for the extreme length of their legs, which enables them to search the muddy shores or mouths of the rivers for small insects and spawn of fish, &c.: as the scooping avocet, long-legged plover, &c.

Case 129. The Sandpipers are inhabitants of most parts of the world, seeking their food on the sea-shore and in marine marshes; as the knot sandpiper, ruff sandpiper, purre sandpiper, lesser grey sandpiper, of England, &c. The Phalaropes are found on the sea-shores of the Arctic regions; their food consists of crustacea, &c.; as the red phalarope, grey phalarope, &c.

Case 130. The True Snipes inhabit the thickest underwood, others seek the marshy districts; their food consists of worms and insects; as the woodcock, great snipe, common snipe, jack snipe of Britain, Cape snipe of India, &c.

Case 131. The Jacanas, which inhabit the marshes of the warmer parts of the world, where they walk with facility on the floating leaves of aquatic plants, as the chestnut jacana of South America, Chinese jacana, &c. The Screamers are inhabitants of the inundated ground of South America; as the horned screamer and Chaja screamer.

Case 132. The Rails live among the reeds on the borders of lakes, and in marshes, feeding on worms, &c.; as the water rail, crake gallinule, olivaceous gallinule of Britain, clapper rail of North America, &c.

Cases 133, 134. The Gallinules are found on the rivers and lakes, among the reeds, seeking their food, which consists of worms and larvæ of insects, as the purple gallinule of Europe, black-backed gallinule of Australia, &c.; Martinico gallinule of South America; common gallinule of Britain, &c.

Case 134. The Finfoots are peculiar to South America and Western Africa; as the American finfoot, &c.

Cases 135—166. The WEB-FOOTED BIRDS.

Case 135. The Flamingos, which are found in the warmer parts Europe, &c., on the banks of rivers and lakes, feeding on small shell fish, which they seize by inverting the head, to employ with advantage the crook of the upper mandible, as the red flamingo, &c.

Cases 136, 137. The Spur-winged Geese inhabit Asia, Africa, and Australia; as the spur-winged goose, black-backed goose, &c.

Cases 137—140. The Geese are found in various parts of the world, during their periodical flight; their food consists of grain and grass; as the New Holland cereopsis, Magellanic goose, Canada goose, barred headed goose of India, grey-legged goose, and white-fronted goose of Britain, &c.

Cases 141—143. The Swans are remarkable for their graceful appearance upon the water, and are found in most parts of the world; they feed on roots of aquatic plants, &c.; as the whistling swans, black-necked swan, &c.

Cases 144—148. The True Ducks: these birds are inhabitants of the lakes and rivers of the interior, but occasionally resort to the sea-shore of various parts of the world; their food consists of vegetables, insects and shell-fish, as the red-billed whistling duck of South America; shieldrake, widgeon, pintail duck, common teal, &c., of Britain; Chinese teal, and others.

Cases 148—150. The Sea Ducks are principally inhabitants of the ocean or saline lakes, and are sometimes found on rivers of the interior, seeking for small crabs, shell-fish, &c.; as the scoter duck, eider duck, tufted duck, nyroca duck, red-crested duck of Britain, &c.

Case 150. The Spinous-tailed Ducks are found in the warmer parts of the world, as the lobated duck of Australia, Ural duck, &c.

Case 151. The Mergansers inhabit the Arctic regions; their food consists principally of fish, &c.; as the goosander merganser, red-breasted merganser, hooded merganser, &c.

Cases 152, 153 contain the Divers: they form two divisions.

Case 152. The True Divers are found in northern regions, and are rapid divers, feeding on fish; as the northern diver, black-throated diver, &c.

Case 153. The Grebes inhabit most parts of the world, feeding on small fish, crabs, &c.; as the eared grebe, crested grebe, &c., of Britain.

Cases 154, 155 contain the Auks; these are oceanic birds, inhabiting the Arctic circles, feeding on fish and other marine productions, and are thus divided:

Case 154. The True Auks; as the great auk of Orkney, puffin auk, razor-billed auk of the British shores, &c.

Case 155. The Sea Parrots; as the parroquet auk, crested auk, Cape penguin, crested penguin, &c.; the Guillemots; as the foolish guillemot, black guillemot of Britain.

Cases 156—161 contain the Gulls: these birds are divided as follows:

Case 156. The Petrels, which are found in the high latitudes of both hemispheres, feed on fish, &c.; as the diving petrel, stormy petrel, Manks petrel, Fulmar petrel, and broad-billed petrel, &c.; giant petrel, wandering albatross, &c.

Cases 158—160. The True Gulls: they are found in every part of the world, feeding on all kinds of animal matter, fish, &c.; as the Arctic gull, glaucous gull, black-backed gull, little gull, &c., of Britain; fork-tailed gull, kittiwake gull, &c.

Case 161. The Terns are met with on every coast in the world, and occasionally inland, on the lakes, feeding on marine productions; as

the Caspian tern, roseate tern, gull-billed tern, minute tern, &c., of Britain; white-winged tern, &c. The Skimmers have remarkably formed bills, that enable them to skim the surface of the sea, in which they dip the lower mandible, the upper being elevated out of the water, until the prey is felt by the lower; as in the black skimmer.

Case 162. The Tropic Birds are peculiar to tropical climates, where they catch the flying-fish, &c., as the common tropic bird, red-tailed tropic bird, &c. The Darters live in small flocks, on the trees that overhang the rivers, &c., from whence they plunge into the water, and catch fish by darting at them with their sharp bill and long vibrating neck; as the white-bellied darter, &c.

Cases 162—166. The Pelicans that inhabit the marshes and sea coasts, feeding on fish, &c.; as the gannet of Britain, &c. Cases 163 and 164. White pelican, red-backed pelican, &c. Case 165. Common cormorant, shag of Britain, &c.; and Case 166. Greater frigate bird, and lesser frigate bird.

THE EGGS OF BIRDS

are placed in the smaller Table Cases along the side of the room; they are arranged in the same series as the birds in the Upright Cases. The Table Cases, in each department of the room, contain the eggs of the species in the Cases near to them.

THE SHELLS OF MOLLUSCOUS ANIMALS

are placed in the larger Table Cases across the sides of the room, (in progress of arrangement).

Tables 1—26. UNIVALVE SHELLS,

belonging to belly-walking, or Gasteropodous Mollusca.

Tables 1, 2. The *Strombs*, as the large pink-mouthed stromb, from the West Indies. With it are some of the pink pearls which are formed by the animal; they are extremely rare and valuable when of a good shape. The Diana ear stromb; the spiders' claws, sea scorpions, &c., which are peculiar for the outer lip of the full grown shell being furnished with finger-like projections; the terebellum, which is polished like the olive, but has no groove on the suture, and the front of the shell as it were cut off. The spindle strombs, of the Red Sea, which have the cavity of the tip of the shells filled up with crystalline matter as the animal grows.

Tables 2—8. The various genera allied to *Murices*.

Tables 2, 3. The Trumpet Shells (*Triton*), the larger species of which is often used as a trumpet by the natives of the Pacific Islands. The angulated or gadrooned triton. The gadrooned edge, so generally used by silversmiths, was taken from the finely wrought margin on the mouth of this shell. The frog shell (*Ranella*), so called because they are flattened shells, and have a ridge of spines on each side.

Tables 3, 4. The Rock Shells (*Murex*), so beautifully ornamented with the foliaceous, curled, and spinous protuberances with which their shells are adorned. Among others, the *Murex trunculus* of the Mediterranean, which is believed to have yielded the Tyrian purple of the ancients. The Slit-mouthed Shell (*Pleurotoma*), with a notch

on the hinder part of the upper lip, as the virgin slit-mouthed shell, from China.

Tables 5, 6. The Cone Shells, among which is to be seen the celebrated Glory of the Sea (*Conus Gloria Maris*), from the Philippines; it is very like some varieties of the cloth of gold. The setting sun cone (*Conus Vespertinus*), from the east coast of Africa.

Tables 6, 7. The Spindle Shells (*Fusus*), and the Pear Shell (*Pyrgula*); some of the shells have the whorls always turned in the contrary direction to the usual one, and have hence been called reversed; as the reversed spindle shell, from Sicily, or the Crag Rocks, and the reversed pear shell. It is commonly believed that reversed shells of this kind are only found fossil; but this is not the case, and reversed specimens of shells which have the whorls in the usual direction sometimes occur; but they are monstrosities, produced by some accident of the animal before it is hatched. Specimens of the common whelk, and one or two other shells of these kinds are to be seen in the collection; but they are rare, and hence persons have been induced to believe that reversed shells are always very valuable, but this is not the case. A specimen of the reversed spindle shell, of the reversed bulimus, or of physæ or clausiliæ, with the whorls in the common direction, would be as rare and valuable as reversed shells of those kinds which are generally of the common direction. The large Chinese spindle shell, which grows to a large size.

Tables 7, 8. The Turnip Shells (*Turbinella*), some kinds of which are very large and heavy. They are generally spotted when young, and white when adult, and from their form have been called Turnip Shells or Rape Shells; these are often used as oil vessels in the Indian temples, and for this purpose are carved and otherwise ornamented, as may be seen by some in the collection. When reversed they are much sought for by the Ceylonese, and highly valued; one of these reversed clamp shells is in the collection: they are said to sell for a very large price in Ceylon and China. The Iris wave, (*Turbinella prismatica*), so called, because when the shell is wetted the periostraca gives out brilliant prismatic reflections. The tulip shells, (*Fasciolaria*), among which is a kind which is by far larger than any other univalve shell yet discovered. The ostrich foot, (*Struthiolaria*), and the pelican's foot, (*Aporrhais*.)

Tables 8—11. The genera allied to *Buccinum*.

Table 8. The helmet shells, (*Cassis*), some of which grow to a very large size, and are used to form cameos.

Table 9. The *Cassidea*. The false helmet (*Cassidaria*). The harp helmet (*Cyathura*). The tun, (*Dolium*), which are often used in tropical climates to bale boats with. And the harps, (*Harpa*), so called because the ribs left on the surface by each succeeding addition to the growth of the shell have been compared to the strings of a harp. In some species these ribs are far apart, in others close; the latter are called the double-stringed or ridged harp; they were formerly very rare.

Table 10. The purple shell, (*Purpura*), so called because, like many other of the animals of this kind, they emit a purple secretion which has been used in dyeing. The unicorn shell, (*Monoceros*), so called because of the tooth-like horn on the front of the edge of the outer lip. The planaxis, which has been confounded with the peri-

winkles. The limpet purple, (*Concholepas*), which was formerly arranged with the *Patella*, because of the large size of the mouth of its shells. It exactly resembles the *left* valve of the heart cockle, a bivalve shell, in shape, but it has the same small horn-like projection on the front of the outer lip. The mulberry shells, (*Ricinula*), which are usually covered with spines, and have been thought to resemble the fruit. The *Magillus*, which, when the shell was first discovered, was thought by Guetard to be a stalactite, or mineral secretion; more lately Lamarck placed it with the worm shells, but the animal scarcely differs from the *Purpuræ*; when the animal is young it has a thin shell of nearly the usual form, but of a white colour; at a certain period of its growth, the animal deposits in the cavity such a quantity of calcareous matter as to produce the shell, in its subsequent growth, into a more or less elongated straight process, leaving only a small cavity for the body of the animal at its end. They exist in or on corals, and the extension of the shell is to allow the animal to keep its body level with the surface of the growing coral, that it may be enabled to procure its food. The *Litiopæ*, which, continually floating about the ocean, are attached to the Gulph weed. The whelks (*Buccinum*). The needle shell (*Terebra*). The *Bullia*, which has a very large animal for the size of the shell.

Table 11. The *Nassa*. The *Ringicula*, which has been confounded with the *Auricula*, but only differs from the *Nassæ* in having the large plaits on the pillar. The *Olives*, *Annularia*, and butter shells, or *Eburna*, which are polished externally: as the camp olive, (*Oliva porphyria*), from Panama; the Brazilian olive (*O. Brasiliensis*).

Tables 12—14. The genera allied to the *Volutes*.

Table 12. The Melons, or *Cymbium*, which often grow to a large size, and are used for domestic purposes by the Chinese and other Asiatic nations: as the crowned melon, and some of the *Volutes*. The young of the melons are produced alive and of a large size, the top of the spine is of an irregular shape like a nipple.

Table 13. The *Volutes*; as the very rare courtier or red clouded volute (*V. aulica*); the gambaroon (*Voluta Beckii*); the imperial volute (*V. imperialis*), from China; long-spined volute (*V. ancilla*), from the Falkland Islands.

Table 14. The rest of the volutes, and the *Mitres*, which differ from the former in having a longer spire; as the bishop mitre (*M. episcopalis*); the abbot mitre (*M. tiara*); the papal crown (*Mitra Papalis*); the orange flag (*Mitra vexillum*); the cracked mitre (*M. fissurata*). The date shells (*Marginella*), which are covered with a polished coat, like the cowries and olives, as the spotted and in ed date (*Marginella Persicula*); the robin (*Marg. glabella*).

Tables 15, 16. The Cowries (*Cypræa*) and their allied genera.

Table 15. The Cowries, as the morning dawn, or orange cowry (*Cypræa aurantia*), used as an ornament by the inhabitants of the Friendly Islands, and therefore seldom procured without having been drilled; the map cowry (*C. mappæ*); the *Cypræa Valentiana*; the mole (*Cypræa talpa*); the lapwing egg (*Cypræa mus*), with scarcely any teeth; the white-toothed cowry (*Cypræa leucodon*); the money cowry (*C. Moneta*), still used as currency in Africa.

Table 16. The pig cowries (*Trivia*), which from the ribs on the back have been compared to scored pigs, from their resemblance to the animal; the China shell, or *Ovula*, as the *Ovula angulosa*, which, like the orange cowry, is worn as an ornament by the natives of the country where it is found, and where it is so valued that they sometimes cut cones or other thick white shells into its shape. These shells are called *Porcellaines*, and are supposed to have been the cause of china being called by that name. The weaver's shuttle (*Radius*), which is so called from its shape.

Table 16. The various genera allied to *Turbo*, as the pomegranate or *Turbo Sarmaticus*, from the Cape of Good Hope. The singular, or *Turbo torquatus*, with its peculiar operculum, from New Zealand. The golden sun (*Imperator occidentalis*), from the West Indies. The imperial, from New Zealand. The Guilfordian sun (*Imp. Guilfordiae*), from Japan. The pheasant (*Phasianella varia*), from New Holland.

Table 17. The Top Shells (*Trochus*) and their allied genera; as the pyramid (*Pyramis*). The rosary (*Clangulus Pharaonicus*). The jujube berry (*Trochus Ziziphorus*). The iris or rainbow eardrop (*Cantherus Iris*), from New Zealand. The button shell (*Rotella lineolata*). The strawberry (*Monodonta*). The gold button (*Livona aurea*), which is peculiar for the light golden colour of the pearl. The dolphin (*Delphinula*).

Table 18. The false ear shell (*Stomatella* and *Stomatia*). The true ear shell (*Halotis*), as wrinkled ear (*H. Midæ*); the iris or rainbow ear (*H. Iris*); the slender ear (*H. Asinina*); the double ribbed ear (*Padollus*). The slit limpet (*Emarginula*). The shield shell (*Parmophorus*). The key-hole limpet, or mask (*Fissurella*). The long-holed limpet (*Machrochisma*). The tooth shells (*Dentalium*). The false patellas (*Lottia*), from South America. The nerites (*Nerita*). Fresh-water nerites (*Neritina*). The crowned nerites (*Clithon*), and the fresh-water boat shells (*Navicella*).

Table 19. The apple snails (*Ampullaria*). The reversed apple snails (*Lanistes*). The purple, or floating snail (*Ianthina*). The nipple shell (*Natica*).

Table 20. The Venus' ear (*Cryptostoma*). The winkle (*Littorina*), and other genera allied to them. The pagoda shell (*Pagodus*). The staircase shell (*Solarium*), so called on account of the ridge round the cavity in the axis or umbilicus resembling a well staircase. The screw (*Turritella*), as the press screw (*T. bicarinata*). The milk shell (*Eulima*). The ladder shell (*Scalaria*), often called by the Dutch name, Wentletrap, signifying a winding ladder; they were formerly very rare, but are now brought from China.

Table 21. The Fresh-water Clubs (*Melania*); the clubs (*Cerithium*); and the pond snails (*Paludina*).

Table 22. The worm shell (*Vermetus*), which is like the tubes of serpulæ. The fool's cap (*Capulus*), and the Hipponyx with its shelly under valve, which has caused it to be mistaken for a bivalve shell. The slipper shell (*Crepidula*). The cup and saucer limpet (*Dispotea*). The Trochus-like limpet (*Trochila*) and the Neptune's cap, which has a cup-shaped under valve. The carrier (*Phorus*), which has the peculiarity of attaching to the outer surface of its

shell, as it enlarges in size, stones, fragments of other shells, coral, and other marine substances, from whence it has been called respectively the "Conchologist," and the "Mineralogist," as shell or mineral preponderated. Some of the species have this habit only in an early stage, others retain it during the whole period of their existence; some have the margin of the whorls expanded out into a broad disk, others have this part furnished with a series of long tubular processes like the rays of the sun, hence the name of Sun Carriers. The Bubble Shells (*Bulla*), and the shelly plates found in the gizzard of some of the species. The rose-bud (*Bullina*).

Table 23. The horny shells found under the skin of the sea hares (*Aplysia*), and the shelly blade bone shell of *Dolabella*, from the Indian seas. The very fragile and thin glassy nautilus (*Carinaria*), and the different species of paper nautilus or Argonauts. The poetic account of the animal usually found in this shell using its dilated arms for sails, and its slender arms as oars, from whence Pope gave his well known lines,

" Learn from the little Nautilus to sail,
Spread the thin oar and catch the driving gale,"

proves to be a fiction. The dilated arms are used by the animal to clasp the shell and keep it on the body, when it passes through the water, like other cuttle fish, with the broad part of the body forwards. The flat orbicular shell of the Chinese umbrella (*Umbrella*), and the horny thin silvery shells found under the skin on the backs of *Pleurobranchus* and *Berthella*. The Limpets (*Patella*). Scaly Chitons (*Chitons*). Spiny Chiton (*Acanthopleura*). Leathery Chiton (*Tonichia*). Fasciculated Chiton (*Acanthochetes*). *Chitonella*, or sea caterpillars, and the *Amiculae*, or shellless chitons.

Tables 24—30. The various genera of Land Shells, as the shelly plates which are found under the skin of the slugs and the different kinds of snails or *Helices*: as the *Streptaxis*, which has the axis bent on one side, as if the shell was crushed. The Grecian lamp, (*Helix Anastoma*), which has the mouth turned up towards the whorls on the upper surface of the shell. The *Proserpina*, which has the cavity of the shell furnished with large continuous folds.

Tables 27—29. Land Shells continued: as the different kinds of *Bulimi*; the puppets (*Pupa*); the closed shell (*Clausilia*), which has a shelly valve that closes the mouth of the shell, placed behind the plait on the pillar, and the *Achatinae*. Many of these shells deposit a large egg covered with a hard shell, like the eggs of birds. The eggs of different kinds are in the Case.

Table 29, 30. The Fresh-water Shells, as the different genera allied to *Auricula*, amongst which is the *Carychium*, the most minute of the British land shells; and the different kind of pond snails (*Limneus*), coil shells (*Planorbis*), and fresh-water limpets (*Ancylus*). The *Amphibolæ*, from Australia. The *Siphonariæ*, which so much resemble the limpets; and lastly, the various kinds of *Cyclostomæ* and *Helicinæ*.

Tables 31—45. The BIVALVE SHELLS,

Which are under arrangement into tribes.

Table 46. The lamp shell (*Terebratula*); Duck muscles (*Lingula*); the *Crania* and *Discina*, the upper valves of which have been mistaken by some authors for limpets; the bones of cuttle fish (*Sepia*); the cartilaginous lances of sea leaves (*Loligo*), sometimes called sea pens. The fossil *Belemnites*, which are supposed to be similar to the small horny process at the end of the cuttle fish bone. The crozier shell (*Spirula*), and the different kinds of *Ammonites* and *Nautili*.

THE NORTHERN ZOOLOGICAL GALLERY.

FIRST ROOM.

This room may be for the present considered as an appendage to the two foregoing.

THE WALL CASES. A series of the skulls of the larger MAMMALIA to illustrate the characters of the families and genera, and of the nests of birds, and the arbours of the two species of Bower Bird; the one ornamented with fresh-water shells and bones, and the other with feathers and land shells, &c.

THE TABLE CASES. The tubes of ANNULOSE ANIMALS, the casts of the interior cavities of SHELLS, and various specimens of shells, illustrative of the diseases and malformation of those animals.

Tables 1, 2 contain the shelly tube formed by the *Serpula*, which have often been confounded with shells. The tubes of sand, agglutinated together by the juices of the animal, formed by the *Amphitrite*.

Tables 3, 4 contain specimens of shells, exhibiting the different size of different specimens in their adult age, the changes of form which occur in the shell during the growth of the animal, the changes which take place in the cavity of shells, the manner in which shells are mended by the animal after any injury, and also how the animal covers any excrescence which attaches itself to a shell, or removes any part which is in the way of its enlargement.

Tables 5, 6 contain a series of plaster casts of the interior cavities of different shells of living mollusca, to assist in determining the casts of fossil species often found in rocks.

Tables 7, 8 contain a series of models on an enlarged scale, and some specimens of minute bodies, formerly called *Nautili*, but now formed into a group under the name of *Foraminifera*.

In one of the Cases are the shells used for cutting cameos, showing the places where they are cut from.

SECOND ROOM.

The UPRIGHT CASES round the room contain the collection of REPTILES and BATRACHIAN ANIMALS, preserved dry and in spirits, and the TABLE CASES the first part of the collection of the hard part of RADIATED ANIMALS, including the SEA EGGS, SEA STARS, and ENCRINITES.

THE WALL CASES.

Cases 1—7. The LIZARDS.

The Cases 1—3. The Monitors of Africa and India. In both countries they are venerated by the natives, who assert that they give notice of the approach of crocodiles, by hissing when they perceive one of those animals; hence their name.

Case 3. At the bottom are the Heloderms from Mexico, which, unlike any other lizard, have a groove in the back of the teeth like serpents. They are said to be poisonous; but this may be a mistake, for ignorant persons are inclined to believe that all reptiles are dangerous.

Case 4. At the upper part, the Safeguards of the tropical parts of America. They grow to a large size. The *Crocodilurus* has two keels in the tail like the crocodiles. The lower part of the Case, the lizards of Europe and North Africa, and the snake lizards (*Chamæsauros*), which have very long bodies, and small or very rudimentary legs.

Case 5. The Scincs and other allied genera, which are generally small and polished. They come from the warmer parts of both hemispheres. Some have distinct and strong legs, and others rudimentary ones; as the blind worms, which have the bones of the legs hid under the skin; they are all quite innocent. In the lower part of the Case are the *Aprasia*, *Pygopi*, *Delmæ*, and *Lialisidæ*, or different kinds of blind worms from Australia, and the *Acontia* from the Cape of Good Hope.

Case 6. The Geckos, or night lizards, which have the power of walking up glass, or even to run with facility back downwards on the ceiling of a room, like a fly. They come from the warm parts of both hemispheres, and differ greatly in the form of their toes; some have the skin of the sides spread out to assist them when jumping from tree to tree. In the lower part are the various lizards allied to the Guanas. They are only found in America, and live on trees; are very quarrelsome, and often fight with great ardour when they meet; they have the faculty of changing their colour with great quickness. The Anoles have the end of their toes dilated, which enables them to walk on smooth and perpendicular surfaces, like the Geckos.

Case 7. The different genera allied to Agama. They are only found in the warmer parts of the Old World and Australia; as the *Molochs*, which are almost entirely covered with large spines; the Dragons of India, which have the skin of their sides spread out into the form of wings, held up by the ends of the ribs; when at rest these wings are folded together on the sides, but when it leaps from branch to branch they are spread out and act as a parachute; the frilled agama (*Chlamydosaurus*), which has a large folded frill round its neck like a Queen Elizabeth's ruff, which it can elevate when excited. The lower shelves contain the different kinds of chameleons, which are found in Africa and India, and the islands near them; they have been long celebrated on account of the rapidity with which they change their colours; and they are remarkable for the distance to which they can protrude the tongue in order to catch insects, which form their principal food.

Cases 8—19. The SNAKES or SERPENTS.

They differ from the lizard in always swallowing their food entire.

Case 8. The POISONOUS SERPENTS.

In the upper shelves are placed the Rattle-snakes peculiar to America, which have a rattle at the end of the tail; this rattle is formed of a series of horny joints, fitting one into the other, which the animal can shake at pleasure; there are several detached rattles, to show their structure; the fer de lance of the French colonists in South America, and the different kinds of poisonous snakes allied to the rattle-snake which come from India. The lower shelves contain the Vipers; as the adders of Europe, the long-nosed viper (*Ammodytes*) of Southern Europe; the crested or double-horned viper of Egypt and North Africa; the nosehorn viper of Guinea, and the puff adder or short-tailed viper of the Cape of Good Hope and Western Africa. The viper is the only reptile found in Great Britain possessed of dangerous poisonous qualities.

Cases 9—19. The HARMLESS SNAKES.

Cases 9—17. The genera allied to Coluber; as the water snakes (*Tropidonotus*) and the common ring snake of England; the coral snake (*Elaps*), which is marked with alternate black and red rings; the flat-tailed coral snake, which lives in the sea and has a flattened tail; the juggler snakes (*Naja*), which have the faculty of dilating the skin of the neck so as to form a kind of hood over the head; they are found in Africa and India, and are used by the native jugglers in their exhibitions; the Indian species have usually a yellow spot on the back of the neck, somewhat resembling a pair of spectacles. These snakes have their hinder teeth larger than the rest; are furnished with a poison tube, like the fang of the rattle-snake and vipers. The tree snakes, or coach-whip snakes have very long bodies; they live chiefly on trees; one of these is peculiar for its nose being much produced.

Case 18. The genera allied to the *Boa*; they are the only snakes furnished with the rudiments of legs; they are not venomous, and kill their prey by crushing it between the folds of the body, generally at the same time twisting the end of their prehensile tail round a tree or some other fixed point, in order to increase their power; some come from America, some from India, and a few from Africa.

Case 19. The Sea Snakes, which are peculiar to the seas of Asia and New Holland, and are in some degree dangerous, as many of the species have small fangs dispersed amongst the true teeth; some of them grow to a very large size; they sleep on the shores coiled up, and are sometimes found asleep on the surface of the calm tropical seas. On the lower shelves is the *Acrochorde*, found in the ditches of the rice-fields of India.

Cases 20—23. The TORTOISES and TURTLES.

Case 20. The LAND TORTOISES, which live on vegetable substances. They are used for food; as the gigantic Indian tortoise, naturalized at Galapagos, from whence they are procured in large numbers for food by the sailors; and the different species from India, Africa, and America, many of which are beautifully varied with yellow.

Cases 21, 22. The FRESH-WATER TORTOISES, or Terrapins, which live on animal food; they are found in the warmer parts of both

hemispheres, and are eaten by the North Americans and the natives of India. Some grow to a large size, as the crocodile or snapping tortoise of America, and the thurgi tortoise of India. On the lower shelves of Case 22 are the *Chelydæ*, which differ from the other terrapins in bending their head back under the margin of the shell when at rest, and cannot withdraw it into the cavity of the shell like the other tortoises. These animals will only take their food while in the water, when in confinement.

Case 23. The three-clawed terrapins, which live in the rivers of Africa and Asia, and North America; they are strictly carnivorous, and eat their food in water; they are to be seen in the Ganges preying on the human bodies that float down that river. The lower shelves of this Case contain the Marine Turtles, which live principally on fuci, sea-weeds, shells, and crustaceous animals: as the Luth of the Mediterranean; the green turtle, and the imbricated turtle, or tortoise-shell turtle of Arabia, which furnishes the best sort of tortoise-shell.

Case 24. The specimens of CROCODILES.

The Crocodiles inhabit both the Old and New World; the alligators, only found in America; and the gavials, which are peculiar to India. The lower shelves of this Case contain the double-headed snakes (*Amphisbæna*), so called because both ends are nearly equally blunt, which has led to the idea that they could walk backwards and forwards with the same facility.

Cases 25—26. The BATRACHIAN ANIMALS.

The toads, frogs, and efts: the most remarkable are the tree frogs, which have the power of walking on polished surfaces, and of attaching themselves by their feet to, and walking with their bodies suspended on the under side of the smoothest leaves; they fix themselves directly they alight on any body, and, like many reptiles, they have the faculty of changing the colour of their skins, which often enables them to elude the vigilance of their enemies. The bull frogs of America; the horned toads of Brazil; the paradoxical frog from Surinam, the young or tadpole of which, when in its fish-like form, is larger than its parent, and has been described as a fish; and *Pipa* of Brazil, which deposits its eggs on the back of the male, who carries them a certain period, when the young are emitted from the cells; the siren of Carolina, which looks like an eel with front legs; the proteus of the dark subterraneous lakes of Southern Europe, which is of a pale pink colour, and blushes when exposed to the light; of this there is a very accurate wax model, to exhibit its appearance when alive.

THE TABLE CASES. THE SEA EGGS, STAR-FISH, AND ENCRINITES.

Tables 1—9. SEA EGGS.

Tables 1—6. The globular sea eggs. The club-spined echinus (Case 3), which has very large club-shaped spines; the tessellated echinus, which has short, broad, flat-topped spines like tessellated pavement. The spines easily fall off when the animal is dead, which makes specimens with spines on them rare in collections.

Tables 7, 8. The Sea Pancakes, which are so depressed that there scarcely appears to be any room for their internal viscera; some of them are lobed or fingered on the margin, and others pierced with slits.

Table 9. The *Galerites*, which are most abundant in a fossil state; and some of the Sea Hearts, the species of which are continued into and occupy Case 10.

Tables 11—18. The STAR-FISH.

Some have five and others many rays; some have the surface scattered with tubercles placed on the junction of a net-like skeleton, and others are formed of flat-topped pieces, like a tessellated pavement, each separate stem being fringed with an edge of minuter pieces; some of them bear on the top of each of the flat pieces a solid tubercle, which often falls off when the animal is dead.

Tables 19—23. The LIZARD-TAILED STAR-FISH,

So called because they often throw off the end of their rays when they are handled or put into fresh water, as lizards do when they are caught and cannot escape.

Table 23. The GORGON'S HEAD,

The arms of which are repeated branches, so as to end in innumerable flexible filaments, by which the animal attaches itself to marine bodies, and strains its food from the surrounding water.

Table 24. The *Comatula* or SEA WIGS,

Which are the recent representatives of encrinites, found so abundantly in certain rocks.

THIRD ROOM.

The WALL CASES round this Room contain, until another Room is prepared for them, the Glirine MAMMALIA, and part of the collection of Fish; and the TABLE CASES the different kinds of CORALS.

THE WALL CASES. MAMMALIA.

Case 24. On the upper shelves, the leaf-nosed bat from Brazil, the vampire, or bloodsucking bat, from the same country; the Rhinolophes and Megadermes, from India and Africa. On the lower shelves are placed the horseshoe bats of the Old World.

Case 25. The Nycteres of Africa, and the Petalias of Java; the Nyctophiles of Australia; the Barbastelles and long-eared bats of Europe; and the true bat and Scotophiles, which are scattered over different parts of the world, and the Lasiures of America.

Case 26. The Moormops and Chelonictes of the West Indies; the Taphozous of Africa and India; the bull-dog bats of Tropical America; and the Molossi and Nyctinomes.

Cases 27—29. The different kinds of fruit-eating bats, which from their large size are often called flying foxes; they are only found in the warm parts of the Old World and the Australian islands.

Cases 1—28. The GLIRINE MAMMALIA.

Case 6. The various kinds of Rats on the upper shelves, and the different species of Mice on the lower ones.

Case 7. The Hapalotes of Australia, and other genera allied to the rats, on the upper shelves; the voles and jerboa rats, and the spinous-pouched rat from Tropical America on the lower shelves.

Case 8. The Beaver, young and old, of Europe and South America; the coypus rat of Tropical America, much used, like the beavers, to make hats; the Ondatra of North America on the upper shelf; the Hydromys of Australia, and the spiny rats of America, are on the lower ones.

Cases 9, 10. The Porcupine of the Old World; the fasciculated porcupines of India and Africa; the tree porcupine, or ursons, of North America; the spiny and hairy prehensile-tailed porcupines of Tropical America are on the upper shelves: the Cavies and genera allied to them, which are only found in South or Tropical America, are on the lower ones.

Cases 11—13. The Hares of Europe, of North America, Africa, and India.

Case 14. The different varieties of Rabbits, and the various kinds of tailless hares, from Europe, Asia, and America, on the upper shelves; and the Jerboas of North Africa and Asia, the leaping hare of South Africa, the chinchilla of South America, and the dormice of Europe on the lower ones.

Case 15—17. The Taguans and Flying Squirrels of Asia and its islands; the Assapan of N. America; the Polatouche of Siberia, and the spiny-tailed squirrel of Fernando Po; the large long-tailed Asiatic squirrel, with or without tufts on their ears, on the upper shelf; and the different species of the large North American, more or less grised ones, on the lower shelves.

Case 18. The South American squirrel on the upper, and the smaller grised Asiatic species on the lower shelves.

Case 19. The remainder of the Asiatic grised squirrels on the upper, and the striped backed Asiatic species on the lower shelves.

Case 20. The ground squirrels of Africa and India on the upper, and the striped pouched squirrels of North America and Europe on the lower shelves.

Case 21. The various kind of Souslicks of North America and Europe.

Case 22. The remainder of the Souslicks, the Marmots of America and Europe on the upper; and the different kinds of mole rats of Europe, the sand moles of the Cape of Good Hope, the bamboo rats of Malacca, the golden rats of Africa, and the Sewellel of North America, on the lower shelves.

The TABLE CASES. The different kinds of CORALS.

Tables 1—32. The various kinds of star corals or madrepores; as the sandy corticifera, the sea mushroom (Case 2); the brain stones (Case 10); the tree-like corals (Case 15); the clove coral of the Mediterranean (Case 7); the millepore, which grows extremely rapidly and expands itself with facility over all the different anomalous objects that

come in its way: thus we have it covering shells, bottles, horny corals, and assuming the form of all the things it covers.

OVER THE WALL CASES are placed the fish which are too large to be inclosed in the Cases; as the Herschell pike fish, from the Cape of Good Hope; the Sudis, from the rivers of Berbice; the bony pike, from North America.

FOURTH ROOM.

The WALL CASES round the Room contain the collection of Fish, under the course of arrangement.

The TABLE CASES, a few specimens of Annulose Animals, to exhibit their systematic arrangement.

The general collection of insects and crustacea are preserved in cabinets. They may be seen by persons wishing to consult them for the purpose of study (by application to the Keeper of the Zoological Collection) every Tuesday and Thursday. To prevent disappointment, it is requested that persons wishing to see those collections will apply two days previous to their intended visit.

WALL CASES 1—13. SPINY-RAYED FISH.

Cases 1—4. The perches, gurnards, the flying gurnards with their large pectoral fins, the bull heads, the hog-fish, sea scorpions, the flying sea scorpions or sea butterflies, paradise fish, and fingered perches.

Case 5. The Scienoid Fish, maigres, ombres.

Case 6. The bristle-toothed fish or *Chaetodons*.

Case 7. The *Holacanthi*, the scombers, mackarel, tunny, the sword fish with its long pike-like nose: some of these afford a most important article of food.

Case 8. Pilot fish, horse mackarel, john dories, pomfrets.

Case 9. Dolphins, which change colour so rapidly when they are caught; the sea garters and lophotes, which are very thin and compressed; the surgeons, which have a lancet-like spine on the side of their tail.

Case 10. The sea mullets, wolf fish.

Case 11. The *Lophius* or fishing frog or angler, with their very large head and mouth; hand fish, so called because its pectoral fins are elongate, as if placed on an arm; the rock fish or *Labri*.

Cases 12, 13. Various kinds of rock fish (*Labri*). At the bottom of 13, the tobacco-pipe fish and trumpeter fish.

WALL CASES 14—19. SOFT-RAYED FISH.

Case 14. Carp, and other fresh water fish of different countries.

Case 15. The pikes: the bony pikes, from America; the garpike, which has green bones; and different kinds of flying fish.

Case 16. Siluroid fish: the callichthes, which are covered with rows of imbricate plates like scale armour; and the loricaria, which has the body entirely covered with a hard coat formed of angular scales; the salmon, trouts, &c.

Case 17. Different kinds of herrings, shad.

Case 18. Cod, ling, whiting. Flat fish: turbot, flounders; their bodies are compressed, and they lie on the white side at the bottom of the sea.

Case 19. Remainder of the flat fish; as the different species of soles, finless soles, &c.; the lump fish, and different kinds of eels.

Case 20. The remainder of the eels; sea horses, so called because they bear a grotesque resemblance to a horse in miniature when dry and contracted.

WALL CASES 20—26. ANOMALOUS FISH.

Case 20. Spiny globe fish, which have a beak like a parrot; they have the faculty of dilating their stomach with air, hence their name.

Case 21. The balistes or file fish, which have small teeth, and are covered with a hard skin; leather jackets, with a more flexible less armed skin.

Case 22. The coffin fishes, covered with a hard horny skin formed of six or eight-sided plates, forming an even coat; the sturgeons, from Europe and America.

Cases 23, 24. The sharks; the saw-fishes, with their elongated head furnished with teeth on each side.

Cases 25, 26. The rays, the torpedoes, and the sting rays.

ON THE TOPS OF THE CASES,

Different kinds of fish which are too large to be arranged in the proper places in the Cases.

Large shad with a long dorsal ray, from Mexico; a maigre from Guernsey; a sword-fish, from Margate; a flying sword-fish, from the Indian Ocean, with two other pikes; and belonging to the same kind of fish, one which has been forced through the oak timber of a ship. These fish swim so rapidly, that if they come against a ship they pierce it. A conger, an angel fish, a short-nosed bony pike from North America; sharks; the nose of various large saw-fishes; a piraruca, from British Guiana; a sturgeon, and a large sting ray.

THE TABLES 1—12. INSECTS.

Tables 1—8. The *Coleopterous Insects* or Beetles; the leaf-beetle or mormolyce, from Java; the burying beetle (*Necrophorus*); the stag-beetle, with its long jaws like the horns of deer; the scarabæus, which incloses its eggs in balls of dung, and was esteemed sacred by the Egyptians; the rhinoceros, elephant, and bubaline beetles, which have the front of the head or the front of the thorax produced into variously shaped horns or humps.

Table 2. The buprestidæ, with their metallic colours, the hard wings of which are often used to ornament dresses in the place of spangles; the lantern spring-jack (*Elatér noctilucus*), with a spot on each side of the thorax, luminous when living; the various kinds of glow-worms, curculians, or long-nosed beetles, as the diamond beetle, from Brazil;

the prionii, which have very long jaws, and live chiefly in old wood; the harlequin beetle with its very long fore legs.

Table 3. The false kangaroo beetles (*Sagra*), with their very large hinder legs; and the different kinds of tortoise beetles, and lady-birds, some of which are very brilliant.

The earwigs, with their beautiful fan-like wings; the cockroaches, which have been introduced into England; the praying insects, (*Mantis*) and some of their eggs, which are formed into different shaped masses; the walking-sticks, some of which are provided with large fan-like wings, but the greater part are destitute of them and look like fragments of stick.

Table 4. The rest of the *Orthopterous Insects*. The house, field, and mole crickets of England; the monstrous cricket, with its extraordinary toes and curled wings, from China; the different kinds of locusts; grasshoppers. The *Neuropterous Insects*, as dragon-flies, ant-lions, with their curious larva, which forms a pit to catch insects; the scorpion-fly (*Panorpa*); the white ants (*Termes*), so destructive in the tropics; and the cases of different kinds of caddis flies. The *Hymenopterous Insects*, as saw-flies, wasps, hornets, ichneumons, sand wasps; bees, as the wood-cutting bee.

Tables 5—8. *Lepidopterous Insects*.

Tables 5, 6, 7. Butterflies, exhibiting the different forms of their wings and the peculiarities of their colouring.

Table 8. The hawk-moths, as the privet hawk-moths, the death's head moth, the clear wings, the humming-bird, and the Burnets. The different kinds of moths, as the ghost, found in and so destructive to hop grounds; the leopard and goat moths, which feed on wood in their larva state. The Tusseh silk-worm moth, and some of the silk worked; the Kentish glory; the drinkers; the silk-worm moth, and cocoon on birch twigs, as they are kept in Siberia.

Table 9. Different kinds of moths, as the large owl moth, from Brazil.

Table 10. The *Dipterous Insects*, as the different kinds of flies, gnats, breeze flies. The *Hemipterous Insects*, bugs of all kinds: the wing-legged bug; the water scorpion; the boat fly; the cicadæ; and the lantern flies from China.

Table 11. SPIDERS. The tarantula; the nest of a spider with a moveable lid which closes the hole by its own weight when the animal leaves it; one has a door at each end, the nest having been in a clod of earth which was turned over, the animal formed a second lid at the opposite end. The scorpions of different countries: bristle-tailed scorpion (*Thelyphonus*); the tailless scorpion (*Phrynus*), which has very long claws.

Table 12. The whale lice; sand spider; galeodes; acari; shepherd spiders; the scarlet tick, from Africa. The iuli, scolopendræ or centipedes, so called from the number of their legs.

TABLES 13—24. CRUSTACEA.

Table 13. Spider crabs, with long legs and small bodies.

Table 14. Rough crabs; the common crab; two have a number of oysters growing on their backs, showing that the crabs do not change

their skin every year, or that the oyster grows to a large size in a very short space of time.

Table 15. Oval-bodied crabs.

Table 16. The fin-footed or swimming crabs, from different parts of the ocean.

Table 17. The telescope or long-eyed crab; the land crabs.

Table 18. The square-bodied crabs; the crested crab; and the Chinese fin-footed crab.

Table 19. The porcelain crabs; the corystes; the back-footed crabs; and the death's head crabs, which usually form for themselves a case from pieces of sponge or shell.

Table 20. The Bernhard or hermit crabs, which live in shells; the tree lobster, which is said to climb cocoa trees to get at the nuts.

Table 21. The sea locusts or scyllarus; the sea craw-fish.

Table 22. The scorpion lobster, which lives a great part of its life on land, and destroys new made roads in India by the excavations it forms under them. The lobster; one of the specimens exhibited was pale red, nearly of its present colour, when alive. The mantis crabs; the different species of shrimps; the glass-like alima and phyllosoma, which are scarcely thicker than a piece of paper, and nearly as transparent as glass; they are found in the ocean near the equator; the king crab, with its long stile-like tail and large head.

Tables 23, 24. The sea acorn; whale lice; barnacles, or goose shells, as they are called, from the extraordinary belief that they were the origin of barnacle geese.

FIFTH ROOM.

The WALL CASES. Molluscos and Radiated Animals and Crustacea in spirits, and the Nests of different kinds of Insects.

OVER THE WALL CASES is a very large wasp's nest from India; and some Neptune's cups, a kind of sponge, from Singapore.

TABLE CASES. Sponges of different kinds, showing their various forms and structure, and some preserved in flint, showing the same structure.

JOHN EDWARD GRAY. *x 26*

Oct. 26, 1847.

1867

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