

Cattle Raising in the Americas



WHEN the United States ceases to be an exporter of beef and pork from whence will Europe get its meat?

Will the United States, with its large ratio of increase in population, with which the meat production by no means keeps pace, be able in the future to feed itself?

Must Europe and the United States curtail their meat consumption?

There is no need to take a pessimist's view in answering any of these questions. The meat proposition is already serious, it is true; but this is because we are at the turning of the ways and not because the immediate future, or even the future for some hundreds of years at least, presents any real difficulty to the solution of this proposition.

Leaving out of consideration all questions involving the so-called meat trust, the tariff, etc., and looking at the matter simply as a question of economy in meat production, there is no need to fear a famine, nor ought there to be any fear of high prices to limit the consumption.

A number of factors enter into the world's present meat problem, one of the most important of which is the change in conditions under which meat has been produced in the United States. The change from range to farm production of beef cattle and the improved shipping facilities for corn, which latter has revolutionized the hog industry, have together upset the balance in the meat market. Unlimited free range on government lands made cheap meat, but the taking up of these lands by settlers, and particularly the taking up of land around water sites has changed the whole situation. The extension of railways and an improved service has given the western farmer a choice, either to sell his corn or to feed for meat, where formerly he had no choice; it was either hogs or cease raising corn. He raised hogs because he was forced to it, and he bought range beef cattle to put them in condition for the market by feeding for a few months with a part of his surplus grain.

The raising of cattle on the free ranges of the west was the cheapest method of meat production at the time practiced in the United States, but it is a question whether beef may not now be produced, and is not now produced by a few farmers, even cheaper than on the western ranges in the past.

The poor quality of range meat, which necessitated several months of farm feeding and care in order to be gotten in condition for the market, the great losses in the herds due to insufficient food and water, and the lack of winter shelter made the business of cattle raising on the western plains a more or less uncertain and precarious industry. It was an exotic, and as such it will die with changing conditions.

The future of meat production in the United States is a farming proposition, and like all other questions connected with the national agriculture depends for its satisfactory solution upon the improvement of farm methods. To remain a meat-exporting country, lands must be brought up to the European standard of production. At that standard, or even considerably below, farming in the United States pays, and pays well, and in no way better than by turning grass and grain into meat. But until the United States adjusts itself to the changed conditions and can again enter the European market as a competitor with Argentina, Uruguay and Australia for the meat trade, where will Europe, and even the United States, should it have a temporary need for meat, secure their supplies?

The answer to this question is not difficult. It is only surprising that it has not been more fully recognized. The broad plains of Mexico and Central America, of Venezuela and Colombia, the Amazon region of Brazil, Bolivia, Peru and Ecuador rival, if they do not excel the famed pastures of Argentina and Uruguay as cheap meat-producing districts.

In the country of the Orinoco alone, Venezuela and eastern Colombia, there is an area of territory more than equal to France, Germany, the Netherlands, Belgium and Denmark, or ten times the size of the state of New York, which has its superior as a cattle country in no part of the world, if indeed it has anywhere its equal.

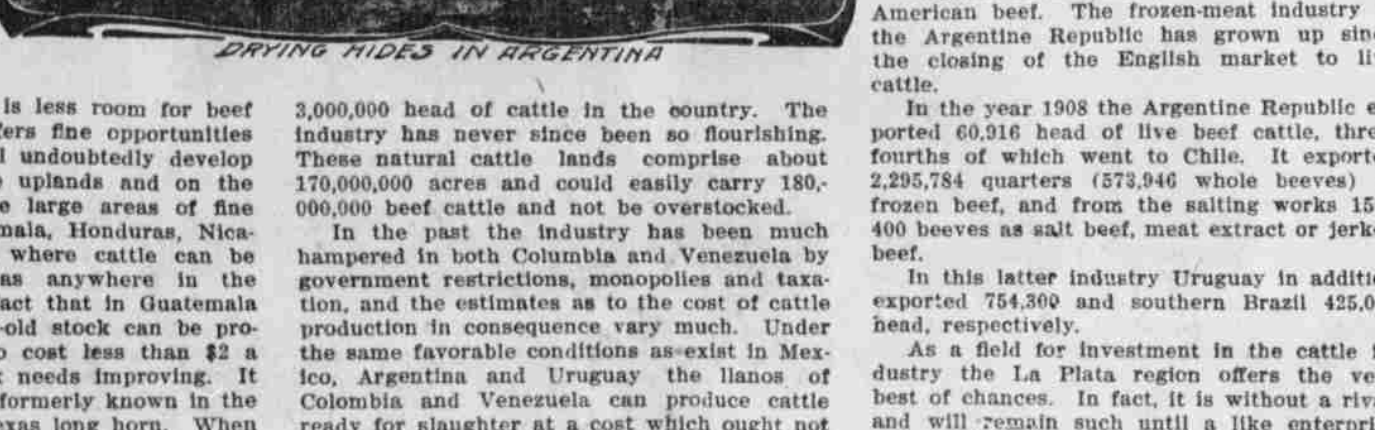
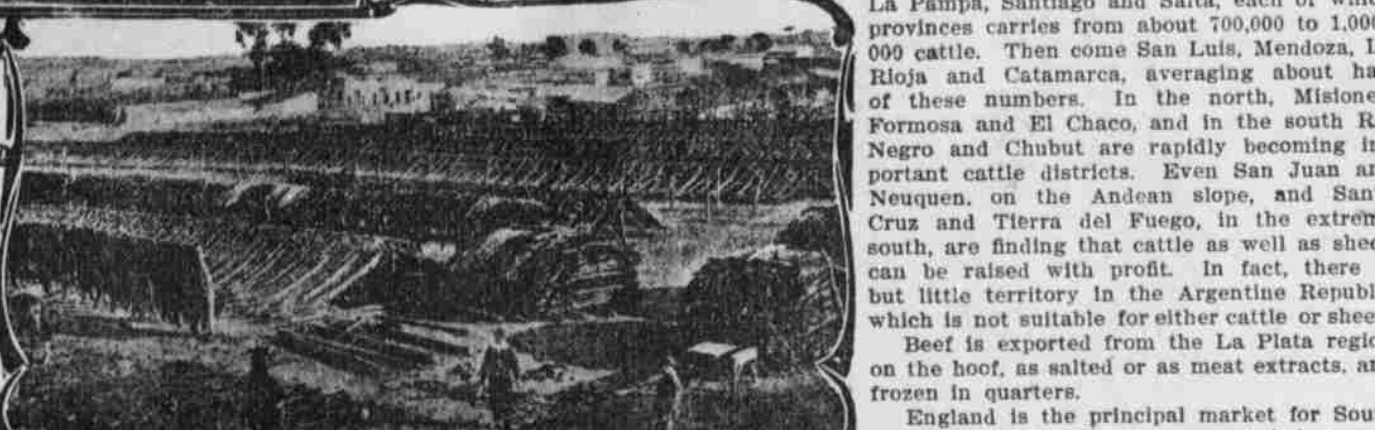
Mexico offers many advantages to the stock raiser. The conditions there are those with which stockmen from the United States are more or less familiar, which last fact, in part, accounts for the large investments of American capital made in this industry within the last few years in Mexico. Cattlemen own the land in large tracts of from 100,000 to 1,000,000 acres, acquired for the government by grant and at a very low figure. This prevents the shutting off from water, which has done so much to destroy the range industry in the United States. The winters are mild and there is no danger of loss from blizzards—in fact, the grazing is good all the year round.

The character of the ranges on the Pacific coast side in Jalisco, Michoacan, Guerrero, southern Oaxaca and Tepic are similar in character to the northern ranges, but not so well watered, and the grass is scantier.

On the gulf side there are entirely different conditions. On the slope of the eastern Cordilleras in the states of San Luis Potosi, Tamaulipas and northern Vera Cruz is the region known as the Huasteca Potosina, the country of the Tamesi, Panuco, Temporal and Tamazunchale rivers. This is an almost ideal grass country. It is a succession of valleys separated by grass-covered terraces or hills increasing in height from the low plains near the coast to the borders of the central plateau 6,000 feet. This slope receives the moist breezes from the Gulf of Mexico in the form of rain during the summer months and dew in winter, and is always free from frost, drought and excessive heat. The natural pasturage of this country is as fine as any in the world, except on the Orinoco and in the upper Amazon country. Cattle in good condition can be sent to market at a cost of less than \$10 a head. On the northern and western ranges lean cattle cost to produce from \$2 to \$5 a head and can be fattened for market to cost in all about \$10 a head.

The latest Mexican statistics show about 5,250,000 head of cattle in the whole country, of an estimated value of about \$8 gold per head. Chihuahua and Vera Cruz lead with about 400,000 head for each state. As compared with Argentina with its 30,000,000 head of cattle it can be seen that Mexico is but at the beginning of the industry; in fact, as present the country produces but little meat above its own needs, yet it could, on natural pasture alone, carry twice the number of cattle now grazing in Argentina, and could easily supply to the European markets from its surplus an amount of meat twice what the United States has even been able to supply from its surplus.

South of Mexico in Central America and in parts of Mexico not above mentioned there is yet another cattle country, where the climate is more tropical. On the Pacific side the area suitable for cattle is limited. It is similar to the Pacific slope of Mexico, but the country is more thickly settled, a larger proportion of the land is devoted to agriculture,



and consequently there is less room for beef cattle. The country offers fine opportunities for dairy stock and will undoubtedly develop along this line. In the uplands and on the Atlantic slope there are large areas of fine open country in Guatemala, Honduras, Nicaragua and Costa Rica, where cattle can be produced as cheaply as anywhere in the world. It is a known fact that in Guatemala and Honduras four-year-old stock can be produced on the ranges to cost less than \$2 a head. The native stock needs improving. It is the same which was formerly known in the United States as the Texas long horn. When crossed by Shorthorn bulls the resulting progeny is a first-class beef animal. Hereford, Galloway and Aberdeen-Angus crosses also produce good results.

At present the industry is almost entirely local. Millions of acres of the finest pasturage in the world, where the native grasses stand from knee to shoulder high, are unutilized. A tithe of the capital and enterprise which have produced such large results in Argentina and Uruguay would make Central America, although limited in area, an important factor in the world's meat market and would pay to the investors a handsome return on their investment.

In South America there are three great natural cattle regions which in area and adaptability for cattle production are unequalled in any other part of the world. The plains of the Orinoco, of the Amazon and of the Plata rivers are without doubt the best adapted for producing beef cattle cheaply and on a large scale of any other sections of either the old or the new world.

Behind the Venezuelan coast range of mountains lies the basin of the Orinoco. This river has nearly 500 tributaries and at its greatest length is 1,500 miles long. It is navigable from the ocean for about 1,200 miles. For about half its length it flows north and then turns almost directly east and continues in this line to the Atlantic. Near the bend of the Orinoco it is joined by the Apure, one of its chief tributaries, which has come down from the eastern Cordilleras of Colombia through the heart of the region of the llanos or prairie lands. These lands continue on to the east to the vertex of the delta of the Orinoco. They comprise about 150,000 square miles in Venezuela and about 120,000 square miles in Colombia. It is the largest single compact area of high-class natural pasture in the world. In the luxuriance of its grasses it is as far ahead of the pampas lands of Argentina as are these ahead of the short-grass lands of Kansas or Nebraska. It is an immense level prairie, thickly carpeted with para and guineo grass, growing twice as high as broom sedge on a neglected Virginia farm. It is crossed and intersected by hundreds of rivers flowing into the Orinoco or into its larger tributaries, the Apure, the Aranca, the Meta, the Vichada and the Guaviare. From these rivers spread out smaller rivers, creeks and gullies joining one river to another so that the whole is one great water mesh. In some places for a hundred miles one must cross water every half mile or less. The creeks and gullies, when wide enough are navigable for launches and flatboats and offer the best and cheapest possible system of highways leading directly down to the Orinoco and the sea.

From the earliest days of the Spanish conquest this country has been famed as a cattle land. At the time of the war of independence, in 1812, it was estimated that there were

3,000,000 head of cattle in the country. The industry has never since been so flourishing. These natural cattle lands comprise about 170,000,000 acres and could easily carry 180,000,000 head of beef cattle and not be overstocked.

In the past the industry has been much hampered in both Colombia and Venezuela by government restrictions, monopolies and taxation, and the estimates as to the cost of cattle production in consequence vary much. Under the same favorable conditions as exist in Mexico, Argentina and Uruguay can produce cattle ready for slaughter at a cost which ought not to exceed \$2 gold per head.

In the valley of the Amazon there are no such great prairie lands as exist on the Orinoco, yet on the whole there is as much or even more first-class cattle country, a considerable part of which is in easy deep-water connection with the world's markets.

The Amazon basin comprises one-eighth of the habitable earth and one-half of the most fertile portion thereof. In a territory so large as this it would be unreasonable not to expect to find many varieties of soil and soil cover, and such is the fact. Between the rivers tributary to the great river and back from the bottoms are here and there large tracts of open land similar to that found on the Gulf coast of Mexico, in the prairie lands of Louisiana and in Honduras and in Guatemala. This is all fine cattle country; there could be no better.

Near the headwaters of the great rivers that flow down to make the mighty Amazon, on the eastern slope of the Andes, are millions of acres of fine grass lands in Colombia, Ecuador, Peru and Bolivia, as well as in Brazil, that are more immediately available for cattle raising than are the lands farther east in the great basin.

The third great river basin of South America is that of the Plata river, with which must be included the southern half of Argentina, whose rivers drain directly into the Atlantic. Any account of the cattle industry of Argentina must of necessity be less a story of what can be done than of what has been done. Included in the Plata basin in addition to Argentina are Uruguay, Paraguay and southern Brazil. The cattle conditions are similar over all this area.

Argentina ranks third in the world as a cattle-producing country, Russia and the United States alone lead it; but Argentina has only about 6,000,000 inhabitants to feed, which accounts for the fact that it is the leading country in beef exports. Russia and the United States must consume most of what they raise; Argentina ships the greater proportion of what it raises, not only beef cattle, but horses, sheep, wool, corn, wheat and flaxseed.

At the last census, taken about two years ago, there were 23,116,020 cattle in Argentina and about 6,000,000 in Uruguay. This is nearly all grade stock of the best English blood—Shorthorn, Hereford and Aberdeen-Angus. Argentina and Uruguay cattle are reared under conditions somewhat peculiar to the locality. They are not range cattle nor yet exactly farm cattle, but little or no grain is fed, yet the export steers of Buenos Aires or Montevideo are fully equal in size and will cut as much prime beef and as little waste as the best steers of Kansas, Pennsylvania or south-west Virginia.

In the central provinces of Buenos Aires, Coroba, Santa Fe, Entre Rios and Corrientes the native grasses are better and more alfalfa is grown. These five are the principal cattle-



"BICYCLE" HAS FOUR WHEELS

Improvement Recently Made in Motorcycle Design, Bringing it Nearer to Automobile.

An improvement has been recently made in the design of the motorcycle, which brings it nearer to the automobile class. It has a carriage body and seat which gives it more the appearance of an automobile, but the greatest innovation is the introduction of auxiliary wheels, one on either side, by which the vehicle is instantly transformed into a four-wheeler. This change is desirable when the operator is wending his way through crowded streets where it is necessary to move slowly or when it is necessary to come to a stop. The additional wheels are



Four-Wheeled Motorcycle.

quite small, but large enough to answer all purposes and are controlled from the handle bar. This improvement will make the motorcycle available to many who otherwise are afraid to make use of it, on account of the necessity of maintaining a rather high rate of speed in order to keep the machine in an upright position.

LARGEST ANIMAL IN WORLD

Represented by Colossal Skeleton of Whale Eighty-seven Feet Long in New Zealand Zoo.

What is claimed as the largest animal in the world is represented by a colossal skeleton in the museum of Christchurch, New Zealand. This is the remains of a large specimen of the blue whale stranded on the coast of that country. This whale is probably the largest of all living animals. The length of the skeleton is 87 feet, and the head alone is 21 feet. The weight of the bones is estimated at nine tons. This gigantic whale gets its name of blue whale from the dark bluish-gray of its upper surface. The tinge of yellow on its lower part has led to the name "sulphur bottom," by which it is known on the western side of the Atlantic. It is otherwise known as Sibbald's rorqual (Baleenoptera sibbaldi).

The chief food of this gigantic animal is a small marine crustacean (Trysanopoda inermis), known to the whalers as "krill." Another species of the same shrimp-like group has been obtained in thousands from the stomachs of mackerel caught on the Cornish coast. The nearly related opossum shrimps, found in enormous number in the Greenland seas, form the chief food of the common whale. Some of the thysanopoda are phosphorescent and contribute to the luminosity of the sea.

PLANT LOOKS LIKE INSECTS

Spots on Orchid Resemble Flies and Bees—Imitation A Puzzling to Flower Scholars.

Orchid imitations are a puzzle to flower scholars. The whole appearance of the flower is suggestive of some insect, sometimes to quite a remarkable degree. It does not seem easy to find any real purpose that could be served by this resemblance, yet no one imagines that it can be accidental.

Any one who knew of the bee orchid, a native of Europe, and came upon it for the first time would at once recognize it. It seems to be a large velvety brown backed bee variegated with yellow. The two lateral petals might serve well for the wings of the insect.

In the center of the lip of the fly orchid there is a small bluish spot like the body of a fly. The two lateral petals are slender and curiously like the antennae of an insect. The whole illusion is complete and suggests to the casual glance that a few flies are hanging on the stem of some plant which has cast its flowers.

FINGERS AND FORKS.

"You must not use your fingers, dear. A fork will do instead." "Mamma looked down upon her son, and gravely shook her head. "It is not nice for little boys to use their hands that way. I'm sure, to hold a knife and fork. You learned the other day." "Not why?" asked Jacky, little rogue; "His eyes glow with fun. He glanced from mother's earnest face. To breakfast just begun. "I'm sure in everybody's mouth, This silver fork you've seen, My fingers only go in mine, And they are nice and clean."

What the Toad Does.

He has the power to drink with his skin. Even if emaciated, his skin will take up enough water to make him appear fat.

He is most useful in the garden, catching the insects. His skin secretes an acrid humor, so a dog seldom bites one the second time.

Authorities unite in saying that he has been known to live 25 to 40 years. It is not true that he can exist imbedded in stone, unless there be a fissure.

ADVENTURE IN BUGTOWN.



The rules are very, very strict in Bugtown, so they say; And so it's very hard to bathe Upon a summer's day.

For instance, on a pitcher Of lukewarm milk a crowd Of bugs once spied this warning: "No Bathing Is Allowed."

One bug, who was more daring Than all the rest exclaimed, "I'll show you that I'm not afraid, And make you all ashamed."

So he put on his bathing suit, And took a little drive, The bugs who were less daring Are even now alive.

BOYS IN INTENSIVE FARMING

Twelve Thousand Southern Lads Show How Productiveness of Land May Be Increased.

More than 12,000 southern boys less than eighteen years old planted and cultivated an acre of corn each year under the direction of the department of agriculture. Persons interested in the experiment in Arkansas, Mississippi, South Carolina and Virginia offered to pay the expenses of a trip to Washington for the boy in each state who raised the greatest amount of corn on his acre. The winning boys will soon visit the national capital.

The average yield of corn to the acre in 1909 was a little more than twenty-five bushels. The South Carolina boy, who made the best record, produced 152½, says Youth's Companion. If they should be followed exactly, the yield of corn to the acre could easily be doubled in a single year.

Intensive cultivation is worth while on all crops. The average yield of potatoes to the acre in 1909 was 107 bushels, but the Maine farmers averaged 225 bushels, and some of the more progressive of them dug 400 bushels to the acre. The yield of corn and potatoes depends more upon cultivation and fertilization than upon the soil, and there is practically no part of the United States in which these crops cannot be raised successfully.

It is beyond doubt that larger crops can be produced from ten acres thoroughly tilled than from two or even three times ten acres cultivated as they usually are. The fact that the South Carolina prize-winner raised more corn on one acre than the average farmer produces from six tells a story that should not be lost upon those for whose benefit the experiment was made.

NOVEL COASTER FOR YOUTHS

Healthful Device Can Be Used as Racer, Cart, or to Glide Merrily Down Any Hill.

An entertaining and healthful device for children has been invented by an Ohio man. It consists of a triangular base portion with two wheels in back and a steering wheel in front. From the steering wheel a handle rises high enough to be within comfortable reach of a person standing on the footboard in the rear. With one foot on this board and pushing with the other foot, a boy can attain a re-



Light and Easy to Pull.

markable speed with this device and can have many a good race with his friends. Another use for it is as a regular coaster, for gliding down any though as has been seen it can be pushed up hill and has therefore an advantage over most coasters, especially those that depend on snow. Finally, the device can be used as a cart, there being an attachment that serves as a seat. Being of such light construction, the small boy will find it much easier to pull his comrades on this than on the ordinary wagon, and it is very strongly made so there is no danger of a breakdown.

Mother Goose Rhymes.

A jolly form of entertainment is for each person to be given a subject and made to write a Mother Goose rhyme of more than two lines containing the given word. This is a difficult thing for many people to do, and many absurd verses are the result, while a clever rhymester can convulse the entire party. After all the people playing have written their contributions these are collected in a bowl and drawn forth by one and read to the assembly, who try to guess the author.

Why the Sun Sets.

Little Jack asked his mother one night why the sun set so often. She told him so that it might rise in the morning. This seemed a useless reason, and Jack hunted for another. At last he said: "Oh! I know, mother. The sun sets so that she can hatch all the daisies!"

Troubles of Married Life

Succession of Incidents That Made a Comedy of a Philadelphia Couple's Nuptial Day.

The first incident occurred while the bride was hastily donning her trousseau preparatory to being whisked to the church in a carriage. The carriage happened to be a buggy, to which was attached a crippled nag, half-starved and hardly able to stand upon its legs.

When the happy but unfortunate pair arrived at the church they found, to their amazement, that the main item on the day's program would be delayed through the absence of the clergyman.

After half an hour's wait, during which they wasted both their patience and time, the two were married.

Incident the third occurred while they were waiting for the train to take them away on their honeymoon. The husband unaccountably wandered from the bride and became lost in the crowd.

Thinking that he was still by her side, the young woman took hold of a man's arm and continued her conversation.

Toads Feast on Honey Bees.

As the toad rather enjoys feasting on the honey bee laden with honey his appetite should be considered. The toad remains on the ground, never springs into the air, and bees may be protected by setting the hive well above the ground.—Fur Ne

He has the power to drink with his skin.

Even if emaciated, his skin will take up enough water to make him appear fat. He is most useful in the garden, catching the insects. His skin secretes an acrid humor, so a dog seldom bites one the second time. Authorities unite in saying that he has been known to live 25 to 40 years. It is not true that he can exist imbedded in stone, unless there be a fissure.