

FARMERS' CORNER

Feeding Horses.

It might be said that grass is the natural ration for the horse, but when confined to a barn and also when worked, the animal needs a more strengthening and nutritious food. To feed properly there must be a mixed diet. The intention of the food is to supply heat and muscle, but not an oversupply of fat.

The quantity of food given should be based on the amount of work the horse has done—the more work the greater the amount of food that should be given.

The foods that are generally fed are hay, grass, corn, oats, barley, rye, bran, carrots, turnips and apples. Of the grains oats is best, with corn second, but both are improved if fed in a crushed state. Oats build up the muscles, make blood and put nerve and endurance in the horse. On account of the price, oats are not generally used, and in such cases care must be taken that the hay given is rather rich in protein.

Corn and timothy hay are of a heating nature and hard on the digestion, causing the animal to perspire freely. If corn is liberally used, some bran, with clover or some well-cured pea-vine hay, or clover with corn, will help balance up the ration and keep the digestive organs in a healthy state. In feeding green food care must be taken.

Average Milk.

It has been shown that 100 pounds of average milk contains about 87 pounds of water, 4 pounds of fat, 5

on corn at all. Corn is said to contain about 60 per cent of starch and 8 per cent of oil, both being very digestible. Oil makes fat and the starch produces heat and also fat. On account of its heat-producing power it is inadvisable to feed corn. Because of there not being any great quantity of protein in corn it is necessary to feed something else with it—either clover or alfalfa.

Fountain-Like Feed Bag.

Almost everyone has noticed the painful efforts of the unfortunate horse which is compelled to take its noon-day meal out of a feed bag. In order to get the feed the horse must throw the bag and its contents into the air and catch a mouthful as he can. Besides the industry he is compelled to exercise in the pursuit of his feed, the horse loses about half the grain by reason of the fact that it is thrown over the top of the bag.



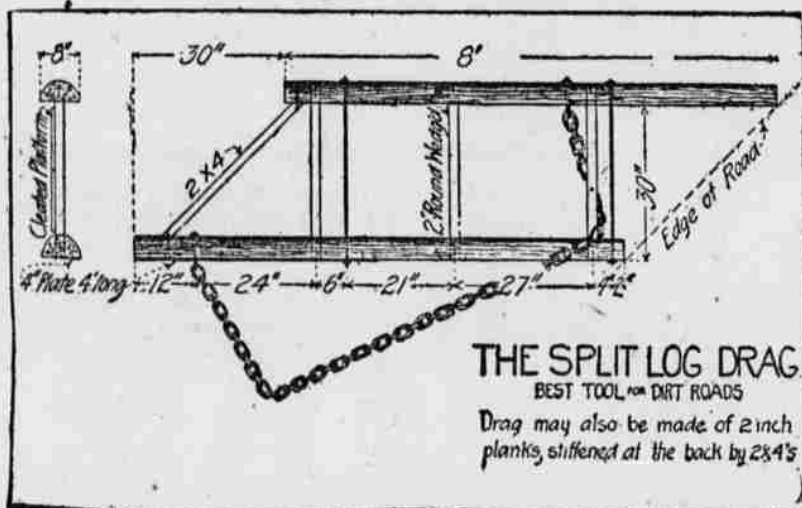
FEED BAG.

The nose bag shown in the accompanying cut is of recent invention and is designed to overcome this trouble. The feed supply is contained in a reservoir which is secured to the bridle and is suspended between the animal's eyes. The feed flows down of its own weight into a saucer-like receptacle which is held under the animal's mouth. The feed is always in reach and there is no occasion for the painful gymnastics which are so commonly seen under the circumstances.

Poultry Profits.

The cost of food required to produce a pound of beef, pork or chicken does not differ greatly, although chicken sells for 12 to 20 cents a pound by the carcass, while other meats sell at from 4 to 8 cents. This difference is further increased on the farm from the fact that poultry picks up a good deal of material that would otherwise

A ROAD IMPROVER



THE SPLIT LOG DRAG
BEST TOOL FOR DIRT ROADS

Drag may also be made of 2 inch planks stiffened at the back by 2x4's

On behalf of a number of farmers who wish to construct splitlog drags, a correspondent asks for publication of a plan. The dimensions of the several parts are indicated in the illustration. D. W. King of Missouri, who has been the most prominent advocate of this road implement, describes it as a lever for smoothing down the rough places and packing the surface soil. Best results are obtained on clay roads. It will improve even sandy soils, though it cannot make a hard roadbed of such material.

pounds of sugar, 3.3 pounds of casein and albumen and 0.7 pounds of mineral matter or salts. The composition of the milk depends largely upon the cows producing it. Both Jerseys and Guernseys give rich milk, upon which the cream quickly rises. Durhams and Ayrshires give milk of an average richness, upon which the cream slowly rises. Holstein cows are noted for giving a large quantity of milk in which there is a small proportion of fat.

Inexpensive Chicken Coops.

Very good crops can be made at small cost from empty barrels, as shown in cut. First, drive shingle nails through the hoops on both sides of each stave, and clinch them down on the inside. Then divide the barrel in halves, if it is big enough, by



BARREL CHICKEN COOP.

cutting through the hoops and the bottom. Drive sticks into the ground to hold the coop in place, and drive a long stick at each side of the open end just far enough from coop to allow the front door to be slipped out and in.

The night door can be made of the head from the barrel or any solid board, and the slatted door, used to confine the hen, by nailing upright strips of lath to a cross lath at top and bottom.—D. H. F., in Farm and Home.

Feeding Sheep.

It is always advisable in feeding sheep not to feed too much corn. Clover, hay and corn in equal parts, by weight, should be given during the fattening period. Except for fattening purpose it is better not to feed sheep

go to waste, as well as numerous insects that should be destroyed, so that much of their food should not really be figured as expense at all.

But there is a greater risk of loss in raising chickens and the cost of labor per pound of finished product is more than with sheep or hogs. Then you must credit eggs produced, which complicates the problem until you get a headache. The net returns, according to capital invested and cost of maintenance, however, leaves a greater profit from poultry than any other farm live stock. If a farmer would keep close account of the income from his poultry, including the amount of eggs and butter consumed at home, he would be surprised at the returns.—Agricultural Epitomist.

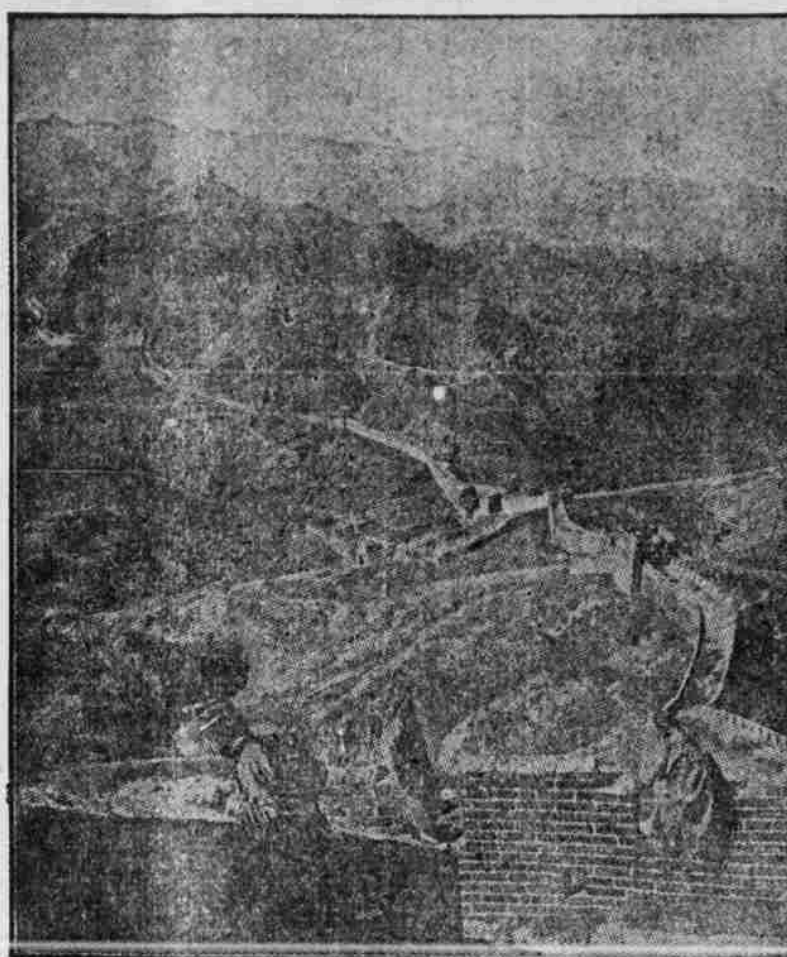
Hauling Farm Produce.

It is said that a Pennsylvania farmer does not average more than one ton of marketing to two horses, and he must send one man with every two horses. English and Scotch farmers generally put two tons of marketing on a one-horse cart, and place two of those carts in charge of one driver. The driver ties one of these carts behind the other and walks alongside of the first one. Thus we have a foreign farmer doing with one man and two horses the work an American farmer takes four men and eight horses to do.

Breeding Up Stock.

A Western stock breeder advises farmers to breed up stock rather than buy all pure-breds. He says that to establish a herd of pure-breds costs more money than the average farmer can afford, when the progeny is to be sold to the packers or the butchers. Good females of pure-bred beef stock bring high prices, and the farmer would need a considerable number to make a good start. But with a pure-bred bull he can in a few years have a herd of cows that will make it possible to market beves of high grade.

WHAT ANY PEOPLE ON MARS MIGHT SEE.



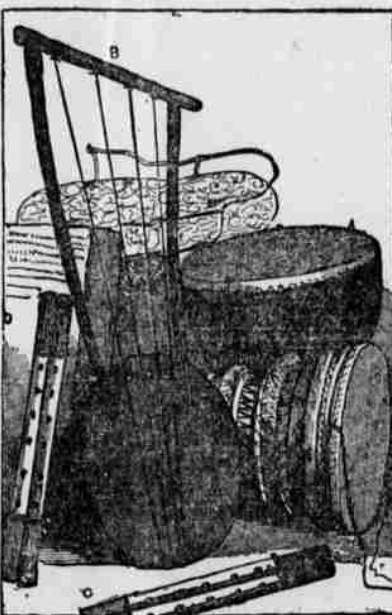
A Section of the Great Chinese Wall.

The Great Wall of China, an eighth wonder of the world, owes its being to Shi-Hwang-Ti, the first Emperor of United China, "who cut the grand canals that still intersect China; who built palaces and roads, walled cities and ships, and then, jealous of the fame which the founders of the earlier dynasties had earned in the hearts of his letter-loving population, ordered the famous burning of the books." So says B. L. Putnam Weale's "The Reshaping of the Far East." The wall is 1,800 miles long, and was constructed between the years 214 and 204 B. C. Dealing with it in "China, the Long-Lived Empire," Miss E. R. Seidmore describes it as "the one artificial construction on the face of the earth that may be seen by the inhabitants of Mars," an opinion that gains additional interest from Prof. Lowell's recent experiments to prove that narrow lines (such as the Great Wall) can be seen from great distances, provided always that their length is greatly out of proportion to their width.—London Illustrated News.

Marvelous, Quaint and Curious.

Scriptural Antiquities.

The rude musical instruments here represented have been collected by modern travelers, and are but little changed from the ancient forms. The



drum or timbrel marked A is made of thin baked clay, something in the shape of a bottle, with parchment stretched over the wider part. On being struck with the finger this instrument makes a remarkably loud sound. These relics are lodged in the London Scriptural Museum, and are all tick-



eted with the texts they serve to illustrate. This arrangement is very judicious, and gives a great additional interest to the sacred objects while under inspection.

The distaff was the instrument which wrought the materials for the robes of

the Egyptian kings, and for the "little coat" which Hannah made for Samuel; by it, too, were wrought the cloths and other fabrics used in Solomon's temple. By reference to the engraving it will be seen that nothing can be more simple than this ancient instrument, which is a sort of wooden skewer, round which the flax is wrapped; it is then spun on the ground in the same manner as a boy's top, and the thread wrought off and wound upon a reel shown in the foreground of the picture. "Querns," or stone hand-mills of various sizes, similar to that represented in our engraving, have been repeatedly found in connection with Roman, Saxon and other ancient remains in England. They are still to be met with in constant use over the greater part of India, in Africa and also those districts of the East which are more particularly associated with Holy Writ. It may be worth while to mention that this description of mill is an improvement upon the method of simply crushing the corn laid on a flat stone with another held in the hand. The "Quern" is a hard stone roughly rounded, and partly hollowed, into which another stone, which has a handle, is loosely fitted. The corn required to be ground is placed in the hollow receptacle, and the inner stone is moved rapidly round, and, in course of time, by immense labor, the wheat, etc., is ground into flour. The Scripture prophecies mention that of two women grinding at the mill, one shall be left and the other taken—the two-handled mill will explain the meaning of this passage.

"There's Many a Slip."

This phrase originated with a pool slave. It was prophesied of a king, and the prophecy was fulfilled. When Ancaeus was King of Samos in the Grecian Archipelago, he planted an extensive vineyard, and oppressed his slaves so heavily in its cultivation that one of the bolder ones prophesied that he would never live to taste any of the wines. The King laughed and had the slave beaten. Then at last, when the wine was made, he sent for the slave to witness him drink the first glass of it in order to show him that the prophecy was false. When the servant appeared, the King, raising his glass of wine, said, "What do you think of your prophecy now?" "There is many a slip 'twixt cup and lip," was the answer. The words were scarcely uttered when Ancaeus was informed that a wild boar had broken into the vineyard and was ruining it. Dropping the wine untasted the King hastened to the scene to drive out the boar, but he was killed in the encounter, and the slave's prophecy was fulfilled.

Nonecommittal.

"How old are you, madam?" asked the judge of the woman who had been arrested for assaulting "the lady next door."

"Five years younger than her that had me pinched."

"Well, what age is that?"

"Ask her first."—Philadelphia Press.

SOMETHING FOR EVERYBODY

There are 752 kinds of flowers found in the Arctic regions.

Twice as many widows as widowers filed in New York State in 1908.

The total production of turpentine in the Southern woods during the last year was 36,500,000 gallons, and of rosin 4,000,000 barrels. The value of the two products was \$32,000,000.

In connection with the recent trial of Chatham (Eng.) dockyard men for thefts of old metal, the auditors' report on the navy says: "Some of the conspirators obtained leave of absence from the dockyard in order actively to carry out the thefts."

Trudeau's classic experiment points us in the right direction. After inoculating a number of rabbits with tuberculosis he confined a number of them indoors and turned the others outdoor. The latter all recovered, while the former all died.—Medical Record.

A seven-foot alligator has been disporting himself in the canal near Pine street bridge. He has afforded much amusement for the school children, for the gator has evidently a musical ear. He only appears when singing is going on in the school. When this fact became known a number of the children went to the bridge and to the strains of "Onward Christian Soldiers," sung by them, he lazily came from his hiding place and enjoyed the impromptu concert. The experiment has been repeated several times with success.—Ft. Pierce (Fla.) Tribune.

Amsterdam enjoys an enviable reputation for its cleanliness. Owen Feltham, who visited Holland in the seventeenth century, was particularly impressed by the spotlessness of its streets and houses. "Whatever their estates be," he writes, "their houses must be fair. Therefore, from Amsterdam they have banished seacole, lest it soiled their buildings. Every door seemed studded with diamonds. The nails and hinges hold a constant brightness, as if rust there was not a quality incident to iron. Their houses they kept cleaner than their bodies; their bodies than their souls."

Australia has an area of 2,974,501 square miles. In 1906 the estimated white population was 4,119,481, and the estimated residue of the aboriginal "black fellows" about 75,000. Of these fully 20,000 are within the limits of the state of Queensland, which occupies the northeastern part of the continent and has a white population of about 600,000 on an area of 670,000 square miles. The Australian aborigines are not civilizable and have a very low intellectual capacity. They are cared for by a well considered system of laws and are looked after by "protectors" located at numerous points throughout the continent.

A query has been addressed to Kew as to the wood used for mummy coffins in Egypt, which was stated by the correspondent to be that of sycamore. Some pieces of mummy coffin wood were presented to Kew in 1875 by H. H. Calvert, British consul at Alexandria, and later specimens of the wood of Ficus sycamorus were forwarded from Egypt by Dr. Schweinfurth. The microscopic structure of these specimens has been compared in the laboratory, and we learn from the Bulletin that there is no reason to doubt that the mummy coffins referred to were made from the wood of Ficus sycamorus—the sycamore fig.—Westminster Gazette.

Cattaro, the Austrian sea gate of Montenegro, which was recently believed to be threatened by Prince Nicholas' guns, was held by Montenegro once for a little time. Montenegro acquired it in 1813 with the aid of a British squadron. Any inhabitant of Cattaro who was contemporary with the rise and fall of Napoleon must often have had to pause and think what country he belonged to. For having been Venetian for centuries, Cattaro became Austrian by the treaty of Campo Formio, and Italian in 1805, by the peace of Pressburg. It was absorbed in the French empire in 1810, and wrested from it in 1813, and finally, in 1814, Russia compelled Montenegro to give it up to Austria.

Of the world's islands Borneo and New Guinea are accounted the two largest. As their areas have not been accurately ascertained, it is uncertain which is the larger of the two. Authorities vary, some calling New Guinea the largest island on earth, some the second largest. Its area is estimated at about 313,000 square miles—greater than that of all our Atlantic coast States from New Jersey to Florida, with West Virginia added. Of this vast island the Dutch own nearly half—and the best half—all west of longitude 141 east of Greenwich. This large tract of land, estimated at 152,000 square miles—more than three times the extent of the State of New York—is practically unexplored.