THE

MONTHLY BULLETIN

OF THE

Bureau

OF THE

American Republics

WASHINGTON, U.S. A.

JULY, 1894

AMERICAN LIVE Chapter I-	The Ho	rse. (Compi	iled by	E.	T.	
Riddick	-			-	-	-	
COTTON STATES A							
(English an	d Spanish	1) -	-	-	-	-	4
Mexico-Price o	f Public	Lands	and	Miscel	lane	ous	
News			-	- '	-	-	4
ARGENTINE REPU	BLIC		-	-	-	-	6
CHILE -			-		-	-	7
VENEZUELA							7.
NICARAGUA	-		-	-	-	-	7
ECUADOR -			-	-	-		7
GUATEMALA			-	-	-	-	8
COMMERCIAL AND	INDUST	RIAL IN	FORM	ATION	-	-	8
DON IDIARTE BOI	RDA		-	-	-		8



BUREAU OF THE AMERICAN REPUBLICS, NO. 2 LAFAYETTE SQUARE, WASHINGTON, D. C., U. S. A.

Director-CLINTON FURBISH.

While the utmost care is taken to insure accuracy in the publications of the Bureau of the American Republics, no pecuniary responsibility is assumed on account of errors or inaccuracies which may occur therein.







UNITED STATES CONSULATES.

Frequent application is made to the Bureau for the address of United States Consuls in the South and Central American Republics. Those desiring to correspond with any consul can do so by addressing "The United States Consulate" at the point named. Letters thus addressed will be delivered to the proper person. It must be understood, however, that it is not the duty of consuls to devote their time to private business, and that all such letters may properly be treated as personal and any labor involved may be subject to charge therefor.

The following is a list of United States Consulates in the different Republics:

ARGENTINE REPUBLIC-

Buenos Aires.

Cordoba.

Rosario.

BOLIVIA-

La Paz.

Brazil—

Bahia.

Pernambuco.

Rio Grande do Sul.

Rio de Janeiro.

Santos.

CHILE-

Antofagasta.

Arica.

Coquimbo.

Iquique.

Talcahuano.

Valparaiso.

COLOMBIA-

Barranquilla.

Bogota.

Cartagena.

Colon (Aspinwall).

Medillin.

Panama.

COSTA RICA-

San José.

DOMINICAN REPUBLIC-

Puerto Plata.

Samana.

Santo Domingo.

ECUADOR-

Guayaquil.

GUATEMALA-

Guatemala.

HAITI-

Cape Haitien.

Port au Prince.

UNITED STATES CONSULATES.

HONDURAS-

Ruatan.

Tegucigalpa.

MEXICO-

Acapulco.

Chihuahua.

Durango.

Ensenada.

Guaymas.

La Paz.

Matamoras.

Mazatlan.

Merida.

Mexico.

Nogales.

Nuevo Laredo.

Paso del Norte. Piedras Negras.

Saltillo.

Tampico.

MEXICO-Continued.

Tuxpan.

Vera Cruz.

NICARAGUA-

Managua.

San Juan del Norte.

PARAGUAY-

Asuncion.

PERU-

Callao.

SALVADOR-

San Salvador.

URUGUAY-

Colonia.

Montevideo.

Paysandu.

VENEZUELA-

La Guayra.

Maracaibo.

Puerto Cabello.

BUREAU OF THE AMERICAN REPUBLICS.

DEPARTMENT OF STATE, WASHINGTON, U. S. A., 1894.

It is impossible to comply with requests for the free distribution of the publications of this Bureau. The demand for Handbooks and Bulletins has increased so rapidly as to make compliance impossible, because of the limited editions published. The lists of applicants desiring to be supplied with every Handbook and Bulletin issued by the Bureau largely exceed any edition published, and these lists would be constantly increased if the requests received daily at the Bureau were acceded to. Yet, it is well understood that many requests are received from persons having good reasons for desiring the information asked for, and both willing and able to pay the slight cost of these documents.

Recognizing these facts, the Bureau some months ago issued a circular announcing that thereafter the publications of the Bureau would be sold to all applicants at a small price. This was done with a view of extending rather than limiting the circulation of the information published by the Bureau, and at the same time securing the utmost impartiality in such distribution. It was believed that this course would result in a more general circulation of the information secured in saving the unnecessary labor of replying to requests from persons who apparently had no special interest in the publications applied for, and that all who had a well-grounded intention of embarking in business in foreign countries, or extending business already established, would be able to afford the slight expense involved in the payment of the cost price of the Bureau documents.

The result of this experiment has more than justified the hopes with which it was undertaken. With exceptions too rare to be noted, the plan embraced in the circular has met with the cordial approbation of the business men of the

PRICE LIST OF PUBLICATIONS.

country, and if the progress made thus far in extending the circulation of these publications shall be continued it will be possible to largely increase the numbers of each edition of future publications.

Many of the earlier Bulletins have been included in more recent publications. This applies especially to the tariffs, commercial directories and newspaper directories of the different Republics.

Suggestions from manufacturers and dealers as to their special needs of information will receive prompt attention by the Bureau.

The following list embraces a catalogue of the Bulletins and Handbooks published since the organization of the Bureau, of which copies may be secured by remitting to the undersigned the price named in inclosed list.

PRICE LIST OF PUBLICATIONS OF THE BUREAU OF THE AMERICAN REPUBLICS.

	Cents.
3. Patent and Trade-mark Laws of America	5
4. Money, Weights and Measures of the American Republics	5
6. Foreign Commerce of the American Republics	
8. Import Duties of Brazil	IO
10. Import Duties of Cuba and Puerto Rico	15
11. Import Duties of Costa Rica	10
13. Commercial Directory of Brazil	5
14. Commercial Directory of Venezuela	5
15. Commercial Directory of Colombia	5
16. Commercial Directory of Peru	5
17. Commercial Directory of Chile	5
18. Commercial Directory of Mexico	15
19. Commercial Directory of Bolivia, Ecuador, Paraguay and Ur	u-
guay	5
20. Import Duties of Nicaragua	10
21. Import Duties of Mexico (revised)	15
22. Import Duties of Bolivia	20
23. Import Duties of Salvador	5
24. Import Duties of Honduras	
25. Import Duties of Ecuador	5
26. Commercial Directory of the Argentine Republic	5
27. Import Duties of Colombia	
28. Commercial Directory of Central America	10

PRICE LIST OF PUBLICATIONS.

C	ents.
29. Commercial Directory of Haiti and Santo Domingo	5
30. First Annual Report of the Bureau, 1891	10
32. Handbook of Guatemala	35
33. Handbook of Colombia	30
34. Handbook of Venezuela	35
36. Import Duties of Venezuela	
38. Commercial Directory of Cuba and Puerto Rico	
39. Commercial Directory of British, Danish, Dutch and French	
colonies	
42. Newspaper Directory of Latin America	-
43. Import Duties of Guatemala	
44. Import Duties of the United States	
45. Import Duties of Peru	
46. Import Duties of Chile	
47. Import Duties of Uruguay	
48. Import duties of the Argentine Republic	
49. Import Duties of Haiti	
50. Handbook of the American Republics, No. 3	
51. Handbook of Nicaragua	. 50
52. Handbook of Sauto Domingo	0
53. Immigration and Land Laws of Latin America	
55. Handbook of Bolivia	
61. Handbook of Uruguay	
62. Handbook of Haiti	
63 How the Markets of Latin America May Be Reached	
67. Handbook of the Argentine Republic	
68. April Special Bulletin, Costa Rica	
69. Handbook of Ecuador	. 50
PUBLICATIONS NOT NUMBERED.	
Commercial Directory of Latin America	40
Second Annual Report of the Bureau, 1892	40
Third Annual Report of the Bureau, 1893	5
Manual de las Republicas Americanas, 1891 (Spanish edition of	15
Hand-book No. 1)	50
International American Conference Reports and Recommenda- tions, including Reports upon the Plan of Arbitration, Reci- procity Treaties, Inter-Continental Railway, Steamship Com- munication, Sanitary Regulations, Customs Regulations,	
Common Silver Coin, Patents and Trade-Marks, Weights and Measures, Port Dues, International Law, Extradition	
Treaties, International Bank, Memorial Tablet, Columbian Exposition—	
Octavo, bound in paper	\$0 50
Ostavo bound in half Morocco	7 50

PRICE LIST OF PUBLICATIONS.

Monthly Bulletins, \$1 per annum; single copies	Cents.
Code of Commercial Nomeuclature, first volume, 852 pages, bound	
iu cloth, contains upwards of 24,000 commercial terms in	
English, Spanish and Portuguese	3 00

Money may be sent by postoffice money order, payable to the Director of the Bureau of the American Republics. All other remittances are at the risk of the sender. Postage stamps will not be received.

CLINTON FURBISH,

Director.

These publications may be purchased from Rand, McNally & Co., Chicago and New York.

THE MONTHLY BULLETIN

OF THE

BUREAU OF THE AMERICAN REPUBLICS.

JULY, 1894.

CHAPTER I.

AMERICAN LIVE STOCK.

(ENGLISH AND SPANISH.)

THE HORSE.

HINTS ON SELECTION, CARE, AND MANAGEMENT.

In selecting a horse, more actual knowledge is needed than can be secured from books alone. The accurate judge of horseflesh is one who has made the subject a practical, continued study for years, and who has at command not only the close knowledge gained by experience, but a good understanding, as well, of the principles which underlie force and action, applied in the movements of the horse. For an exhaustive discussion of this subject, the reader is referred to anyone of the special works on the horse—especially such books as "Sanders' Horse Breeding" and "Helm's American Roadsters and Trotting Horses." We can only undertake to give a few of the more prominent points, which may possibly aid somewhat in forming an intelligent judgment.

First. For draft, a horse must have weight; he may have fine action also, but the weight he must have, if capable of long pulls before heavy loads. The shoulders should be upright and heavy below, in order that strain on the traces may be met by collar resistance at such an angle as will utilize all of the force exerted. The draft horse should stand fairly high in front (rather prominent withers), and must have a chest of ample width to permit free expansion of lungs when under any temporary strain. The legs are best short, and should never exhibit that smooth, puffy appearance which always indicates a tendency to form fat at the expense of muscle; the canons should be flat, and the joints, especially, hard and firmly bound together. As we have stated, fine action is not absolutely necessary, but for farm use a good, sprightly walk is certainly desirable. Right here we may say, that a horse of 1,200 to 1,400 pounds weight is about the heaviest that will be found profitable on the ordinary farm; the heavier animals will always be in demand for a different purpose, and an intelligent judgment will select in reference to the purpose for which desired. To be too "fiery" or "high strung" is an objection; the draft horse should be pre-eminently an animal of quiet-vet not sluggish—temperament. A strong, even puller will resist fatigue better, and do more service.

Second. For speed, the shoulders should be slanting, the withers medium to low, the loin and rump high, and the hind quarters long and furnished with powerful muscles. In the race horse, the propelling power comes from the rear, and a greater mistake could not be made than to select for running a horse at all deficient in these parts, no matter how fully he might fill the judgment in other respects. The legs must have some length, and here may be added double caution as to their quality; not a particle of surplus flesh or fat should be apparent, and joints in particular must be closely knit together. The English Government has a set of rules for the use of those who select horses for cavalry service, and we insert them here; they are called "Points for Rejection," but will answer equally well as points for selection:

"Reject a horse whose forelegs are not straight; they will not stand wear. Stand behind the horse as it walks away from you and you will be able to notice these defects, if they exist. "Reject a horse that is light below the knee, especially if immediately below the knee; the conformation is essentially weak.

"Or a horse with long, or short, or upright pasterns. Long pasterns are subject to sprains; short or upright pasterns make a horse unpleasant to ride, and, on account of extra concussions, are apt to cause ossific deposits.

"Or a horse with toes turned in or out. The twist generally occurs at the fetlock. Toes turned out are more objectionable than toes turned in. When toes turn out the fetlocks are generally turned in, and animals so formed are very apt to cut or brush. Both, however, are weak formations.

"Reject a horse whose hind legs are too far behind. Good propelling power will be wanting, and disease as a result may be expected in the hocks. And a horse which goes either very wide or very close behind, and one with very straight or very bent hocks. The former cause undue concussion; the latter are apt to give way.

"Reject a horse that is 'split-up'—that is, shows much daylight between the thighs. Propelling power comes from behind, and must be deficient in horses without due muscular development between the thighs.

"Reject a horse with flat or overlarge feet, or with very small feet; medium sized are best.

"Also, with one foot smaller than another."

MANAGEMENT OF BROOD MARES.

As the breeding season approaches and preparations begin to be made for the matings, small breeders, who have one or two mares, are constantly in search of information as to the proper selection of a sire, as well as the care and management of the mare before and after mating.

The large stock farms are always provided with either a competent veterinary or a foreman, who has had experience in handling mares at this precarious time, but the small breeder is frequently far from competent advice, and, as he has only himself to depend upon, must understand fully the

4

methods to save his mare and the valuable foal in an emergency. There are certain things desirable in a mare selected for breeding purposes, some of them so strongly to be desired that they may be considered essential. In the first place, the mare must be of a frame suitable to carry a foal. and be of vigorous enough constitution to insure that she will be able to sustain the drain upon her system caused by the foal during pregnancy and after delivery. Large, roomy mares are to be chosen, as they are more likely to impart their size to their offspring and the foal has more room to grow. Mares of great width across the hips, and with the back ribs large and deep, are of a conformation peculiarly desirable, as their structure, besides allowing plenty of room for the growing foal, reduces the risks incident upon parturition. She should also be a good feeder, and be furnished with an udder which will give sufficient milk, or else the foal may show the want of proper nourishment by a lack of strength and development. A mare which is noticeably defective in structure should not be selected for a breeder, and it will not pay to waste any time upon her. Her milking qualities can only be determined by giving her a trial for a season, though an experienced man may frequently make a tolerably close guess.

If a mare is in constant use in harness, it is better to give her a few days of pasture before breeding. If this can not be readily done, give mashes and let up in her work. The fact that a mare comes in season while in use is no reason why she should not be turned out previous to breeding, for, while she might repeatedly be in season and be served each time, she would, in all probability, fail to catch any of the services, especially if a mare that had never had a foal. Race mares are generally let up entirely while in foal, though instances are on record of mares going through an entire campaign while nourishing foals; but this is to be condemned, and it will be found more profitable in the end to throw them out. If the mare is required for service after breeding, be very careful that she is not strained in her work. Do not give her fast work, and let her take her own time going up

hills. With care, she can be used to almost the day of foaling, and I believe the ordinary work is better for her—of course, making it very light during the latter part of the term. The beneficial effects of exercise upon the mare should not be lost sight of.

When the mare is in foal if she is not intended for work. she should be turned out in good pasture. The grasses should be nourishing, but not rich and succulent enough to disagree with her stomach or make her unwieldy from fat. Stomachic derangements are a common cause of miscarriage, and the use of too much soft food, producing relaxation of the bowels, is the most common complaint. On the other hand, the food must be sufficiently nourishing, or the mare will become thin and will starve her foal in its growth. Mares that have been fed a great deal of corn all their lives will be found to do better if given a feed or two daily after they are six months in foal, especially if the autumnal grasses are not rich and plentiful. Excessive fat should be avoided, as it is a type of disease and interferes with the due nutrition of the foal, while it induces complications at foaling time, not only interfering with the process of parturition, but also being liable to cause fever. If the mare is kept at work, she should have some kind of green food, care being used to avoid anything too succulent, as the mare's organs are liable to become overheated by this kind of food. Any of the grasses or clovers fill the requirements very well, and after they are gone, carrots, sliced in a bran mash every night, form an excellent food

Excitement of any kind is a frequent cause of miscarriage or "slipping," and everything which tends in that direction should be avoided. The smell of blood is said to have a very decided tendency to produce abortion; and it is a fact that the miscarriage of one mare will affect others in the same way. If a mare has slipped her foal in a previous pregnancy, care should be taken to guard against a repetition of the occurrence, as she is more apt to do so again than one that has heretotore escaped the accident. It occurs most frequently about the fourth or fifth month, and extra care should be

given her about this time. She should be isolated from other mares and kept quiet; it is better to give her the freedom of a small paddock to herself than to confine her, as she may become restless and anxious from want of exercise. Purging drugs should not be given, unless absolutely necessary, and if the bowels are in such a condition that a relaxation is required it can usually be secured by the use of bran mashes and a change to more suitable food; but if this fails, use should be made of the mildest possible aperient which is likely to answer the purpose. It is also advisable to begin about four months previous to foaling to give her twice a day-night and morning-a half pint of hempseed, and to continue this until within a week of foaling. Commencing at the same time, add to her feed night and morning one ounce of the fluid extract of viburnum prunifolium, continuing for two months. It can be obtained at any drug store. Good clean wheat is also recommended as a preventive of abortion, and many experienced men, if a mare begins to strain or show other signs of approaching abortion, immediately give her a handful of whole wheat, and this is also found to be very effective. Care must be taken, of course, to have the wheat clean and free from "smut" or ergot.

It would not be advisable to here lay down any rules for the management of the mare during parturition, any further than to see that she is comfortably located previous to its arrival, and is allowed her freedom, in order that she may assist herself: for I think it is better in nearly every case to leave the process to nature, and if assistance is needed, beyoud the very simplest kind, to at once secure the services of an experienced and competent man. If it is necessary to confine her when she begins to show signs of her approaching delivery she should have a box stall, care being taken not to excite or injure her, and plenty of good bedding provided for her. She should not be haltered, as she needs perfect liberty to help herself and to attend the colt as soon as it is foaled. An attendant should be supplied her, not necessarily to interfere with the process or to assist her, but it will be found that she will acquire confidence from his presence,

and will not be so likely to become nervous as if left entirely alone. The attendant should, if possible, be one who has had some experience of that kind, and he may in some cases be able to render her some trifling manual assistance. But in the large majority of cases she will have no trouble, and the attendant's services will not be required at all.

Immediately after foaling, the mare should be give a warm "slop" consisting of bran or crushed meal, with a little salt, the whole mixed with plenty of warm water. This warms the mare, and enables her to more quickly recover from the effects of foaling. For some time after foaling she should be provided with nourishing food, and if it is too early for her to obtain plenty of good grass she should have carrots, bran mashes, and a feed or two of oats daily, the oats being given as a gruel, the water of which it is made first having the chill taken off. Rye grass, cultivated and cut daily, is very well thought of by many who have used it; but, while it is much to be preferred over hay, it is not equal to good clover grass.

The mare should be returned to the horse on the ninth day, and will nearly always be found in season at that time. She should again be tried on the twenty-first day, and if she refuses the horse, it is pretty good evidence that she is in foal. If she is found in season on the second trial and takes the horse, she should again be returned ten days after and tried once more. Many breeders try their mares on the fifteenth day as well, but this is hardly necessary, and I believe the days indicated will prove as satisfactory as any that can be suggested.

THOROUGHBREDS

The English Thoroughbred is the undoubted scion of Eastern blood—Turk, Barb and Arabian—improved and perfected by the influence of skillful handling and natural conditions peculiar to English soil and climate.

The American Thoroughbred is, of course, a lineal descendant of the parent stock—English.

In the United States, it has been found advisable to permit a certain relaxation of the rigid rules adhered to in the Eng-

lish Stud Book, and to admit animals that show an unmixed descent for five generations of pure blood. This necessarily admits animals which are not strictly Thoroughbred, but if for five generations nothing but Thoroughbred stallions are used, the resulting animal is so nearly Thoroughbred as to answer all requirements. Indeed, we are inclined to think that the American system of breeding and recognized rules for entry have done much toward making the American Thoroughbred the successful rival of his English cousin, which he has proved himself to be.

The head of a Thoroughbred is fine; neck slender, but well set on at the shoulders; chest deep, wide and bounded by shoulders long and slanting, hindquarters high and well muscled; legs flat, with short canons, long, elastic pasterns, and rounded, well-made feet. Not a pound of surplus fat is carried when in racing trim; the cords and muscles stand out clearly and play in action like the sensitive strings of some delicate instrument. The Racer is essentially nervous in temperament; many have been made vicious by careless handling, and not a few have failed to show extreme speed on the turf because of failure to understand and appreciate their nerve peculiarities.

Many regard the Thoroughbred as a mere fancy animal—the especial horse of the sporting fraternity—but we do not agree with such expression. His indomitable will and wonderful endura ce, combined with his beauty of form and usually good size, make him a horse of much value to use on native mares of mixed breeding, and the colts thus produced are among our most stylish saddle and harness horses. The South has always been rich in the blood of the Thoroughbred; and since there has been little call for horses of the heavier breeds until recent times, mules being employed almost exclusively for heavy draft and farm work, the racer has served a most valuable purpose. As heavier stallions are now being introduced extensively, we shall find the mares of racing stock a valuable foundation for producing an excellent general purpose horse.

AMERICAN TROTTERS.

The history of the origin and improvement of American Trotters furnishes one of the most, if not the most, remarkable examples of human skill in developing and training to desired lines, qualities which before had remained partially developed or entirely latent. The courage and stamina of the Trotting horse, in brief, are found in the use of Oriental blood in and through the royal blood of the Thoroughbred; but to those remarkable individual animals hereinafter mentioned—in which the trotting gait seems to have been a spontaneous development of the trotting instinct combined with the energy and speed of the Racer—belongs the credit for this immediate origin.

Among the horses which may be thus considered original sources of trotting blood, and first in the list, by acknowledged right, stands Imported Messenger, himself a Thoroughbred, and embracing some of the choicest blood of the desert in his make-up, as will be seen by a simple statement of his paternal ancestry: Imported Messenger was a gray horse, foaled in 1780; imported to United States in 1783, and died on Long Island in 1808. His first sire was Mambrino; second sire, Engineer; third sire, Sampson; fourth sire, Blaize; fifth sire, Flying Childers; sixth sire, Darley Arabian. His dam was sired by Turf, by Matchem, by Cade (who was a son of Godolphin Arabian), and his second dam was by Regulus, also a son of Godolphin Arabian. His great grandsire, Samson, was a black horse out of all keeping with the ideal Thoroughbred in appearance, being large, coarse, and heavyboned, but with a wonderful power of speed and bottom. Samson's reputed and recorded sire was Blaize, a bay thoroughbred, but his conformation and the inclination to trot which he transmitted to his offspring have led students of equine history to doubt the record of his paternity, and assert that his dam was covered by a Coach horse. If this were true-and it seems at least reasonable-it was the most fortunate accident that could have occurred, since it furnished the exact combination to insure a change of gait and still retain the fire and instinctive speed of the racer.

10

The peculiar conformation of Imported Messenger—low, round, almost flat withers—has been faithfully handed down to his lineal descendants; and it is a matter of common note that all true Messenger-bred trotters have always enjoyed a remarkable freedom from all kinds of foot, leg, and bone diseases. Messenger blood is found in nearly every family of American trotters; and through his great grandson, Rysdyk's Hambletonian, we have a family pre-eminent above all others in steady reproduction of the trotting gait, through a long line of noted descendants, of which we shall write later.

Another original source of trotting blood was found in Imported Bellfounder, a blood bay, with white diamond on nose and white left hind foot. His breeding has always been a matter of question, but by the best evidence obtainable his pedigree is as follows: sire, Old Bellfounder, out of Velocity by Haphazard, by Sir Peter, out of Miss Hervey by Eclipse. Grand dam of good blood, but not Thoroughbred. stamps him as a true descendant of the Fireaways, a strain which has never been excelled for the saddle. Bellfounder, the "Norfolk Trotter," was foaled about 1815, imported to America in 1822, and died on Long Island in 1843. He was a natural trotter, of remarkable honesty, and his truest descendants have since been known as "field trotters." showing their best speed when free from all restraint of reins. The peculiar value of the Bellfounder blood is found, like that of Duroc, in its happy combination with the blood of Messenger.

First in trotting lines, by acknowledged right, are—

The Hambletonians: The family takes its name from Rysdyk's Hambletonian, descended, on the paternal side, from Imp. Messenger, through his thoroughbred son Mambrino (American) and Mambrino's son, Abdallah, sire of Hambletonian. The dam of Hambletonian was by Bellfounder. Through Hambletonian we have the Volunteers, Edward Everetts, Alexander's Abdallahs, Almonts, Messenger-Durocs, Happy Mediums, Wilkeses, Dictators, Wood's Hambletonians, Electioneers, and many others of acknowledged eminence, laying claim to the general title of Hambletonian.

The Mambrinos, another great family—descended, on the paternal side, from Imp. Messenger—take the name from Mambrino Chief. His sire was Mambrino Paymaster, a son of Mambrino, who was also the grandsire of Hambletonian. All the Mambrinos, Champions, and many others are grouped under this head.

The Bashaws take their name from Young Bashaw, a son of the Imp. Barb, Grand Bashaw. Young Bashaw was the sire of Andrew Jackson, who in turn got Long Island Black Hawk; and through the latter we have Green's Bashaw, the Mohawks, and others of note.

Closely related to the Bashaws are-

The Clays, who take the family name from Henry Clay, a son of Andrew Jackson, above mentioned. From this horse we have the numerons strains of Clays; and through his famous grandson, George M. Patcheu, we have the branch which bears his name.

The Morgans we have already mentioned as taking the name and excellence of old Justin Morgan. Under this head we have the Black Hawks (exclusive of Long Island Black Hawk, who was by Andrew Jackson, with no trace of Morgan blood), Ethan Allens, Knoxes, Daniel Lamberts, Fearnaughts, Morrills, and others.

AMERICAN SADDLE HORSES.

The saddle horse is a modern production—based on a growing demand for something not only handsome, but confortable as well, for saddle use.

The origin of the Saddler is, of course, found in thoroughbred blood, supplemented by the blood of easy pacers which have proved potent in imparting saddle gaits.

In appearance, the typical Saddler is a combination of Thoroughbred and Trotter, having the size, gameness and easy, clean-going action of the former, with the quiet, intelligent appreciation of education at the trainer's hands, which we find so marked among the trotters. All colors are found—bays, browns, blacks, chestnuts and grays, about in the order named. Stallions weigh from 1,000 to 1,200 pounds; mares

proportionately less. The head is fine; neck slender, but well arched and muscular; shoulders and girth deep and ample; back short; rump close and generally sloping; quarters long and well muscled, and legs fine-boned, neat, close-fleshed, and without feather.

HACKNEYS.

The origin of the Hackney can not be stated in definite terms; indeed, it has been only within the last decade that it has been strictly considered a breed.

The foundation of the Hackney must be sought in the blood of the Hunter, combined with that of the English Thoroughbred, and with sufficient infusion of blood of the common middle-sized horse—generally known in England as the "Farmer's Horse"—to insure harness gaits and tractability. The strains of blood which are just now most popular among Hackneys are those of "Confidence" and "Fireaway," individuals, especially of the latter breeding, commanding ready sale at good figures. The Fireaways were especially noted as the best saddle strains which England has ever seen, and their blood, handed down through imported Bellfounder, as will be seen in chapter on American Trotters, has proved desirable in more than one direction.

The colors found are bays, blacks, browns and chestnuts, often with white star and sometimes with white feet and ankles. In size they are about equal to the French Coacher, standing fifteen to sixteen hands high, and weighing from 1,000 to 1,300 pounds. The Hackney is especially high at the withers; shoulders strongly slanted; neck well crested, and carrying the head very high; back short; legs of medium length, close knit; canons broad and flat; pasterns shorter than with Thoroughbreds and Trotters, but longer than with draft breeds; feet firm and of moderate size; forearm especially short, giving an unusually high knee action, and quarters well muscled and compact.

The Hackney's disposition is kind, and his speed in harness, while by no means comparing with that of the trotting horse, is still amply sufficient for all heavy carriage use. The Hack-

ney really approaches closer to the standard of the Trotter than any of the other carriage breeds. They are uniformly hardy, strongly built, have an abundance of "style," and the best specimens can be relied on for endurance at long distance.

The Hackney has become the English gentleman's favorite horse-of-all-work, being largely used for park riding as well as light road driving, and in our eastern cities, where the tendency is so often to pattern after English custom and style, the Hackney finds his most congenial American home.

FRENCH COACH HORSES.

These horses are the direct result of the wisdom and fore-sight of the French government. Some time during the latter part of the Eighteenth century, the government began the establishment of studs and breeding stables, in anticipation of an approaching scarcity of good horses for the cavalry service. Thoroughbred stallions from England were introduced and their services offered to breeders at remarkably low rates, the policy of the government being to buy back the get of these horses, and eventually establish a breed of the peculiar type desired. The practice led to a great deal of trickery in the way of selling good-looking individuals on appearance solely, the fraud only appearing when the animal was used for breeding purposes. To obviate this trouble, the French government adopted the plan of buying up superior stallion colts and rearing them in the public studs.

In addition to this, the owners of very superior stallions are granted a bonus by the government, on condition that the stallion in question shall remain in the country for service; a second class—the owners of stallions good but not fine—are allowed to offer their stallions for service, but receive no subsidy. No stallions except these two classes, and those belonging to the government, are allowed to stand. In certain departments of France only—as notably in Orne, Calvados and Seine-Inférieure—is government attention directed to the production of Coachers.

The color of the French Coach is usually bay, but chestnuts

are abundant and blacks quite common; the fashion in America calls for bays, and most of our importers have selected with a view of supplying this fashionable demand. In size, they rank with the Cleveland—an average weight falling between 1,000 and 1,200 pounds for stallions. The head is small with full forehead, expressive eyes, fine muzzle, and medium, quick-playing ears. The neck is long, well arched and firmly set on long, sloping shoulders. The back is short; hips long and well-up; legs of good length, firmly knit, and with tough, well-made feet. In general appearance the French Coach horse is just what the name indicates, a stylish, well-made carriage horse of good action and fine appearance.

CLEVELAND BAYS.

We have no authentic data regarding the origin of the Cleveland breed, but give what seems to be the most probable of the many theories advanced. Professor Low says:

"It has been formed by the same means as the Hunter, namely, by the progressive mixture of the blood of the Race Horse with the original breeds of the country."

The name of the breed is taken from the district of Cleveland, in Yorkshire, England, where it was first known, and the term bay was added to indicate the prevailing color.

Color, invariably a bright bay, either light or dark, with black mane and tail, black points, and usually a small white spot between "bulbs" of the heel. In size they are medium, individuals standing from sixteen hands to sixteen hands three inches in height, and weighing from 1,100 to 1,300 pounds. The head is of fair size, with a face of kindly expression and intelligent cast; neck finely arched and well set on to long, sloping shoulders; back short; loins even and powerful; hips of good length, and legs straight, close knit, and free from long hairs at the fetlock.

The Cleveland bay is a general purpose horse, heavy enough for all ordinary farm work, and active, stylish, and with ample speed for either wagon or carriage use. In breeding he transmits color, bone, style, kind, and docile disposi-

tion, and general characteristics to a marked degree; he is easy to handle, and for use in grading on the pony mares of the great Southwest, we doubt if his superior can be found, or, indeed, his equal. Royalty and Lord Derby, both prize winners, are excellent representatives of the breed, and fully bear out the proverbial good judgment of their respective importers.

THE SUFFOLK PUNCH.

This breed of horses, which has for many years enjoyed such merited popularity in England, has of late years found substantial and growing favor with American breeders. The origin of the Suffolk breed is somewhat obscure, but the best evidence obtainable indicates the use of Norman stallions on the best native Suffolkshire mares. That this is true is strongly evidenced by the Suffolk color—sorrel or light chestnut—which has so often been found a compromise color between bay and gray; the former being represented in the native mares, the latter being the predominating color of the Norman stock.

As far back as 1745 the Suffolk was famed for its still prominent characteristic—draft; and notices of the breed at the drawing matches of that period may be unearthed among the old files of some of the English newspapers. Improvement of the Suffolk has been very great, especially within the last quarter century.

Color, almost invariably chestnut or sorrel; size somewhat less than Shire or Clydesdale, having an average height of fifteen and three-fourths to sixteen and one-half hands, and weighing at maturity from 1,400 to 1,800 pounds. The body is round, close and compact, with short, clean legs, and pasterns free from the troublesome long hair of the Shire and Clyde. The shoulders are long, and lie well forward for draft; the bone is small, but firm; the hind quarters long, heavy and well coupled to a short, close-knit back. The general appearance indicates a rather over medium-sized sorrel horse with heavy, round body and short legs. The Suffolk is emphatically a draft animal, valuable for remarkable steadiness and great faithfulness in the collar.

He will pull every pound which is possible, and no whip is needed or should be used to urge his natural freedom in work. As a horse for the general farmer, it would be hard to find one more suitable—having a good, fast walk, an even, "all-around" trot, and sufficient weight to save muscle work before plow or harrow.

PERCHERONS.

The Percheron is an old French breed, long noted for rapid and effective draft work, and always supposed to owe much of its excellence to Eastern blood.

Color varies, gray—mostly dappled—predominating, while there are many pure blacks and bays, and all shades of gray, from the darkest iron to almost pure white. The body is low, square and full in all points, with magnificent head, and a neck, which, for beauty, would not disgrace the proudest of Barbs. Legs are short in proportion, and, while very massive, are yet fine and close knit. Percheron breeders claim almost perfect immunity from bone and leg diseases, such as ringbone, splint, windgalls, etc. Our own experience with the breed, particularly with the half-blood colts from native mares, has not justified an admission of this claim, and we feel compelled to state that some breeders, and many who have used the Percheron grades for heavy farm or other work, have expressed a belief that the Percherons are even more subject to these troubles than some of the other breeds.

The Percheron is a draft breed, mature stallions weighing from 1,600 to 2,100 or 2,200 pounds, and their get from ordinary mares weighing from 1,200 to 1,700 or 1,800 pounds, when grown. They are quick, active, and intelligent. Some have thought them vicious, and we have known a number of ill-tempered representatives of the breed; but it is more than likely that the troublesome temper was caused by unskilled or "vicious" grooms. While they stand change of climate as well as any of the large breeds, yet we can not say—as do some of their partisan breeders—that they acclimate with perfect safety.

CLYDESDALES.

Like the Percheron, the French draft, and in fact all of the other draft breeds, the Clydesdale owes its original merit to the Black Horse of Flanders—a lineal descendant of the great Black Horse of northern Europe.

Color, either bay, brown, or black, with usually a white strip in the face, "blaze," and more or less white on the teet and lower parts of the legs; occasionally there is found a dun, chestnut, or even sorrel. The color which may be called peculiar to the breed is a light bay, fading to still lighter bay at the flanks, between the thighs, and forward on the belly line. In size they are classed with the large breeds, stallions ranging from 1,700 to 2,100 pounds, and mares from 1,200 to 1,600 pounds. In appearance, the Clydesdale horse is a large, tall, rangy animal, with a long head, medium neck, strong legs, heavily fringed with hair below the knee, and long, slanting shoulders—the latter a point well worth noticing as inclining toward greater activity than is usual with the large breeds.

As compared with the Percheron or the French draft, the Clydesdale horse is longer legged, longer bodied, and of more quiet temperament. Our observation and experience with the half blood colts from native mares fully bear out the assertion that they are, almost without exception, kind, quiet, intelligent, and easily broken. One very prominent characteristic is their naturally fast walk. The American farmer is not slow to apprecriate the superior value of a team that will plow three acres of ground in a day, as against one that, with the same plow, will turn but two acres; and this fact has done much to advance the interests of the Clydesdale in America. The tendency of late to widen the breach between Clydesdale and English Shires has induced breeders of the former to look more to appearance and action, and gradually lower the average in weight-thus leaving to breeders of the latter a market demand for great weight and appearance, with action somewhat in the background.

A point to which many object is the fringe of long hair at

the fetlock, already referred to; the objection, however well founded, has caused certain breeders to attempt a reduction of the characteristic—with what success remains to be seen. In the South, the Clydes are perhaps not so well known as the French draft; but the few shipments made are said to have done remarkably well. It is claimed indeed, that no other horse of the heavy breeds can so well endure the Southern climate.

EL CABALLO.

INDICACIONES PARA LA SELECCIÓN DE ESTOS - ANIMALES Y SU MEJOR CUIDADO Y MANEJO.

Para elegir un caballo de la propia clase se necesita poseer mayor conocimiento de este animal que el que puede adquirirse solamente en los libros. Nadie puede ser buen juez de caballos si no ha estudiado prácticamente el asunto por espacio de muchos años, y no une á los frutos de la experiencia una idea bastante clara de los principios á que obedecen la Fuerza y la Acción, en cuanto pueden aplicarse á los movimientos de este animal. El asunto está tratado con cuanta extensión puede apetecerse en varias obras notables relativas á este objeto especial, entre las cuales pueden citarse en primera línea el libro de Sanders titulado Horse Breeding (cría de caballos) y el de Helm denominado American Roadsters and Trotting Horses (caballos americanos de tiro y de trote); y el que quiera informes detallados sobre cualquiera de estos puntos harábien en procurarse aquellas publicaciones y estudiarlas atentamente. En este opúsculo no podrán hacerse sino indicaciones generales, ilustrativas solamente de los particulares mas importantes.

ī

Cuando se desea un buen caballo de tiro es preciso atender con preferencia á su peso. Es bueno que el animal tenga los movimientos fáciles, pero la circumstancia de que tenga también mucho peso es absolutamente imprescindible para que sea capaz de arrastrar grandes cargas. Sus paletas deberán ser rectas, y de base bastante ancha para que la tracción ejercida por las tiraderas se antagonize debidamente por la resistencia que ofrece la collera, efectuándose esto á un ángulo de tal abertura que permita utilizar por completo la fuerza ejercida.

Un buen caballo de tiro debe ser lo mas alto posible, en la parte del frente más bien prominente de antepecho, y debe ser igualmente tan ancho de pecho que permita la expansión libre de los pulmones en cualquier momento de cansancio. Las patas cortas son las mejores, y nunca deben mostrar una apariencia lisa é hinchada, que siempre indica una tendencia á producir gordura á expensas del músculo; la parte inferior de la pata debe ser aplanada, y las coyunturas especialmente fuertes y bien atadas. Según dijimos no es absolutamente necesario el buen movimiento, pero para la labranza es preferible uno que sea bueno y ligero. De paso dirémos que un caballo de 1.200 á 1,400 libras es el más conveniente para la labranza; los caballos más pesados estarán siempre en demanda para otros propósitos, y un criterio propio los escojerá según el fin para que se les desea. El ser demasiado "fogoso" ó "muy obstinado" es una objeción; el caballo de tiro deberá ser preeminentemente un animal quieto, aunque no de temperamento flojo. Uno fuerte y de tiro seguido resistirá mejor la fatiga y hará más trabajo.

II.

Para la carrera, las paletas deberán ser oblicuas, el antepecho de mediano á inferior, el muslo y parte trasera altos, el cuerpo largo y con ponderosa musculación. En el caballo de carrera, la fuerza motriz viene de atrás, y no podría cometerse peor error que el de escojer para la carrera un caballo en algo deficiente en esto, por mucho que llenase todos los requisitos en otros respectos. Las patas deben tener un largo suficiente, sin muchas carnes ni mucha gordura, y particularmente con las coyunturas bien unidas. El Gobierno inglés tiene un Reglamento para el uso de los que escojen caballos para la caballería. A continuación lo insertamos. Se titula: "Indicaciones para negarse á aceptar;" pero bien se le podría llamar "Indicaciones para escoger."

"Rechazad todo caballo cuyas patas delanteras no sean derechas; pues no resisten á la fatiga. Poneos detrás del caballo al ponerse él á caminar, y podréis notar estos defectos, si es que existen.

"Rechazad todo caballo que sea delgado debajo de la rodilla, mayormente en la parte inferior; esta conformación es esencialmente débil.

"También todo caballo con cuartillas largas, cortas ó paradas; las cuartillas largas están sujetas á torceduras; las cortas ó paradas hacen al caballo desagradable para el que va á montarlo, y á causa de las frecuentes concusiones que reciben están expuestas á que en ellas se formen depósitos huesosos.

"También todo caballo con cascos torcidos hacia fuera ó hacia dentro. La torcedura generalmente ocurre en la cuartilla. Los cascos torcidos hacia fuera son más objetables que los torcidos hacia adentro. Cuando están torcidos hacia fuera las cuartillas son encojidas, y los animales así formados están muy expuestos á cortarse ó dañarse. Ambas, sin embargo, son conformaciones débiles.

"Rechazad todo caballo cuyas patas traseras se inclinen mucho para atrás; le faltará la fuerza motriz, por lo que puede resultarle enfermedad en los jarretes. También todo caballo que camina con las patas traseras muy separadas, ó juntas, y el que tiene los jarretes muy rectos ó muy torcidos; aquello produce demasiada concusión y esto lo hace apto á que se rinda al cansancio.

"Rechazad todo caballo que tenga las patas muy separadas; la fuerza motriz viene de atrás y debe precisamente ser deficiente en los caballos que carecen del necesario desarrollo muscular en aquel paraje.

"Rechazad todo caballo de casco aplanado ó demasiado grande, ó demasiado pequeño; los de casco mediano son los mejores.

"También todo caballo que tenga un casco más pequeño que el otro."

TRATAMIENTO DE LAS YEGUAS DE CRÍA.

Al acercarse la época de la cría y comenzar preparaciones para sortear las yeguas con los caballos padres, los criadores en pequeña escala que no poseen sino una ó dos yeguas procuran siempre obtener informes que los ilustren debidamente acerca del caballo que han de escoger, como también sobre el cuidado y tratamiento que necesita la yegua antes y después de su fecundación.

En las grandes haciendas de crianza hay siempre, ó bien un veterinario competente, ó bien un empleado experto, á quien se encomienda el importante asunto de cuidar las yeguas en esta época precaria. Pero los criadores en pequeña escala carecen frecuentemente del consejo adecuado, y en general no tienen á quien volver los ojos, sin quedarles mas recurso que descansar en sus proprias fuerzas. Es preciso por lo tanto procurar que entiendan tan completamente como se pueda los métodos que deben seguir para salvar la yegua, lo mismo que su cría en caso de emergencia.

Hay ciertas cosas que deben buscarse siempre en una yegua cuando se trata de escojerla para objetos de crianza; y entre ellas hay algunas hasta tal grado importantes que pudiera considerárselas como esenciales. En primer lugar la yegua debe estar conformada de manera que sobrelleve bien los sufrimientos de la preñez, y que sea de constitución suficientemente vigorosa para que su salud no se altere por virtud de su estado, ni durante el período antedicho, ni en consecuencia del parto. Se deben escojer yeguas robustas y bien desarrolladas, puesto que con ello resulta más probable que el potro salga con idénticas cualidades de robustez y lozanía. Las yeguas cuyo diámetro entre las ancas sea muy considerable, y que tengan las últimas costillas grandes y bien encorvadas, deberán preferirse para madres á todas las demás. puesto que su conformación, á parte de suministrar capacidad suficiente para que el feto se desarrolle sin dificultad, hace también que sean menores los riesgos que pueden venir del parto.

Debe también cuidarse mucho de elegir una yegua que sea buena criadora, y que dé suficiente leche, porque de lo contrario el potro sufrirá por falta de la nutrición adecuada, y dejará mucho que desear en cuanto á robustez y desenvolvimiento.

Una yegua que deje ver desde luego algún defecto de conformación no debe escojerse nunca para madre, porque el dedicarla á semejante objeto sería perder el tiempo y el dinero.

En cuanto á la determinación de sus méritos como buena criadora será siempre necesario poner á prueba la yegua, á lo menos por algún tiempo; pero un hombre práctico y experimentado, podrá, sin embargo, descubrir desde luego y sin gran trabajo, lo que haya exactamente en este particular.

Si la yegua que se destina para madre está siempre trabajando aparejada, será bueno, antes de entregarla al caballo, que se la deje descansar por algunos días y andar snelta en potrero. Si esto no puede hacerse sin inconveniente, se la debe alimentar con salvado mezclado con agua, y disminuirle el trabajo.

El hecho de que una yegua pueda quedar preñada aunque se la tenga ocupada en el trabajo no es argumento contra el consejo de que se la deje libre y se le dé descanso, puesto que en toda probabilidad el resultado de no hacerlo así será la pérdida del potro. A las yeguas de carrera generalmente se las deja libres y en descanso durante la preñez: pero también ha habido casos en que se las ha hecho correr en ese estado, durante toda una campaña, sin perjuicio aparente. Esta práctica debe sin embargo ser condenada, puesto que al fin y al cabo resultan más ventajas, cuando se las deja en reposo.

Si se necesitare el trabajo de la yegua después de estar preñada, será preciso tener cuidado de no cansarla demasiado. No debe hacérsela andar muy de prisa, y hay que permitirle que al subir las lomas se tome el tiempo que quiera. Si se procede con cuidado y prudencia podrá trabajarse con ella, á pasar de su estado, casi hasta el mismo día del parto. El mejor trabajo que puede dársele es el ordinario á que esté acostumbrada, procurando por supuesto alijerarlo cuanto se pueda en el último período de la preñez. Es preciso no perder de vistar que el ejercicio es siempre provechoso para el animal en este estado.

Cuando la vegua está preñada y no hay necesidad de dedicarla al trabajo se la debe dejar suelta en lugar donde exista buen pasto. Este debe ser nutritivo, aunque no tan rico v suculento que pueda caerle mal en el estómago ó ponerla demasiado gorda. Las indigestiones y en general todas las enfermedades del canal intestinal son causas frecuentes de mal parto. La enfermedad mas común de esta clase, que consiste en demasiada soltura del vientre, procede del uso excesivo de alimento suave. Es inútil demostrar que es necesario que la yegua reciba la suficiente alimentación, pues que de lo contrario se pondrá flaca, llegándose tal vez hasta el extremo de matar al feto. Una yegua que ha sido alimentada toda su vida con maíz en cantidad abundante, lo pasará mucho mejor después del sexto mes de la preñez, si se le dá una ó dos veces por día una ración de dicho grano, especialmente en el caso de que los pastos del otoño no sean bastante ricos ó no se encuentren en abundancia. Debe evitarse con cuidado que la vegua se ponga demasiada gorda, porque la gordura es una clase de enfermedad que se opone á la debida nutrición del feto y que produce complicaciones en el momento del parto, facilitando al mismo tiempo la presentación de la fiebre.

Si la yegua tiene que trabajar, será preciso darle algún forraje verde cuid**a**ndo sin embargo de que no sea demasiado suculento, puesto que el alimento de esta clase es capaz de producir una irritación peligrosa en la economía del animal. Cualquiera clase de alfalfa, ó de pasto común, llenará las condiciones que se desean, y si se hubiere pasado la estación en que este alimento se encuentra con abundancia podrá darse de comer á la yegua cualquiera otra cosa que llene en lo posible las mismas condiciones. Las zanahorias cortadas en rebanadas y sumergidas en un atol de salvado, constituyen un excelente alimento que debe darse á la yeguas todas las noches en el caso antedicho.

Debe evitarse con cuidado que el animal se asuste ó salga por cualquiera causa de su estado normal de reposo, pues que todo lo que saque á la yegua de esta quietud puede ser causa de un mal parto. Se dice generalmente que este sobreviene muchas veces por solo el olor de la sangre, y es cosa positiva que el mal parto de una yegua que anda con otras en su mismo estado las afecta igualmente haciéndolas mal parir también.

Una yegua que ha mal parido una vez está expuesta á que le suceda lo mismo en las subsiguientes ocasiones; y por eso hay que tener más cuidado en proporcionarle reposo y manternerla aislada de las otras. Lo mejor sería en este caso dejarla suelta en un pequeño corral destinado exclusivamente para ella y donde pueda hacer todo el ejercicio conveniente.

Debe evitarse mucho dar á la yegua ninguna medicina purgante, á menos que no sea absolutamente indispensable. Si los intestinos están en tal estado que se hace indispensable evacuarlos por este medio, lo mejor que puede hacerse es alimentar la yegua con atol de salvado y con otro pasto que sea menos productivo de estreñimiento. Si estos medios suaves resultaren insuficientes podrá apelarse á los purgantes, escogiendo siempre el que sea menos violento en su acción.

En todo caso es siempre útil que desde cuatro meses antes del parto se haya estado alimentando á la yegua con la semilla llamada cañamón, de la que debe dársele una media pinta por la mañana y otra por la noche todos los días, continuando este tratamiento hasta una semana antes del parto. Al mismo tiempo, además de la semilla indicada se debe dar junto con ella á la yegua por la mañana y por la noche una onza del extracto fluído de viburnum prunifolium, pero esta medicina, que puede encontrarse en cualquier botica, no debe darse por más de dos meses. El trigo limpio y de buena cualidad está también recomendado como remedio para impedir el mal parto, y muchos criadores experimentados acostumbran dar á la yegua un puñado de trigo en el momento que descubren en aquella cualquiera síntoma que indique la proximidad de un mal parto. El resultado ha sido siempre satisfactorio. Es preciso tener mucho cuidado, sin embargo, de que el trigo esté limpio y enteramente libre de moho y de cornezuelo ó ergot.

No sería juicioso formular ninguna regla especial con respecto al tratamiento de las yeguas durante el parto, pero debe decirse en general que es importante procurarles alojamiento cómodo y dejarlas en libertad de ayudarse á si mismas. Es mejor por regla general dejar sola á la naturaleza, y que el auxilio que se preste á esta en caso de necesidad sea el más simple posible. Por supuesto si ocurre una dificultad seria debe acudirse en al momento á un hombre competente y de suficiente experiencia en el ramo.

Si fuere necesario encerrar á la yegua cuando empieza á presentar los síntomas del parto debe ponérsela en uno de los compartimientos de la caballeriza, procurando que nada haya que la moleste ó le cause daño, y que tenga una buena cama en que descansar. No debe estar amarrada ni tener ataduras de ninguna clase, puesto que le es necesaria perfecta libertad para ayudarse á si misma y para atender al potro en el momento de haber nacido.

Será bueno que haya alguien encargado de atender á lo que necesite, no precisamente para que intente hacer algo ni procure ayudar la, sino porque la experiencia demuestra que con su presencia la yegua adquiere confianza y no está tan expuesta á asustarse y ponerse nerviosa como cuando se la deja enteramente sola. Este sirviente debe ser en cuanto sea posible un hombre práctico y experimentado, capáz, si la ocasión lo requiere, de ayudar al animal con alguna sencilla operación manual. En la gran mayoría de los casos no habrá absolutamente ninguna necesidad de sus servicios.

Inmediatamente después del parto debe darse á la yegua una especie de sopa caliente compuesta de salvado ó de harina gruesa de maíz con un poco de sal, mezclado todo en una gran cantidad de agua. Con esto se da calor á la yegua y se la pone en actitud de recuperar más pronto sus fuerzas, extenuadas por razón del parto. El alimento que debe dársele por algún tiempo después de aquel acto debe ser siempre muy nutritivo y si fuese demasiado temprano en el año para poder darle buena yerba, habrá que apelar á las zanahorias, á los atoles de salvado y á una ó dos raciones diarias de avena, esta última administrada en la forma de una especie de

almidón, preparado con agua, no caliente sino simplemente tibia. El forraje de centeno cultivado y cortado diariamente es en la opinión de muchos un excelente alimento para estos casos; pero si bien es cierto que debe preferírsele con mucho al heno ordinario, también lo es que no puede comparársele en cuanto á bondad con el forraje de alfalfa.

Nueve días después del parto puede ponerse de nuevo la yegua donde están los caballos, y por regla general se encontrará que está otra vez en disposición de ser fecundada. Si á los veintiun dias se prueba de nuevo y ella rehusa el caballo es casi cierto que ya se encuentra preñada. Si en esta segunda prueba no rehusase al caballo, deberá volverse á hacer el experimento diez dias más tarde. Hay nuchos criadores que vuelven á hacerlo á los quince días, pero esto me parece que es enteramente innecesario. Lo que queda expuesto se encontrará tan satisfactorio en sus efectos como puede desearse.

CABALLOS DE RAZA PURA.

(Thoroughbreds.)

El caballo inglés de pura sangre es un vástago indudable de la raza pura oriental, turca, berberisca y árabe, mejorada y perfeccionada por virtud de manejos diestros y de las condiciones naturales que son inherentes al clima y suelo de Inglaterra. El caballo de pura sangre americano es por supuesto un descendiente directo del inglés.

En los Estados Unidos se ha considerado conveniente separarse algún tanto de las estrictas reglas que se observan en Inglaterra para la inscripción de los animales en el libro de registro (Stud Book), admitiendo en este á los que pueden probar su descendencia sin mezcla por el espacio de cinco generaciones. De aquí resulta que se registran animales que no son estrictamente de pura saugre; pero si por el espacio de cinco generaciones nunca se ha usado un caballo padre que no sea de pura raza, el animal resultante de aquellas uniones viene á ser en realidad casi tan de pura raza como cualquiera otro, llenando para el efecto cuantos requisitos pueden desearse. En realidad nos parece que el sistema americano

de crianza y las reglas que se han reconocido en América para el rejistro de los animales han contribuido á convertir el caballo americano de pura sangre en el rival, sino el vencedor del caballo inglés.

La cabeza de un caballo de raza pura es fina, su pescuezo es delgado pero bien asentado sobre los cuartos anteriores. su pecho ancho y bien desarrollad, sus cuartos traseros altos y musculosos, sus patas planas con cañas cortas, sobrecascos largos y elásticos y cascos redondos y bien formados. una libra de gordura más de la debida ha de existir en él cuando está en disposición para la carrera. Sus músculos y tendones deben estar claramente marcados y ponerse en acción con tanta facilidad como las cuerdas mas sensitivas de cualquier delicado instrumento. El caballo de carrera es esencialmente nervioso en su tempe amento, y así es que muchos se han vuelto resabiosos por consecuencia del mal manejo, y no pocos han dejado de obtener el éxito en las carreras que de otro modo hubieran podido alcanzar ciertamente, á causa solo de que han dejado de entenderse y apreciarse las peculiaridades de sus nervios.

Hay muchos que no ven en el caballo de pura raza sino un objeto de capricho, el caballo especial de los aficionados á las carreras; pero nosotros no podemos estar de acuerdo con semejante idea. La indomitable voluntad de este animal y su maravillosa resistencialo hacen de mucho valor para servir de padre uniéndolo á yeguas del país de raza mezclada, y muchos potros obtenidos de esta manera se encuentran entre nuestros más elegantes caballos tanto de silla como de tiro. En el sur siempre ha habido muchos caballos de esta clase, y desde que se introdujeron allí poca ha sido la demanda por caballos de mayor peso. Para arrastrar grandes cargas y ejecutar los trabajos de la agricultura no se han empleado hasta hace poco sino las mulas; el caballo de carrera ha servido para propósitos más altos.

Como ahora se están introduciendo en gran número caballos padres de mayor peso encontraremos que las yeguas de carrera suministran un buen medio para que de su mezcla con aquellos resulte una raza de caballos excelentes para todo lo que se desee.

CABALLOS AMERICANOS DE TROTE.

La historia del origen y mejoramiento de los caballos americanos de trote suministra uno de los ejemplos mas notables, si no el más notable de todos, de lo que puede hacer el esfuerzo humano en el desenvolvimiento y educación de una variedad de animales, imprimiéndoles un tipo y cualidades fijas que antes habían estado latentes, ó manifestadas solo de una manera imperfecta. El brío y la resistencia del caballo de trote provienen, para decirlo en pocas palabras, de la sangre oriental que se mezcló para formarlo con la real sangre del caballo de raza pura; pero trayendo las cosas de más cerca hay que buscar el dicho origen en los famosos animales que se nombrarán después, en que el trote parece ser una cosa natural y espontanea, y en que se combina el instinto de trotar con la energía y la velocidad del caballo de carrera.

Entre los caballos que como se ha dicho pueden considerarse como origen y fuente de la variedad de que se trata, se encuentra ocupando el primer puesto en la lista, según todos lo reconocen, el llamado "Imported Messenger" que era de pura raza y poseía en su constitución la sangre más escojida del desierto. Una simple noticia de su genealogía por parte de padre lo demostrará fácilmente. "Imported Messenger" era un caballo que nació en 1780, fué importado en los Estados Unidos en 1788, y murió en Long Island en 1808. La línea de sus antepasados arranca de "Mambrino," que engendró á "Engineer," que engendró á "Sampson," que engendró á "Blaize," que engendró á "Flying Childers," que engendró á "Darley Arabian." Su madre fué engendrada por "Turf," cuyo padre era "Matchem" que tenía por padre á "Cade," el cual era hijo de "Godolphin Arabian." y la madre de su madre había sido engendrada por "Regulus," que era también un hijo de "Godolphin Arabian." Su antepasado "Sampson " era un caballo negro que en nada parecía ser de pura raza, pues que era grande, pesado y huesudo, pero que desplegaba sin embargo una velocidad maravillosa y tenía mucha resistencia. Su padre "Blaize" fué un caballo bayo de raza pura, pero cuya conformación, así como su inclinación al trote.

que transmitió á sus descendientes, han hecho dudar á l· s que se ocupan de este asunto, de que sea auténtico el origen y ascendencia que se le atribuyen, habiéndose llegado á asegurar que debió su nacimiento á un caballo de coche. Si así fuere la verdad, lo que no parece fuera de razón, la tal mezcla constituyó el accidente más feliz, puesto que de allí resultó una combinación exacta para conseguir el cambio del paso, reteniendo al mismo tiempo la fogosidad y la instintiva velocidad del caballo de carrera.

La peculiar conformación de "Imported Messenger," que era un caballo bajo, redondo, casi plano en la cruz, se ha trasmitido fielmente en toda la línea de su descendencia, y es cosa que se ha observado universalmente que todos los caballos de trote de la raza de "Imported Messenger" se han visto siempre libres de toda especie de enfermedades en el casco, en las patas, ó en el hueso. Casi no hay ninguna familia de caballos americanos de trote que no tenga sangre de "Imported Messenger," y por el intermedio de su bisnieto "Rysdyk's Hambletonian" tenemos una familia que se distingue entre todas las otras por la manera constante con que transmite y perpetúa, por una larga serie de descendientes notables, la buena disposición para el trote. De él hablaremos más tarde.

Otra fuente y origen de nuestros caballos de trote ha de encontrarse en "Imported Bellfounder," un caballo bayo, que tenía una mancha blanca en forma de alfajor sobre la nariz. y que tenía también blanca la pata de atrás izquierda. Siempre se ha disputado con respecto á su genealogía pero las mejores pruebas que pueden obtenerse indican que nació de "Old Bellfounder," que era hijo de la yegua "Velocity" y del caballo "Haphazard," el cual era hijo de "Sir Peter," que á su turno lo era de la yegua "Miss Hervey" y el caballo "Eclipse." Su abuela era una yegua de buena saugre pero Según esta genealogía el caballo de que se no de raza pura trata era un verdadero descendiente de los "Fireaways," una raza de caballos de montar que jamás ha sido superada. "Bellfounder," el "Norfolk trotter" nació por el año de 1815 y fué importado en América en 1832, muriendo en Long

Island en 1843. Era por naturaleza un caballo de trote y de muy buenas disposiciones, y sus mas legitimos descendientes han desplegado siempre mayor velocidad mientras más libres se encuentran de la retención de las riendas. El mérito peculiar de los caballos de la raza "Bellfounder" se encuentra, lo mismo que el de los caballos de la raza de "Duroc," en la feliz combinación de su sangre con la de "Imported Messenger."

Los caballos de trote que están reconocidos en pleno derecho á ocupar el primer lugar en su clase son los siguientes :

Los Hambletonianos ("Hambletonians.") Esta familia toma su nombre de "Rysdyk's Hambletonian," descendiente por la parte de padre de "Imported Messenger" y de su hijo "Mambrino" (nacido en América), y del hijo de "Mambrino" nombrado "Abdallah," padre de "Hambletonian." La madre de este fue engendrada por "Bellfounder." De "Hambletonian" tenemos los llamados "Volunteers," "Edward Everetts," "Alexander's Abdallahs," "Almonts," "Messenger-Duroc's," "Happy Mediums," "Wilkeses," "Dictators," "Wood's Hambletonians," "Electioneers" y muchas otras clases de reconocida eminencia, comprendidas todas bajo el título general de Hambletonianos.

Los "Mambrinos," otra gran familia, que desciende por parte de padre de "Imported Messenger" tomó su nombre de "Mambrino Chief," cuyo padre fué "Mambrino Paymaster," que fué engendrado por "Mambrino," el cual era también abuelo de "Hambletonian." Los "Mambrinos," "Champions," y muchos otros deben ser comprendidos en este grupo.

Los "Bashaws" toman su nombre de "Young Bashaw" cuyo padre fué "Imported Arabian Grand Bashaw." "Young Bashaw" fué el padre de "Andrew Jackson" que engendró á "Long Island Black Hawk," del cual hemos tenido á "Green's Bashaw." los "Mohawks" y otros caballos de nota.

Estrechamente unidos á los "Bashaws" están:

Los "Clays," que toman su nombre de familia de "Henry Clay," que tuvo por padre al "Andrew Jackson" antes mencionado. De este caballo tenemos las numerosas clases de

"Clays;" y de su famoso nieto "George M. Patchen" tenemos también la rama que lleva su nombre.

Los "Morgans" que ya hemos mencionado derivan su nombre y excelencia del viejo "Justin Morgan." En este grupo han de colocarse los "Blackhawks," excluyendo sin embargo de ellos, á "Long Island Black Hawk" engendrado por "Andrew Jackson," que no tiene huellas de sangre de Morgan. Pertenecen á la misma familia los "Ethan Allen," los "Knoxs," los "Daniel Lamberts," los "Fearnaughts," los "Morrills" y otros.

CABALLOS AMERICANOS DE SILLA.

El caballo americano de silla es una producción moderna debida á la gran demanda de un caballo de montar que fuese no solamente bonito sino que tuviese también paso cómodo.

La fuente ó raíz de esta raza hay que irla á buscar, por supuesto, en el caballo de sangre pura, cuya sangre se mezcló con la de caballos menos veloces produciendo movimientos más adecuados para el objeto.

En apariencia el caballo de silla típico es una combinación del de raza pura y del de trote, teniendo el tamaño, actividad, y movimientos fáciles del primero, junto con la educabilidad y las demás cualidades características del segundo.

Los hay de todos colores, bayos, oscuros, negros, castaños y tordillos, predominando estos colores poco más ó menos en el orden en que se les ha nombrado. Los caballos padres de esta clase pesan de mil á mil dos cientas libras. El peso de las yeguas es menor en proporción. La cabeza de estos animales es fina, su pescuezo delgado, pero bien arqueado y muscular. Sus cuartos delanteros y el lugar donde se pone la cincha son amplios y desarrollados, el lomo corto, las ancas estrechas y generalmente inclinadas, los cuartos traseros largos y musculosos, y las patas delgadas, poco huesosas y de músculos apretados, y sin pelo.

LOS "HACKNEYS."

El origen de los caballos que llevan este nombre no puede explicarse en términos precisos, y en realidad de verdad no se les ha considerado como formando raza especial sino durante los diez últimos años.

El elemento constitutivo del "Hackney" debe buscarse en la sangre del denominado "Hunter" combinada con la del caballo inglés de pura raza, con el aditamento de la suficiente infusión de sangre del animal ordinario, de tamaño mediano, que se conoce generalmente en Inglaterra con el nombre de caballo de campo (farmer's horse). De estos tres elementos reunidos resultan su modo especial de andar y la facilidad de manejarlo. Las variedades de "Hackneys" que gozan de mas popularidad en Inglaterra son las denominadas "Confidence" y "Fireaway." Los caballos de estas dos razas, especialmente los de la última, aseguran buenos precios y pronta venta en todos los mercados.

El "Fireaway" es notable especialmente por las cualidades que hacen de él el mejor caballo de silla que jamás se ha visto en Inglaterra, y las virtudes de su raza trasmitidas á este país con la importación del "Bellfounder" como se vé en el capítulo de los caballos americanos de trote, han resultado de

gran provecho en más de un sentido.

El color de los "Hackneys" es vario: los hay bayos, negros, oscuros y castaños. A menudo tienen una estrella blanca, y algunas veces tienen las patas y los sobrecascos también blancos. En cuanto á su tamaño son casi iguales al "French Coacher" que tiene de altura de quince á diez y seis manos, y de peso de mil á mil trescientas libras. El "Hackney" tiene la cruz alta, los cuartos delanteros fuertemente inclinados, el pescuezo bien arqueado, la cabeza muy alta, el lomo corto, las patas de mediana longitud, el cuerpo fornido, las cañas anchas y aplanadas, las sobrecascos más cortós que en los caballos de raza pura y los de trote, pero mas largos que en los de la raza de tiro, las patas firmes y de tamaño moderado, el antebrazo especialmente corto, de donde resulta que puedan levantar bien altas las patas, y los cuartos traseros musculosos y compactos.

El "Hackney" es manso por naturaleza, y la velocidad de que es capaz cuando está ensillado, aunque no puede compararse de ninguna manera con la del caballo de trote, es sin embargo suficiente paraque pueda usarse sin desventaja aún para carruajes pesados. El "Hackney" se aproxima más estrechamente al tipo del caballo de trote que á cualquiera otro de las razas que se usan para carruages. Es por regla general fuerte, de constitución poderosa, y con mucho brío al mismo tiempo. Puede contarse también con la facultad de resistir la fatiga de una larga distancia que adorna á los mejores caballos de esta clase.

El "Hackney" ha venido á ser el caballo favorito de los ingleses, destinándosele á toda clase de trabajo. Se le usa para pasear en los parques y para tirar de carruajes lijeros. En nuestras ciudades del Este donde existe la tendencia dá modelar las cosas conforme al sistema inglés, el "Hackney" ha encontrado un hogar que lo recibe con simpatía.

CABALLOS FRANCESES DE COCHE.

Estos caballos ("French Coachers") son el resultado directo de la sabiduría y previsión del Gobierno francés. A fines del siglo XVIII fundó este Gobierno establecimientos de crianza de caballos, previendo que habría pronto una escasez de estos animales propios para el servicio de la caballería. Hizo traer de Inglaterra caballos padres de pura raza y los puso á disposición de los criadores, á precios muy bajos, siendo el principal objeto del Gobierno comprar los potros que de esta manera se obtuvieren, y conseguir también, si fuera posible, una raza particular del tipo que deseaba. Dió esto lugar á muchas causas de queja, por cuanto se vendieron animales de muy buena aparencia, pero sin los requisitos apetecidos, especialmente cuando se trataba de usarlos para propósitos de crianza. El Gobierno francés tuvo al fin, para remediar estos males, que adoptar el plan de comprar potros de superior cualidad para dedicarlos á ser en su oportunidad caballos padres, criándolos entre tanto y cuidando de ellos en establecimientos sostenidos por el Estado.

Además de esto se concede en Francia una prima á los posedores de caballos padres de superior cualidad, á condición de que no salgan del país y permanezcan en él haciendo el servicio á que se les destina. También se permite que los dueños de caballos padres buenos, aunque no de clase superior, puedan ofrecerlos para el servicio sin recibir auxilio pecuniario. Ningún caballo padre que no pertenezca á estas dos clases, ó que no sea de la propiedad del Gobierno, puede usarse legalmente.

En algunos departamentos de Francia, especialmente en el de Orne, el de Calvados y el del Sena inferior, el Gobierno se ocupa directamente de atender á la propagación y perpetuidad de la raza de los caballos de coche.

El color de este caballo francés es generalmente bayo, pero hay muchos que son castaños y también negros. Los que la moda prefiere en América son los bayos, y la mayor parte de nuestros importadores los escojen con el objeto de suplir esta demanda del mundo elegante. Su tamaño es casi el mismo que el de los caballos de la raza de "Cleveland," y su peso por término medio varía entre mil y mil y doscientas libras en los caballos padres. Su cabeza es pequeña con la frente ancha, con ojos expresivos, boca y nariz finas, y orejas medianas y de rápido movimiento. El pescuezo lo tiene largo, bien arqueado y firmemente asentado en los cuartos delanteros que son largos y suavemente inclinados, el lomo es corto, las ancas largas y levantadas, las patas de buena longitud, bien trabadas y con cascos duros y bien conformados. El aspecto general de estos caballos, como podrá descubrirse echando una mirada á los grabados que los representen, es exactamente lo que su nombre indica: un caballo de carruaje elegante y bien hecho con buenos movimientos y de bella apariencia.

LOS "CLEVELAND BAYS."

No tenemos datos auténticos respecto al origen de la raza que lleva este nombre, pero haremos constar lo que parece mas probable entre las muchas teorías que sobre este asunto han sido propuestas. Según el Profesor Low, esta raza "ha sido formada de la misma manera que el 'Hunter, á saber; por la mezcla progresiva de la sangre del caballo de carrera con la de los caballos oriundos del país."

El nombre de la raza está tomado del distrito de Cleveland en Yorkshire en Inglaterra, donde fué conocida por primera vez, y el término "Bay" se añadió á esta designación por causa de que el color bayo es el que prevalece en estos animales.

Este color es invariablemente brillante, bien sea claro ú oscuro. Las crines del pescuezo y de la cola son negras. Suele presentar el animal puntos negros y también una mancha blanca en la parte carnosa del casco. El tamaño de estos caballos es mediano, teniendo una alzada que varía de 16 manos á 16 manos y 3 pulgadas. El peso varía también de mil ciento á mil trescientas libras. La cabeza de estos animales es de tamaño regular, y la expresión de sus ojos es suave é inteligente. El pescuezo lo tienen bellamente arqueado y bien asentado en los cuartos delanteros, que son largos y suavemente inclinados. El lomo es corto, los sobre lomos parejos y poderosos, las ancas de buen tamaño, las patas derechas, fornidas y sin largos pelos en el sobrecasco.

Los "Cleveland Bays" son caballos útiles para cualquier objeto, pues tienen suficiente peso para ejecutar todos los trabajos agrícolas ordinarios, además de la actividad, elegancia, y velocidad de paso que se necesita para el tiro, bien sea de carros ó carruajes. Trasmiten á sus descendientes su color, su constitución, elegancia, mansedumbre, docilidad, y sus demás cualidades características, de una manera sumamente marcada. Son fáciles de manejar, y para el propósito de mezclar su raza con la nuestra ordinaria del gran Sudoeste nos parece que sería imposible encontrar ningunos otros que les fuesen superiores, ni tal vez iguales. Dos caballos célebres llamados "Royalty" y "Lord Derby," uno y otro agraciados con premios, son excelentes representantes de esta raza y justifican plenamente el buen juicio proverbial de sus respectivos importadores.

LOS "PUNCH" DE SUFFOLK.

Esta clase de caballos que por muchos años ha gozado de mucha popularidad en Inglaterra ha encoutrado mucho favor en los últimos años entre los criadores americanos. Il origen de esta raza es algo oscuro, pero según los mejores datos existentes puede decirse que es debido á la mezcla de caballos padres normandos con las mejores yeguas de Suffolkshire. La verdad de esta teoría se demuestra claramente por el color castaño lijero ó alazán, que es una mezcla del bayo y del tordillo, el primero de cuyos colores es el distintivo de la yeguas de Suffolk, mientras que el segundo lo es, por regla general, del caballo normando.

En época tan remota como 1745, ya tenía fama el caballo de Suffolk por su cualidad predominante y característica, que es el tiro de grande pesos. En los periódicos ingleses de aquellos tiempos pueden encontrarse noticias respecto á este particular. El mejoramiento que ha experimentado esta clase especialmente en los últimos veinte y cinco años ha sido muy notable.

El color de estos caballos es casi invariablemente ó alazán ó castaño. Su tamaño es un poco más chico que el de los "Shires" ó "Clydesdales," pues su alzada por término medio es de quince manos y tres cuartas á diez y seis y media manos. Su peso en pleno desarrollo varía de mil cuatrocientas á mil ochocientas libras. Su cuerpo es enjuto y compacto, sus patas cortas y limpias y con los sobrecascos libres de los pelos largos que tienen los "Shires" y los "Clydes." Los cuartos anteriores son largos y bien conformados para el tiro, los huesos pequeños pero sólidos, los cuartos traseros largos, pesados y bien ajustados á un lomo corto y fornido. aspecto general del animal lo hace aparecer al pronto como un caballo alazán de mediana altura, de cuerpo redondo y pesado y de patas cortas. El "Suffolk" es por esencia un animal de tiro de mucho precio por causa de su notable firmeza y constancia en el trabajo.

El arrastrará el máximum posible de peso sin que se necesite usar el látigo ni apremiar en ninguna manera su natural libertad de acción en el trabajo. Como caballo de uso general para los agricultores sería dificil encontrar otro que fuese mas adecuado, puesto que tiene un paso bueno y rápido, además de suficiente peso y resistencia para tirar del arado ó del rastro.

LOS "PERCHERONS."

El "Percheron" es un antiguo caballo francés, notable por su trabajo de tiro rápido y efectivo, cuya excelencia según siempre se ha supuesto depende en mucho de la sangre oriental que corre en sus venas.

Su color varía, pero por regla general puede decirse que es tordillo, generalmente del matíz mas oscuro. Los hay sin embargo enteramente negros y también bayos; y entre los mismos tordillos los hay que varían desde el mas oscuro hasta el casi blanco.

Son estos caballos de poca alzada y de cuerpo ancho y casi cuadrado, con la cabeza magnífica y un pescuezo que por su belleza no sería desdeñado por el más elegante de los caballos árabes. Sus patas son cortas en proporción, y aunque macizas son sin embargo finas y enjutas.

Los criadores de estos caballos mantienen que están perfectamente libres de toda enfermedad de los huesos y en las patas. Nuestra propia experiencia sin embargo, especialmente con los potros obtenidos por el cruzamiento de esta raza con la de las yeguas nativas, no ha corroborado este aserto. Además de esto no faltan tampoco algunos criadores y varias personas de otras clases que han empleado los "Percherons" en trabajos agrícolas pesados ó en otras cosas, que creen sujetos estos animales á las referidas enfermedades en mayor grado tal vez que las otras razas.

El "Percheron" es un caballo de tiro. Los padres en perfecto desarrollo pesan de mil seiscientas á dos mil ciento ó dos mil doscientas libras. Su progenie obtenida con yeguas ordinarias no excede nunca en pleno desarrollo del peso de mil ochocientas libras, variando ordinariamente entre mil doscientas y mil setecientas.

Son los "Percherons" prontos, activos é inteligentes.

Hay quien los considera resabiosos y sabemos de un buen número de representantes de esta raza que son de mala disposición. Pero puede también suceder que estos defectos dependan del mal manejo de los que andan con ellos.

Aunque resisten los cambios de clima tanto como los caballos de cualquiera otra raza, no podemos sin embargo decir, como lo hacen algunos criadores, que se aclimatan sin peligro.

LOS "CLYDESDALES."

Los caballos llamados "Clylesdale" deben su mérito original, así como los "Percherons," los franceses de tiro, y en general todos los de las otras razas, que se dedican á este último uso, al caballo negro de Flandes, que es un descendieente por línea recta del gran caballo negro del norte de Europa.

Su color es generalmente ó bayo ó negro, ú oscuro, teniendo por lo común una faja blanca en la cara, cuando toda la cara no tenga este color. Las patas principalmente en la parte inferior son siempre más ó menos blancas. De vez en cuando se encuentra un "Clydesdale" cervuno, castaña, ó alazán. El color que puede considerarse distintivo de la raza es el bayo claro, mucho más pálido en los costados y en la parte interna de los muslos y en la inferior del vientre. Juzgando por el tamaño pudieran clasificarse estos animales entre los pertenecientes á las razas de mayor volumen, puesto que los caballos padres varían en peso de mil setecientas á dos mil cien libras, mientras que las yeguas pesan entre mil doscientas y mil seiscientas libras.

En su apariencia externa el "Clydesdale" es un caballo grande, alto, de cuerpo prolongado, de cabeza larga, de pescuezo mediano, patas firmes, muy llenas de pelo debajo de la rodilla y con los cuartos delanteros largos é inclinados. Esta última cualidad es digna de tenerse en cuenta, pues que indica mayor actividad que la usual en las razas de caballos de gran volumen.

Comparados los "Clydesdales" con los "Percherons" ó los caballos franceses de tiro, se encontrará que tienen el cuerpo

más largo que estos últimos, que sus patas son también más largas, y que tienen mayor docilidad. Las observaciones que hemos hecho, y la experiencia que hemos adquirido respecto de potros de sangre mezclada, obtenidos con yeguas del país, justifican plenamente el aserto de que son casi sin excepción mansos, quietos, inteligentes y fáciles de domar. Una de sus cualidades características mas prominentes es que naturalmente caminan pronto. El agricultor americano no tarda mucho en apreciar que una pareja de caballos que puede arar tres acres de terreno en un día es superior á la que con el mismo instrumento no pueda arar más que dos acres, y este hecho ha servido de mucho para favorecer el crédito de los "Clydesdales" en América.

La tendencia que se ha observado ultimamente de diferenciar más y más las razas de los "Clydesdales" y de los "Shires" ingleses ha inclinado á los criadores de los primeros á fijarse sobre todo en el aspecto y los movimientos, bajando gradualmente el promedio en el peso, dejando así á los criadores de los segundos un mercado libre para la demanda de grande peso y volumen, y descuidando hasta cierto punto ó dejando en lugar secundario, todo lo que se refiere á la acción ó facilidad en las movimientos.

Un particular acerca del cual muchos encuentran objeción es la franja de pelo largo que tiene este caballo en el sobrecasco; y de ahi ha resultado que varios criadores hayan emprendido remover ó disminuir este signo distintivo; pero hasta ahora no puede juzgarse del resultado. En el Sud los "Clydes" no son tal vez tan conocidos como los caballos de tiro franceses, pero los pocos que se han enviado allí parecen haber dado muy buen resultado. En realidad ha llegado á decirse que ningún otro caballo de raza pesada puede soportar tan bién el clima del Sud.

COTTON STATES AND INTERNATIONAL EXPOSITION.

There is to be held at Atlanta, Ga., U. S. A., in the fall of 1895 an Exposition, international in its character, and designed to demonstrate the practicability of extending the trade of the Southern States of this country with the South and Central American Republics. The central idea of the promoters of this enterprise is thus expressed, and yet, as they have proceeded with their work they have found themselves tending constantly in the direction of a really international exposition. The promoters believe in the assured completion of the Nicaragua Canal and are awake to the necessity for taking early steps to secure the trade that will naturally result from the completion of this undertaking. They have witnessed the rapid growth of the Southern Republics and the growing inclination of their people to trade with this country. Taking steps to increase their lines of manufacturing, the enterprising people of the New South are looking for enlarged markets for their productions and believe they can see them among the people of this Continent. Speaking in the language of their preliminary prospectus the promoters of the Atlanta Exposition say:

The central idea of the "Cotton States and International Exposition" is to increase the trade and secure closer commercial relations between this country and Central and South America, Mexico and the West Indies. The certainty of the construction of the Nicaragua Canal, the rapid progress being made in those countries, and the growing demand for manufactures, material and supplies, which these United States can furnish, make it imperative that we shall bring

to their attention at the earliest date and most convenient place the full capability of this country to supply all their needs, and also demonstrate the exceptional facilities our seaports provide for the mutual interchange of commodities. No country in the world can hold forth equal advantages for such commerce with all of this western continent as the United States, but the small per cent of trade we enjoy is proof that we have not given it the attention it required.

The charter of this company proposes that it "shall hold in or near the city of Atlanta, an exposition of the products and resources of the Cotton States and other States of the United States and of all other countries, and of the appliances, machinery, inventions and devices used in cultivation, prepartion, manufacture and use of such products and resources, together with exhibitions of works of art, and inventions of all persons who may exhibit the same."

Under this charter the company has already secured in the city of Atlanta alone nearly one-quarter of a million of dollars as a minimum fund, and has secured the use of the splendid grounds and buildings of the Piedmont Exposition Company, on which has been expended nearly \$200,000.

These grounds are just outside the city limits, beautifully located, and supplied with ample transportation facilities, consisting of convenient tracks on the main line of the Richmond and Danville railroad, with well-arranged stations at the grounds and in the city, and also three finished electric lines from the center of the city to the grounds, also streets with asphalt and block pavements leading direct to the gates.

Plans are under way for large and complete buildings filled with all that is necessary to accommodate the largest exhibit that can be collected, and surpassed by no exposition held in this country, except the World's Columbian Exposition and the Centennial at Philadelphia.

GOVERNMENT BUILDINGS.

A bill has been introduced in Congress to secure the aid of the United States and a Government exhibit in a national building, such as has been made several times elsewhere, and showing the progress since made, and especially adapted to the development of the Cotton and other Southern States.

WOMAN'S BUILDING.

A large, capable and enthusiastic committee of ladies is already energe ically at work to secure the funds for a building to be devoted to the exhibition of woman's work and progress in every department of domestic, social, literary, art, or other work by which the feminine talent of this age is making the world richer and purer. The work already done is a guarantee of a magnificent success.

NEGRO BUILDING.

The progress of the Negro race since their emancipation has had no adequate presentation at any time, and now it is proposed to accept the proffer of Bishops Gaines, Turner and others to give the opportunity for a full display in a building of their own, of the best product of their race in the various industries and pursuits that have been open to them, and such evidences as they can present of educational and intellectual progress. The few and inadequate presentations they have made have fitted them to enter at this time into a larger and more complete exposition of their own work.

STATE EXHIBITS.

The unanimous and enthusiastic indorsement of the Exposition by the governors of all the Southern States and the hearty responses made by them to the proposition for an interstate feature, assures the probability of magnificent State exhibits. The location of the Exposition in the very center of these States will give all an equal chance to present to the world a more complete exhibit of the wealth, progress, and future possibilities of the South, and on a scale proportioned to their most ambitious desires.

FOREIGN STATES.

Foreign countries, and especially those near us—Mexico, the West Indies, Central and South America—will be invited to participate by representative exhibits, both national and individual, in buildings of their own, and in those provided by the management. These will give an impetus to the constantly increasing trade between those countries and the United States at Southern ports, and bring about closer commercial relations, in anticipation of the building of the Nicaragua Canal, and greatly aid in the successful progress of that enterprise.

The appended map shows the position of Atlanta with reference to the great marts of commerce in the United States as well as to the seaports from which products of this country are to be exported.

LOS ESTADOS ALGODONEROS Y LA EXPO-SICIÓN INTERNACIONAL.

En el otoño de 1895 ha de tener lugar en la ciudad de Atlanta, Estado de Georgia, de los Estados Unidos de América, una Exposición, que tendrá el carácter de internacional, y cuyo objeto principal será poner de manifiesto la posibilidad práctica de aumentar el tráfico mercantil entre los Estados del Sud de este país y las Repúblicas de las Américas Central y del Sud. En el desenvolvimiento de esta idea fundamental del certamen, encontraron los promotores que era indispensable convertirlo prácticamente en una verdadera Exposición Internacional. Para ellos es asunto de firme creencia que el canal de Nicaragua ha de ser construido, y que es por tanto indispensible tomar desde ahora, ó cuanto mas pronto sea posible, medidas necesarias para apoderarse del tráfico que ha de resultar naturalmente de la realización de aquella empresa. Ellos han presenciado el rápido desenvolvimiento que ha

tenido efecto en las Repúblicas latino-americanas, y tienen conocimiento de la inclinación cada vez mayor que existe entre sus habitantes de entrar con nuestro país en relaciones comerciales. Y juzgan, por lo tanto, que al emprender como ha emprendido el pueblo laborioso y enérgico del nuevo Sud el acrecentamiento de su industria fabril, y buscar naturalmente para sus manufacturas mercados nuevos, se facilita mucho la realización de ambas tendencias, estableciéndose un comercio cuyas corrientes no tengan que salir de los límites de este hemisferio. Usando las palabras de que se valieron en su Prospecto preliminar los promotores de la Exposición de Atlanta, debe decirse lo siguiente:

"La idea fundamental de la 'Exposición Internacional de los Estados algodoneros' es aumentar el tráfico entre este país y los Estados de Centro y Sud América, México y las Antillas, estrechando lo mas posible sus relaciones comerciales. La certeza de que el canal de Nicaragua llegará á construirseel rápido progreso de los países autes nombrados—y la creciente demanda que en estos se nota por las ma sufacturas, el material, y las provisiones que los Estados Unidos pueden suministrar-son cosas todas que hacen imperativo para nosotros llamar la atención de los dichos pueblos, lo mas pronto posible, y de la manera y en el lugar que sea mas conveniente, hacia las oportunidades que les ofrece este país, y las facilidades con que cuenta para proveerlos de cuanto pueden necesitar-demostrando al mismo tiempo las ventajas excepcionales que tienen nuestros puertos de mar para el mutuo canje de mercancías.

"No hay país en el mundo que pueda ofrecer para este comercio del hemisferio occidental las ventajas que ofrecen los Estados Unidos. Si las cifras hasta ahora obtenidas no corresponden debidamente á lo que debía esperarse de este hecho cierto, hay que atribuirlo á que no hemos prestado al asunto la atención debida.

"La carta fundamental de esta Compañía pone de manifiesto que es su propósito celebrar en la ciudad de Atlanta, ó en sus inmediaciones una Exposición de los productos y recursos de los Estados algodoneros, como también de los de otros Estados de los Estados Unidos y del extranjero, exhibiéndose además en ella las invenciones, máquinas, y sistemas y procedimientos en práctica, para el cultivo, ó fabricación, según sea el caso, de los artículos exhibidos, así como también las obras de arte y los inventos de cualquier género que quieran mostrarse al público.

"Para llevar á debido efecto los propósitos que acaban de explicarse, la Compañía ha reunido ya, en solo la ciudad de Atlanta, el capital mínimo de doscientos cincuenta mil pesos, y contratado además el uso de los espléndidos edificios y terrenos de la Compañía denominada 'Piedmont Exposition Company,' en que se han gastado como \$200,000 próximamente.

"Estos terrenos, colocados á muy corta distancia de los límites de la ciudad, y bellamente dispuestos, están provistos de abundantes facilidades para el transporte de la gente y de los artículos exhibidos. La línea troncal del ferrocarril de Richmond y Danville está unida con ellos por medio de un ramal conveniente, que está provisto de cómodas estaciones. Hay también tres líneas de carros movidos por electricidad que parten del centro de la ciudad y terminan en los mismos terrenos. Y á todo debe añadirse que las calles y caminos ordinarios que conducen á los viajeros, hasta las mismas puertas de la Exposición, están pavimentadas con asfalto, ó con trozos de madera.

"Están completándose los planos de los nuevos edificios que se trata de construir, y se espera que en todos ellos se habrá de encontrar reunida la colección de artículos más grande que se haya nunca exhibido en ninguna parte en este país, excepto en Chicago en la Exposición Universal Colombina, ó en Philadelphia, en la también universal del centenario de la independencia.

EDIFICIOS DEL GOBIERNO.

"En el Congreso de los Estados Unidos de América se presentó oportunamente un proyecto de ley con el objecto de obtener del Gobierno federal nó solo su auxilio pecuniario sino también la remisión de los artículos adecuados, para que sean exhibidos, según se ha hecho hasta ahora muchas veces en casos análogos, en un edificio nacional. Allí podrá observarse el progreso que se ha efectuado en el desarrollo de la riqueza y de los recursos de los Estados algodoneros y de los demás de la Unión."

EL EDIFICIO DE LAS MUJERES.

"Una Comisión de Señoras, numerosa en su personal, y llena de entusiasmo, además de ser sumamente capazé ilustrada, ha tomado á su cargo, con enérgico empeño, la reunión de fondos con el objeto de levantar un edificio en que se exhiban los resultados del trabajo de las mujeres, y el progreso que á ellas se debe en los diferentes ramos de la actividad social, no solo en lo relativo al hogar doméstico, sino también en las ciencias, las artes, la literatura, y en todas las demas esferas en que bajo la influencia de su sexo se purifica y se mejora el mundo. Lo que hasta ahora tiene conseguido esta Comision es una garantía de que sus esfuerzos serán coronados por un éxito magnífico."

EL EDIFICIO DE LOS NEGROS.

"El progreso alcanzado por la raza negra después de su emancipación no se ha exhibido nunca de una manera satisfactoria y adecuada. Ahora se trata de llenar esta omisión aceptando la oferta de los Obispos Gaines, Turner y otros, que se proponen hacer una exhibición completa de este particular, en un edificio exclusivamente construido por ellos para este objeto. Allí se verán los mejores productos del trabajo y actividad de los negros, y se pondrá de manifiesto también el progreso que hayan realizado hasta ahora en punto á educación y cultivo intelectual. Las exhibiciones de este género que ya ha habido, aunque pocas y bastante incompletas, han preparado sin embargo á los promotores de este pensamiento para hacer esperar en el presente caso algo verdaderamento satisfactorio."

EXPOSICIONES PARTICULARES DE CADA ESTADO.

"La aprobación unánime y entusiasta que han dado al pensamiento de la Exposición los Gobernadores de todos los Estados del Sud y la cordial respuesta que de todos ellos se ha recibido respecto á que concurran al certamen los Estados á que respectivamente presiden, hacen esperar que los resultados que se obtendrán en este punto serán magníficos. Situada como lo estará la Exposición en el verdadero centro de aquellos Estados, tendrán todos idénticas oportunidades para ostentar por completo su riqueza y su progreso, así como las posibilidades que tiene el Sud en lo futuro, haciéndolo todo en tal escala que satisfaga sus mas ambiciosos deseos."

ESTADOS EXTRANJEROS.

"A los Estados extranjeros, y especialmente á México, las Antillas, Centro América, y la América del Sud se les invitará á que concurran, tanto nacional como individualmente, enviando sus respectivos artículos, y exhibiéndolos, bien en edificios construidos por los mismos países, bien en los que aquí se provean para ese objeto. Con esto se dará impulso al tráfico siempre creciente entre los referidos pueblos y los puertos del Sud de los Estados Unidos de América, y se entrecharán todavía mas las relaciones comerciales que existen en el día, y que deben procurar fomentarse ahora más que nunca, en vista de que se va á construir el canal de Nicaragua, y de lo mucho que puede hacerse en favor de tan útil empresa."

Los mapas que se acompañan muestran la situación de Atlanta relativamente á los grandes centros de comercio en los Estados Unidos de América, y también á los puertos de mar por donde pueden exportarse los productos de este país.

MEXICO.

ENCOURAGEMENT TO GOLD MINING.

LEGATION OF THE UNITED STATES, MEXICO, fune 13, 1894.

To the HONORABLE SECRETARY OF STATE,

Washington, D. C.

SIR: In encouragement to gold mining in this country the Mexican Government, by Federal decree, grants certain concessions to parties who engage in the development of gold mines and placers. I have the honor to inclose copy of said decree, taken from the Diario Oficial of the 12th instant, together with a translation thereof. I am, sir, etc.

(Signed) ISAAC P. GRAY.

DEPARTMENT OF PUBLIC WORKS,

THIRD BUREAU.

The President of the Republic has been pleased to direct me the following decree, to wit:

Porfirio Diaz, Constitutional President of the United Mexican States, to the inhabitants thereof.

Know Ye.

That the Congress of the Union has been pleased to decree the following—

The Congress of the Mexican States decrees:

Sole Article. The Executive is hereby empowered, during the period of one year dated from the promulgation of this law, to make contracts for the prospecting and operating of gold mines and placers, in accordance with legislation now in force, and subject to the following conditions amendatory of said legislation:

First. The contracts shall be in the form of concessions, which the Executive shall issue freely, and upon the hypothe-

sis that it is in possession of data sufficient to justify the belief that such concession is to cover the mining of gold in the district to be developed.

Second. For the purposes of this decree gold mining regions shall include deposits of that metal, whether alluvial or not, as well as deposits wherein the gold is found mixed with some other metal, but where the commercial value of the gold exceeds that of the other concomitant metals.

Third. No region shall be considered as gold bearing if the average show of metals in all the mines included therein yields less of gold than expressed in the foregoing paragraph.

Fourth. As soon as the nature of the ore changes in such manner that the average yield mentioned in the foregoing paragraph is not realized the contracts granted under this law shall be revoked.

Fifth. Each contract shall clearly specify the limits of the tract to be developed.

Sixth. Within the limits of such tract the concessionaires can designate and acquire as many claims as can be located upon unoccupied territory, or incorporate thereto claims belonging to the concessionaires prior to the date of the contract, as well as any others they may hereafter acquire by purchase or other legal manner.

Seventh. Concessionaires shall obtain prospecting permits subject to the laws in force, all other companies or private individuals being inhibited from prospecting in that district for any kind of metals, but with the proviso that such permits shall be good for six months and no longer; and that once lapsing and during the two years immediately succeeding, neither the concessionaires nor any other party can obtain such exceptional prospecting permits.

Eighth. The concessionaires can import into the Republic, free of import duties, the machinery, instruments, tools and necessary apparata for the purposes of prospecting and development of materials of construction for mines and metallurgical officies, provided such concessionaires first advise in each case with the Department of the Treasury and

abide by the regulations thereby imposed. Should the concessionaires sell a portion or all of the supplies thus imported without the consent of the Government, they shall lose all such supplies thus sold, and forfeit also all the franchises granted in the concession, unless such sale be rendered necessary by bankruptcy or liquidation.

Ninth. The concessionaires shall enjoy a rebate on the annual mining tax for a period of ten years, paying in the first year at the rate of one-tenth of the impost in force, and an increasing amount each year until the full tax becomes payable in the eleventh year.

Tenth. During ten years time the concessionaires shall be exempt from all Federal impost, with the exception of the tax alluded to in the foregoing article, and with the exception of taxes payable in stamps, and mintage and assay taxes or dues.

Eleventh. The concessionaires shall invest in their undertaking, during the first three years, a capital of \$500,000 at least, to be increased to \$1,000,000 during the following five years.

Twelfth. The concessionaires shall, within the time of the terms designated in the contract, present the plans, samples, ores, descriptive reports and geological specimens resultant upon their prospects.

Thirteenth. The concessionaires shall allow an inspector, appointed and salaried by the Executive, to examine the work of prospect and of mining.

Fourteenth. The concessionaires shall guarantee compliance with their obligations by a deposit, in minimum, of \$10,000 in bonds of the public debt, to be furnished at the time of signing of the contract, and which they can not redeem until they have proven the inversion of capital (see Article II) of at least \$200,000. If the bonds deposited bear interest the depositors shall withdraw the coupons in due time for collection.

Fifteenth. The exemptions from imposts mentioned in the ninth and tenth articles do not include the mining of alluvial gold. In such case the concessionaires, if discoverers thereof,

shall pay, during the mining of such alluvial gold, at the rate of one-third of the imposts in force.

Sixteenth. Within two years from the date of this contract the concessionaires shall establish a metallurgic establishment of treating at least 400 tons of ore per week, or in place of such establishment, any other concern capable in the judgment of the Secretary of Public Works of such amount of work.

I therefore order the same to be printed, published, circulated, and that due compliance be had thereto.

Given in the Palace of the Federal Executive of the Union in Mexico, on June 4, 1894.

(Signed) PORFIRIO DIAZ.

To Lic. MANUEL FERNANDEZ LEAL,

Secretary of Public Works, Mexico.

IRRIGATION.

LEGATION OF THE UNITED STATES,

MEXICO June 16, 1894.

To the Honorable Secretary of State,

Washington, D. C.

SIR: The enclosed extract from the *Diario Oficial* of 15th inst., will acquaint you with the bases of concessions the Mexican executive is authorized, by Federal decree, to grant persons who may engage in irrigation.

I am, etc.,

(Signed)

ISAAC P. GRAY.

DEPARTMENT OF PUBLIC WORKS, MEXICO,

SECOND BUREAU.

DECREE JUNE 15, 1894.

The President of the Republic has been pleased to address the following decree:

Porfirio Diaz, Constitutional President of the United Mexican States, to the inhabitants thereof.

Know Ye,

That the Congress of the Union has been pleased to decree— The Congress of the United Mexican States decrees: Article I. The executive is authorized, under this law and the law of June 5, 1888, to make concessions to private parties and to companies for the better use and improvement of waters lying within the Federal jurisdiction, for irrigating purposes, and as power to be applied to various industries.

Article II. The concessions which may be granted shall be

under the following conditions:

1. Prior publication of petition in the official journal of the respective Federal Entity or State.

- 2. Without conflict with the interests or vested rights of any third party; the courts first deciding in case of objections filed.
- 3. Presentation of plans, profile charts and descriptive reports for the full comprehension of contemplated works, such presentation to be made within the time specified in the concession.
- 4. The obligation to allow an engineer to inspect the plans and construction of all the works, an inspector appointed by the Executive and paid by the Company.
- 5. Obligation to make a deposit, in bonds of the public debt to guarantee compliance with the stipulations under the concessions.
- 6. Obligation to submit for examination and approval, to the Department of Public Works, all schedules for sale or lease of waters.

Article III. The Executive can grant to Companies the following concessions and privileges:

- 1. Exemption for five years from every Federal impost, save the internal-revenue stamp taxes, on all capital invested in the plans, construction and repair of the works defined in the contracts.
- 2. The duty-free importation, for one sole time, of the machinery, scientific instruments and apparata necessary to the plans, construction and development of the works.
- 3. The right to occupy, free of expense, public and national lands for the passage of canals, the construction of dams or dykes, and the formation of reservoirs.
 - 4. The right to appropriate, on the ground of public serv-

ice and utility, the property of private parties, per payment of proper indemnity, and in accordance with the provisions defined by the railroads, in tracts sufficient for the uses described in the foregoing Article.

Article IV. Pursuant to the provisions of this law and those of the law of June 5, 1888, the Executive shall regulate the issue of waters in the Federal District and Territories, making concessions for the construction of dams and reservoirs, subject likewise to the stipulations established in the Civil Code.

Article V. The Executive is authorized to grant the duty-free importation on machinery and apparata necessary for the using of waters for purposes of irrigation and power to companies obtaining concessions for that purpose from the States, provided such companies give guarantees to perfect such works, and in accordance with rules and regulations to be established therefor by the Executive of the Union.

(Signed)

PABLO MACEDO, Speaker House.

R. DONDÉ, President Senate.

E. CERVANTES, Clerk House.

A. GARCIA, Clerk Senate.

Ordered published, printed, circulated, etc.

COAL FIELDS OF MEXICO.

The following interesting account of the discovery and development of the coal fields of Mexico is taken from a recent number of a paper published in that Republic:

Prior to 1880 it was generally assumed by both geologists and engineers that there were no commercially important coal-bearing formations in Mexico. As early as 1870 a small amount of coal had been mined in the State of Sonora, near the town of Los Bronces, for the use of local smelters, and in some other portions of the country a little coal had been taken out for local use, but none of these deposits had been carefully examined, and in view of the almost entire absence of transportation facilities they were not deemed of much importance. By 1880 railroad development had com-

menced to play an important part in opening hitherto inaccessible regions, and when, about the time a number of samples of anthracite were sent to the Government Bureau of Mines for analysis, so much attention was attracted that a commission was appointed to visit and examine the locality from which it came, and also other points where coal was reported as existing. After devoting considerable time and study to the matter the commission rendered a very comprehensive report, in which it was shown that anthracite, bituminous and brown coals existed in a number of the Mexican States in such quantity as to be of the utmost economic importance to the country, so soon as railroads should be built to them, providing a means of transportation. Until nearly 1890 very little work of importance was done, though many mines had been opened, some operated, and a better knowledge of the extent and condition of the coal fields arrived at.

The most fully developed coal field in the country is that in the State of Coahuila. This is evidently a part of the coal field lying on the north side of the Rio Grande, around Eagle Pass, Tex., and covers a considerable area in the Mexican State named. Geologically, all of the coal measures occur in the cretaceous formation, and are divided into two beds, the upper, or Laramie, and the lower, or Fox Hill. both corresponding with the coal-bearing formation of the same name in Colorado, Utah, and Wyoming. In what is termed the Rio Grande region, lying near to Piedras Negras, the Fox Hill group outcrops and is mined to a small extent, the product being a variety of cannel coal, useful for certain purposes. From Sabinas, extending south and southeast, the Laramie group is developed, and in it the mines at Sabinas, San Felipe, Hondo, and Alamo are operating, supplying coal for various railroads, principally the Mexican International: making coke for the use of smelters in the various Mexican States, and also shipping a considerable portion of the output through the port of Piedras Negras into the United States. The coal measures throughout this region are greatly disturbed by faults and foldings, another difficulty encountered being the irregularity in the width of the seams, and occasional intervention of barren areas.

In the State of Sonora, lying along the Gulf of California and extending north to the line of Arizona, coal was found and used by local silver smelters so early as 1870. At the towns of Los Bronces and La Barranca some small openings were also made. In 1800 an English company sent an engineer to examine the reported discovery of coal near San Marcial, sixty miles from Guaymas. It was found that about 17 feet beneath the surface a seam of anthracite occurred, variously reported as 3 to 9 feet in thickness. The company secured a concession of 4,000,000 acres of land, and planned to develop the coal and construct a railroad to the port of Guaymas, in the Gulf of California, from whence coal was to be exported and also supplied to Pacific steamers. Failing to carry out the provisions specified, the concessions were declared forfeited, and shortly afterward were granted to a Mexican company, organized to carry on the proposed work. Explorations with the diamond drill and by prospectors show that this coal field is quite extensive. It is reported to have been traced sixty miles east from San Marcial, nearly one hundred and twenty miles northeast, and in the north to the Arizona line. The developments started by the Mexican company are about forty miles from Ortiz, lying between Hermosillo and Guaymas. The drill is said to have shown three distinct seams of coal, 2, 4, and 71/2 feet respectively.

It is all anthracite or semi-anthracite, containing from 8 to 15 per cent ash and sulphur, according to reported analyses.

In the State of Puebla some fifty-nine coal mines had been opened up to 1890. In the district of Acatlan, in the southern part of the State, twenty mines were opened, eighteen of them belonging to one company. Owing to poor facilities for transportation, difficulties encountered in mining, and the rather poor quality of the coal, little work of importance has been done. Most of the mines were opened in hopes of securing from the State government the bounty of \$1,000 per year for ten years, and freedom from taxation for twenty-five years, which had been offered to the first company which should supply Puebla with a quantity of coal at a price no higher than that of wood. Very attractive inducements were

also offered to railroads which would build in and develop these coal properties and the contiguous country.

In the State of Jalisco coal has been found at a number of places—on the border of Lake Chapala, in the Rancho del Veralito, Chiquilista, and in the Ameca and San Gabriel valleys. Small deposits have also been discovered in the States of Vera Cruz, Hidalgo, Tamaulipas, Tlaxcala and Nueva Leon, some of that occurring in the latter States, being used on the locomotives of the Mexican National Railroad. A deposit of a variety of bituminous coal known as Grahamite is reported as having been found a few miles up the river from Tampico.

Brown coal, or lignite, is found in a number of loc lities in Mexico, but is little used, practically not at all in a commercial way. As a rule it presents the same peculiarities both as to formation and character as the lignites of Texas, Colorado and other localities in the United States.

STEAMSHIP CONCESSION.

The *Diario Oficial* publishes the concession granted to Mr. Elliseo Canton Julio for the establishment of two lines of navigation, one between the ports of the Gulf of Mexico, with the privilege of extension to the United States and Europe; the other between the ports on the Pacific Coast and the United States and South America.

These navigation companies must be organized within a year from date; within two years one of the lines must be in service; and within two years and three months the other line.

The Pacific line will be composed of three steamers of 2,500 tons each, and two of 500 to 1,000 tons each; the former to have a speed of twelve knots, and the latter of eight.

The Gulf line will have three steamers of 4,000 tons each; two of 2,000 tons each; and two of 500 to 1,000 tons each; the first five to have a speed of 12 to 14 knots, and the last two of 8 knots.

The Pacific steamers will run between San Francisco,

Cal., and Panama, with the privilege of extending further north and further south.

The Gulf steamers will ply between Vera Cruz, Progreso, Habana, and American and European ports, with the privilege of touching at any ports.

The two lines must make connections with the terminal stations of the Isthmus of Tehnantepec Railway, for inter-oceanic traffic.

There will be special rates for Government freight and troops and employes, as well as immigrants. The latter must not be less than twenty-five in number on any steamer, in order to obtain the benefit of the reduction.

Beans, peas, corn, rye, and other analogous national products will pay as a maximum freight 40 francs per ton between the Gulf ports and Liverpool.

The usual franchises and concessions are given, and the contract is for thirty-three years.

Before the completion of the time fixed for the opening of the lines the concessionaire must give a bond as a guarantee, in the sum of \$30,000, or deposit that amount in bonds of the public debt.

THE TOBACCO INDUSTRY OF MEXICO.

Speaking of the tobacco industry of Mexico, the *Two Republics* published at the City of Mexico, in its issue of June 2, says:

It is an indisputable fact that there is a growing demand for Mexican tobacco in the United States and also in several markets of Europe, and it is within the power of those who handle the leaf of this country to cause this demand to become very much greater. The best Mexican tobacco is too often converted into what are branded as Habana cigars, and many people who enjoy the fragrant weed of this country imagine they are smoking Cuban tobacco. As yet the cigar factories of this country can do little more than supply the domestic demand, and for this reason no great effort is being made to open up foreign markets for Mexican cigars. Until

the excellence of the cigars of this country becomes more generally recognized abroad, other countries will reap the greater part of the benefit to be derived from the growing popularity of the Mexican leaf. In other words, most of the tobacco exported from Mexico is made into cigars elsewhere, and smokers are not aware that the Cuban or American cigars which they enjoy are made chiefly from Mexican tobacco. With cigars the case is different. These are usually sold for what they really are, and the more cigars Mexico exports the greater will become the fame of the tobacco of this country.

The popularity of Mexican tobacco is further attested by the fact that the present growing crop of the State of Vera Cruz is about to be contracted for by owners of factories in Hayana and the United States.

THE TEHAUNTEPEC RAILWAY.

The Tehauntepec Railway which has been in process of construction for the past forty years, and has in that time experienced every phase of adversity, is now practically completed. It is announced that the first train from ocean to ocean will pass over it on August 1, proximo.

The northern, or Atlantic, terminus is the port of Coatza-coalcos, at the mouth of the river of that name, and distant about twenty-five miles from the thrifty city of Minatitlan. The southern terminus is Salina Cruz, on the Pacific Ocean. The road is about 190 miles long, its general direction being north and south, traversing the southern portions of the States of Vera Cruz and Oaxaca.

This is the first transcontinental line constructed in Mexico, and its completion is a matter of great importance not only to that Republic, but also to the entire maritime world; especially the United States. The distance between United States ports and those on the west coast of Central and North America and Australia, will be materially shortened over the present route via the Isthmus of Panama.

The Republic of Mexico wisely retains control of this railway.

ENCOURAGEMENT OF MERCHANT MARINE.

The recent session of the Mexican Congress made the following provisions looking to the encouragement and development of the merchant marine of that Republic.

Congress, before adjourning, empowered the Executive to take all the necessary measures for the creation of a Mexican Merchant Marine, subject to the following conditions:

I. Foreigners may be permitted to acquire national vessels.

II. The present legislation as to the make up of crews is to be repealed.

III. Registration of native or foreign-built vessels under the Mexican flag is to be facilitated by the abolition of the bond for the proper use of the flag.

IV. The existing system of issuing shipping licenses is to be modified, and the rule making obligatory the renewal of such licenses is to be done away with.

V. A. Marine Registry is to be established as a measure of protection to seafaring men.

VI. Bounties for the encouragement of shipbuilding may be granted in accordance with the following principles:

a. The bounties for steamers shall be greater than for sailing vessels.

b. The amount of bounties shall be assessed according to the gross tonnage of the vessel.

c. The bounties for the construction of engines and other auxiliary apparatus shall be adjusted to a standard unit not less than one hundred kilograms in weight.

VII. Navigation bounties may also be granted in accordance with the following principles:

a. The unit of the bounty shall be greater for sailing vessels than for steamers.

b. The bounties shall be proportional to the tonnage of the vessels and the distance run, measured on an orthodromic line.

c. The bounties shall be granted to all shipbuilders and owners, and for not more than ten years.

d. The navigation bounties shall be on a descending scale.

c. Sailing vessels of less than fifty tons and steamers of less than seventy-five tons are not to be entitled to a bounty.

VIII. A temporary reduction or removal of the import duties may be granted on materials of all kinds which enter into the construction of wooden, iron, or steel vessels, but in order to enjoy the benefit of such exemption importers must give a bond for the duties, to be cancelled when the employment of the material in the construction of the vessels has been proved.

IX. The Executive may concentrate all matters relating to the national marine under the control of a new department of Government.

X. Foreign vessels may be permitted to enter the coasting trade, but only in particular sections and for a given length of time, the Executive always reserving the right to enforce the prerogatives of national vessels in this trade.

SANITARY DUES.

The President of the Republic of Mexico has approved the bill recently passed by Congress authorizing the collection of "sanitary dues," as follows:

I. For bill of health, according to the following scale:

Mexican and foreign vessels sailing for a foreign port are to pay: Steamers, \$5: sailing ships, \$3.

Mexican and foreign vessels sailing for a Mexican port are to pay: Steamers, \$3; sailing ships, \$2.

11. For sanitary visit, as follows:

Vessels arriving from abroad are to pay 2 cents per ton's capacity at the first Mexican port at which they touch and 1 cent at the others; but the dnes are never to be less than \$10 at the first port and \$5 at the others.

Vessels trading between Mexican ports are to pay 1 cent per ton, but the dues are never to be less than \$3.

III. Quarantine dues, as follows:

Mexican and foreign vessels, withou: distinction are to pay

3 cents per ton's capacity for every day which they are held in quarantine.

Every person on board is also to pay a given sum per day, according to a schedule to be drawn up by the Board of Health.

IV. Charges for disinfection:

These dues are to be collected according to a schedule to be drawn up by the Board of Health.

[From the "Two Republics" of June 30, 1994.]

PEARL FISHING.

Señor Cornejo's company have the largest concession for pearl fishing given by the Government. It reaches from the limits of Guatemala to the mouth of Colorado River, in the Gulf of California, with exception of the islands of Espiritu Santo, Cedros, and San José. Señor Cornejo informs us that the annual take of pearls averages \$150,000, and the take of shells from 400 to 500 tons, which are worth from \$140 to \$160 per ton. The apparatus used for pearl fishing is now of the latest improvement, and accidents are very rare. There is still a little diving done in the old way by the Indians, "buzos de cabeza," on their own account. Some of these men will go down in thirty and fifty feet of water, and remain under water close to three minutes.

The darker colored pearls are the most valuable. The black, green, and blue of various shades are not found in other parts of the world. The vessels and apparatus of the company are valued at \$150,000. There are 40 fishing boats at 8 tons burden; 7 vessels of from 25 to 100 tons. Every year some notable pearls are taken, and this year, between September, 1893, and May, 1894, \$80,000 worth of pearls were secured, among which were five or six splendid ones, two black and three blue, exceptionally beautiful, weighing six carats each and worth from \$5,000 to \$10,000 each.

The principal markets are London, Paris, and Germany.

PRICE OF PUBLIC LANDS IN MEXICO.

The following is the schedule of prices at which public lands are to be sold during the fiscal year beginning July 1, 1894. They are the same as those at present in force.

	rice per hectare— (2½ acres.)		
Aguas Calientes	\$2	25	
Campeche	I	65	
Coahuila		75	
Colima	2	25	
Chiapas	I	55	
Chihuahua		75	
Durango		75	
Guanajnato	3	35	
Guerrero	· I	10	
Hidalgo	2	25	
Jalisco	2	25	
Mexico	3	35	
Michoacan	. 2	25	
Morelos	. 4	50	
Nuevo Leon		75	
Oaxaca	. I	IO	
Puebla	. 3	35	
Queretaro	. 3	35	
San Luis Potosi	2	25	
Sinaloa	. 1	IO	
Souora	. 1	IO	
Tabasco	. 2	00	
Tamaulipas		75	
Tlaxcala	. 2	25	
Vera Cruz	. 2	75	
Yucatan	. 1	65	
%acatecas		25	
Distrito Federal (federal district)	. 5	6o	
Tepic (territory)		65	
Baja California (territory)		65	

These prices are usually payable in some form or other of Government security.

The Mexican Government has recently granted concessions for the construction of the following railways: A line from Aguas Calientes to the mines of Tepezala; from La Paz to

the mines of El Triunfo in Lower California; from San Juan de las Huartas to a point on the Pacific Ocean; a line from Perote to Tezcutlan; from Mazatlan to Rosario; from San Luis de la Paz, State of Guanajuato, to San Miguel in Allende on the Mexican National. The concession to the Mexican Pacific Railway has been declared null and void.

The President of Mexico has decreed that the impost of \$500,000 shall be levied on all the distilleries of alcoholic liquors for the next fiscal year the same as last fiscal year.

The following are items taken from Mexican Financier of May 26, 1894:

The exportation of dyewoods from the State of Sinaloa is a new industry which promises to grow to considerable proportions. A shipment of 700 tons of the wood consigued to Falmouth, England, was recently made from the port of Perihuete. Shipments are also being made from Altata.

A company with a capital of \$50,000 was recently organized at Tlacotalpam, State of Vera Cruz, for the purpose of engaging in the manufacture of cotton-seed oil. The necessary machinery is about to arrive from the United States, and it is hoped that its erection will be completed and the whole mill in running order before the close of the year. It is intended also to export the crushed seed to England, where it is made into cakes for cattle. It is probable, too, that the company will undertake the extraction of oil from the coyol nut and the castor bean.

JALISCO.—A company to work the gold placers at Pihuamo was organized at Guadalajara, the 15th inst. Ventura Anaya y Aranda was chosen president. Messrs. H. A. Hilton and A. G. Higbee, both experts of much experience in this class of work, started for Pihuamo on the 16th, and will at once begin the erection of sluices and commence active operations. The claims owned by the company comprise a zone ten kilometers long, following the course of a river which in the driest season has an abundance of water for

working requirements, and great hopes are entertained that the enterprise will prove an unqualified success.

The San Lorenzo Company, in the State of Sinaloa, Mexico, has opened the first 400 meters of the irrigation canal, the portion most difficult and costly. Some 1,500 meters yet remain to be opened. When this work is finished 100,000 acres of very fertile land will become available.

The Governor of the State of Guanajuato, Mexico, has issued a circular throughout the State, calling for full statistical data relating to farming properties, and mines and reduction works. He has also in view a law for modernizing the schoolrooms of the State so as to improve the hygiene and convenience for teaching.

ECONOMIC RESOURCES OF THE ARGEN-TINE REPUBLIC.

From an official volume entitled "Statement Regarding the Economic and Financial condition of the Argentine Republic," we extract the following interesting information regarding that country.

With an area of 2,894,257 square kilometers there are scarcely 4,531,000 inhabitants. That is to say, there are 1.6 inhabitants per square kilometer, while Belgium shows 242; Spain, 34.6; and the United States, 7 inhabitants per kilometer.

While the population during the last decade has increased 50 per cent, owing to immigration and natural growth, the cultivated area of the Republic has increased 300 per cent. As compared with eighteen European countries, the Argentine Republic holds the lowest rank. It has 14 kilometers under cultivation for every 1,000, whereas France, Belgium, Italy, and Spain present, respectively, 549, 539, 402 and 391 kilometers.

Cattle breeding and agriculture engage chief attention in the Republic. During the last ten years the increase in horned cattle has reached 57 per cent.

In 1883 there were 65,000,000 sheep, and in 1892, 75,000,000 head, or, say, an increase of 15 per cent.

Taking the three quinquennial periods from 1878 to 1892, the following statement shows the chief products exported:

Products.	1878-82	1883-87.	1888–92.
Woollons	485 692	602,436	685.164
Cowhidesthousands	11,504	12,744	19,001
Meat productslons	141,432	159,070	321,115
Tallow	77,541	73,283	91,088

With reference to agricultural production, the following statement shows the progress realized in this branch during the last ten years:

Products.	Exports.		
	1878-82	1883-87	1888-92.
Wheattons Maize	31,243 193,996 7,787	523.427 943.708 26,688	1,395,294 1,814,024 47,635

The above three products, when added to those of the herds and flocks, represent about 80 per cent of the value of the annual exports.

The chief manifestations of the manufacturing industries are connected with the production of sugar, wine, eau de vie, beer, matches, stearine candles, corn milling and meat preserving.

The sugar produce in 1883 was 12,000 tons; to-day it is almost 35,000. The production of wine in 1883 is put at 200,000 hectoliters; at present it exceeds 660,000.

And if the import returns as to these products are examined, it will be found that said imports, besides beer, eau de vie, matches, edible grain substances, furniture, etc., have decreased in proportion to the national production, the development of which, in turn, depends upon the ever-increasing needs of home consumption.

According to returns of the Inland Revenue Office, the seventy four breweries that are in operation in the Republic had an output in 1892 of 4,040,827 litres of small beer and 8,578,139 of ale.

There are at present 193 distilleries, with an acknowledged output of 37,242,069 litres; 364 factories of spiritous beverages, with an output of 4,011,047 litres per annum; six large match factories, with an annual output of 125,549,000 boxes.

The bank of the nation keeps a statistical and minute

record of the factories whose owners are desirous of opening an account there; and the data on the matter show that there are in the metropolis of the Republic 347 factories whose owners possess in round numbers a capital of \$40,700,000, and who employ \$2,200 operatives.

The public land belonging to the State amounts to 42,406 square leagues, without taking into account those let out on lease.

During the last ten years more than 10,000 kilometers of railroad have been constructed. The traffic of these lines has increased as follows. In 1885 there were 5,587,299 passengers; in 1892 there were 11,709,017; in 1885 there were 4,145,117 tons of goods carried, and in the first half of 1893 the figures were 6,360,260 tons.

The number of letters, telegrams and parcels sent through the post is continually increasing.

The value of the imports, which amounted to \$80,000,000 in 1883, rose to \$164,000,000 in 1889, and fell to \$67,000,000 in 1891, in consequence of the crisis. In the first six months of 1893 the value of the imports stood at 50,291,966 gold dollars.

The exports, which in 1883 stood at \$60,000,000, in 1892 had reached \$113,000,000, and in the first half of 1893, \$70,355,939 in gold, with this peculiarity, that the increment has been a constant one during these ten years, a circumstance which shows beyond all question that the crisis has not in the least influenced the sources of production of the country.

The revenue has continued to increase, as may be seen from the following figures:

	Amount in millies	
Quinquennium-	dollars.	Per cent.
1878-82	100.7	
		8o
1888-02	380.5	

In 1891 there was an emigration of 44,120 persons, while in 1892 there was an excess of immigration over emigration of 10,080, and the first half of 1893 of more than 3,000.

CITY OF BUENOS AIRES, STATISTICS MARCH, 1894.

The rainfall for the month was 1.15 milimeters.

On March 31 the population was estimated at 586,665 inhabitants.

There were 2,103 births, the nationality of the parents being: Argentines, 228; Argentine father, foreign mother, 48; foreign father, Argentine mother, 215; foreigners, 1,239. The nationality of the remaining parents is classified as unknown.

There were 407 marriages, the nationality of the contracting parties being: Argentine husbands, 75, wives, 109; Italian husbands, 163, wives, 149; Spanish husbands, 84, wives, 75; French husbands, 32, wives, 34; English husbands, 8, wives, 6; German husbands, 7, wives, 6. Remainder unknown.

The deaths amounted to 1,010, which is a slightly higher rate than in the month of February, and lower than the month of January. The nationalities of the deceased were as follows: Argentines, 730; Italians, 181: Spaniards, 75; French, 42, English, 16; Germans, 4: rest unknown: 543 deaths were of children under 4 years of age. There were 72 deaths from infectious diseases, being: measles, 1; diphtheria, 39; scarlet fever, 5; typhoid, 20: croup, 6; influenza, 1; 525 deaths occurred in the daytime, and 586 at night.

The port returns show 198 vessels of every description as entering, with 12,047 passengers, and 124 sailings, with 6,618 passengers.

The immigration returns show entries from beyond seas 3,499, and emigration to beyond seas, 2,568. The nationality of the immigrants was: Italians, 2,685; Spaniards, 468; French, 113; Germans, 70: Austrians, 51; Belgians, 23; English, 20; Swiss, 20; Danish, 8; Portuguese, 8; Russians, 8; North Americans, 4; and Argentines, 14.

The police returns show a total of 1,048 prisoners in the penitentiary, and 122 in the correctional prison for women and children; 436 cases of assault, homicide, and robbery took place during the month, and 3,256 breaches of the peace, 2,009 of which were cases of drunkenness. There were 83

accidents, causing injury to 86 persons. There were 8 succides, and 8 attempted suicides. Seven fires were reported, the losses amounting to \$71,950, of which \$58,400 was covered by insurance.

The real estate sales comprised 829 properties for \$7,682,017, the average rate per meter being \$13.66. The nationality of the sellers and buyers was (cents omitted):

	Sellers.	Value of sales.	Buyers.	Value of purchases.
Argentiues	339	\$3,946,428	168	\$1,996,406
Italiaus	225	1,133,872	404	1,475,711
Spaniards	92	360,417	66	684,451
French		253, 167	34	602,023
Euglish	29 8	122,006	7	40,128
Geruiaus	31	128,364	25	648,193
Companies		1,227,807	11	1,315,052

The nationality of the remainder is unknown.

One hundred and seventy-six properties were mortgaged for a total of \$1,865,344, being an average of \$23.90 per square meter

The transactions on the Bolsa amounted to \$529,596,076, and \$36,772,689 gold were sold.

Forty-five trade-marks were registered and nineteen patents granted.

At the end of the month there were 8,329 patients in the hospitals and retreats, and 1,478 in the lunatic asylums.

The entries into the markets comprised 42,223 head of cattle, 67.594 sheep, 556 pigs, 142,909 fowls, 5,490 turkeys, 2,953 ducks, 1,315 brace partridges, 8,730 brace pigeons, 4,710 rabbits, 2,338 geese, 5,106,435 kilos vegetables, 29,729 kilos cheese, 2,821,037 kilos fruit, 202,061 kilos fish, 12,186 kilos shellfish, 16,538 kilos butter, 77,832 kilos tripe, 112,377 dozen eggs.

The 287 bakeries used 3,004 tons of flour.

The waterworks supplied 2,511,963 kiloliters of water.

The eight tramway companies carried 6,903,948 passengers, making 172,750 round trips, employing 7,187 horses, 3,487 personnel, with 428 cars in service.

The six railway companies carried 635,402 passengers, and 156,950 tons of freight.

The postoffice dealt with 6,547,664 letters, etc.

The messenger service ran 12,181 messages.

Seven thousand one hundred persons attended the race courses, and spent \$511,294 at the "sport."

The theatres were attended by 114,861 persons, the gross income of the thirteen which were open during the month being \$134,596.

The public lighting was done by means of 7,513 gas lamps, consuming 300,520 cubic meters of gas, at a cost of \$63,860; and 5,213 kerosene lamps, using 39,090 liters of kerosene, at a cost of \$13,030.

Eight thousand seven hundred and nine tons of basura were burnt during the month.

CHILE.

THE NITRATE INDUSTRY.

The totals exports of nitrate from Chilean ports for the year 1893, amounted to 20,655,161 Spanish quintals, as follows:

	Quintals.
To the United Kingdom, for orders	10,259,887
The United Kingdom, direct	386,441
Germany	5,016,779
Holland and Belgium	922,883
Mediteranean ports	272,941
France	1,314,767
United States, east coast	2,187,277
United States, west coast	190,417
Mauritius	45,031
China	390
Chile	58,424
Peru	195
Bolivia	49
Ecuador	40

Of this total there was shipped from the different ports quantities as follows:

Iquique	10,014,231
Pisagua	4.683,769
Junin	2,332,626
Coleto Buena	550,950
Taltal	1,435,307
Antofagasta	668,871
Tocopella	
-	

The exports for the first quarter of the year 1894, show an excess of 1,736,494 quintals over that of the corresponding period of the preceding year.

The total value of the exports of nitrate for the year 1893, was \$29,760,000.

Last March the Chilean Government published a notice

in the principal cities of Europe and the United States, inviting proposals for the purchase of the first lot of the Government nitrate beds and nitrate refineries in northern Chile. The senventeen different properties then advertised comprised 1.305 acres not vet worked, and 678 acres more or less worked; the amount of merchantable mitrate of soda remaining in these seventeen deposits was estimated by the Government engineers to be 1,603,739 tons, and its market value as it now lies in the beds was appraised at \$2,500,000. The bids were to be opened at Santiago, on June 15, and the sale awarded to the highest bidder. The Chilean Government has now given notice of the sale of the second lot of nitrate beds in the same district. The appraised value of these forty-three properties now advertised for sale aggregates \$9,504,809, United States gold; they contain 5,513 acres unworked, and 1,408 acres partly worked, and are estimated to contain 4,634,967 tons of merchantable nitrate of soda when refined. The bids are to be opened at Santiago, October 15, These nitrate deposits average twenty-six miles by railroad from the shipping ports, and the crude nitrate (caliche), averaging 40 per cent merchantable nitrate, is appraised by the official engineers at about \$2 per ton in the bed. To facilitate intending purchasers the plans and specifications of the several nitrate properties now offered for sale have been sent to the Chilean consulates in this country and in Europe. The second sale now advertised is about three times as large as the former lot.

The mineral exports from Chile for the year 1893 were as follows:

Copper	\$4,320,000
Manganese	384,000
Gold	96,000
Silver	7,200,000
Nitrate	29,760,000
Total	41,760,000

VENEZUELA.

NEW REGULATIONS AFFECTING FOREIGNERS IN VENEZUELA.

[Gaceta Oficial de Venezuela, May 12, 1891.]

On May 12 and 14 the President of Venezuela approved the following enactments of Congress affecting the rights of foreigners in that Republic.

Under date of May 12, 1894, the President of the Republic of Venezuela approved a law passed by Congress regulating the exercise of the freedom of the press guaranteed to the Venezuelan citizens by Article XIV of the Constitution.

Article XIV of this law reads as follows: To be the owner, editor, manager, contributor, printer, or in any way a colaborer of a newspaper, book, pamphlet, or writing of a political character it is required to be a Venezuelan.

SECTION 1. Foreigners shall be permitted to be owners, editors, printers, managers, or colaborers of books, pamphlets, newspapers, or writings of scientific, literary, industrial, technical, or any other character not dealing with the politics of the country.

SEC. 2. Such foreigners as may violate this provision shall incur for the first time a fine of not less than one hundred and not more than one thousand bolivars. A double fine shall be imposed in the case of a second offense, and if the offense is committed a third time, the foreigner shall be expelled from the territory of the Republic.

DECREE OF MAY 14, 1894.

[Gaceta Oficial (Official Gazette), Venezuela, May 14, 1894.]

I, Joaquin Crespo, the Constitutional President of the United States of Venezuela, upon consultation with the Council of Government, considering:

I. That under Article 78 of the Constitution of the Republic, the President has the power, after having heard the opinion of the Council of Government, "to forbid the admission into the national territory, or to expel from it, those foreigners who have not a domicile in the country and who are notoriously pernicious to the public order."

II. That in order to carry these provisions into effect in the proper manner it is necessary to know who are the individuals who come into the country, as it has been done for the same purpose in some other nations, do hereby decree as follows:

Article 1. Foreigners arriving in Venezuela shall file before the Collector of Customs of the respective port a declaration, supported by the documentary evidence stating the following:

I. Their name and the names of their parents.

II. Their nationality.

III. The place and date of their birth.

IV. The place of their last domicile.

V. Their profession, occupation, or manner of making their living.

VI 'The name, age, and nationality of wife and minor children, if accompanied by them.

Article 2. The collectors of customs shall report by wire to the National Executive the facts stated in the said declarations. If no declaration is made they will report this fact.

Article 3. If the newly arrived foreigners have not documents to append to their declarations, the statement can be proved by the testimony of trustworthy witnesses who are acquainted with them.

Article 4. Foreigners who have entered the territory of the Republic during the last six months shall file the above said declaration before the Governor of the Federal district if they live in said district, or before the President of the respective State if they reside in its capital. Should they reside in any other place in the country their declarations shall be made before the respective local authorities, who will transmit them to the president of the State.

Article 5. In the cases referred to in the preceding Article, the Governor of the Federal district, or the President of the respective State, shall report the facts to the National Executive in the same manner as provided for in Articles 2 and 3 of the present decree, in order to enable the National Executive to decide whether those foreigners who have made unsatisfactory declarations, or who have been unable or unwilling to make any, are to be considered permicious or liable to expulsion.

Article 6. The consuls of the Republic shall cause the present decree to be published in their respective consular districts, for which purpose they shall have it translated from the Spanish into the language of the country. They shall send to the Government a copy of the newspaper in which the publication has been made.

Article 7. The Secretaries of Internal Relations, of Foreign Relations, and of the Treasury shall take charge of the execution of the present decree.

Given under my hand and the seal of the National Executive, and countersigned by the Secretaries of Internal Relations, Foreign Relations, and the Treasury, in the Federal Palace at Caracas on May 14, 1894, the eighty-third of independence and the thirty-sixth of the Federation.

JOAQUIN CRESPO.
JOSÉ R. NUÑEZ,
Secretary of Internal Relations.
P. EZEQUIEL ROJAS,
Secretary of Foreign Relations.
FABRICIO CONDE,
Secretary of the Treasury.

NICARAGUA.

The following information regarding gold and silver mining in Nicaragua, is taken from a letter of recent date from Mr. J. Crawfords, of Managua:

Valuable silver mines have been discovered in three mineral districts in Nicaragua. The ores are principally varieties of argentite. None of these mines have been developed.

Valuable "reefs" and "lodes" or "true fissure veins" of low grade containing gold are numerous in Nicaragua. Excepting two, the mines are worked by crude processes without regard to the character or constituents of the gold-containing deposit; yet they yield from one-half to two and one-quarter ounces of gold—about 670 fine to the ton of gangue, or ore. Water for power and wood for timbering are generally abundant and convenient to these mines.

Three mineral districts have been discovered in Nicaragua containing high-grade gold deposits in fissures and veins. Two of these deposits are about fourteen miles distant from sufficient water for power, or wood for timbering and for steam power. These mines have been worked only in small areas and a few feet deep. The fragments of quartz that show several particles of gold easily discernible by the naked eye, are selected by Indian boys. These are culled over again by men and the pieces of quartz perceptible to the unaided eye, are crushed into powder in the concave surface of a rock, a hand muller or pestle. The mixture of gold and mercury is separated from the gangue by water. By this process only quartz containing over \$500 to the ton is worked. It is yet impossible to give a reliable estimate of the gold per ton of gaugue in these high-grade mines. The gold or metal from these mines is usually .887 to .900 fine.

Valuable placer mines have also been discovered in Nicaragua. One district is at Princapulka, on the southeastern

side of a mountain range in northeastern Nicaragua; the other is on the northwest side of the same range and in the same section. These mines yield about four ounces of gold per day, average, to four miners with picks, shovels and rocker.

No hydraulic power works have yet been erected in either of these districts, although the water in creeks and rivers descends over numerous cascades, rapids, and falls, from their sources in the mountains. The placer gold is from .867 to .872 fine. It is mixed with silver.

ECUADOR.

From the Panama Star and Herald of recent date we make the following extract, showing measures which are proposed for increasing the revenues of the Republic of Ecuador:

"Among the many new projects and reforms that are to be laid before the approaching Congress is one for the purpose of increasing the country's revenues by a tax of 4 sucres per quintal upon the quantity of cocoa harvested, and and s.2.40 sucres upon coffee. The idea is very popular in the interior, but, as may be supposed, quite the reverse along the Pacific slope, or to be concise, the cocoa and coffee producing area.

"The wants of the country are increasing every day; fresh liabilities have to be met, and its credits maintained, but these very desirable ends can not be obtained upon a palpably empty purse. Up to the present everything—with one exception has been taxed and surtaxed, until the strain upon each industry has become too great. Until recently, if extra funds were required, an appeal was made to the import dues, which to-day are 40 per cent (!) in excess of their original standard. As a natural consequence of this the consumer has borne the burden of contributing to the country's advancement. This would be quite fair were one man's requirements greater than those of his fellow. Quite right, if the man who, to use a vulgar phrase, is making money "hand over fist," were to expend a correspondingly large amount in his own private needs, as the poor quill-driver earning the princely salary of 5100 a month. Or, I would go still further, and yet say that it was quite right did the surtaxes not apply to the prime necessaries of life. But such is not the case; your poor man spends as much as his richer brother, not in luxuries, be it

understood, but in the actual requirements of his daily existence. Manifestly, the system is, to say the least of it, unfair. Possibly this view of the question has struck the people in power (for the measure I mention emanates from a Government quarter) and they have properly decided to make the money grub contribute a just and equitable share by taxing the source of his riches.

"As a matter of fact the prime cost of a quintal of cocoa, that fetches \$14.50 in New York, is not more than 7 sucres, or, say, \$4 American gold. The freight from Guayaquil to the United States is \$1.10, so that between the producer, the broker, and the exporter the sum of \$9.40, or, say, \$4 per cent or thereabouts of its actual value, is divided. From this, one must reduce 4 per cent, which is the exporter's maximum share. Thus we have the producer and the broker—or, more comprehensively, the debtor and creditor (since they invariably stand in this relation to each other), deriving enormous profits from a source that does not supply the country with a single centum of revenue, for it must be borne in mind that it is the New York merchant who pays the exports dues.

"Cocoa is the mainstay of the country and the nature of each year's crop determines her commercial relations for the time being, but these relations, though of paramount importance, can but slightly affect the cocoa grower and his creditor, who derive the greatest profits and contribute the minimum to the public revenues. They are always certain of huge gains while a demand for the article exists, and should, until the demand and their fabulous profits cease, contribute a fair share toward the support of the country."

GUATEMALA.

INTERNAL TAXATION.

By legislative decree No. 494, the Government of Guatemala orders that from and after July 1, 1894, all taxation for national purposes shall be designated under six heads as follows:

I. Stamped paper and stamps. All contracts and documents of all kinds, shares of stock, bonds, insurance and other policies, pawnbrokers' tickets, receipts, powers of attorney, letters of credit, leases, bills, accounts, drafts, bills of exchange, doctors' bills, promisory notes, protests, last wills and testaments, manifestoes, patents of land, all petitions, writs, returns and records of all kinds in judicial proceedings, certificates, certified copies, orders, passports, all memorials and petitions to the authorities whether executive, legislative or judicial, titles, diplomas, commissions, etc., shall have to be written on stamped paper, ranging in value according to the value involved in the transaction to which the document refers: 1 cent when the value involve! is less than \$10: 10 cents when it does not exceed \$100, and 10 cents for each \$10 when the amount exceed \$100.

When no stamped paper of the required class can be had at the place, this circumstance shall be set forth; and the payment of the tax shall be made by attaching to the document as many stamps of the class or classes provided for by the same decree as may cover the value of the stamped paper.

Commercial books of all kinds, registries, books of accounts, etc., shall require a 10-cent stamp on each folio.

Articles II and III of the decree explain particularly the amount to be paid in each case.

The failure to comply with the provisions of this decree will

render the document inadmissible as evidence, until the defect is cured, besides subjecting the signers thereof to pay a fine, equivalent to 10 per cent on the amount involved in the transaction, or to twenty times the value of the stamp or stamped paper which ought to have been used, if amount is expressed. But no fine shall exceed \$500.

The fines shall be to the benefit of the informers or of the authorities who discovered the violation of the law, if there is no informer.

II. Direct tax on the sales and exchange of real estate.

This tax, amounting to 5 per cent on the value of the property sold or exchanged, shall be paid on all conveyances of real estate by sale or exchange, unless the property belongs to the Government, or is worth less than \$100. When the conveyance is made for the settlement of some estate, among the heirs themselves, the tax shall not be due.

No deed of conveyance shall be recorded if no evidence is attached to it of payment of the tax.

Fines and other penalties are provided for to punish the violations of these provisions.

III. Tax on conveyances by descent, and gifts or donations. All conveyances by descent, whether under a will or ab intertato, and all gifts or donations, shall pay as follows:

One per cent on the value of all donations and legacies or bequests to legitimate descendants.

Two per cent on the value of all donations and legacies or bequests to legitimate ancestors, or to illegitimate recognized children or relations.

Three per cent on the value of all donations and legacies or bequests to wife or husband, legitimate or illegitimate brother or sister, and adopted children.

Five per cent on the value of all donations and legacies or bequests to all collateral relatives and to the foster father.

Eight per cent on the value of all donations and legacies or bequests to all relatives by marriage.

Ten per cent on the value of all donations and legacies or bequests to strangers.

The decree establishes some cases of exception, and provides for the enforcement of its provisions in this respect.

IV. Consumption duties.

Under the head of "consumption duties" charges are made. on the consumption of meat and the manufacture of salt.

Each head of cattle slaughtered shall pay \$2.50, and each quintal (100 pounds) of salt shall pay 50 cents.

V. Tax on real estate.

A tax of six per 1,000 on the assessed value of real estate shall be paid in Guatemala.

VI. Road tax.

Every man between the age of eighteen and sixty years is bound to work four days every year on the public roads, or to pay in lieu thereof 50 cents for each day of service.

COMMERCIAL AND INDUSTRIAL INFOR-MATION.

MEXICO.

The project of sanitation of the City of Mexico undertaken by Mr. Orozco gives promise of great success.

Thus far all the scientific points upon which the plan was based, have been borne out by practical results. The pure water of La Viga has been successfully diverted from its former course and made to flow through many of the city drains, thus effectually preventing the stagnation and decomposition of sewage. The general health of those portions of the city in which Mr. Orozco's plan has been realized has been so greatly improved that he has been the recipient of an emphatic and spontaneous vote of thanks from the residents of those sections.

In his most commenable scheme looking to the proper drainage of the City of Mexico, and consequent improvement of the sanitary condition of the city, Mr. Orozco has encountered two serious obstacles, both of which, however, it is thought will be overcome.

The first is the defective construction of many of the sewers which does not admit of the passage of water through them; the second is, that Mr. Orozco is not permitted to dam the water of La Viga to a level necessary to give the passage of the water through the sewers the velocity and volume requisite to reach all portions of the sewage system and properly scour them out.

It is understood that the objection to Mr. Orozco's damming the water of La Viga to the necessary level, is on account of a slight and temporary inundation of private property adjoining the canal when that level was attained. To meet this difficulty it is proposed to construct some levees, or other means of protection. It is also proposed to so repair the present water mains and sewers of the city that they may be utilized in Engineer Orozco's scheme.

The following monthly summary of the weather for June, 1894, is taken from the official report of the Central Meteorological Observatory of the City of Mexico:

Temperature of the air (deg. Falir.)—	
Mouthly mean, in shade	64.0
Monthly mean, in sun	64.6
Maximum, in shade	81.5
Maximum, in open air	90.3
Minimum, in shade	50.9
Minimum, in open air	44.6
Total range, in shade	62.6
	45-7
Barometrical pressure (inches)—	
Monthly mean	23.0S
Maximum	23.18
Minimum,	22.94
Greatest range in 24 hours.	0.16
Total range in the month	0.24
Relative humidity (saturation 100)—	
Monthly mean	59
Clouds—	
Prevailing direction	N.E.
Number of cloudy days	15
Number of clear days	7
Winds (miles per hour)—	
Prevailing direction	N.W.
Mean velocity.	3.3
Maximum	27.9
Rainfall (inches)—	
Total in month	1.6
Greatest fall in 24 hours	0.3
Number of rainy days	16
Evaporation (inches)—	
Monthly mean, in shade	0.13
Mouthly mean, in sun	0 37
Maximum in 24 hours, in shade	0.34
Maximum in 24 hours, in sun	0.53

The copy of the Mexican Financier of July 7 was printed on paper manufactured by the San Rafael paper mills of the City of Mexico. In its quality and finish this paper compares favorably with that used by periodicals in the United States and other countries. Speaking on this subject the Mexican Financier says:

"We have hitherto imported our paper, but with the recent great advance in the art of paper-making here, inaugurated by the San Rafael mill, we find it possible to supply ourselves at less than the price of importing the same class of paper. Cheap silver will, we fear, be a very dear metal for foreign manufacturers of articles similar to those made in this country. Mexico, as we have pointed out before, is following in the same path of industrial independence as Japan and China."

The Sonora and Sinaloa Irrigation Company, which owns a concession, granted in the name of Mr. Carlos Conant, for the construction of an irrigation canal in the States of Sonora and Sinaloa, is rapidly pushing forward its work. When completed the canal will be seventy feet wide on the bottom, having a fall of fifteen inches per mile, and will carry a stream of water six feet deep. For more than one year a steam dredge costing \$27,000 has been at work. The concessionaire has a land grant of 550,000 acres, lying between the rivers Vaqui and Mayo, which will be opened to settlement as soon as the canal shall have been completed and the land subdivided.

The concession given to W. H. Carlsen in April last for the construction of a railway from Tijuana, Lower California to Ensenada has been officially promulgated. This

road must be completed within eight years.

A concession has been recently granted to Messrs. Rubira & Co. to erect at Tajamiroa, in the State of Michoacan, a plant for the manufacture of cloth from cotton and wool, as well as from the other fibers which grow freely in that region, and have not been hitherto utilized for manufacturing purposes.

This enterprise is interesting, not only as being one of many new industries springing up in our neighbor Republic, but particularly because it purposes to bring into use resources of the country which have been left slumbering during all these years.

A company has been recently formed for the purpose of developing and working antimony beds lately discovered near the station of Guzman on the Mexican Central railway. The vein which has been followed for about thirty feet is

three feet wide. Miners get out 300 pounds of high-grade ore for \$1.50. The ore is remarkably pure and is absolutely free from arsenic or lead, it runs 50 per cent metallic antimony and commands \$46 per ton in Liverpool. Ordinary miners are plentiful and work for 50 cents per day; expert miners work for 75 cents per day.

By a recent arrangement the line of steamers now plying between New Orleans, Belize, Livingston, and Puerto Cortez will, in future, touch at the Mexican ports of Progreso, Vera Cruz, and Tampico monthly.

The concession granted by the Mexican Government to the Chiapas Mining Company, Limited, of London, for the construction of a railway from a point on the Teapa River, in the in the State of Tabasco, to Solosuchiapa, in the State of Chiapa, has been officially declared null and void, owing to the fact that conditions embodied in the concession had not been complied with. The concessionaries lose the guarantee deposit of \$6,000.

The concession held by Mr. Woodhouse for the construction of a railway between the stations of Guadeloupe and Apizaco, on the Vera Cruz line, to the iron works at Zacatlan in the State of Puebla, has been declared forfeited, owing to the failure of the concessionaire to deposit the required guarantee within the time stipulated.

The harbor works contractors of the city of Vera Cruz are considering a proposition from a French company represented by Engineer M. Emile de Morteau, looking to the permanent improvement of the harbor of that city. The plan as proposed is very extensive, involving the expenditure of \$7,000,000; when completed there will be a depth of twenty-seven feet of water alongside the wharves. The dredges, which will be used in the work are those formerly in the service of the construction of the Panama Canal.

In the month of May last, there was exported from Yucatan 33,437 bales of henequen (sisal hemp) weighing 11,831,502 pounds and valued at \$621,153.86.

DON IDIARTE BORDA.

[Communicated.]

Don Idiarte Borda was born in the city of Mercedes, the capital of the department of Soriano. His parents were Don Juan Idiarte and Doña Maria Borda, both of them French Basques and industrious people, who settled in that city in 1840. They established a restaurant, with ball-playing grounds attached, which at that period was the center of reunion of the great number of Basques who then resided in the picturesque city of Mercedes. Señor Idiarte Borda received no other primary instruction than what could then be obtained in the country schools. He learned to read and write in a small primary school, but never attended colleges or universities, because of the limited means of his parents. He was devoted to study and exceedingly clever, and by constant application he taught himself all the branches, which rendered him a well-informed man, relatively speaking.

When Señor Idiarte Borda reached the age of manhood, he married a beautiful young lady of Mercedes, Doña Matilde Baños, the daughter of an honest business man, Don Francisco Baños, and Doña Manuela Sanchez. This most distinguished lady is still living. About that time the political movement known as "la invasion," of General Don Venancio Flores took place, which resulted in the overthrow of the government of Don Bernardo Berro. Señor Idiarte Borda joined the revolutionary party and contributed to the triumph of its ideas.

After the pacification of the country, Señor Idiarte Borda, who was fond of public life, was elected justice of the peace, and filled this position for some time, until the revolution headed by Gen. Don Timoteo Aparicio broke out. Then Señor Idiarte Borda again took up arms in defense of his party, and was present in several encounters of that bloody struggle.

In the month of April peace was re-established, and Señor Idiarte Borda was called, successively, to fill the positions of Counsel for Minors, and Mayor of Mercedes. While holding the latter office the dictatorship of Don Lorenzo Latorre occurred.

In 1875, when the revolutionary movement known as the "Tri-color" took place, Señor Idiarte Borda lent his assistance to the cause, which was decided in the memorable battle-fields of Palomas and Guayabos—fighting by the side of Fonda, Lalleman, and other distinguished citizens who undertook to defend the institutions of the country trodden upon by the military movement of January 15, 1875. When the revolution was suppressed and the dictatorship of Colonel Latorre affirmed, Don Justo R. Pelayo was appointed Political Chief of the Department of Soriano, and he went to Mercedes strongly recommended to Bernardino Echevarria, who was a person of great influence in the department, and a great friend of the dictator, as well as the best friend of Señor Idiarte Borda.

When the elections for the new legislative chamber took place the Political Chief of Soriano, Señor Pelayo, acting in harmony with Don Bernardino Echevarria, recommended to the consideration of Colonel Latorre the following list of deputies, to represent the Department of Soriano, to wit: Juan Idiarte Borda, Antonio Gonzalez Roca, and Juan Meza. This ticket was accepted without objection and voted by the "colorados" and "nacionalistas," who took part in those famous elections—forerunners of all the others which have taken place up to this date.

Señor Idiarte Borda took his seat in the chamber, and the first act of that body was the approval of all that had been done by the Dictator. It may be said that from that moment the public life of the present President of Uruguay started. When the government of Don Lorenzo Latorre was overthrown, Señor Idiarte Borda remained firm in his seat in the chamber. His influence grew greater, and he became a warm friend of General Santos, whose confidence he enjoyed to the utmost degree.

When the revolution, which ended at Los Palamares de Soto (Quebracho) was overpowered, Señor Idiarte Borda, together with Señor Abdon Arosteguy, Dr. Benito M. Cuñarro, Dr. José Roman Mendoza and other deputies, entered into the conspiracy which was called "of the minority," their object being to overthrow the tottering government of that period. But Santos was informed of the purpose of those who up to that time had been his friends, and the latter saw themselves compelled to abandon the bountry and go to Buenos Aires. Most of them, however, soon returned to their own country, thanks to the change in the political situation operated by the cabinet called "Ministerio de la Conciliación."

When General Don Maximo Tajes was elected President of the Republic Señor Idiarte Borda was also elected to serve in the Chamber of Deputies as representative of the Department of Soriano, an election which did not please either the President or Colonel Galarza, both of whom were afraid that Señor Idiarte Borda would counteract their influence in the business of Soriano, in which they thought their influence ought to be eternally supreme. From that moment the rivalry which keeps the present President at a distance from the "chanás" leaders orginated.

In the preparatory movements which had preceded that election of 1887, Señor Idiarte Borda had been appointed Vice-President of the Executive Committee of the "colorado" party, and as such he could strengthen the bonds of friendship which connected him with Don Julio Herrera, then Secretary of War, who was preparing his way to become the President of the Republic.

It has been said that Señor Idiarte Borda took an active part in the financial transactions which ended in the failure of the National Bank and produced the violent crisis, the liquidation of which is now almost at an end. Notwithstanding this, the President of the Republic is rather poor, his whole property, consisting, as far as it is known, of the house on Ituzaingo Street, where he resides, and a concession granted him by the municipal corporation of Mercedes for the man-

agement of a market in that city in association with the Deputy Don José Modesto Irisarri and another person. This concession has been a subject of considerable opposition by the local press on account of its being considered prejudicial to the general interests.

In the preliminary movements for the last election, and while Señor Idiarte Borda was serving as a Senator in the Department of Maldonado, he was chosen to preside over the Executive Committee of the "colorado" party, and in that position he showed great ability and energy in carrying out the purposes of the party in power.

The new President of the Republic is a man of simple habits and amiable disposition; he is very systematic, and personally takes care of all domestic details in his house. He dislikes show and vain ostentation. This is the citizen whom the course of events has brought to preside over the destinies of the Republic of Uruguay.

