**The Breeding and Rearing
of Jacks, Jennets and
Mules
*
Knight**

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DR. L. W. KNIGHT.

The Breeding and Rearing
=====of=====
Jacks, Jennets and Mules.

BY
L. W. KNIGHT, M.D.

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PREFACE.

Realizing the constantly growing demand for mules in the United States, as well as other countries, I have been induced to write a book in my old and declining years on the subject of breeding and rearing jacks and jennets as well as mules. I know of no literature on the subject of breeding jacks and jennets, and very little on the mule, which I regard as the best animal for the Southern and tropical climates. I have written this book without notes, and entirely from memory, for the benefit of the young stock farmers, who *are*, or *will* be hereafter engaged in this line of business. I am aware there are many imperfections in the book, which I trust a generous public will excuse under the circumstances. THE AUTHOR.

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Breeding and Rearing of Jacks, Jennets and Mules.

SECTION FIRST.

God in his infinite wisdom and goodness has given unto us three great kingdoms, viz.: the Animal, Vegetable and Mineral. He has given us dominion over them and if we expect to make them profitable we have to study them and cultivate them to make them valuable so that we may get our revenue from them. Having had long experience in the developing of the animal kingdom, especially the jack and jennet stock and valuable mule, I thought perhaps I could make some suggestions and give my experience for over three-fourths of a century in handling this stock.

Having been favorably impressed, especially since the termination of the Spanish-American war, with the great importance of opening up a trade with the many tropical islands, viz.: Cuba, Porto Rico, Philippine and Caroline and Hawaii Islands, the question presents itself to my mind, How are those fertile countries to be supplied with suitable stock to cultivate them? They are coming under the jurisdiction of the government of the United States. May we not include Africa, which in a few years may be open as a market for our mules? Where can they get their supply from? Tennessee, Kentucky, Missouri, Texas, and, perhaps, a few other states. Now, to supply this great demand we have to make the preliminary ar-

rangements, hence we will have to increase our jack and jennet stock. We cannot have mules without jacks, neither can we have jacks without jennets. So, they are the basis or foundation for mules. The United States has scarcely enough mules to supply her own demands. The English government has within recent date, shipped from New Orleans and other places thousands of mules to Africa for army purposes, and is still shipping them.

The demand is growing every year in the United States for mules, as the railroads are being developed in all parts of our country, opening the great forests and the lumber trade as well as the various minerals, as gold, silver, iron, lead, coal and phosphate; and oil is being found in various parts of our country. As the great internal resources are developed so will the demand for stock be increased. It may be stated as a fixed fact that as long as sugar, cotton and rice will grow in the South, there will be a demand for mules. No animal can supersede the mule for the tropical climate.

SECTION SECOND.

Having been appointed by the Executive Committee of the "Jack Stock Stud Book of America," I have given a brief history of the early breeders of jacks and jennets in the United States as far as could be ascertained, and have also given a history of all the late importations as far as could be learned, from one of the largest importers, who has made eight trips to Europe and has had more experience than any importer of jacks and jennets in America. I allude to Mr. Wm. H. Goodpasture, who was also Secretary

of the "American Jack Stock Stud Book Association." He and his lamented father, Judge Goodpasture, together made more and larger importations than any other parties with whom I am acquainted. Their eight importations have been worth millions of dollars to the United States. Mr. Wm. H. Goodpasture has written a very accurate description of the different breeds of jacks that are used in Spain, Italy and France, and the different islands of the Mediterranean Sea, particularly Malta and Majorca. His description of each species is so full and accurate, that it would be superfluous for me to repeat, or try to improve on them. I have had through the courtesy of both the original secretary, Mr. Wm. H. Goodpasture, and the present secretary, Mr. J. L. Jones, Jr., of Columbia, Tenn., the privilege of using such articles in the "American Jack Stock Stud Book" as would be of special interest in furthering the cause and development of the jack breeders of the United States. We find but little literature on the subject of breeding and rearing jacks and jennets in our country. Hence, we think some one who has had varied experience in breeding and rearing this stock in the United States should give additional information.

I was born in Guilford County, North Carolina, in 1816, and when about four years of age I remember that my father, the late Captain James Knight, owned a Diomeed stallion and a jack. He placed me on the jack's back and led him into a wheat field to graze him. This was about the year 1820. Early in the twenties my father moved to Middle Tennessee and settled in the Southern part of Rutherford County, where I was reared.

He was born in Sussex County, Virginia, about the year 1793. My grandfather, Captain Doak, was an officer in the Revolutionary War. When the war ended the government of the United States did not have money to pay the officers for their services and many were paid in scrip. My grandfather and a cousin of his, named Doak Hanna, brought their scrips to Rutherford County, in Middle Tennessee, and each one of them entered a thousand acres of land in the beautiful valley lying between Marshall's and Lee's knobs. The Murfreesboro and Shelbyville pike runs through this valley eight miles south of Murfreesboro. My mother was a daughter of Captain James Doak, and inherited a part of the one thousand acre tract of land.

I remember the first sucking mule I ever saw was foaled on my father's farm and he sold it at weaning and it brought a better price than horse colts did at the same age. This made a lasting impression on my mind, and I have often observed since that those who would buy young mules at weaning or at an early age and grow them properly and have a good lot to sell every year were generally prosperous stock farmers and would, from time to time, be able to buy their neighbor's land and perhaps sow it down in grass and make the fences mule proof; and in the course of a short time the growth of their mules and enhancement in value would make the owner a handsome capital.

Some time in the thirties I remember my father visited General Andrew Jackson (Old Hickory) who was noted for his love of fine horses and had won a wagon load of negroes from ex-Governor Cannon at Clover Bottom race track. The General, in speaking

to my father in regard to raising mules, said to him, the finer the mare the finer the mule. The same will also apply to the jack.

Some time in the thirties my father went to Brunswick County, Virginia, and purchased a very fine black jack with white nose and belly. He was said to have been the third descendant of the Royal Gift to Gen. George Washington after the Revolutionary War. I have made reference to the Royal Gift in my essay on "Reminiscences," written in the American Jack Stock Stud Book, giving a history of the early breeders of jacks and jennets as well as all of the importations made in the United States except the last, which was made by my son, James M. Knight (who lives at Murfreesboro, Tenn., and made the last importation in 1893). I have requested him and my son, William E. Knight, who resides at Nashville, Tenn., and who has made three trips to Europe to purchase jacks and jennets, to write a history of their travels and purchases for this book. They are both engaged in handling that stock at their respective homes, Murfreesboro and Nashville. Their sale stables are easy of access at their places of abode. They both made a trip to Europe with Mr. Roth, who was a native of Hungary, and who could speak a number of languages. When he was with either of them no interpreter was needed. I heard J. M. Knight say he never knew Mr. Roth to meet a man on land or sea with whom he could not converse. I think he told me he had crossed the Atlantic Ocean about thirty-five times and had traveled over various parts of Europe. It has been the custom of most of the Americans that have gone to Spain, France or Italy to pur-

chase jacks and jennets to get an interpreter who could speak Spanish, French or Italian, and they also had to have a man that was acquainted with the country where the stock could be found; besides, it was necessary to procure a vehicle and team to hunt up this stock. Hence, you see what an amount of money it requires for a stock dealer to visit those countries and have so much expense attached to his finding and purchasing stock, paying hotel bills and traveling. After the stock has been found and purchased, perhaps it is scattered over a great extent of territory, and has to be concentrated and gotten to a shipping point. And even then, the interpreter must be kept until the stock is put on board of ship. Now, after the stock is put on board of ship, they require vigilant attention. Sometimes when placed in the hull, where they cannot get sufficient pure air, they are liable to suffer and die for the want of it; or if they are placed on upper deck, and the sea is rough and tempestuous, as is the case in a severe storm, and the ship nearly covered with the raging waves, the stock, in that case, is in great danger of being washed overboard; but when the sea is calm, the deck passage is more favorable.

About the year of 1853 or 1854 I owned a very superior jack called Monarch. He was a gray, about fifteen hands high, horse measure; was sired by my jennet jack Maringo Mammoth. His dam was by Hon. Henry Clay's imported Don Callous, of Kentucky. He proved to be a superior breeder for both mares and jennets. I was able to stand him at \$10 for mares and \$20 for jennets. He was considered then the best and most valuable jack in Rutherford

County, Tennessee. I was doing a large business with him when the Civil War commenced in 1861, and continued to do business with him until the fall of 1862, when the Federal and Confederate armies were fighting at Richmond and Perryville, Ky. I had a public stock sale and sold some jacks, horses, mule colts, hogs and other stock, believing that either army was liable to take my stock if they needed them. I lived in the southern part of Rutherford County, Middle Tennessee, where both armies concentrated at Murfreesboro and where was fought one of the heavy battles of the war (Stone's River or the battle of Murfreesboro). This jack, Monarch, was sold at my sale at \$900. I was offered by Esq. Lane, of Walker County, Georgia, \$1,000 in gold for this jack a few days before he was two years old. I had bought a farm and had commenced preparing for stock farming; was satisfied that I could make a good jack pay me better to keep him and buy up his mule colts at weaning or yearlings. I bought good bone fillies and bred them to my jack. When they got with foal they would grow and spread and enhance in value when I could sell them for good profits or swap them for good young mules and sell the mules. So you perceive I was making the jack's services pay me as well as enhancing the value of my young brood mares by getting them with foal, and by buying the young mules he would produce in the neighborhood. All of which were fruitful sources of revenue. Besides I was improving my soil and enhancing the value of my farm.

I have long since learned that it is the growth and enhancement of a man's property that makes him his capital. How rarely we see a man who works for

standing wages and doing hard, muscular labor that ever makes more than a scant living. But for a man to prosper, he must generally have something growing, something enhancing in value, or increasing in numbers, when he is asleep or resting. His muscle alone will not do to depend on. It will fail him in a few years. If he does not prepare something for his old and declining years he is apt to be brought to want or thrown on the cold charities of the world.

I do not know of a better plan for a young man who expects to make stock farming his occupation than to get him a farm with good running water that lasts the year round. Then put his land in such grasses that suit his soil. He should study his soil and be sure that his grasses are well adapted to the land he is using it on. For instance: Blue grass and clover require a great deal of lime in the soil for them to flourish. They will not do well in sandy land, but orchard grass and herd's grass will grow on sandy soil. Herd's grass does very well on low or damp soil. A man to stock farm properly should be a good judge of land as well as a good judge of stock. If he is not, he should advise with some one who has had experience on the subject. Most men of experience will take pleasure in advising with a young man wanting information. The soil is a compound like a man's blood, has a variety of ingredients and can be changed or modified as circumstances may require, and it behooves the farmer to study the nature both of his stock and soil. It should be remembered that a stock farmer has an opportunity of improving his lands while he is growing his stock; what they eat is put back on the soil. So, it seems that God intended that

the animal kingdom and the vegetable kingdom should go together.

SECTION THIRD.

Some years before the Civil War I visited the blue grass regions of Kentucky and found the farmers had nearly all of their lands down in grass. They kept, perhaps, two fields—one for corn and another for wheat—and a garden; the balance all in blue grass. I thought they, as a people, had more time for social enjoyment than any farmers I had ever seen. When we would call at a man's house to look at stock, after showing his own he would propose taking us to see his neighbors'. We found the Kentuckians very hospitable and generous. They did not appear to be envious or jealous of each other like some people engaged in the same business. If they had animals that had blemishes that were not perceptible they would point them out to you. A stock breeder cannot afford to sell blemished stock without making it known; he will be more damaged by it than the purchaser.

Our lands during the days of slavery had been cultivated in cotton, until the soil was very much exhausted, and was needing a change to small grain and grass, with more and better stock, in order to resuscitate them and make them more remunerative.

During one of my visits to Kentucky with my brother, the late Gen. J. M. Knight, for the purpose of attending the fairs and looking at the different kinds of stock, with a view of making purchases for the benefit of our own section of country, Middle Tennessee (Murfreesboro was our home at that time), after visiting the best blue grass regions of Kentucky, and seeing the most improved stock of that

state, we were more impressed with the importance of changing our mode of farming in our own state, especially in Middle Tennessee. So after consulting quite a number of the most enterprising farmers, we agreed that the best plan to bring about a change in our mode of farming would be to get up an agricultural fair in our own county (Rutherford). The day was appointed to have a mass meeting and organize for the purpose of establishing a permanent county fair.

The citizens of my old county did me the honor of electing me president by acclamation. All the other officers were elected. The secretary, Capt. Darragh, who was originally from Kentucky, and I were appointed by the Board of Directors to visit the northern part of Tennessee and Kentucky and select the most approved, modern models for an amphitheater and pagoda. In our travels we procured a gentleman who had built five or six amphitheaters in his own state (Kentucky), who came over and built ours, which is now standing on the Murfreesboro and Shelbyville turnpike about one and one-half miles from the public square of Murfreesboro, and one hundred and fifty yards from the station on the Nashville and Chattanooga Railroad. We have had a number of successful fairs at this place, and believe it has been the means of encouraging the farmers of our county and the adjoining ones to improve their stock of different kinds, as well as improving their lands. Thus the great object of our fairs is to improve our domestic animals, as well as the products of the field and garden; also the handiwork of the ladies in the fine arts and their culinary department, as well as the

improvement in agricultural implements, etc. As the citizens of my county did me the honor of placing me at the head of the executive department of the Agricultural Association, I felt I was under obligations to them to exert myself to the utmost of my ability in doing all I could to introduce such stock as would promote the best interests of the association. I made it a point to visit Kentucky and attend the most popular fairs of that state and make myself familiar with their best modes of conducting their fairs. I also visited some of the largest annual stock sales, such as R. A. Alexander's, Suddith's, Grooms', and Van-meter's. I also examined the renowned shorthorn herd of Mr. Abram Reneck. I succeeded in purchasing some fine stock that was quite an accession to my county. More than one generation has passed since this stock was introduced, but its effects can be seen now.

These agricultural fairs when properly conducted are calculated to improve the country in many respects. We have thought that there was too much partiality shown the speed rings. Instead of giving them such large premiums we should give them less, and increase the premiums to those who are engaged in raising the best specimens of corn, wheat, oats, rye, barley, cotton and such products of the farm as are of the greatest interest to the general farmer. We are in favor of giving liberal premiums to the animal kingdom, such as horses, mules, jacks and jennets, swine, sheep, cattle and fowls. The ladies' department in the floral hall should, too, receive proper encouragement. Those who generally take the premiums in the speed rings are not usually farmers, but make a

specialty of training for speed alone, and should go to organized race courses.

SECTION FOURTH.

The different breeds of jacks have been given by my friend, W. H. Goodpasture, with a good deal of care. He is the most competent gentleman with whom I am acquainted to perform that task, having seen and handled nearly all classes of that stock.

Now it will be my purpose to give instruction as to the proper care of jacks and jennets while they are engaged in business. I am satisfied that the majority of grooms allow their jacks and stallions to do too much business in a day. My rule is to limit them to two services a day, that is, in twenty-four hours, and the time should be properly divided, one service in the morning and the other, in the evening. I never allow my stock to do business on the Sabbath day.

A great deal of an animal's service is wasted by allowing a jack or stallion to serve a mare or jennet when not in proper season or heat; and when they are served they should not be allowed to remain about the stable, but carried away where they will not see or hear a jack bray. I would prefer breeding to an animal that was limited in his service. I think if one of those peddling stud horse men that travels on a circuit and allows his horse or jack to serve a number of times in a day, going from one stand to another, should succeed in foaling, the progeny will be so weak and feeble that they will have to be held up to let them suck. I do not think colts produced under such circumstances ever make strong, serviceable animals.

I have observed where boars or rams that have been allowed to run at large, and are overworked that a boar will produce a number of small and runty pigs, and rams will produce the same kind of lambs. Many of them will die where they are lambed. Hence, I think male animals should be properly limited in their services.

I remember a conversation with Major Bacon, of South Carolina, while attending state fairs at Macon, Ga., in 1873, and at Atlanta in 1874, at which places he won the two mile races with the celebrated race horse Granger, which was also known as Wade Hampton. (I will state I also took premiums with my jacks and jennets, Berkshire hogs and Devon bull at Macon, Ga., in 1873; and at Atlanta in 1874 with my jacks and jennets, Berkshire hogs and Durham bull.) Major Bacon was a very successful sportsman. He remarked to me that the reason why the famous race horses did not produce more racers like themselves was that they were allowed to serve too many mares during the season, and stated he did not want his retired horses he had to farm out to serve more than twenty-five mares in one season to produce race horses. Some horses are allowed to go to over one hundred mares in one season. I think the same rule or principle will apply to all male animals.

I am writing this book in my eighty-sixth year of age, and for the benefit of the young and inexperienced stock farmers and breeders, and I am sure they will excuse my plain, practical, unpretending style. My object is to give my experience and observation. I am aware that I am making many digressions from my main subject, but my apology is to illustrate some

practical truth that I hope may be of interest to my young readers.

I remember a very noted trotting stallion that stood at Nashville, Tenn., at \$100 per mare. He did a very large business and I think he served the best class of trotting mares, and if he ever produced over a very few extra winners I never knew them. Blackwood ranked among the first-class trotting stallions of his day. I think he was over-taxed with business.

I think it best to have a stallion to tease for a jack that is used for mares. Some mares are afraid of jacks and will not show sign of being in heat. Hence it is best to have a stallion as a teaser. Now from experience and observation I think that after a mare has been bred she ought not to be taken back until the tenth day to try her. Should she appear to be ill do not have her teased much, but after she has refused once, she may be coaxed more the second or third time. While I am writing more for the interest of the breeders of jacks and jennets, I wish to state just here that I have found that plowing mares in rocky or rooty ground while breeding is injurious. Would advise, that if the mares are to be plowed, let them be used in old land, clear of roots and rocks, and use mules or geldings in their stead until you have them safely in foal. Mares when breeding and having to be worked in rough, rooty or rocky ground, cast off a great deal when jerked by the hitching of the plow, etc., and have known men fail to get colts under such circumstances. Neither should they be allowed to run on white or red clover in bloom or rye at this time. Another important point I wish to call the attention to is, after a mare or jennet foals,

the mares are apt to come in heat about the seventh or eighth day ; should you fail to breed them then, and they go out of heat, they sometimes do not come in while nursing or suckling their colt. Jennets usually come in heat later, about the twelfth or fourteenth day, and if you fail to breed them then you may not have an opportunity of breeding while she is nursing her colt. So you see how important it is to keep a record of the breeding of your mares and jennets. After the colts are weaned and the mare or jennet becomes entirely dry, if they are well cared for and put in a thriving condition they are apt to come in heat in a few days. Hence how important it is to breed at the right time and not lose several months of the proper breeding season.

You will remember that a mare goes eleven months, and if she is a very old mare and has had a number of colts, will often go over her regular time. I have known a jennet to exceed their twelve months, especially if it is advanced in age and has brought a number of colts. I want to call the attention of owners of jennets to the great importance of keeping a close watch over them at the time they are due to foal. They should be kept away from other stock, and if the weather is unfavorable, they ought to be placed in a foaling stable of good size, say from twelve by fifteen feet, and sawdust or short straw for the jennet to lie on. If the straw should be long the colt may get tangled in it.

When the time is due for the jennet to foal she should be noticed, and if at night and she is found restless and showing signs of labor, the groom should go to the stable with a lantern and stay with the jennet

until her labor is over and the colt is able to get up and suck. Then the groom may retire. Sometimes jennets have inflamed udders and are sore and tender. When that is the case they will not allow the colt to suck, but kick and bite the colt, and it will starve if not looked after properly. When this is the case the jennet will have to be milked carefully and the udder bathed in warm salt water to keep the bag from rising. I have known jennets to bite off the tails of their colts. I think when the jennet has an undue amount of milk in her bag, and it threatens to rise, she should be milked some before she foals. Some jennets give great quantities of milk. It is a good plan not to give much stimulating food before she is due to foal, and not have her too fat. When the colt is born, it sometimes has the membrane over its head and nostrils, and if it is not torn and removed, it will smother the colt. How important it is then that a competent groom should be present and remove the trouble. Then again there may be a malformation or a wrong presentation of the colt; the feet may be presented instead of the head. In this instance the feet must be reduced, that is pushed back, and the head brought forward. If you have a fine and valuable jennet, and you have such complications, would advise you to have a veterinary surgeon called in. It is now and then that the navel cord is tough and does not give way or break. If it is pulsating after the colt is born, it should be tied with a silk or flax thread, and then cut three or four inches from the navel. Jack colts are liable to have trouble with the navel, same as a child—a disease called trismus, a species of lockjaw, which I never saw in a child (and practiced medicine from

thirty-five to forty years), but have seen it in a jack colt, and never knew one to recover. The colt will throw its ears on his neck and appear to have little or no use of himself, and will linger from three to seven days and die. My opinion is the navel cord has been the principal cause of the trouble; i. e., the pulling or irritating of the nerves connected with the navel.

The jack stock is very tender when young, and should have vigilant attention. I know of no stock that pays a man better than the first-class stock of this character. I have known of some jennets that have brought their owners as high as ten thousand dollars worth of stock.

I trust I will be pardoned for another digression. I want to relate a circumstance that occurred in Kentucky to a gentleman by the name of Knox, who lived in Boyle County, near Danville, Ky. His father gave him fifty acres of land to start him in business; he commenced raising corn and hogs, and succeeded in that business very well, for that kind of occupation. He said some years he had cholera among his hogs and they would die. Then when they had drouth, the corn crop failed, so then he had hogs and no corn, and when the cholera killed his hogs, he had corn and no hogs. He became discouraged. He had a neighbor who had two jennets over medium size and quality; he bred them to the best jennet jacks in the country, and was lucky to get jack colts. They were well nursed. The owner had two small blue grass lots where he kept his jennets and colts and would change them from one to the other as was necessary. When the jack colts became able to consume

all of their dams' milk, he would give them warm milk from a cow, and at weaning time they were of fine size, looking well. He succeeded in selling them for \$500, each, making \$1,000 a year. Major Knox saw what his old neighbor was doing, and went to consult his father, and he told his son that he was doing very well, and he thought it was well enough to let well enough alone. But Major Knox said that the old man who owned the jennets was doing nothing but smoke his pipe and feed the jennets and caress the colts, while he (Knox) and a negro man he had hired to help him make corn and raise hogs, were beaten so badly in making money that he would act contrary to his father's advice. So he bought two jennets that he thought a little superior to his neighbor's. He also bred them to the best jennet jack he could find. The Major was succeeding finely when the Civil War came on in 1861. He had succeeded in selling \$10,000 worth of jack and jennet stock in one year, and had increased his farm from fifty to one hundred and fifty acres, and his land then worth \$150 per acre. He made the jack and jennet stock a specialty, taking premiums wherever he showed his stock. Never overstocking himself, he did not have more stock than he could keep in first-class order. So when a customer would call to see his stock he could show to the best advantage. I remember visiting his farm on one occasion when the Major was absent, but his interest was well represented by his most excellent wife. She had the groom to lead the stock up to the yard and had them shown to the best advantage. She was familiar with the merits of the stock and nothing was lost by the owner's being absent.

I think it wisdom for a man not to keep more stock than he can keep well. Stock farmers often lose by having more animals than they can do justice to. He may have fine, well-bred animals, but if he has neglected them and a customer calls to see them an unfavorable impression is made on his mind and he goes home without making a purchase. Now you see the fault is in the owner and not in the stock.

If my memory serves me correctly, I was shown one of Major Knox's premium jennets that he rated at \$2,000. The year that he sold \$10,000 worth of jacks and jennets, one of the animals was a three-year-old jack he called Black Mammoth that my old friend, Robert Rains, of Nashville, Tenn., bought especially for a jennet jack. He was a very superior animal and made his mark in Middle Tennessee. Black Mammoth was a half-brother to my jennet jack, Maringo Mammoth. I think Mr. Rains stood his jack at \$40 per jennet. That was what I stood my jack at. I am sure I could get competent stockmen who would testify to the best of their belief that Maringo Mammoth and his progeny have been worth to Tennessee \$100,000. It is hard to estimate the value of a No. 1 jennet jack that is producing jacks selling from \$1,000 to \$3,000, and his jennets \$500, frequently, and upwards. One of my neighbors owned a jennet not exceeding fourteen hands high that brought him \$10,000 worth of jacks and jennets. I believe the jennet is still living. She was the property of the late H. C. Ezell, of Davidson County, Tennessee (Old Ann is the name).

When I first knew Mr. H. C. Ezell, which was fifteen or sixteen years ago, he was engaged in farming on a small scale. He farmed jacks on the shares from

Mr. Robert Rains, to stand for mares. Soon after he purchased the jennet just alluded to and bred her to a jack that he afterwards owned, called Starlight, Sr. It was from this stock that he had such wonderful success. The Starlights became a very popular breed of jacks, and justly so. At the deceased sale of Mr. H. C. Ezell there were a large number of jacks and jennets sold which brought to the estate many thousands of dollars—all produced through the jack stock with his great energy, his vigilance and his good management. I think any young man can meet with the same success with the same amount of energy and good judgment. This great success was accomplished on a small farm. We think one of the secrets of his success was to keep the best of his stock at home where his customers could see them, and he would buy up his jacks' best colts and was able to sell them for a prospective value. Mr. Ezell kept a few of his best jacks and jennets and would show them at the stock fairs and was very successful in his exhibition.

We think it a good rule where a stock breeder is able, to keep a number of good animals at his stable so that his customers can be accommodated in breeding their mares and jennets at one stand. Where there is only one jack and one stallion, perhaps they may be crowded and they will turn off their customers for two or three days, and by that time perhaps the mare or jennet may have gone out of heat. Should they be nursing a colt they may not come in heat again while they are nursing, and the owner of the mare or jennet may lose the best of the breeding season. One groom can care for several jacks and a stallion. The French keep several animals at one stand, so they can always supply the demands of their patrons.

SECTION FIFTH.

When a jennet has nursed her colt six months, and is in foal, the colt ought to be weaned. If a jennet is allowed to suckle her colt unduly long and she is in foal, the one she is carrying is liable to be made a dwarf. I have known this to be done. Where a man has a very promising jack colt that is growing fast, and he has every reason to believe he will make a fine show animal, and he wants to take him to the fairs, it is a great inducement to have the colt suck until the fairs are over, hoping to take premiums with him. I want the young reader to remember when this is done he is damaging the fetus the jennet is carrying. When we wish to prepare a colt for the fair, and want to give it every advantage, it is best not to breed the jennet that year, and let the jack colt nurse until he is a year old or over. When a jack colt is allowed to run with a herd until he is a year old and has become well developed he is liable to become spoiled by being with jennets coming in heat, and may become so much enamored with them that he will have a strong partiality for his own species over mares. I have heard of jack colts running with their dams until they would get them with foal. This inbreeding of stock will bring about malformation and impair the constitution.

I cannot impress too strongly on young stock breeders the great importance of vigilant care in rearing young jacks. They must be kept where they cannot see or smell jennets until they are well broken or trained to serve mares properly. I allude to mule jacks. I once owned a jack that was partial to mares, and would not serve jennets without a mare was

brought before him, and let him get ready to serve a mare before he would serve a jennet. I well remember one of our imported Catalonia three-year-old jacks that I had broken to serve mares and by accident a jennet that was in heat broke out of her lot and came to the lot where this jack (Tennessee Giant, for that was his name) was. She stood by the gate with open slats where the jack could smell her all night. The jack did not get to serve her, but he became so much enamored with her that it was some time before we could get him to serve mares again. He was sixteen hands high, black and with white points. He was strictly a jennet jack. We rated him at \$2,000. It has been our custom to first train our jennet jacks to serve mares before they are broken to serve jennets. Some times we want our jennet jack to serve a few mares when he is not engaged with jennets. So we think it best to break them to serve both mares and jennets, even where you expect to make jennets almost a specialty.

As long as I have been in the jack and jennet business I have known but few breeders who have not reared some jacks that were spoiled in their raising by allowing them to associate with their own species too long when colts. When this is the case the value of the jack is reduced to about one-half of a mule jack. So you will readily see how important it is for a breeder to keep his jack colts away from jennets or even mules, and let them be put with fillies about their own age and continue with them until the jack colt becomes too rough for the filly colt. When the jack colt is associated with a filly he becomes attached to her and when he becomes about twenty or twenty-

four months old, and is well matured for that age, he might be permitted to serve a mare. In breaking the jack colt you should be very careful and not allow him to be kicked or bitten, or go about a mare that is ill and will switch her tail and back her ears. Such action on the part of the mare is calculated to intimidate a young jack, but on the other hand it is best to have a low mare that the jack will not have to strain himself in getting up on, and it is best to have her served by another jack or stallion so that she will be in good heat and make no resistance. I used to break my young jacks by using an Indian pony mare.

I am not writing this book for the *Ladies' Home Journal*, nor for the general public, but for the young jack and jennet breeders that want information on that subject. Having known so many fine jacks spoiled by carelessness or for the want of experience or information is my apology for writing on the subject with so much plainness and precision.

I have often been consulted in regard to young jacks springing in their fore legs. While the colt is very young the animal matter predominates over the bony or calcareous matter. Hence, they are liable to spring or give way, especially when the colt commences to graze and the grass is short. He is required to put too much weight on one of his fore legs to enable him to reach the grass, hence there is a giving way in the joints. It is usually the knee that springs in, or out, but some time the ankle gives way or I have known the arm joint to fail. Then again where the jack colt has a very low dam, and he is tall and has to stoop to suck, compelling him to put

undue weight on one of his limbs, springing is likely to result.

Now when the short grazing is the cause of the trouble the colt can be put in the stable and fed with suitable food. Green food can be cut and carried to him so he will not have to expose the limbs by grazing. Should the springing be caused by the dam being so low, it may be obviated by the colt being put in a stable and fed on cow's milk, or milk from his dam; some jennets give large quantities of milk. I am aware that this course of treatment would give the owner much trouble and worry. But after the colt is from one to two years old, he is not so liable to spring. When the bony matter predominates over the animal matter the trouble subsides. A fine, well-bred jack colt, that promises to make an extra good animal, will pay his owner to give him some attention when young. From my long experience in handling this stock, I do not know of any animal that is more remunerative than the growth of a fine jack colt.

From what has been written as regards rearing jacks and jennets, you will perceive how careful we should be in the selection of our stock to commence rearing a herd. In selecting a jennet jack we should bear in mind that as a general rule in breeding stock like begets like; hence we should select a model jack as near as possible in every respect—form, size, color, constitution and a good general make-up. In judging of the constitution the animal should have a well developed chest, plenty of room for the heart and lungs to play. Bear in mind that they are the principal vital organs in all domestic animals. Length is an essential point in the make-up of a jennet jack. I re-

gard it of more importance than height, yet the height has its bearing in the selling of a jack as well as a mule. Mules are generally classified by their height, and more importance is attached to it than I think should be. A jennet jack ought to have a long, thin, bony head, with long, well-tapered ears, sitting gracefully on his head; large, flat, clean limbs, big foot, deeply cupped. As to color, it should be a good black with distinct white points. The pelvis, or breadth of hips, is very essential, either in jack or jennet. I have known jennets so deficient or narrow in the pelvis that they had great difficulty in giving birth to their offspring.

TREATMENT OF BREEDING JACKS.

SECTION SIXTH.

A breeding jack to keep him healthy and vigorous, should not be confined unduly to his stable. He should run out in his lot twelve hours in twenty-four if the weather is favorable. Feed him principally on shelled oats and wheat bran—sheaf oats cut fine and mixed wheat bran and occasionally shorts; put enough water to make the bran stick to the oats, add a little salt to give the food a good relish. The bran acts as a laxative. Jacks are inclined to be costive. When this is the trouble give a mash and increase his green food. Green wheat and barley are good grazing for jacks. Never give more than two to four ears of corn at a feed. Should you notice the jack inclined to rub his body or bite his limbs you had better stop giving him corn. Jacks are subject to sores in hot weather, especially if they are kept in the stable too much, and fed on corn unduly. I have known them ruined by letting them have chronic sores, which caused their death. You will please bear this in mind, not to keep your jacks too much *confined*, or to feed unduly on *corn*. I do not remember ever seeing jennets have sores that were allowed to run in the open air and graze. I am sure that jacks would live much longer and be more prolific if they were allowed more freedom in the open air and allowed to follow their instincts. They are great animals to wallow. I think it a good

rule to have a suitable place in his lot dug up, and if there are clods, have them mashed and let him have a soft place to wallow. Where an animal is accustomed to roll or wallow every day the place becomes very hard, and if it is not dug up occasionally it may bruise his withers and produce fistula.

In building a jack stable it should be large and roomy so that he can exercise some in bad weather. There should be no cracks in the stable that an animal can get his feet through. Some log stables have cracks large enough to let an animal get his foot in them and break his leg. Have known such instances. In building a stable let the door be roomy and on the south side.

The lot should be at least one acre and sowed down in blue grass, herd's grass, orchard grass and timothy, provided the soil is suitable for such grasses. By having different kinds of grass it gives the animal a variety of grazing and some one of them will afford good grazing all seasons of the year. Now I would suggest that you, if convenient, have a small lot of a quarter of an acre and let the jack exercise in it and roll, or wallow, then he can be let in his grazing lot and when he has filled himself put him in his exercising pound. By so doing you can economize in saving your grass. Stock do not like to eat grass where it has been walked over by other stock. It is important to give plenty of good, sweet timothy or herd's grass, well-cured fodder or such roughness as the animal is fond of.

The stable should be kept dry.

If the jack is kept shod during the breeding season, his shoes should be taken off to let his hoofs toughen,

When the flies are very bad and the jack stamps his feet he is liable to break them and make himself lame. When this is the case the animals had better be shod until the flies quit fretting the stock. Some times you may use train oil or some remedy that will keep the flies away from the stock by applying occasionally while they are so annoying. A dark stable will usually keep them away in the day and the stock can run out at night when there are no flies to worry them.

SECTION SEVENTH.

As I am writing this book for the interest of my young countrymen and wishing to give them my experience, I have concluded to give them a brief history of one of my trips after the Civil War of 1861 to 1865, inclusive. Previous to the war I was extensively engaged in breeding stock, especially the jack and jennet. I had procured a first-class jennet jack, Maringo Mammoth, at the cost of \$2,160, and used him exclusively as a jennet jack at \$40 per jennet.

I had at that time about seventy-five jacks and jennets and was compelled to farm many of them out to stockmen on the shares. I tried to select good, steady, sober, upright men, that had farms of their own and men that would take care of them, those who had grass and were fond of this class of stock. I had selected men from my own county (Rutherford), Bedford, Cannon, Coffee, Wilson, and Marshall counties. They had given me their obligations to take special good care of my jennets and be at all expense in breeding and rearing of said stock for a period of some three years, and some five years. They also agreed and bound themselves to consult me in the breeding

of the jennets; they were not to breed to jacks that stood for mares, but were to breed to the best jacks that were standing for jennets alone. My object was to improve my stock, and make it better all the time. I was sure that all of the jennets I owned or had farmed out, if bred to such jacks as Maringo Mammoth, and should bring jack colts, and were properly cared for, could be readily sold for remunerative prices, say from \$500 to \$1,000 or more at maturity. At the expiration of the time for which the stock was farmed out, the original jennets were to be returned to me in as good condition as when they were taken away. Of some of the premium jennets, I was to have two-thirds of the produce, and of the others one-half.

But when the four years' war ended, many of the farms in my section (Middle Tennessee) were torn to pieces, both armies having been about there for a number of months, and finally met at our city, Murfreesboro, and fought one of the heavy battles of the war, called the Battle of Stone's River, or Battle of Murfreesboro. Many of the parties came to me and said that they were not able to carry out the contract that they had made with me before the war; that they were left in destitute circumstances. They could scarcely get bread for their children. They stated that the mares were nearly all taken out of the country by the soldiers, and if they had jacks they would be of no value to them then. So they insisted positively that I must take the stock and release them of any further obligation and give up the breeding bills and that I should have all the proceeds up to that date. I told my patrons it was a liberal proposition

on their part, but I stated it was like putting five wheels to a wagon. I thought I might be able to care for the stock through the spring, summer and fall months, by grazing them on my farm of several hundred acres, nearly all well set in grasses adapted to the different qualities of the soil, but knew I could not possibly care for them during the winter under existing circumstances.

This stock could not be disposed of in my country, owing to the ravages of the war, but must be taken off where the people had not suffered so much, and where such stock was needed, and also where there was money. I was engaged in the practice of medicine at the time, but gave that up in order to take my surplus stock off and try to dispose of them before winter. I began making my preliminary arrangements for a trip: procured a suitable two-horse wagon and a camping equipage, making arrangements for a camp life. I procured a very good salesman to aid me in disposing of my stock in the event I should get sick or unable to attend to business. I also procured a hand for every four or five jacks. I had the animals coupled together with a check stick so as to prevent them from biting or rearing on each other. I taught them to stand beside each other a short time before coupling them together for the road. The jacks soon learned to walk side by side after a little training. I had the jacks to travel in front of the wagon and the jennets behind the wagon, to prevent the jacks from fretting after the jennets. I had small boxes made to feed the jacks in, one made a little larger than the other so as to let them fit in each other that they could be handled in the wagon without taking up

much room. We usually got suitable pastures for our jennets, but the jacks were kept haltered to trees if we were camping in the woods, or to fences, as the case required. Our wagon cover was waterproof, which kept our bed clothing and wearing apparel dry.

We were now ready to start on our campaign. About the 15th of September, 1865, we were on our route to southern Illinois. Had some of my kind neighbors to go with me for a day or two so as to get my stock accustomed to the road. We started with fifty head—twenty-five jacks and twenty-five jennets. We traveled by way of Clarksville, Tenn., and crossed the Cumberland river above the city a few miles. There we had some trouble with our jennets. We could not take all of our jennets at one time, owing to the size of the ferryboat, which was small and had no banisters to it. After we got the second load of jennets in the boat and had left the shore a short distance the jennets became frightened and commenced jumping overboard into the river and swam ashore. I came very near being run over by the stock as they left the boat. We should have had a better boat for ferrying loose stock! This stock is afraid of water and we have trouble frequently in getting them to cross water on a bridge. Have had to put a rope around the under jaw and tie it to my horse's tail and have two strong men to take a plank or pole and put it behind the jack's rump and have the men to push while the horse pulled by his tail. This has been done frequently in getting the stock to cross branches and creeks where there is no bridge. If you are handling this stock and have to travel much with them you will soon become acquainted with some of their peculiar

characteristics. After crossing the Cumberland river we moved on to the neighborhood of Hopkinsville, Ky., where we spent the Sabbath.

On Monday morning we made our first sale. We made it a rule not to travel or trade on the Lord's day. We sold a very fine four-year-old jack that I had raised, called Beauregard, to a company of four nice gentlemen who paid me nine hundred dollars cash. He was a good jennet jack and was sired by an imported jack called Prince Napoleon, that was imported by General Edney, of North Carolina, while consul, during President Polk's administration. The dam of this jack was a premium jennet for a half interest in which I gave my brother, General J. M. Knight, \$250. She was sired by my jennet jack Maringo Mammoth. Beauregard made quite a character as a fine breeder, for both mares and jennets, around Hopkinsville, Ky.

My next sale was between Hopkinsville and Princeton, Ky. I sold a half-interest in a four-year-old jack, fifteen hands high, a dapple gray, to Mr. Clardy, who formerly lived in Bedford County, Tennessee, and had made quite a reputation for handling good stock, especially the saddle stallions. He reared the noted horse, Blue John, that was so famous for producing that class of stock. This horse was taken by the Federal soldiers during the Civil War into Indiana and was subsequently brought back to Tennessee, where he made his mark. Mr. Clardy gave me \$400 for one-half interest in this jack and was to keep him five years and be at all expenses for that period, except that I was to pay one-half of the United States government tax (\$10), and for half of a ten-dollar show bridle. I also farmed Mr. Clardy one of my fine jennets,

with a sucking jennet colt, which he was to keep and breed for five years and return the jennets. At the expiration of that time this sucking colt had a fine sucking jack colt worth \$200. I bought Mr. Clardy's interest in all the stock and shipped them home to Middle Tennessee—Murfreesboro.

We crossed the Ohio river at a place called Cave in the Rock. Here one of the young men came to me and told me he could not swim and was afraid to cross the river; that he had a cousin living in the Kentucky purchase and he preferred staying with him until I returned from Illinois. After crossing the river I sold one of my young jacks to an aged Irishman whose name I have forgotten. There was an agricultural fair going on near the river and we concluded to stop over and show our stock. We took some premiums. I remember there was a premium offered for the best and fastest saddle stallion one mile and repeat. I owned old Brown Pilott and was riding and driving my jennets that trip on him. I did not have any time to prepare him for the race, but he had been trained and raced before with some success. I think he was sired by Brown Pilott, of Kentucky. My horse, Brown Pilott, was the sire of the noted pacing horse Bone Setter, Brooks and other good ones. I had a young man with me, a good rider, and had my horse ridden around the track several times in a brisk pace so as to make him familiar with it, but not strain or make him track-sore. So when the day of the race came there were six entries and there had been a heavy rain. The track was muddy and there was a swag in the track for about fifty yards wide, the water six or eight inches deep, so that the horse had

to pace through. Brown Pilott won the race in good style in two heats. The riders were so wet and muddy it was hard to tell one from the other. Mr. Ephraim Nesbitt was my jockey and my neighbor, and went the round trip with me and was a most excellent assistant. I mention this trip and circumstance not to encourage sporting, but on the contrary would advise all of my readers to abstain from all manner of evil and to keep from forming any bad habits. It is much easier to contract bad habits than it is to abandon them.

I have great partiality for all kinds of fine domestic animals, and have raised some animals that have distinguished themselves on the turf as pacers, viz.: Tom Hal, the sire of Snow Heels; and he sired the famous brood mare, Sweepstakes, that was the dam of Hal Pointer, 2.4½; Star Pointer, 1.59½; and eight others that all had good records. She certainly was the most famous brood mare for producing pacers on the American continent.

I feel it due to give a brief history of the sire and grandsire of this famous old brood mare, which lived to be twenty-nine years old: Snow Heels was her sire and was bred and reared by me in Rutherford County, Tennessee, and he was sired by my Tom Hal, he by Major Kitrell's Tom Hal, and he by Tom Hal, of Kentucky. My Tom Hal had four thoroughbred blood crosses on his dam's side, and looked more like a thoroughbred blood horse than a saddle stallion. Snow Heels' first dam was sired by Puckett's Glencoe, and he was sired by imported Glencoe. Puckett's Glencoe's first dam was the noted four-mile mare, Frances Terral, by Bertran, he by Sir Archie, and he

by imported Diomeed. So you will perceive that Snow Heels and Tom Hal's dams had a great deal of fine, thoroughbred crosses which gave such speed and endurance to their descendants. Mr. Edmond Geers stated to me that Hal Pointer was the best campaign horse that he had ever pulled a line over.

The late Major Campbell Brown in writing me for the pedigree of Snow Heels stated that his mares were greatly sought after. Snow Heels' second dam was sired by Mr. Wm. Thomas' noted stock horse, Brown Solomon, and his pedigree ran back to the old Sir Archie and Diomeed crosses. This noted brood mare was exhibited at Shelbyville, Bedford County, Tennessee, when a sucking colt in a large lot of colts and was awarded the first premium. I purchased her from Dr. Daniel Johnson when a filly at a large price. He told me that the dam of this filly was the best saddle mare he ever saw or owned. The doctor was an old man and had practiced medicine for many years at Liberty, in Rutherford County. I bred this mare to my jack, Monarch. She brought me a mare mule that I sold at weaning for one hundred dollars. This was the first and last sucking mule colt I ever saw sold for that price.

Tom Hal and Snow Heels were both fine, commanding saddle stallions and very popular. I owned them when the Civil War was going on and the officers of both armies wanted them. The Federal army got Tom Hal three times and we succeeded in getting him back twice, but the third time he was taken I never was able to recover him. Was offered twelve hundred dollars for him before the commencement of the war.

I sold half interest in Snow Heels to my brother, General J. M. Knight, and he was taken by the Confederate soldiers and was carried to Canton, Miss., where my brother got him and brought him back to Marshall County, Tennessee. There is quite a history connected with those two saddle stallions and their descendants. Sweepstakes as a breeder of pacing horses sired by Snow Heels has never been equaled in America. Her dam, I think, was sired by McMinn's Traveler, another well bred saddle stallion with good thoroughbred blood crosses. You will perceive that the crosses of the thoroughbred blood stock are essentially necessary to give bottom or stamina to the pacer, trotter or running horse.

But with all that is so fascinating and alluring about the fine speed horses in every line I want my friends to understand that I do not advise them to get in that line of business. In my younger days I was associated with race horses and was very fond of seeing them run. My father was engaged in breeding fine stock and he gave me an interest in a fine colt that was sired by Thornton's Old Ratler, by Sir Archer, by imported Diomeed. I rubbed this colt and imagined that we had in him a world beater. Jeffrey Beck was our trainer. He was an uncle of General Bedford Forrest, and esteemed as a trainer of horses in his day, that is, about 1837. While we were campaigning with our horses I witnessed so much gambling with cards and heard so much profane language, that I had such a disgust for cards that I did not want to learn anything about them. Now in my eighty-sixth year of age could not tell the

name of each card. So you may know what I think of them!

I have made quite a digression from my trip to Illinois. I think I left off at a fair ground where I put Brown Pilott in a race. It has been about thirty-six years since and I have forgotten the name of the place. We won the race and made some sales and went to a place called Salem. There I found a farmer that offered me ten two-year-old mules for a four-year-old jack I had raised, fifteen hands high, and was one of the best that I had in my drove when I started from home with twenty-five head of jacks and the same number of jennets. I had bred a number of my jennets to this jack (Harry of the West). I did not want to dispose of him until I had sold my jennets, for I wanted those who would buy the jennets to know what a fine jack they had been bred to. I made a trade with the farmer at Salem with this proviso: That if, when I had disposed of all of my jennets, I did not have an opportunity of selling him for money, or swapping him for better matured stock, I would make the trade with the first offer of ten two-year-old mules.

We then traveled west and located in Bond County, Illinois, where we pretty well closed out all of our jennets; had sold and bartered until we were about ready to start home. We sold to a firm in Mulberry Grove three thousand dollars' worth of jacks and jennets. We left the grove for Vandalia and stopped to lay in our supplies to last us home, and while there saw two gentlemen who wanted our jack, Harry of the West. They stated they had one hundred and fifty mules and would give me nine three-year-olds

as good as a three-year-old iron-gray mare mule I had bartered for, and she should be the sample. She was fifteen hands high and smooth. Thinking I could sell nine three-year-olds for more than I could ten two-year-olds, I agreed to go and see the mules. We had to travel nine miles obliquely from our main route home. We took the jack and the sample mule and spent the night. We had no special trouble in agreeing about the selection of the mules. The company that wanted my jack, wished to exhibit him at the state fair in Illinois. The party assisted me in getting the stock to my camp.

We then went the direct route to Hopkinsville, Ky. Here we sold out our surplus stock to the party who had bought Beauregard, as we were going to Illinois. In bartering the jack, Harry of the West, we got about twelve hundred and fifty dollars for him. I now desire to refer very kindly to my venerable friend, the late Rev. Mr. Woolard, of Mulberry Grove, Bond County, Illinois. He was originally from Maury County, Tennessee, and had settled in Illinois at an early date. He rendered me valuable service while there.

I was nine weeks making this trip, and bartered and sold together about ten thousand dollars' worth of jacks and jennets that I could not have sold at home for one thousand dollars cash, owing to the ravages of war. I had left on my farm quite a number of jacks and jennets for which there was no demand in my section of country, consequently after having made that long and tedious journey to Illinois, I had necessarily to hunt other localities that had not suffered so much from the destruction of the armies.

I made several other trips into different states—Alabama, Georgia, East Tennessee, West Tennessee, Arkansas, Missouri, Kansas and Texas. I traded in Texas before any railroad depot was established at Fort Worth. When trading in any adjoining states, I usually had a light two-horse wagon and a tent, and bought our feed by the wholesale for our stock, and when the weather was favorable, we camped out, and avoided heavy hotel and stable bills.

I made it a point when I found a man that wanted any of my stock, and could not pay me all cash, to barter with him, he to pay me some money, and I would take young mules, good fillies, young cattle, or take cotton in the bale, or anything that I could soon convert into money. Have traded for fat hogs and shipped them home on the cars. The cotton I could place in the hands of a merchant at nearest depot, and let him sell it for me. After disposing of my jacks I would concentrate the cattle, fillies and mules, and ship on the cars, provided the distance was too great to drive through by land to my home. I want to state right here, that cattle shipped from the Southern states, north several degrees, appear to do well themselves, but the native cattle that graze on the same pasture with the Southern cattle frequently die of a disease similar to murrain. On the other hand, when matured cattle are shipped from Tennessee, several degrees south, they are apt to die soon. It is much safer to select calves to ship to a southern climate, to avoid cattle fever, and the best season to ship is late in the fall, when the weather becomes cool. I have had a good deal of experience in this line of business. I remember when trading in Arkansas, camping out

in the canebrake section, and preparing our meals at night, the broiling of our meat would attract the wolves, and we could hear them howl. At that date, deer, bear, turkeys, and all kinds of wild game were plentiful, and are yet in some places.

While traveling through the rich bottom lands of Arkansas we saw great quantities of mast, such as pecans, acorns of different kinds, switch cane, that would keep stock in good order through the winter and spring seasons. An old native living in the neighborhood came to our camp and was regretting his misfortunes, saying he had lost a great deal of money while living there. I asked him how it occurred. He said it was because he did not have money to buy hogs to eat the mast that rotted in the swamps. I have seen pretty good pork taken to St. Louis, that had been fattened on mast.

While trading in Arkansas I met with a Kentuckian who had a herd of improved Durham cattle of one hundred and fifty head, and proposed giving me fifty head of cows that would be fresh to give milk the following spring, for a young stallion and a large sixteen-hand jack I had, and agreed to keep the cattle on the switch cane until April or May following. His rancho was on White river at a place called Peach Orchard Bluff. There were about one hundred acres not subject to overflow. When I went after the cattle there had been a considerable freshet, and we had to take a canoe and go through the woods nine miles to reach the cattle. We built a lot on the bank of the river, collected and assorted the cattle. We had to lariat mine, and draw them on the steamboat by a windlass, which was no small undertaking. They

were taken to Williamsport on White river, and there put on the cars, shipped to St. Louis and sold. I will state here, that while in the bottom lands in Arkansas I saw in the fork of a cypress tree an eagle's nest, the first and last I have ever seen. When I traded for the cattle, I expected to take them to New Orleans or Memphis, but learned that an ordinance had been passed in both of those cities forbidding cattle to run on the streets, because they were expecting an epidemic of cholera, consequently had to go to St. Louis and closed out. I made this trip alone, and would not be willing to make a similar one, with plenty of good help, at my advanced age.

I will not tax my readers with an account of my trips in Texas, Missouri, Kansas and other states. Before closing this part of my book let me advise that when the country is in a prosperous condition, as a general rule, the stock farmer had better keep good stock, keep them in fine, saleable order, stay at home, and advertise well, and he will generally meet with success in selling his stock.

I hope my friends will pardon me for a little egotism in stating that I put up the first sale stable in Nashville, Tenn., to sell jacks and jennets. I have sold them in fourteen different states, and some that were carried out of the United States, and have frequently sold jacks at different times to the same customers, but up to date have never had a lawsuit or litigation with one of my customers. He would take the jack home, and do business with him, perhaps two or three seasons, and get the growth and development of the animal, and his services, and sell him for a good profit, and come back, and buy another one or two. I have sold several in that way.

Before leaving this part of my book, I wish to refer my readers to the life of Judge J. D. Goodpasture as written and published by his sons, A. V. and W. H. Goodpasture, containing also sketches of their visits to Europe in search of stock, especially the jack and jennet stock, which they imported eight different times to this market, Nashville, Tenn. This book will be found very interesting to all parties engaged in stock raising and selling, as there is a great deal of information to be had from reading it. Messrs. A. V. and W. H. Goodpasture have a large book store on Church Street, Nashville, where this book can be found. I will also state that Judge Goodpasture and son had a sale stable of jacks and jennets very near mine for several years; when they had a customer to whom they did not sell, they would either bring or send him to my stable to see my stock, and we did the same by them, which made everything between us work very pleasantly and harmoniously, although in the same line of business.

THE MULE.

I have been for some time writing about the jacks and jennets, of the different species of them that have been imported from Europe, especially those that have been brought from Spain, France and Italy. I think that from the year 1885 to 1893 Tennessee imported from those three above named countries and the islands of the Mediterranean Sea. During those eight years about eight hundred to one thousand jacks and jennets were landed in and around Nashville. I think it can be truthfully stated that Tennessee imported more jacks and jennets than all the other states in the

United States put together in the eight years. Hence, we have had the pick of the best stock of Europe to select our jacks and jennets and from them we ought to rear the finest class of mules out of our fine brood mares. Tennessee ought to stand at the head of the list with her advantages now if she will only do her duty in breeding to the best jacks and jennets and best class of brood mares.

The mule is a hybrid, the product of a jack and a mare. The hinny is also a mongrel, the produce of a stallion and jennet. The latter is seldom seen in our country, but resembles the mule very much. It is claimed that they partake more of the nature of the horse in form and disposition than the jennet. They have a neater head and heavier mane and tail than a mule, and a larger foot, but it is thought that they have not the endurance of a mule. I do not remember ever seeing but two hinnies; one of them I saw in Texas on the Brazos river, the other was in Bedford County, Tennessee. The hinny is said to make a noise more like a horse, while the mule brays more like a jack. I think one reason that we have so few hinnies in our country is, that stallions have an aversion to jennets, and will not serve them unless they have been reared with jennets, as jack colts are reared with filly colts, when they are first weaned.

I have tried to impress upon jack breeders the great importance of taking their jack colts away from their own species and put them with filly colts as soon as they are weaned and let them continue to remain with them until the jack colt becomes too rough for the fillies. By this time the jack colt becomes attached to the filly and then you will not have trouble to

break him to business at a proper time. I will also repeat what I have written when speaking of training jacks, that they should be away from mules as well as jennets. Some jacks are partial to mules and I have known mare mules used to get jacks ready to serve mares.

At an early day mules were used for riding. In the patriarchal ages the ass, ox and camel were the principal beasts of burden, but in our day we use the horse, ox and mule, the latter especially for the South and tropical climate. Since the Spanish-American War there has been so much tropical territory added to the United States, that the demand for mules has increased and will continue to increase until those tropical islands of the Atlantic and Pacific oceans are supplied with mules. Of all the beasts of burden and for agricultural purposes, especially for the South, there are none equal to the long-lived and hardy mule. He lives much longer than the horse, perhaps more than twice as long, and is not so subject to disease. He consumes much less food, pulls under a cold collar and is not so liable to balk. His hoof is more deeply cupped and is tougher, consequently he will hold a shoe much longer than a horse. He is considered more sure-footed than a horse, and I have known physicians who preferred riding a mule to using a horse.

Will give you a description of the different classes of mules by Messrs. Shryer & McConnell, of Nashville, Tenn., who are perhaps the largest mule dealers in Tennessee, and are reliable business men.

The sugar mules run in age from three to five years old and from fifteen and a half to sixteen and one-

fourth hands high; they are fed from the time they are colts until they are shipped to Louisiana.

The mine mules are from fifteen to sixteen hands high, from five to ten years old, and must have bone and good foot and good body.

The dray mules are from five to eight years old, fifteen and three-fourths to sixteen and one-half hands high, from 1,200 to 1,400 pounds.

The cotton mules are from three to five years old, thirteen and three-fourths to fifteen and one-fourth hands.

The mules sold to the British government must be from five to twelve years old, but must be sound and free from blemishes.

Mules from fifteen and one-half to sixteen and one-fourth hands high sell better in spring, summer and fall for work in Tennessee.

The dealers begin to buy cotton mules in the fall and fatten them for the Southern market, which commences in October and continues until March.

There are several advantages in handling mules over horses. You can sell them readily at any age. They sell at weaning, one year old, or at two, three or four, or at any age you have him in market order you can get his cash value. You do not have to curry and rub and educate to the different saddle gaits and break him to harness before he is ready for market. You can often sell them in carload lots instead of selling by retail, and by so doing you get your money in a bulk and can invest it to much better advantage.

REMINISCENCES OF JACKS AND JACK BREEDERS.

At a called meeting of the American Breeders' Association of Jacks and Jennets, held at Nashville, Tenn., June 25, 1890, the executive committee appointed me to write an essay or history of our old original jack stock and pioneer breeders of the United States. In undertaking this somewhat difficult task we have to be governed in a great measure by memory, as we have but little literature on the subject of jacks. History informs us that soon after the close of the Revolutionary War the king of Spain presented to General George Washington a Spanish jack and jennet. General Lafayette, after his return to France, also presented him with a fine jack, which was bred to the Spanish jennet, and produced the famous jack, Compound, which sired some mules that were sold after the General's death for upwards of two hundred dollars each. This gave rise to considerable interest in the breeding of mules, not only in Virginia, but Kentucky, Tennessee and other states soon fell into the same line.

Perhaps the credit is due the Hon. Henry Clay, of Kentucky, for introducing the fine Spanish jacks into that state. If our memory serves us correctly, he introduced the noted imported jacks, Don Carlos, Ulysses, Black Hawk, etc. These fine imported jacks soon made the blue grass region famous for their

superior mules, sired by these imported jacks and out of finely bred mares. Mules were one of the great staples of Kentucky before the war.

Messrs. Aquilla Young and Everette, of Mt. Sterling, Ky., owned Mammoth (imported). He was considered the largest jack that had ever been imported into the United States up to that time. They were able to stand him alone for jennets at \$100 per jennet.

Mammoth made nine seasons before he died, and his owners realized a handsome income from his services by buying his jack colts and growing them until they were two and three years old. Many of his jack colts sold readily for \$500 before weaning. Perhaps no jack that was ever introduced into the United States improved the jack and jennet stock in bone and size equal to him. He was about sixteen hands high, standard measure, and heavy like a horse.

The late Mr. Miller, of Millersburg, Ky., owned some fine jacks.

In 1856 Lear Brothers owned the large jack, Buena Vista, by Mammoth (imported).

The late Major Knox, of Danville, Ky., was considered one of the foremost breeders of jacks and jennets before the war. He made quite a success in rearing this stock, and captured more premiums with his jacks and jennets than any breeder in the state.

Major Tarkington (the son-in-law of Major Knox) is occupying the old, noted stock farm, and is rearing some of the best stock in the same line. He has recently purchased the noted jack, Paragon (imported), of Dr. Curd and Wm. and R. Davis, all of Lebanon, Tenn., at a cost of \$2,000, and is using him for jennets

exclusively. The major has, perhaps, the finest jennet in the state, sired by Abran (imported). She is fifteen and one-half hands high, very heavy and stylish; is a successful breeder and a fine show animal. She is registered.

Messrs. W. L. Caldwell & Son, of Danville, Ky., are spirited breeders. They are the owners of Giant 32, who took the first premium at the State Fair at St. Louis, Mo.

Mr. Hubble, of Danville, Ky., reared some most excellent jacks and jennets. He bred Brignoli and Luke Blackburn, that were recently sold at his dispersion sale at fabulous prices.

The earliest pioneer breeder in Tennessee, as nearly as we can learn, was Colonel James Ridley, of Davidson County. He visited Virginia about 1820 and purchased a jack called Compromise. He was the sire of Colonel Ridley's Old Wonder, that was considered the largest and best jack of his day in Tennessee. He was to Tennessee what Mammoth was to Kentucky as a pioneer breeder.

The late Jonathan Curran, of Murfreesboro, Tenn., was a breeder of jacks and jennets about the year 1830.

In 1835 or 1836 my father, the late Captain James Knight, visited Virginia and purchased a very fine black jack, with white points, called John Bull. He did business in Rutherford County, Tennessee, and gave satisfaction as a popular breeder. He was said to be the third descendant from the Royal Gift of General Washington. My father also owned a jack in North Carolina about the year 1820. I have an imperfect recollection of this jack, as I was only four or five years old.

General A. Wilson, my father and my brother, General J. M. Knight, purchased in Kentucky the celebrated premium jennet jack, Maringo Mammoth. He did business for a number of years in Marshall County, Tennessee, after which I purchased him as a nine-year-old, and at a cost of \$2,160, and used him exclusively for jennets at \$40 per jennet. The jack was about sixteen hands high, standard, with unusual weight and substance. We regarded him as the largest and best adapted to improve the small-boned jack stock that was ever introduced into Tennessee. He was the recipient of every premium for which he contended in the State of Kentucky, of his own age, and captured every premium contended for in Tennessee, and was shown at all the important fairs in the middle division. He was black, with white points, was sired by Maringo Mammoth, of Kentucky, and he by Mammoth (imported). A number of his jennets sold for \$500 before the war.

I also owned the celebrated premium jack, Ben Franklin, he being a purely bred Spanish jack. He proved to be a most excellent breeder, both for mares and jennets. He was the recipient of more premiums than any jack of his day. I exhibited him at a great many fairs in Middle Tennessee, at Chattanooga, and at two state fairs in Georgia—one at Macon in 1873, and at Atlanta in 1874. He was also exhibited in Illinois. In all of these places he met with success.

I think one of the first imported jacks ever brought to Tennessee was taken to Maury County, and was owned by a Mr. Thomas. He was afterwards sold to General Gideon J. Pillow and brother. This was Knight Errant (imported). I think he was imported

about 1840. He proved quite an accession to Maury and adjoining counties.

Dr. Boyd also owned a fine jack, called Philip—I think by Mammoth.

The late Benjamin Harlan also owned a fine jack, called Harlan's Mammoth. He made considerable reputation.

The late J. J. Williamson, of Marshall County, Tennessee, was an early and successful breeder of jacks and jennets. He paid \$500 at a very early day for a jennet called Matilda. She was sired by Maringo Mammoth, and was the dam of several remarkably fine jennet jacks, among others being Black Prince, sire of J. D. Reed's Longfellow, for which he paid \$2,250. Longfellow was a fine breeder and a successful premium winner. His dam was also by Maringo Mammoth.

The late Thos. Dean, of Bedford County, Tennessee, was perhaps the earliest breeder of that county. He owned the distinguished jack, Black-and-All-Black, which sired Goliath, owned by Rev. T. B. Marks, and was sold to a company in Alabama for \$1,600. This was regarded as a large price in that day for a native jack. Rev. T. B. Marks is and has been regarded as one of the very best stock breeders in Middle Tennessee.

Messrs. Steel & Bro., Esquire Williams, Dr. Thomas Lipscomb, Samuel Wood, J. D. Hutton, Cotner, and others, of Bedford County, were all enterprising jack and jennet breeders.

Messrs. Goodrum, Chairs & Bellanfant owned the jennet jack, Lord of the Isle. He was very large, and was sired by Knight Errant (imported).

The late Pleasant Akin, of Maury County, owned some very superior jacks, among others King Philip, that took the \$500 premium at the State Fair at Nashville. In this exhibition he contended against some of the best jacks in the state, among others the noted Barcelona (imported), then owned by C. Oldham, Major Sam and Colonel J. R. Davis, of Wilson County, Tennessee. There was difficulty in determining this premium. The contention was between King Philip and Barcelona (imported). Several extra judges were called in before the decision was made. They finally resorted to the tape line and measured the jacks carefully, the native jack, King Philip, being at last awarded the premium.

The late William Younger, of Santa Fe, Maury County, was a pioneer and successful breeder, as was also the late M. H. Mays, of the same county, and who owned the following imported jacks, that were used exclusively for jennets, viz.: Moro Castle, purchased in Kentucky from the late Anthony Kilgore at a fabulous price; Napoleon the Third, an exceptionally fine looking animal, and considered one of the finest show jacks in the state. Mr. Mays stood each of these jacks at \$50, perhaps the highest figure that any jack had ever commanded up to that date, this being about 1858. He also owned the two imported jacks, Midnight and Starlight. These were very fine jacks, and were imported by the late A. C. Franklin and Major Tul. Craig. Mr. Mays also owned the native jack, Mohawk, by Mammoth (imported). All the above jacks made their mark in Tennessee.

The late Wyatt Lane, of Coffee County, introduced into his section some good Maringo Mammoth jacks

before the war that improved the stock of that county greatly.

Major Allman, Colonel McClellan and others, of Marshall County, purchased the fine jennet jack Bourbon from parties in Bourbon County, Kentucky. He was a Mammoth-bred jack, and proved to be a superior breeder.

The late Dr. Hocket, Dan Young, Mark Cockrill, Sr., Colonel John Overton, Dr. Shelby, Colonel D. H. McGavock, J. McRidley and Robert Rains, all of Davidson County, were jack breeders. Colonel Rains owned Black Prince (imported), used him awhile as a jennet jack and sold him to Colonel Blythe, of Wilson County. He purchased Black Mammoth of Major Knox, Danville, Ky., just before the war, paying \$2,500 for him as a three-year-old. He was sired by Maringo Mammoth, of Kentucky. He proved to be a superior jennet jack. He sired Black Prince of Fair View. This jack was reared by Colonel R. Rains, and was sold to Dr. W. A. Cheatham at an early age for \$1,000. This jack was a premium winner in both Tennessee and Kentucky. I used him as a jennet jack (soon after the war), and regarded him as one of the best of his day.

I purchased the renowned sweepstakes premium jennet jack, Black Satin, of Sampson Liggett, of Marshall County, Tennessee. He was sired by Dr. Boyd's Philip, a jack fifteen hands, standard, and a silky black with light points. He captured a great many sweepstake premiums in Middle Tennessee. I used him as a jennet jack. He sired a great many fine jacks; among others was J. J. Williams' Black Prince, afterwards sold to Sam Wood. He was the sire of

J. D. Reed's Longfellow, and others. It was said the dam of Black Satin was the dam of \$10,000 worth of jacks.

If time and space would allow, I could mention quite a number of jennets that were the dams of several thousand dollars' worth of jacks. I will mention anyway two that were owned by my father and brother before the war. They sold from one jennet, called Jenny Harlan, \$4,000 worth. She was sired by Benjamin Harlan's Mammoth. The other jennet was sired by M. H. Mays' Mohawk. From this jennet was sold \$6,000 worth. They were both good and regular breeders at my father's death, and I did not keep up with their subsequent breeding.

I have mentioned these examples that they may stimulate and encourage the young jack and jennet breeders of our country. If they will select good, well-bred jennets, breed with proper discretion, and give vigilant attention to their rearing, I do not know of any kind of stock farming that will excel it financially.

In about 1868 I purchased an imported Maltese jack called Malta. He was bred and reared on the Island of Malta, was landed at Charleston, S. C., and brought to Cartersville, Ga., where I purchased him. He, though rather small, made a good cross on my large Mammoth jennets. While the Maltese jacks are generally undersized, they are remarkable for their vitality and longevity.

General J. M. Knight, of Caney Springs, Marshall County, Tenn., did a jennet business with a jack called Prince Napoleon that was imported by General Edney, of North Carolina, while consul to Spain under Presi-

dent Polk's administration. He was a very high-styled jack, but was rather light of bone and body.

I think I have given a general, though imperfect, history of the jack stock from soon after the Revolutionary War down to the late Civil War. Now it is my purpose to give a history of all the importations since that war. The first importation was made by the late A. C. Franklin and Major Tul. Craig, of Sumner County, Tennessee, in about 1867 or 1868. They brought over a very handsome lot of Catalonian jacks. Among some of the most noted were Rifle and Laberdale. They were taken to West Tennessee and greatly improved the jack stock of that section. Midnight and Starlight were sold to M. H. Mays, of Maury County. They were individually good ones.

The jack Mr. Franklin reserved from the importation for his own breeding was Black Forrest. He proved to be a very popular breeder. Among the many fine jacks that he sired was Ben Franklin, of which I have already given an account.

Mr. Lyle, of Kentucky, about the year 1882 imported Andalusians from about Seville. One of his most noted animals, Abran, sold to W. L. Caldwell, of Danville, Ky., sired Major George Tarkington's premium jennet, that is about fifteen and one-half hands high, Abran being only about fourteen hands.

Messrs. Leonard Bros., of Mt. Leonard, Mo. (Honorable Chas. E. was a member of the firm), imported in 1882 a lot of Andalusians, purchased in and around Cordova and Seville. Some of these jacks were large, over fifteen hands high. A jennet by one of them, at the dispersion sale of our late lamented treasurer, Major Gentry, sold for \$750. Other jennets, at the

same sale and by these jacks, also brought good prices.

Mr. Graham, of Kentucky, about the year 1883 or 1884, brought over some Andalusians. We know but little or nothing about them. Some three or four years afterwards the same firm imported a few jacks, some jennets and colts from Catalonia.

Messrs. Hoy Bros., of Nebraska, imported five jacks from Catalonia in the summer of 1884. They were excellent animals, but did badly after landing, mainly on account of bad management and a lack of information as to how they should be treated.

Luke M. Emerson, of Bowling Green, Mo., imported about fifteen or twenty Catalonians in 1889. Most of these were young jacks and colts, and among the number a few excellent animals. In the same year the Hon. Harkreader, of Okolona, Miss., imported. He shipped his stock with Mr. Emerson, and brought over the same kind and about the same quality of stock.

Messrs. Kniffin & White, of Danville, Ill., also imported in 1889. They brought over only ten head—all from the island of Majorca, and sold them mostly in and around Higginsville, Mo. They were of excellent color and of good head and ears. Most of them are registered.

D. Munroe, of Danville, La., made an importation from Andalusia, Spain, in 1889. Most of his jacks were purchased in the provinces of Cordova and Leon. Many of them were black, but never having seen the importation we cannot say what proportion, nor do we know the exact number imported. Some of them, however, have been registered, and judging from these

pedigrees suppose the jacks are large and of good quality.

In 1889 a firm from Arkansas made an importation from the kingdom of Andalusia. This was regarded as one among the best lot of jacks ever brought from that part of Spain. The majority of them were grays, but they were heavy and of large bone. They were on exhibition for the purpose of sale at the St. Louis fair in the fall of 1889. Most of them were sold there, and the balance were taken back to Arkansas. This importation numbered about twenty-five head.

J. D. and W. H. Goodpasture and R. H. Hill landed an importation at Nashville, Tenn., in March, 1886. They were Andalusians from about the city of Cordova, Spain, and were about twenty-five in number, including both jacks and jennets. Some of them were above fifteen hands high. In the fall of 1886 this firm brought over one of the best importations ever made of Catalonian jacks. Included in the number was Jumbo, sold to a company for \$2,000; Peacock for \$1,500; Boyd's Monarch, \$1,500; the Douglas jack, \$1,500, at an auction, etc. The following year, the firm being composed of J. D. & W. H. Goodpasture alone, imported from the Cerdan (the frontier of France and Spain, in the Pyrenees). In this importation was purchased the jack Great Eastern, whose likeness appears in this volume. Later in the fall they made a second importation from the same place. The next year they made an importation in connection with Messrs. Lyles & Parmer of thirty head of Catalonians and Majorcas. This was the largest importation ever made to America up to that time. The following year the firm again became J. D. & W. H.

Goodpasture, when they imported Majorcas, Catalonians and Poitous to the number of fifty-seven head. This stands as the largest individual importation ever made to the United States. The present year, 1890, they imported twenty head of jacks and jennets—all Catalonians.

In the fall of 1886 Whitworth, Perry, Lester and C. C. H. Burton imported twenty head of Catalonians. This was an extra good lot. It included Paragon, recently sold to George Tarkington, of Danville, Ky., for \$2,000. The following year Perry & Lester, Burton and Frank Lester, Jr., made a most excellent selection of Majorcas and Catalonians. There was scarcely an inferior jack in the lot. Some of them were large and superior jennet jacks.

The following year the firm became Perry, Lester, Knight & Son, the selections being made in Spain by William E. Knight and Frank Lester, Jr. This importation included a colt two years and sixteen days old that was sold to Smith Bros., of Murfreesboro, Tenn., for \$2,000, which, considering age, is the highest price ever paid for an imported jack in the United States. This jack (King James) is full sixteen hands, and has proven to be an extra breeder for jennets. There was a number of other good ones in the lot, many of them being colts that afterwards developed into magnificent jacks.

The same firm imported again the following year, bringing good stock. They sold three half-brothers, one yearling and two two-year-olds for \$4,500. The yearling colt (Spanish King) was sold to Dr. Kird, Wm. and R. Davis, all of Wilson County, Tennessee, for \$1,500. He is developing into a first-class jennet jack.

Frank Lester, Jr., individually imported a lot of Catalonian jacks in 1889. They were a good, even lot.

In 1886 Dr. B. Stone Plumlee purchased two Andalusian jacks and one jennet, and shipped to the United States with the importation of J. D. & W. H. Goodpasture. One of these proved to be a great breeder, and is in Jackson County, Tennessee.

Dr. Plumlee imported the following year from Malta, the year afterwards from Italy, and in 1889 from Catalonia. In the last lot was a colt that ranked with the best imported.

In the spring of 1889 Messrs. Lyles & Parmer imported about twenty jacks and jennets, mostly jennets, which they sold at auction at Lexington, Ky.

In 1889 also Pierce, Burford, Lyles, Parmer and others imported a large number of Catalonian jacks.

In 1890 the same firm, with A. B. Harlan, of Maury County, imported from the same place.

Messrs. Berry & Murray, of Hendersonville, Tenn., made importations of Catalonians and Majorcas in 1887-'88-'89-'90, including King of Inca, and other good ones.

In 1887 a firm of Hebrews in Nashville, Tenn., imported a lot of Italian jacks. I think that they made two importations that year, and the following year imported from Catalonia.

Messrs. Roth & McClain, in 1889, imported a few Italian jacks also.

In 1887 Messrs. Ezell, Fannin and Burnett made an importation of Catalonian jacks.

In 1889 a gentleman from Putnam County, Tennessee, a Mr. Young, imported eight or ten Catalonians.

In 1889-'90 Moseley, Whitaker & Co., Bellbuckle, Tenn., made two importations of Catalonian jacks. They were a good average lot.

There may be, and doubtless are, a few whose importation is either unknown or has been unintentionally omitted, but there cannot be many such, and we feel certain that there have been no very large importations omitted. We suppose there have been about eight hundred or one thousand imported jacks and jennets brought into and around Nashville in the last five years.

If all those who import would confine their purchases to such stock only as is calculated to improve our own native jacks and jennets, Middle Tennessee would soon be to the United States what Spain is to Europe. The introduction of the inferior Mexican and Texan jennets has been a great drawback to the progress of elevating the standard of our jacks and jennets.

Before closing this history, we wish to mention the efficient services rendered by John Terry (colored), who has made several trips to Europe as groom—three with J. D. & W. H. Goodpasture, one with W. E. Knight & Co., and two with Moseley & Whitaker. John is justly regarded as the champion groom on a ship, and has had few accidents to occur to stock while in his charge.

We wish to acknowledge our obligations to our efficient secretary, W. H. Goodpasture, for services rendered in getting up the history of the late importations, etc.

L. W. KNIGHT, M.D.

MARINGO MAMMOTH.

About the year 1850 the late General A. Wilson and my father, the late Captain James Knight, both of Marshall County, Tennessee, visited Kentucky, and purchased a very superior jennet jack, Maringo Mammoth, in Boyle County. He was taken to Caney Spring, in Marshall County, Tennessee, and did business as a strictly jennet jack for a number of years at \$40 per jennet. My brother, the late General J. M. Knight, then of Murfreesboro, Tenn., also had an interest in him. I afterwards purchased him at a cost of \$2,160, and took him to my home, then in Rutherford County, Tennessee, and kept him until he died. This jack was about four years of age when purchased in Kentucky. If my memory serves me correctly, he was exhibited at Lexington and Danville, Ky., and took premiums over his own class. He was also shown at Columbia, Lewisburg, Shelbyville, Nashville and Lebanon, Tenn., at all of which places he was awarded the first premium. I regarded him as the most suitable jack that had ever been introduced into Tennessee to improve the small-bone stock of our state, up to that date. He was about sixteen hands high, black, but not a jet black, with white points. He had a remarkably large bone, large head, large foot and body, heavy like a draft horse, stood on and carried his limbs well under him, had good action for an animal of his size. He was sired by Maringo Mammoth, of Kentucky, and he by imported Mammoth that was owned by Messrs. Aquila Young, and Everett, of Mt. Sterling, Ky. One of Maringo Mammoth's dams was called Cleopatra, the others I have forgotten. Imported Mammoth did business

nine years. He was shipped to the United States on a sailing vessel, there being no large ocean steamers at that time. As was the custom then in shipping jacks, he was placed on a swing, and was so heavy that he was cut under the arms by the swing and the continual rocking of the vessel, which caused a running sore perhaps as long as he lived. I am glad to say the facilities for shipping stock have greatly improved since that day. Imported Mammoth did business at \$100 per jennet, and his services were remunerative to his owners.

I have had a most excellent artist, Professor A. C. Webb, of Nashville, Tenn., to make a drawing of Maringo Mammoth from memory. I wanted my stock friends to see a model of a native jack, that had been worth perhaps \$100,000 to Tennessee—he and his descendants. I have succeeded in procuring cuts of a number of imported jacks of different species, from several countries, and thought it would be well to have a cut of an extra good native jack to show in my book, and hope I have succeeded in it. Several half-brothers of Maringo Mammoth were introduced into this state, at a later date, which were great accessions to the jack and jennet stock of this part of the country.

L. W. KNIGHT, M.D.

Dr. L. W. Knight, Nashville, Tenn.:

MY DEAR FATHER: At your request I cheerfully submit a very brief sketch of my trip to Europe in search of jacks and jennets of such quality as to improve our native stock. My brother, W. E. Knight, having been three times for the same purpose, was somewhat satiated with travel or intimidated by storms and floods, having encountered both, and insisted that

it was my turn. So securing identification papers and all necessary articles I started, in company with the late Mr. Herman Roth, who was to be guide, interpreter and companion. He had crossed the Atlantic thirty-five times, and could speak twelve languages; was familiar with all points of interest, and seemed never to tire of showing them to me.

I bought New York exchange in Nashville, Tenn., and carried same to Brown Bros.' banking house on Wall Street and bought with it a letter of credit, which enabled me to draw money at any city in Europe, so numerous were the branch houses. We then looked for ship, but found none would leave for Spain within ten days, so to save time concluded to take passage next day on a French mail ship bound for Havre, France. After eight days and nine hours we were landed at the beautiful city, some of whose streets are paved with water.

While the object of our trip was jacks and jennets we could not miss the opportunity of seeing the many sights, so after taking in Havre, we started for Paris. In a visit to the zoological garden there I saw the skeleton of a whale ninety-two feet long, whose jaw-bone was nineteen feet long; and the largest boa-constrictors I ever saw—the diameter was not less than six inches. The art gallery with its beauties charmed by the hour, but time was precious so on we went, only to stop and stand in awe at the grandeur of Eiffel Tower. Here we were disappointed at not being able to ascend, as it was being painted and closed to visitors.

The next point of special interest was Switzerland with its most beautiful lake Lucerne, encircled by lofty

mountains and romantic scenery. Here we took the tourists' boat and rode the entire length, sixteen miles, enjoying the whole immensely. Then by lake Como on railroad. Then went to Magna Grotto, which is 3,327 feet above sea level, but the summit of mountain above this grotto is 10,800 feet above the sea. This tunnel is said to be nine miles in length and I do not doubt it, for it took the cars considerable time to pass through it. The descent makes two circles into the side of the mountain to lessen the grade.

We then turned to the Adriatic seashore in northern Italy, and traveled almost parallel with the shore into the heel of Italy. Several times we left the cars and went into the interior searching for stock, finding some good ones. And here let me say it may surprise some to know how these people care for their donkeys. Very many of the houses are built of stone, and the donkey is kept on the first or ground floor, which is also of stone. The family occupies the rooms above. Barri and Forga are the principal cities visited on the Adriatic sea. We spent two weeks at Martino Franka, and visited many villages that were used during the feudal system, whose watch towers and belfries still stand well preserved. Portions of the walls around some of these villages are in a good state of preservation, whilst other portions have yielded to time. Then on to Toranto on the great sea. Thence an all day's ride on cars to Naples where we remained one month, daily viewing the noted Mount Vesuvius, from the city and several times passed by its base, through Pompeii. During our stay in Naples we visited all the places of interest in the city; the Royal Palace, the castle which was built by the Romans, whose base-

ment is solid stone and now used for a penitentiary. We frequented the beautiful parks on the beautiful bay of Naples, where bands spent hours discoursing sweet music each afternoon. One day the city was awakened into new life by a visit from the king and queen of Italy in company with their friends, the emperor and empress of Germany, and the crown prince of Greece. The ovation tendered them must have satisfied their vanity, if not enough to turn their heads. The city that once ruled the world (Rome) next claimed our attention. The Vatican, the Colosseum, Royal Palace, St. Peter's and St. Paul's cathedrals, the Pyramid, the Portal, and the Catacombs each was visited by us and excited wonder and admiration.

Upon going back to Naples we discovered that we could get transportation for the twenty-seven jacks and jennets that we had purchased, on a Scotch steamer bound for New York. So, without delay, we began to make ready. Lumber and work on each stall cost \$10, and was only about thirty-eight inches wide. Our stock was taken on board May 16, after paying export duty on each animal, and \$20 for litter to convey stock and feed from shore to ship, and happy were we at prospect of starting to America. We stopped six hours at Gibraltar, taking cattle aboard for slaughter. A rope was fastened around their horns and they were drawn upon the ship by machinery. They would fight the air wildly with their feet, but were landed safely on board. In midocean one of our jennets foaled, and we named the dark-haired beauty Ocean Wave, and he proved to be as restless and energetic as the ocean itself. So instead of losing any we gained

STARLIGHT PARAGON.

MARINGO MAMMOTH

MARINGO MAMMOTH.

PERFECTION 260.

Winner at World's Fair, Chicago, Ill., 1893.

one and took delight in nursing the baby colt while the ship did the rocking. They, of course, had to be watched day and night, but we felt amply rewarded for our diligence when arrived at home without the loss of one, and all in good condition. They were much admired and brought fairly good prices.

This letter has been very hurriedly written and is somewhat disconnected, and many places merely mentioned, that are quite noted, so there may occur some errors, for my notes are quite limited, and a lapse of almost eight years may cause some little variance in memory. Trusting this may in some manner interest some who may chance to read it,

I am your affectionate son,

JAMES M. KNIGHT.

December 3, 1901, Murfreesboro, Tenn.

STARLIGHT PARAGON

Is black with white points, was twenty-five months old when this picture was taken, and is fully fifteen hands high, horse measure. He has more length, size and bone than most colts of his age. He is heavily muscled, is strong and quite active, in fact, he has unusual merit. He was shown at the Texas State Fair, October, 1901, and took first premium in his two-year-old ring, and took second premium in the sweepstakes, where there were more than a dozen entries from three different states. He is the best colt in our knowledge to produce large smooth stock from the average jennets of the country, he being large and smooth and so well-bred that he cannot breed otherwise than well. He is by Lell Jenkins' Starlight, he

by old Starlight, he by Bellknap, etc. The late H. C. Ezell refused \$4,200 for old Starlight.

Starlight Paragon's dam was by imported Paragon, that sold for \$2,600. Hence, it will be seen that this colt has descended from two of the best families in Tennessee. Both have taken their share of prizes in showings. He is the property of Knight & Jetton, Murfreesboro, Tenn.

Dr. L. W. Knight, Nashville, Tenn.:

MY DEAR FATHER: At your request I write you of my three trips to Europe. In March, 1888, I left Nashville, Tenn., accompanied by Mr. Frank Lester, Jr., and John Terry, colored. Going direct to Washington, D. C., we procured our transports in case of trouble abroad. Thence to New York, where I converted the New York exchange into a letter of credit with Messrs. Brown Bros. on Wall Street. This letter of credit enabled us to draw money at any of the leading banks in any city of note. We next went to the office of the Cunard line to engage berths on the Umbria, a very large and fine vessel, five hundred feet in length. This ship was to sail in twenty-four hours. In the meantime we took in some of the sights in New York, which proved to be quite interesting. At the appointed time we went to the ship to take passage and bid adieu to the finest country in the world, America. In taking the step from the pier to the ship I never had such peculiar feelings before nor since. It occurred to me that I might be taking the fatal step, leaving *terra firma* to go out on the dark blue sea, but as I was representing a strong company and all arrangements were made, there was no back-

ing out, so on I went. Many had come to bid farewell to friends and relatives. As the great ship started, tears and handkerchiefs were in great evidence. All this made me feel quite sad. I more fully realized that I was leaving a bride of three months at home. In a few hours everything assumed its normal condition. Two days out the waves were rolling high; the ladies who had almost lived on deck began to disappear and did not come out again until the gales, lasting three days, had passed. They looked as if they had lost their best friend. In the meantime the writer was getting considerable experience, often giving vent to his feelings feeding the fish. Queenstown, Ireland, was our first stop, discharging a few passengers, some cargo and mail. This was Friday night, eleven p. m. The next day we arrived at Liverpool, at eleven a.m. On landing our baggage was examined, which required but a few minutes. We left Liverpool immediately for London, stopping at Charing Cross Hotel, too late for supper. We ate at a restaurant across the street. Having satisfied our appetite we promenaded, taking in some of the sights of the great city. The streets were crowded with people and the cops were very conspicuous. Charing Cross is quite a large hotel, using stone for floors. Next morning we took train for Dover, crossing English channel, a distance of twenty-eight miles, to Calais, France. On arriving at Dover we were informed that a vessel was lost the night before, which is nothing unusual on the channel. We consider this the most dangerous body of water we ever crossed. From Calais we went directly to Paris, the prettiest city we ever saw, waiting here a few hours for our train. In Paris we

had quite a little experience trying to instruct a French cabman where to take us, as he could not understand English nor we French. Finally an Englishman, taking in the situation, came to our rescue and instructed the Frenchman where to take us.

Leaving Paris we arrived in Bordeaux the next morning where our interpreter, Mr. P. Carles, met us as instructed. He proved to be quite a pleasant gentleman. I assure you it was quite a pleasant relief to meet him, as we could not speak any language except English, therefore, it was difficult for us to get along. I asked Mr. Carles where we could buy some good jacks. He did not know, but referred us to Mr. Ribo Saster, who lived in the Pyrenees Mountains in France, near the Spanish line.

We met Mr. Saster in Toulouse, France. We explained our business to him, and asked him if he could render the desired assistance to us. He seemed to think he was the man we were looking for. His services were at once engaged and off we put for Barcelona, thence to Vick, which is situated in the province of Catalonia. We found a few jacks in the town; after looking at them we hired a cart and driver so we could visit the farmers and see their stock. We found that in buying the more matured animals there was considerable competition, besides they were not plentiful, and we began to purchase colts from ten months old up. The jacks in Spain are often kept in the basement of the dwellings on stone floors. They get but little to eat and not much exercise. Their chief food is a large, coarse bean, a few shelled oats and hay. Owing to this style of treatment we found three decided advantages in selecting colts. One was no

competition; the second, we got picking choice; and the third was, after we got the colts home with proper feed and exercise these colts would develop to a much higher degree of perfection, and our expectations were fully realized. For example, we sold three half-brothers; two were yearlings past and one two-year-old, for \$4,500. We purchased nineteen head. Most of them were quite poor. We had led them over the Pyrenees Mountains into France, stopping at Axe, which is about half way down the mountain and a very popular watering resort. We remained here twenty-four days getting our stock in condition for the long voyage. They improved rapidly. At this place Mr. Ribo Saster left us, as we were through buying. He proved to be an excellent gentleman; his judgment was good and he impressed us as a man of unusual energy. He lives at Porta, France. He invited us to dine with him, which was a most excellent affair, serving twelve courses. It is useless to say how much we appreciated this act of kindness from a man that we had known but a few weeks. Mr. Saster seemed to take a great interest in me. Often at meals he would say in broken English, "You no eat, are you seàk?" Mr. Saster came back to Axe to assist us in loading our stock to ship to our sailing point, Bordeaux. As we parted tears rolled down his cheeks and he kissed me good-bye. We remained in Bordeaux but a few days, sailing on the Chateau Lafite, of the Bordeaux shipping line. We had a nice smooth voyage, losing but one animal, in Jersey City. At this place we rested our stock some thirty-six hours. We also made a short stop at Covington, Ky., some eighteen hours, thence home. Mr. Frank Lester is a big-hearted fellow,

always in good spirits. John Terry proved to be a most excellent man with stock on board ship. We were gone about three months on this trip.

My second trip was in 1889. I was accompanied by Mr. Walter Murray, of Mt. Juliet, Tenn. We left Nashville in March, going direct to New York. There we were met by Dr. B. S. Plumlee, who made the entire trip with us. This time we sailed on the *Etruria*, a handsome vessel of the Cunard line. She has made quite a reputation for speed. The *Etruria* is a twin ship to the *Umbria*. We landed at Liverpool and went practically over the same territory as stated in former trip. After buying some forty head we heard of some jacks seventy miles away up in the mountain where it was much colder and very deep snow. Dr. Plumlee was complaining of being unwell, so Mr. Murray and I made the trip, buying nine head of good stock. In the meantime Dr. Plumlee bought a few individual animals. Having purchased in all fifty-six head, Mr. Murray returned to our former field of business to assist in collecting, and paying for that which we had already purchased and I took the nine head to Toulouse, where we met and reshipped to Bordeaux, our sailing point. We were quite unfortunate this trip, losing twelve head in the Atlantic and eight head from New York to Nashville, twenty head in all. This time we shipped on second deck and did not have sufficient ventilation, which produced pneumonia. We used my former interpreter, Mr. P. Carles, and our genial commissioner, Mr. Ribo Saster. Had our train been on time we would have reached Johnstown at ten a.m., just in time for the great flood, but fortunately for us our

train was delayed some six hours. We were detained at Altoona, Pa., thirty-five miles east of Johnstown, some eight days on account of the many washouts on railroad. We crossed a number of bridges just before reaching Altoona; several of them were washed away, so we made a narrow escape after all. Our home people were quite uneasy for some days, as they could not hear from us. All communications were cut off both by wire and postal, but after all we got in, in good shape, minus several jacks. We had a good many ups and downs mixed with pleasure. While at Altoona we did not go to bed; some of our stock were sick and greatly scattered and required attention every few hours, consequently there was not much rest for the weary.

My third and last trip was in 1891. In company with Mr. Herman Roth, an Austrian, we left Nashville, August 19, and sailed on the Saala, of the German Lloyd line, direct to Southampton, England, where we were to take another vessel for Havre, France. But this was twenty-four hours behind time, so we took a special for London, where we spent a few hours, going direct to Paris. While there we visited the Eiffel Tower. It is a wonderful structure, towering about 1,000 feet. It required three different elevators to ascend to the top. It cost some three or four francs to make the trip. We started to go up. After reaching the second elevator my friend, Mr. Roth, said he had gone far enough. I insisted on his going on with me, but to no effect. He said he would remain where he was until my return. On reaching the top I had a bird's-eye view of the city and surrounding country. People looked like children and horses like

ponies on the streets. There is a house on this tower ; in it is a restaurant and some small stores, and one could buy most anything except a horse and buggy.

Leaving Paris we crossed the Alps into Italy. In these mountains we saw a beautiful lake. Descending we passed through a tunnel that required thirty-three minutes to pass through. I suppose this is the longest tunnel in the world. The first city we came to of importance was Turin, then to Genoa, reaching there at night. This is a city of considerable importance, situated on the Mediterranean. It was the birthplace of Columbus. We spent a few hours in Rome, where we visited St. Peter's Cathedral, which is an immense structure, the largest in the world. Joining it is the Vatican, where Pope Leo the Thirteenth lives. His guards are gaudily dressed. We went to see St. Paul's Cathedral, which is two miles out and quite handsome and of more modern style. It is considered by many the handsomer of the two. On our return to the city we saw the Colosseum, which is practically destroyed. In the center of the ring is a small stone structure where wild animals were kept to kill the worst criminals in years gone by. The next city we came to was Naples, a city of large proportions ; from here we went up into the mountain to buy our stock. We purchased seventeen in all. There is some prejudice against the Italian jacks, owing to some very inferior ones having been imported, but this was pronounced by competent judges one of the best all-round importations ever brought over. As a rule the Italian jack is superior to the Spanish jack in color, bone, foot, and constitution, but not altogether so stylish. We kept our stock in Naples about two weeks waiting for

our ship, the steamship California. We sailed from Naples through the Mediterranean Sea into the Straits of Gibraltar. While stopping at Malaga to coal I went ashore to see a bull fight given in behalf of the flood sufferers. It was largely attended by both men and women, and children. Would estimate the crowd at 20,000. Six bulls were killed and some twenty horses. Bull fighting is the chief sport of Spain. It is anything but elevating. Arriving at Gibraltar I went ashore with the steward to get some green stuff for our stock, but did not succeed in getting much. We walked through the city. It is by far the best fortified city we have seen. Leaving Gibraltar we encountered a storm, going around the Azores Islands, which lasted for eighteen days. The question was often asked by the passengers who was the Jonah on the ship. This storm was something fearful. It seemed as if every day would be the last. I have no desire to be in another one like this. The Atlantic was said to be rougher in October, 1891, than had been known in thirty years. We were out in all twenty-four days, losing one animal. Our ship was reported lost ten days before we reached New York. The evening we sailed from Naples Mr. Roth was cabled the news of the death of his wife, but he failed to get it, which I suppose was fortunate for him. He did not learn of her death until he reached his home at Lexington, Ky. While waiting for our ship at Naples I visited Mt. Vesuvius, which is seven miles out. It is plainly seen from Naples. It is constantly throwing out great volumes of smoke. The crater or mouth of the volcano is something like 150 feet square. I went right to the crater and heard a fearful roaring noise. The lava had

spread out over thousands of acres, often as high as fifteen feet. I saw the spot where Pompeii once stood. This was the roughest trip we ever experienced. We lost but one animal, the others reaching home in good condition. There were many places of interest that I would like to have visited, but the opportunity did not present itself.

Your affectionate son,

W. E. KNIGHT.

December 30, 1901, Nashville, Tenn.

BREEDS OF JACKS.

Less is perhaps known of the different breeds of jacks and jennets than of any other character of live stock. This may be said to be true even in those sections in which they are best known, while in many sections of our country absolutely nothing is known of them. They simply know that a donkey is a donkey, and that's the end of it. Now, we conceive it to be of the utmost importance that breeders especially should make themselves familiar with all the different breeds, because there is a vast difference between them, not only in appearance and color, but also in their value as adapted to our country. If a man wants a buggy horse he will hardly buy a Percheron, and if he wants to raise the best animal for beef he will scarcely invest in the Jersey. He knows of these, and need not hesitate as to what breed to buy after he has determined upon the purposes for which it is to be used. Now, if a man has a herd of jennets, too small of bone or too light of body, he ought to know what breed is most likely to remedy these defects in the progeny. If his herd is "off in color," as the saying is, then he ought to know what breed is most likely to overcome such a defect.

Although such a thing properly has no place in a stud book, it was, nevertheless, thought best to give a short but succinct description of all the different breeds of jacks in use in this country, because of the

popular ignorance above referred to, and because of a general lack of literature upon the subject.

Upon the question of the breeds that have been introduced into this country, and of their value as adapted to it, I can perhaps do no better than quote an address read before the East Tennessee Farmers' Convention, with such corrections and additions as may be thought necessary:

We find the jack the first animal domesticated by man for the purpose of bearing his burdens and transporting him in his tedious marches and travels. We find him mentioned with respect in Genesis; that he was carefully bred and reared by King David; that he is the only one of the lower animals of which we have record to whom was given the divine power of speech, which he seems to have used with moderation and discretion in a short conversation with Balaam; that on him alone was conferred the undying honor of conveying our Savior into the proud city of Jerusalem. That wayward son, too, of David—Absalom, the Boulanger of the Jews—rode upon a mule beneath the ill-fated branch that caught his flowing locks.

Beside these distinguished honors, I find that in other countries, climes, and times they possessed distinguished characteristics unknown to our own domestic ass. That in the mountain fastnesses of Arabia they are said to be so fleet of foot that no horse can overtake them, even in that country in which the horse is described as being as fleet as the wind; that in certain parts of Africa their meat is of the most delicious flavor, and was greatly sought after and appreciated by Roman epicures. He was used, too, in ancient times for the same purpose that he is to-day,

viz. : the propagation of mules ; and, during the Roman occupation of Spain, the value of the males for this purpose was placed at above \$13,000. And this brings me to the practical part of my subject—the profit in breeding them.

I think the breeding of all kinds of jacks can be made to a certain degree profitable, and I apprehend that it would be of more interest to my hearers to endeavor to show in what breed there is the most profit, rather than an abstract discussion of the subject of jacks in general. And, therefore, I shall, as briefly as possible, notice the different races of jacks that have been brought to this country, not in the order of their importance, but in the order of their importation. And I shall endeavor to give a just and fair estimate of their value as adapted to our country.

The first to be imported were from the Cape de Verde Islands, and without doubt traced back to the Portuguese. They were introduced into Connecticut principally, and were used to raise a small and inferior mule for export to the West Indies. At that time jacks could not be imported from Spain on account of the Peninsular wars, and, therefore, the specimens introduced were of such an inferior kind that, as soon as the West India trade died out from competition with better animals, the people ceased to raise them, and because of their bad start they have never commenced again. The same may be said of Massachusetts. It is not because of climate, as many erroneously suppose. They were, while in the business, just as successful as any other part of the country, considering their material. Besides the jack does not necessarily come from a warm country ; indeed,

the reverse may be said to hold good so far as the best jacks of Spain are concerned. We have imported some of our best jacks, Great Eastern among the number, from a point in full view of the eternal snows of the Pyrenees, and in bringing them home marched them over snow in June. And let those who are engaged in breeding jacks only think of the enormous unoccupied field yet to be supplied with them. The demand for them North has already commenced. Some of our best sales last year were made to Indiana and Illinois, to which points we had never sold before. We are constantly in receipt of letters of inquiry from Ohio, Iowa, Kansas, Colorado, Nebraska, California, and even far off Vermont. Some two or three weeks ago I received a letter from a gentleman in one of the Sandwich Islands, Hawaii, who was anxious to introduce the jack on these rich and fertile islands. The possibilities for the trade are beyond computation, and a significant fact is that not above two or three states now raise a surplus.

THE ANDALUSIAN.

Here in Tennessee we have experimented more or less—but under the most unfavorable circumstances, on account of a lack of organization and a stud book—with all the prominent breeds. Those first introduced were the Andalusians, and reached either through Virginia or Kentucky. The king of Spain, in 1787, presented to General Washington a jack and jennet of this breed. The former was called the Royal Gift. About the same time he was presented with a Maltese jack by the Marquis Lafayette. The Maltese jack was crossed on the Andalusian jennet,

the result of which was a very famous jack called Compound, that proved to be much more popular as a breeder than the Royal Gift, which was said to have been selected from the royal stud, and was near sixteen hands high, but ill-shapen and ungainly.

Not many years after this, the great orator and statesman, Henry Clay, who always had an unbounded love for agriculture and live stock, imported into Kentucky a few Andalusians. No two men of that day could have added greater popularity to a particular breed—the one, the idol of the whole country, the other, the leader of a great party and the nation's most distinguished orator; and hence, every man who wanted to experiment with jacks wanted to try this particular breed. And the color especially has held on so tenaciously that gray jacks are still extremely common with us.

This is one of the most distinctive breeds of jacks in existence. They are found in the southern part of Spain, embracing the whole of the ancient kingdom of Andalusia, and are evidently of an ancient race, for we read of them and the profits arising from their use in propagating mules during the Roman occupation and before the time of Christ. Columella, who, in the reign of the Emperor Claudius, published a treatise which has been handed down to us on the husbandry and economy of the Romans, gives very particular directions for breeding jacks and mules. He was a native of Cadiz, Spain, owned large estates there, and tells us that the best mules were raised in that part of the country.

They are distinctively gray in color, sometimes indeed practically white, but in rare instances black, and

even blue ones are to be found. To find one black, however, is little in his favor, as he is just as apt to breed gray as his brother, who is entirely white. The blood is there and will show itself. In height they are about the same as the Catalonian; fourteen and one-half to fifteen hands. They have a most excellent leg; the bone is large and firm, and freer than are the other breeds from what is commonly known as "jack sores," viz.: a running sore that appears on the inside of the knee and hock, and which sometimes gives a great deal of trouble. They have a fairly good head and ear, and are really a good jack. While many of them have been imported into this country, they have never been popular, chiefly on account of their color. In this we believe the people to be right. There are other races just as good, and some that we think are better, that have the desired color, and the progressive breeder should seek the ideal in all things.

We have heard at least one importer complain of their not breeding regularly, but we do not think this has been our observation of them. So far as we have seen, they are as much to be depended upon in this respect as any others.

The breed is now pretty thoroughly scattered over this country, as in addition to those brought over before the war, they have been imported in the last few years by Mr. Lyles, of Kentucky; Messrs. Goodpasture, of Tennessee; the Messrs. Leonard, of Missouri; and in 1889 quite a large importation by a firm in Arkansas.

Their hereditary tendency to gray can only be eliminated by carefully breeding to one of the distinctively black races. We do not think a gray or blue jennet

ought ever to be bred to a native jack if a black imported one can be reached, unless, as is sometimes the case, the pedigree of the native can be traced in one unbroken line of black stock to the imported black breed. I feel safe in saying that a majority of our natives at some point in their ancestry, immediate or remote, are tainted with an off color.

THE MALTESE.

About the best known imported jack in America is the Maltese. The older jack men of to-day will remember that as boys they heard a great deal about the Maltese jacks. They are at least contemporary with, if they do not actually antedate, the Andalusian in their introduction into this country.

Mr. Pomeroy, one of our earliest authorities, however, on jackology, says that the Knight of Malta presented to General Washington was unquestionably the first of his breed to be introduced into this country; that the second came in the frigate *Constitution*, from her first cruise in the Mediterranean, and was sold in the District of Columbia; and that not long afterwards a number were introduced by officers of the navy, from Malta, and that a few very valuable ones were brought over in merchant ships. Certain it is that they became comparatively well known in this country at a very early day, and, until a few years ago, the people seemed to know only two breeds—the broad term of Spanish and Maltese.

Mr. Pomeroy says that there is no question but that the race is of Arabian origin, more or less degenerated. They are found on an island in the Mediterranean, very far to the south, and belonging, I be-

lieve, to England. The island of Malta is small in circumference and exceedingly sterile in soil. Dr. Plumlee, who imported from there recently, tells me that the soil in no part is more than a few inches in depth, and that what there is, is a made soil. A few inches below the surface it is a solid rock. Dr. Plumlee says that the supply of pure-bred jacks there is exceedingly limited; in fact, when he was there and bought eight or ten, and as many more jennets, he did not leave more than one jack on the island that was worth his transportation home.

They are by nature a smaller jack than any of the Spanish breeds, seldom, if ever, going over fourteen and one-half hands. The average height of those imported would not go over fourteen hands, and of course they average smaller on the island.

Dr. Plumlee has his kind of theory as to their size. It is that as they are found on an island entirely sterile, with little vegetation and inferior grain crops, they naturally grew small, but with proper treatment in this country, plenty of feed and an abundance of pasturage, they will in a few generations attain the desired size.

They are either black or brown in color, the pure-bred generally inclined to the latter, have good heads and piercing, upright ears, and a great deal of vitality, showing an immense amount of vigor during the breeding season. They are about the gamest and most fiery little jacks that we have, and while some of them have good bone and feet, their limbs have always too much resembled the thoroughbred horse.

If we rode jacks to war as the ancients were said to have done under Marius, or drove mules to our

carriages, as was the custom of the late Queen Isabella of Spain, or in chariot races, as was the custom in the Olympic games five or six hundred years before Christ, then I think the Maltese would be the best, perhaps, of any of the breeds. But none of these things is what the farmer is after.

We want a powerful draft animal fitted for either the city dray or the cotton or sugar plantation. We have now experimented with the breed for over a hundred years, and he is found to be wanting. He is too small for our purposes. And here I want to mention a very important question now facing the breeders of the country, and especially certain portions of it, and which has been made to assume its deserved importance by the organization of the American Breeders' Association of Jacks and Jennets, and that is, What is the proper or ideal size of the breeding jack or jennet?

There is a small coterie of breeders in Tennessee, I hope confined to the middle division, who maintain that jennets under fourteen are better breeders than jennets over fourteen hands high, and estimate as worthless the jennet fifteen hands high or over. I am happy to note that the history of the show ring, especially in the great breeding districts of Kentucky, shows that their ideas have never traveled very far away from home, and it is only mentioned because of its effects in the particular section, and because it was intended as an attack on our rules of entry.

They say they want no overgrown animals. Now, the trouble is that our jennets in Tennessee have at no time been big enough. I agree with the man who says he wants no overgrown animal. What we want

is a big race of jacks. The jack fifteen hands high out of the twelve and one-half hand jennet is overgrown to a greater extent than is the sixteen hand jack from the fourteen and one-half or fifteen hand jennet. The experience of these men has been this: They own no large jennets, and never did. They sometimes, however, get a large jack in spite of the smallness of their jennets. This jack is overgrown and does not breed up to himself, but reproduces the size of his ancestor. And hence they cry aloud from the housetops and from the public prints, "Don't breed to a big jack." And they are in a measure correct, so far as the big jacks which they raised are concerned. But breed a big jack to a big jennet, and the issue will have as much hardness, style and action, as well as size and the power to transmit all these desirable qualities, as will the small jack to transmit the qualities of himself. In other words, the issue will then be in almost exact proportion. When you meet one of these antiquated fossils, he thinks he has forever silenced you when he asks if you ever saw a sixteen hand jack over ten years old. He might just as well ask you if you ever saw a jaybird on Friday. Their theory is utterly untenable. As a race, the big will not produce little, nor will the little produce big, and if established as a race and not as a phenomenon, the big jack will live to just as green an old age as will the little one. The Percheron is quite as long-lived as is the Shetland pony. Length of life is not measured by the number of inches or of pounds.

Another important consideration that will apply with double significance to registration in the stud

book is this: It has been the experience and observation of mankind for all ages that the offspring in the whole of animal life will, to a greater or less extent, reproduce the characteristics of one, and sometimes of both, their immediate ancestors, and they may even have them in a high degree, though the ancestor possessing them be generations back. It is likewise the observation of the thoughtful that they are quite as likely to inherit them from the dam as they are from the sire, and some even maintain they are more so. Now, may not the colt of the small jennet thirteen hands high which produces a jack fifteen and one-half hands reproduce in turn the size of his dam? Under the rules he is eligible to registry, and pray tell me what credit it would be to him to have his thirteen hand dam registered. And suppose they are small for generations back, would not such registration actually detract from his pedigree when the size would not otherwise appear? The great army of scientific breeders would know at once what to expect of his progeny.

Still another important question in this connection is that of money. No one raises jacks for the pure and unadulterated love for the business, nor for the fun that is in it, nor yet for the glory and honor, but for that all-important factor, the amount of money they will bring as a reward for the toil, care and labor involved. Now, for the benefit of those just starting in the business, and for those who believe the world reached perfection about the time of their boyhood, and that there is now no such thing as progress, I will affirm what I can easily prove—that the big jack brings the big price, and the little jack the little price.

This state of affairs has not only existed for some time, but it promises to grow a great deal worse in the future. In handling from one or two importations each year, this, without exception, has been our uniform experience. Give a man a list of our sales, and he can almost grade the size of the animal by the price. I never knew a jack to bring a large price if under fifteen hands high, and I never knew one to bring a very large price if under fifteen and one-half hands. This is not only our own experience, but our observation in sales of above 200 head each year. The best and most profitable trade is in what are termed jennet jacks, and these must in all cases be large. There is a large demand for such animals.

THE CATALONIAN.

The next breed to make its appearance in this country was the Spanish Catalonian.

After Henry Clay's importation of Andalusians, his son was, I believe, made consul-general to Spain. In any event, he was sent there in the consular or diplomatic service, and while there sent to his father's Kentucky home an excellent specimen of this breed. So much pleased was Mr. Clay with the jack that a year or two later he imported from the same place a number of others. A picture of one of these ornaments one of the rooms in the old homestead at Ashland.

A few were also imported at this early day into Virginia. Mr. Franklin and others imported to Middle Tennessee long before the war, and purchased another importation that had been landed at Charles-

CATALONIAN JACK, GREAT EASTERN.

Imported by J. D. & W. H. Goodpasture, Nashville, Tenn.

ton, S. C. This breed has always been popular, and justly so. For the propagation of mules of a certain quality they are unsurpassed, and those who are engaged in rearing them need never fear but that the demand for them will be active and the prices remunerative. They have many valuable qualities, and among these is that of color. Browns, or rather, sunburned blacks, are frequently seen, but the majority have a very glossy, jet-black coat of short hair that is greatly sought after. Besides they are a jack of good height, varying from fourteen and one-half to fifteen hands, in rare instances reaching sixteen hands. While they have not a large bone, it is a very flat, clean one. Our Kentucky brethren object to them chiefly on the ground that their bone is not large enough; but, I think, this objection would disappear after a few generations on our rich blue grass soil.

There are few gray jacks in Catalonia. During numerous trips there I have never seen more than two or three, and these had doubtless strayed in with their owners from some province farther south. They have been thus bred for ages, and this fixedness of color constitutes a point of much merit in the breed, and is one of the chief reasons why I should prefer breeding a jennet to them than to our native stock. Our jennets in this country are very diverse in color. Grays, blues and mouse-colored are quite numerous. There is no way of so quickly eradicating these off-colors as by the cross indicated.

It is a law of nature that a color that has been true for ages in an animal will reproduce itself in a cross with stock lacking in pure breeding. The Cleveland bay horse that is stood to a neighbor's mares of varied

hues will show about ninety per cent of bay foals. It is not uncommon to see grade Holsteins so perfectly marked as to be undistinguishable from the pure breed. Even though the native jack be black, he may not transmit that color—they are quite as apt to transmit the color of their ancestry, though it be for generations back.

The Catalonian is a jack of great style and beauty and of superb action, and many are being used in our best jennet herds. I think they are chiefly responsible for the black cross in our native stock. A great number of them are being imported, and I think they will continue the history of their successful past. They derive their name from the section of country in which they are found, this being the northern part of Spain, embracing all the departments known as Catalonia. It covers some hundreds of miles in area, extending from the Mediterranean coast to the French side of the Pyrenees, taking in what is known as the Cerdan, which lies both in France and Spain. Although they are found in both countries, they are still found only in the mountains of the Pyrenees. They are scattered all over the south of France, bordering the mountains about Toulouse, Tarbes, Pau and elsewhere. These were, nevertheless, born in their mountain fastnesses of the Pyrenees, and were imported as colts to take their places in the stud when they became sufficiently old. Many of our best Catalonian jacks that have been imported from France were thus introduced.

The supply of good jacks in this territory—the Pyrenees—is limited and almost exhausted by the large and increasing importations to America. When

they were being imported before the war it was attended by great difficulty and danger, public conveyances and modes of travel difficult, railroads unknown, and society in a rather unsettled condition. Spain was the last of the countries to become safe and pleasant to travel in, and her mountains, extending all over the country, north and south, east and west, afforded admirable places for sheltering brigands and robbers. It is a large country, but one can hardly find any part of it that is not in full view of a tall mountain peak, covered by eternal snow.

The jack had to be brought home in sailing vessels, steamers not then being in use. These were slow and unfitted for the transportation of live stock, unlike our splendid modern steamers, brought about by the immense importations and exports of horses, cattle, etc. When old Mammoth was imported he had to be swung most of the way, which cut into his flesh, I am told, until it was feared his wounds would prove fatal.

Since the war, with improved facilities, a great many have been imported to this country, and especially to Tennessee, from which point they have been scattered all over the jack territory of the Union. Those imported are usually from fourteen and one-half to fifteen hands high, though smaller ones have been imported, and some that were considerably larger, in a few rare instances going above sixteen hands.

The large bone of the Kentucky jack is well known, and is perhaps given by their unsurpassed limestone, blue grass soil. But the Catalonian jack in his bone, we think, is more devoid of flesh, and it is perhaps of

a finer texture than our native stock, as is the case of the thoroughbred compared to the other breed of horses. They make, therefore, an admirable cross for our native jennets. The imported jennets of this breed may likewise be profitably crossed with the native of proper color and pedigree, avoiding in the selection those in any way related to an off-color.

For style and action they are possibly unequaled, certainly not surpassed, by any other race. This is noticed with great force, too, in the case of jennets. Our native jennet stock are proverbially dull and lazy; they move about in the most composed manner, with an entire lack of appreciation of modern ideas of "get up and go." Such a thing as playing in pasture or paddock is far beneath their sense of dignity and decorum, yea, even childlike. Age fastens upon their feelings and spirits long before they reach the responsibilities of being matrons or mistresses. But the imported will play and run about their lot like a colt, and some of them can trot like an embryo Sunol or Maud S. We remember one occasion, when we were driving in a carriage on a government road in France. Our team was a spirited pair of Tarbes horses, with a great deal of the Oriental Arabian blood coursing through their veins. Our driver was no less spirited—a defeated son of France in their late clash with Germany, but who had still enough spirit left to try to pass everything on the road. We saw ahead of us, driving at a smart gait, a man in a two-wheeled vehicle with a fine looking jennet hitched to it. We were at that time buying a few jennets, and ordered our driver to overtake what promised to be a valuable acquisition to our purchase. The

man, however, refused to be overtaken, and we drove a full half mile at the limit of our speed before we could come alongside of him. It is needless to say that we purchased the jennet, but the amusing feature of it was that we had purchased the same animal the day before. When rigged up and at full speed in a race there was enough difference to cause us to fail to recognize her, though my father said he thought she favored one a good deal that he bought the day before.

One rarely sees a droop-eared one among them, and when one does, it generally has some physical cause, such as a hurt in shipping, disease, or something of the kind.

This race are most excellent breeders, as they have proven in all the jack producing states. Their mules are handsome, quick, active and good sellers, and we have heard it said, though we do not know how this is, that they mature very early.

All those breeders whose stock run back in their pedigree to the imported ought to state of what breed they were imported. A man with a jennet would not want to breed to a jack running back to the Andalusian, because if she had any disposition that way anyhow she would be pretty apt to throw a gray colt, whereas, if bred to one running back to the Catalonian, he would most likely overcome such disposition toward gray.

THE MAJORCA.

One of the popular breeds of jacks that have been imported in the last few years is the Majorca. They are undoubtedly the largest jacks that have been im-

ported, and have been much sought after for jennet purposes. Their bone is exceedingly large, with a body to correspond. They are black and rarely have that glossy color so admired in the Catalonians, but those I have seen brought to this country will average almost, if not quite, a hand taller than the latter. In Europe they rank about the same, both being regarded as superior to the Andalusian. We have imported all three, and I judge of their rank by their price in Spain.

Majorca, the largest of the Balearic group of islands, and the one on which these jacks are principally found, is the richest and most productive part of Spain. Although it is an island, I class it with its continental mother, because of its proximity and close communication, and because the jacks there have fallen into the general category of Spanish. It is necessary to irrigate the greater part of the island, but the rich luxuriance of its grass and grain crops gladdens the eye and cheers the heart. I think this is a full explanation of the size of their jacks. This leads me to believe that here in America, by means of our generous system of feeding and unexcelled pastures, and with careful and scientific breeding, we can succeed in a few years in propagating a race of jacks of whatever size and form desired, provided always that we commence with the proper foundation. Majorca, Kentucky, and even Tennessee, illustrate the fact that we can give them an increased size. The poor and sterile plains of Algiers, Africa, have exactly the opposite effect of our own rich and alluvial soil. We imported a jennet from there a few years ago, fully mature, and she was little above nine hands

high. It has doubtless taken generations to produce an animal in such miniature, but the final effect is none the less inevitable. Nothing will aid the endeavor to create the best jacks in the world here so much as the late organization of the American Breeders' Association of Jacks and Jennets. By means of it we need not necessarily breed our stock to the overgrown jack. A careful perusal of the stud book will reveal to us jacks that are large because their size is inherited, and if our jennets should be materially deficient in any especial point, then from this list or race of big jacks let the breeders select the one strongest and most perfect in such deficient point. And when such an animal is found do not hesitate to breed to him regardless of distance or season fee. By such breeding we can raise up a race such as the French have done, in which there are no really cheap or inferior animals. They will be good breeders because they have good breeding.

The Majorca is not destined to cut any great figure in this country. Their numbers are too limited, and there is no way in which to greatly augment it. The island from which they are imported is small and has been literally stripped of its meritorious animals. What few have been brought to this country are now scattered to the four winds of heaven. No jennets have been imported, and in a few years there will not be a pure-bred Majorca in this country, and except for the stud book their name would be only one of history. They have not been in this country long enough to fully demonstrate their worth, but I am of the opinion that they will rank fully up to the Catalonian for mules, and, for a large class of our jennets,

surpass them. Their power of reproduction is strongly illustrated by the fact that the Spanish government obtains the greater part of her artillery mules from Majorca. And some of these were also obtained a few years ago by the English government for transport service in Egypt and elsewhere.

As to height, those brought to this country will average about fifteen and one-half hands. They are more uniform in size than the Catalonian, and we believe them to be, all things considered, the largest jacks in existence.

A good many of the breed have been imported into South America, and at prices that astonished me when I first learned them. Two sold there a few years ago are reported to have gone at the price of \$900 each, which, if all expenses are added, makes a pretty good figure for a country considered by us so far in the rear of North American civilization.

Their heads and ears are enormous and inclined to a bulky appearance. While they have the longest and largest ears of any other race they are not so erect and piercing as the Catalonian, nor have they the style and action of this breed; in fact, they may be said to incline to sluggishness.

If the Catalonian be likened to the French coach horse or the Cleveland bay, the Majorca would be a Percheron or a Shire.

There is certainly no purer race of jacks in Spain than the Majorca. As far back as 1825 Mr. Pome-roy, in an essay before the Maryland Agricultural Society, said: "So much have been the ravages of war and anarchy in Spain for a long time past that the fine race of jacks that country once possessed has

become almost extinct. In Majorca, however, and probably some parts of the coast of Spain opposite, the large breed may yet be obtained in its purity."

It is easily understood why the race should be the purest of any of the Spanish breeds. The line dividing Andalusia and Catalonia is an imaginary one, and along the border there is necessarily a more or less commingling of the breeds among the people, who at no time have given their time and attention to scientific or even very careful breeding; and of course a large part of both countries must be effected by the kind of stock bred by the other. This is all the more probable, too, as no value whatever is placed upon color. They like a white just as well as a black, and would not reduce a dollar on a jack if he should happen to be green. But Majorca is an isolated island two or three hundred miles from the coast of Spain, and is inhabited by a people satisfied to do as their fathers did before them, and who likewise, as is often the case, think that what they have is better than what anyone else has. It is hardly likely, therefore, that they would go to the expense of bringing across the seas any foreign blood. As a rule the jack breeders of Spain are not a class who have the means to import, or the information that would lead to it.

To our people—I mean those engaged in the stock breeding business—their lack of information is astonishing to the last degree. Go to a progressive breeder in this country, of whatever kind of stock, and he can give with a fair degree of accuracy the location and, perhaps, the ownership, of the larger half of his kind of stock in the state. But in Spain one section is as profoundly ignorant of what is in

another section as he is of the Fiji Islands or Stanley's "Darkest Africa."

THE ITALIAN.

It is not necessary to say very much about the jacks of Italy, but a good many have been imported lately, and it seems proper that the people should know enough of them not to be led away by the seductive term, imported, and who at the same time will not discredit all jacks because they are imported.

They are found almost everywhere in Italy, where little or no attention is paid to the breed. They are principally used for packing purposes, and are the smallest of any of the breeds imported. The moving cause of their importation was their cheapness. They were bought for a song, and in most cases had to be sold for another song, with little or no profit to the dealer. For this reason we have perhaps seen the last of them.

Occasionally they may be found to reach fourteen hands, but they rarely, if ever, get to be taller than this. Those brought to this country, and they were the pick of Italy, ranged from about thirteen to fourteen hands, were generally black (though grays are not uncommon), and had rather large bones and good weight of body. Many of them were practically useless as mule jacks, having doubtless been raised up with jennets. We saw a five-year-old that was imported into Tennessee that positively refused under any circumstances to fall in love with a mare, and that ran out in the pasture with a herd of jennets without harm either to him or them. I saw another lot of four or five, only one of which could be in-

POITOU JACK, LA FLEUR 52.

Imported from the Province of Poitou, France, by J. D. & W. H. Goodpasture,
Nashville, Tennessee, and owned by the importers.

duced to fulfill the end for which nature seems to have adapted them, and that only after a long and tedious use of a jennet. For the mare herself he cared no more than he did for the negro groom who held her. This is all the more unfortunate, because they are entirely too small to use with jennets.

We have heard it said, though we are not willing to vouch for its accuracy, that they have not proven themselves in this country to be satisfactory breeders. We are rather inclined to think that with a mare of merit they would sire a fairly good but small mule. We have seen a few carloads of handsome little mules from Italy, ranging from fourteen to fourteen and one-half hands, and of good form and color. We know nothing of the class of mares producing them.

I believe them to be inferior to, but at the same time descended from, the Maltese. They have many points of resemblance, and are sufficiently close together for such to be the case; or else the Maltese may be descended from the Italian.

I will add, in conclusion, that sometimes they are quite vicious (this is one of the points of resemblance), and in one instance, to our personal knowledge, a groom was hurt by one of them by being so severely bitten on the arm as to confine him to his bed for some weeks. It is our observation that small jacks are more apt to develop vicious propensities than large ones, but it will do to keep one's eyes open on any of them.

THE POITOU.

The last of the distinctive breeds of jacks to be imported to this country were the Poitou. Their

early history is most entertaining. They are to be found in what is known as the granary of France—in the richest and most fertile part of that most fertile of all countries. They are found throughout the province of Poitou, but more especially in the departments of La Vendee and Deux-Sevres. In olden times (they are mentioned in French literature as early as 1016) France was not divided up as now into small farms and plantations, but was owned in large bodies by rich lords and noblemen. These had their tenants by the hundreds, and most of them kept a number of live stock, especially a few mares for farm work, etc. On account of the price of good jacks and the cost of labor, etc., in standing them, it became the custom of the proprietors to provide this for their tenants. Europe was at that time in continual war, and this required vast armies in the field; consumption of agricultural products was enormous, the profits of the farm great, but tenants to till it scarce. The tenant, therefore, having a choice, naturally selected the place offering the greatest inducements. An important one of these was the breeding animals, and hence among these rich landlords there was much rivalry as to the merits of their different studs; and being in command of large wealth and abundant leisure, their breeding establishments, even at an early day, reached the highest degree of perfection attainable by the lavish expenditure of money and the most careful and scientific breeding. Perhaps this may account for the universally high esteem in which the French Poitou jack is held all over the southern part of the continent of Europe. No jacks are used in the north. This was

their start, and for all these years the constant and unabated care of their breeders has been to maintain their distinctive characteristics, the purity of their blood, and to augment their merits. Only think of what may be accomplished by man in the course of a few centuries with the proper effort!

In 1866 Mr. Eugene Ayrault, of Niort, France, published a volume on the Poitou jack. I am sorry that it has never been translated. It is a book of high order of merit, and was awarded a gold medal by the Society of Agriculture in France. I would prefer giving his to my own description of these jacks, because he is the best obtainable authority on this subject. He says:

“His head is enormous in size, and is very much larger than that of any other race in existence. His mouth is smaller than that of the horse; teeth small, but the enamel exceedingly hard. The opening of the nostril is narrow, the ear very long, and adorned with long, curly hair, called *cadanette*, which is much esteemed by breeders.

“It is said that animals with the longest bodies produce the best mules, and this is greatly looked to. The tail is rather short, and furnished with long hair at its extremity only. The chest is very broad, and the belly voluminous. The shoulders are short; the muscles of the forearm long, but not very thick. The knees are exceedingly large, as are all the joints. The chestnuts, or horny places near the knees, are large and well developed. The abundance of hair which covers the jack constitutes one of the most sought-for qualities. The animals are called well-taloned and well-moustached when they have these qualities in a high degree.

"The mane is long and fine, the skin smooth, the hair fine and silky in texture. We give great preference to large feet, for which this breed is noted. The skin is almost universally black or dark brown. The gray jack, though seldom met, is rejected by good mule breeders. The animals which have the end of the nose black and whose bodies are wholly of this color are said to be lacking in breeding. The skin and coating of the jack is very important, and it is thought that the mules from a jack superior in this respect mature earlier."

Such is Mr. Ayrault's description of them. I will add that these jacks are physically the most powerful of any race in existence; they have greater weight and more bone and substance generally. They are not exceedingly tall, their legs being extremely short, but in a cross with a mare of fair size the mule will be found to have all the height desired. The first impression one gains of a Poitou is not a favorable one. They are never trimmed or groomed in Poitou, and we are not accustomed to their long hair and bulky appearance. It gives them the appearance of being too short in the neck and ear; but this is a matter of education.

The demand for these jacks is such that it cannot be supplied, and even French breeders in certain parts of the country are forced to use the Catalonian and Majorca, though they acknowledge the superiority of the Poitou. Their price is enough to stagger one. Mr. Ayrault says that \$1,000 to \$1,200 is ordinary, while \$2,000 for a single animal is not uncommon. I am in receipt of a letter from a friend of mine in France, who writes me that a three-year-old Poitou

that was exhibited at the late Paris Exposition was sold to a South American gentleman for the sum of \$3,200. In our own limited experience there we have been made to pay as high as \$1,500 for a two-year-old colt.

Without disparaging the merits of any other breed, for we have the sincerest admiration for some of them, the fact remains that the mules from the Poitou are the largest, heaviest and best to be seen in Europe. I may add, too, that this is accepted as a fact in all mule breeding countries of the continent.

A very large number of Poitou mules are imported each year to Spain, notably to their chief city, Barcelona, where they outsell their own native stock. The large firm of San Marti & Sons have been thus importing to that city for years. They supply mules both to the government and to individuals. The senior member of the firm has assisted in the purchase of some of the best jacks that have been imported to this country from Catalonia. For heavy work he has expressed the opinion to the writer that the Poitou mules were unequaled by any race of horses or any other breed of mules. It is true that the mares found in Catalonia are not everything that could be desired. They are, perhaps, better in the south of Spain, but hardly the thing yet for mule breeding, being Spanish barbs, perhaps introduced by the Moors when in possession of the country, and continental importations from the Orient. Hence the mules, while they are handsome and active, lack the weight and body required.

The mares to be found in Poitou are neither the Norman draft nor the Percheron, but are a large,

broad-backed, heavy-bodied, powerful race that seem especially adapted to mule breeding. The test of the jack breeds, therefore, is in France. The Poitou, as has been before mentioned, are not sufficient in number to fulfill the demand in their own country, and hence there are hundreds of the Spanish jacks imported there for use in the stud. We have seen the Poitou and the Catalanian in the same establishment—the owner possessing the very best specimens of the latter. The Poitou here fairly maintains his ascendancy, and his mules outsell the Spanish breed.

The Count of Exea, who maintains at Tournay the most magnificent breeding establishment that we have ever visited, keeps two very remarkable specimens of this breed for use solely on his own mares. One of them is fifteen and one-half hands, and the other, a three-year-old past, is fifteen and three-quarters hands. This is a remarkable height for the breed, as they usually range from fourteen and one-half to fifteen hands, rarely growing taller. The fifteen and one-half hand jack was so immense in all his proportions that we measured his knee, hind hock, belt, length of ears, etc., in order to see if our vision was deceived by appearances, and after we had left and applied the measure to other animals we concluded that both our eyes and tape were wrong, so huge did his measure appear. The count says he gave \$2,000 for this jack, and upon our inquiring of him how he could afford to keep so valuable an animal for mares only, he carried us into his barn—a grand structure that has cost a mint of money—and there showed us about one hundred and fifty mule colts, one and two years of age. When I saw the mules

I could readily see how he could afford to use the jack. Owning all the mules, twenty-five or thirty dollars on the head, is an easy demonstration of how a man can afford to use the best jack obtainable, regardless of the money he costs. An easier query would be how could he afford to use an inferior or even an ordinary one, his capital enabling him to obtain the best.

The count also had some jennets, but because they were of kin, or because he was afraid of their effect on the jack, or because he thought he knew of one that would nick better with them, he did not breed to his own jacks but shipped them to M. Sago's, near Niort, France, a distance of at least one hundred and fifty miles.

I mention these things only because I hope they may be of value in teaching two important truths and eliminate at least one popular error. One is, that you cannot get a jack too good for mule breeding. For this purpose many think that one jack, if he is a fair looker, will do about as well as another or a better one. But the true theory is, get the best if you can, and in breeding mares the difference in the value of the colt, between a good and a bad sire, will be perhaps three or four times the difference in price of service fees.

Another lesson is, that in this country, where is raised the finest and best jack stock on earth, or if that is contradicted, it can be said without fear of successful contradiction, the highest priced jack stock on earth, the people do not hesitate to ship hundreds of miles to breed their jennets to that animal that suits them best, even though they may have good

ones at home. The general rule in America is to breed to the one most convenient.

It may be of interest in this connection to note the value of the mule business in Poitou. I have no statistics later than 1866, since which time the country has prospered, and this business has increased in equal or greater proportion to others. This province is hardly larger than one of our American counties, and we do not mean a Texas county, either, and yet in the year 1866, fifty thousand mares were bred to jacks, and the yearly export of young mules amounted to between two and three millions of dollars. This industry there, for profit, is without an equal in agriculture.

I will add, that the French were the first in the field to establish a jack stock stud book, and the Poitou are the only breed having their own distinctive stud book, in which no other breed is eligible to enter. It has been established some years, and the rules governing entries are stricter than those of our American organization. Like ours, gray animals are not eligible. A thing that is superior to the American book is this: No test is made of height, but a complete committee examines each animal sought to be registered; this committee passes upon the jack and recommends or condemns, upon his merit and pedigree alone. He might be sixteen hands high and yet reflect no credit upon the organization, notwithstanding a good pedigree and color; or he might be lower than the average good jack and yet be so superior in weight, bone, form and style as to place him in the first rank of breeding jacks. But to follow this plan requires money, a thing with which a

new society is never burdened. This committee regards many other things of equal importance to height, and pedigree is made to play a much more important part than with us.

As confirmatory of what I have said of this breed, I note the following from A. B. Allen, in the *New York Tribune*, and copied in the *Farmer's Home Journal*, of Louisville. After speaking of other breeds, and their introduction into this country, he says:

"The Poitou is the most perfectly formed of all American jacks imported; not so tall as the Majorca, but more powerful for his inches, with greater weight, more bone and superior muscle. The ordinary stock is held in France at \$1,000 to \$1,500 each, and the choicer ones command \$2,000 to \$3,000. The prices are so high as to almost forbid importation. His mules are unequaled, and sell on an average from fifty to one hundred per cent higher than the get of any other jack. This makes it profitable to breed from him, even at the high price he costs. The breeders of Poitou have a stud book for the record of their stock, so there can be no mistake as to purity. Their mules which I saw in Switzerland were the finest and most powerful of any class that has come under my observation. I was informed that their French dams were of the Percheron or common farm stock or their grades, which helped to give to their offspring greater size and power, together with superior form. There are large numbers of mares now in the United States, half and three-quarter grades of the French, Scotch and English breeds of draft stallions. These mares, in size and quality, are equal to the French, and may be bred to jacks with great advan-

tage. Their mules would be heavy enough for the heaviest farm and road work, and some few single ones would be able to pull alone in a city dray, or a pair of them the heavy four-wheeled city trucks. I am confident that as soon as such mules could be placed in market they would be of quicker sale, and at higher prices than horses, for they are less liable to disease, hardier, longer-lived, and, it is contended, consume less food for the work done. Our breeders should not hesitate to go into this business to the full extent of their ability, for they could not probably be able to produce mules enough to meet the demand even at high prices for fifty years."

PERFECTION.

Perfection was foaled May 27, 1891. He has the finest bone, head and ear of any colt we known—Roman head, finest of style; and took all the premiums in her class at the many Middle Tennessee fairs, to wit: Murfreesboro, Columbia, Lewisburg, Fayetteville, and Pulaski; and a number of other fairs in Kentucky. She has never entered a ring without a ribbon. She has been exhibited twenty-five times and took twenty-five blue ribbons. She took the premium at the World's Fair, Chicago, in 1893, also at the State Fair, at Nashville, 1893. Is in foal to Day Star (22). She is pronounced by jack men to be the best colt ever seen in Middle Tennessee. Sired by Long Tom, fifteen hands, three inches; he by Ezell's Big Tom, Jr.; he by F. R. Rains' Big Tom, Sr.; he by McGavock Bossy; he by Imp. Black Forrest, Long Tom's first dam by F. R. Rains' Black Mammoth, and she out of an imported

jennet. Lecona dam the dam of Old Starlight by Ezell's Big Tom, Jr., his dam Ezell's Old Ann. Perfection's first dam is a fourteen hand jennet, sired by Free Dave, known as the Snell jack; her dam by Dr. Knight's Knight Errant, and her dam was Mammoth. Price \$1,250.

The above jennet, Perfection, is owned by Messrs. I. W. and J. L. Jones, proprietors of Daisy Stock Farm, and registered jacks and jennets, Maury County, Tennessee. Persons wishing to exhibit stock at the World's Fair at St. Louis, Mo., in 1903, can confer with Hon. J. L. Jones, Sr., Columbia, Tenn., who is one of the executive committee, and will represent the interests of the South in jacks, jennets and mules.

[The author regrets his inability to procure photographs of the Andalusian, Maltese and Italian jacks for this book.]

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