



AN APPEAL

BY JEANNETTE COOPER

Bend lower, Cupid; take good aim My Love's a tiny lass. The stately lilies bow their heads In joy, to see her pass. But may I, can I, dare I own This dearest wish of mine? 'Tis to persuade this little maid To be my Valentine

—Harper's Bazar.

STORY OF THE PLOW.

The Origin of the Familiar Farm Implement is a Mystery. Who used the first plow cannot be known. At all events, there was but little difference in the shape of the plow and the hoe in early times, save in size. Cut off the handle from the plow and there was the hoe.

After a time some mechanical genius saw that the plow would operate more easily if the point that runs in the ground were flattened and the beam were more nearly parallel with the bottom of the share, and so he became more particular about the shape of the forked stick than his ancestors had been. By degrees the cutting surface was flattened, and it took such various forms as the makers thought best adapted to their needs, or as the forked stick would allow cutting. Soon two sticks were fastened together with

a much later date than most would think. During the colonial period it was made of wood, the mold-board being covered with sheet iron or wrought iron hammered very thin. A few old horseshoes were often used for this purpose. The proper form of the mold-board was the subject of much thought among the advanced farmers of those and later times. President Jefferson wrote on the subject, and said it should be a lifting and upsetting wedge, with an easy connecting curve. This theory

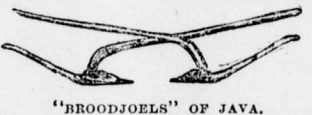


CHINESE STIRRING PLOW.

has been acted on in all the plows that have been made since. In the early settlement of this country the wooden plow was used, and even to a late date plows were made that had no iron except the share.

The steel plow is now making its way all over the world. There is scarcely a country where the plows made in America are not known, and they are taking the place of the primitive instruments.

Fully one-half the wheat raised in the world is raised on land plowed with these primitive instruments. The great

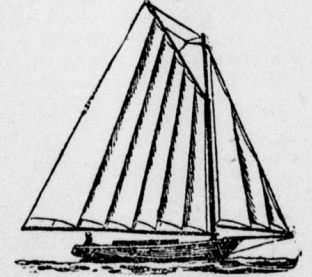


"BROODJOELS" OF JAVA.

possibilities of the plow industry can be seen when it is known that in the not far distant future all these plows will be supplanted by the steel plow.

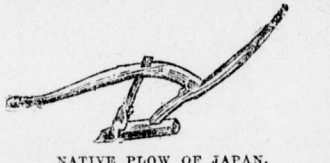
Wind Pockets in the Sail.

In the construction of sails for boats it is desirable to provide for a given space a maximum amount of canvas area to be presented to the action of the wind, whereby in tacking or wearing the dead wind may be easily and quickly spilled from the sail, to effect the change with the least possible delay. The accomplishment of these objects is among the important features of the sail recently designed by George A. Lowry, an illustration of the improvement being shown herewith. In carrying out the invention the sails employed are made up in sections, which when spread occupy the same general dimensions as an ordinary sail, but which, by arranging the sections to overlap each other, presents a greater effective area of canvas to the wind. The method of attaching the sail to the lower boom is such that a pull on certain ropes turns the pocket wrong side out when the ship takes a new tack, allowing the wind to fill the loose canvas in the pockets long before the boom could be swung across



INCREASES THE AREA PRESENTED TO THE WIND.

the boat and presented broadside to the wind. In reefing the sail it is only necessary to take in one or more of the sections by hauling on the ropes, which draw it toward the mast.

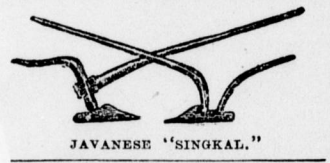


NATIVE PLOW OF JAPAN.

spikes, and plow-making made a distinct gain, since by this method of making the plow a better shape could be secured than by depending on the fastened together branch of a tree.

Plows made of wood, either from a forked limb or fastened together with spikes, are in use now, not only in the remote parts of Asia, but in civilized Europe. In parts of Southern France, parts of Austria, Poland, Sweden, Spain, Norway, Russia, Greece and possibly in some other European countries may be found plows in use today, or could have been a few years ago, practically the same as those used by the ancient Egyptians to turn the ooze soil of the valley of the Nile at the time when Joseph was gathering the wheat into the storehouse of the King in seven years of abundant crops.

The origin of the use of iron plows is involved in as much obscurity as the invention of the plow itself. When Saul was yet a young King, 1100 years before the birth of Christ, the Israelites, who were not skilled in the use of tools or working iron, "went down to the Philistines to sharpen every man his share and his colter and his ax and



JAVANESE "SINGKAL."

s mattock." Evidently these were on tools which were made by the Philistines, and which they alone could repair. An old picture of a wheeled plow dates back 2000 years, and to the Greek nation.

The modern plow had its origin in Holland and Flanders. Two hundred and fifty years ago England imported plows from those countries, and fifty years before that an English work on agriculture alluded to the improved plows of Holland. In the latter part of the eighteenth century cast iron mold boards and wrought iron shares were made in England, and soon after the cast iron share was made. From that time until the present there has been constant improvement in plows. One of the great improvements of the last century was the use of steel by John Deere. He beat his first share to shape over a block of wood in his shop in Grand Detour. Even in America the wooden plow has been used at

The Lobby in Congress

The "Third House of Congress," that heterogeneous body made up of attorneys, promoters, lobbyists and other classes of workers who seek to influence legislation in the National law-making body, has been growing larger, stronger and more resourceful year by year, but it is practically certain that the Congressional session of 1901-1902 will go down into history as one of the most active during the life of the "lobby." The issues which will claim attention and the men in whose hands their fate will lie will of themselves make necessary unusual activity on the part of the schemers whose ambition is to facilitate or retard legislation. In the first place, a new President is in control of the destinies of the Nation, and, in addition to that, the issues, almost without exception, are important in the extreme. The "Third House" has gained some very distinguished recruits of late years, for it has become quite the proper thing for a Congressman whose term has expired and who is desirous of remaining in Washington, to undertake to further the interests of some organization or corporation which is willing to pay well for the service.

to be voted on, and when the absence of one or two members may change the result.

New members are the particular prey of the unscrupulous lobbyists. They analyze a newcomer with the skill born of long experience and govern themselves accordingly. Very seldom does one of these adroit manipulators of men risk alarming his quarry with the suggestion of a downright bribe.—Waldon Fawcett, in Collier's Weekly.

Borneo's New Stamps. Two new stamps have been issued by North Borneo. The stamps are of ten cents and sixteen cents value. The



ten-cent stamp, which is here reproduced, bears a representation of a honey bear, while on the sixteen-cent a picture of a train illustrates the march of civilization in that corner of the world.

Got His Wheel on Time. "It does not always follow that a man is able to detect because he is officially known as a detective," was

"The Lobby" in Washington.



SCENE IN THE CORRIDOR DURING A SESSION OF CONGRESS.

—Collier's Weekly.

As a rule these ex-Congressmen regard themselves simply as attorneys acting for clients and would be indignant if classed with the ordinary lobbyists who are supposed to be ever ready to accomplish things by any possible hook or crook.

A number of representatives of corporations are paid large salaries and live in elegant style, year in and year out, in the most fashionable section of the National capital. Even the "free lance" promoters sometimes make fabulous sums, as, for instance, Major Stahlman, of Nashville, Tenn., who is understood to have received some time since the sum of \$100,800 for getting through Congress a claim for \$288,000.

Women do not play as important a part in lobbying operations as they did before Speaker Reed ordered the closing of a reception room of which they held almost sole possession, and where it was always convenient for them to meet Congressmen. However, a number of attractive women who have an acquaintance with many Congressmen are regularly employed by the professional lobbyists, the usual ruse employed being to have them call at the Capitol and each send in a card requesting a brief interview with some one Representative just at the time when an important bill is

the remark made at the headquarters of the police department the other day.

"There are many people, however, who think that such should be the case. A man who had evidently had no experience in detective matters, called one day and reported the theft of a bicycle. His manner of making the report amused those who heard what he had to say.

"I want to get my wheel by next Thursday," he said, "because I'm going away on the 3.40 train."

"Can't give a guarantee in such matters," he was told.

"Don't forget," said the owner of the wheel, as he started to leave the office, "I'm going away Thursday, and I'd like to take the wheel with me."

"His complaint was given the usual attention, and, strange as it may seem, his wheel was recovered the day he wanted and in time for him to take it away on the train.

"Who said Sherlock?" inquired the detective, after the wheel had been turned over to its owner."—Washington Star.

There is as much real nourishment in one bushel of beans as in five bushels of potatoes.

Marriage is often the result of a maiden effort.

THE NEW CHIEFTAIN OF TAMMANY HALL



LEWIS NIXON.

Lewis Nixon is now the leader of New York's famous political organization, known all over the civilized world under the generic name of "Tammany Hall," for, in his favor, Richard Croker announced his retirement from the leadership of the organization. Mr. Nixon was born at Leesburg, Virginia, in 1861. He graduated from the United States Naval Academy at Annapolis in 1882, and some two years later was given a responsible Government post in the construction department of the Navy. The United States battleships "Oregon" and "Indiana" and "Massachusetts" were designed by him. He founded and operated upon his own account, six years ago, the Crescent Shipyard, at Elizabethport, New Jersey. His New Jersey shipyard is credited with the output of a hundred vessels, among them the submarine torpedo boat "Holland" and the monitor "Florida."

FARMERS' CORNER

Securing a Good Meadow. To secure a good meadow or pasture use care in preparing the land. Give deep plowing and then harrow the land to a fine condition. Use mixed fertilizer and then harrow again before seeding. A variety of seed should be sown, as some kinds may not thrive. The indigenous grasses will in time crowd out all others and take possession. On limestone soils blue grass and white clover should always be included. The pasture should not be grazed until well established, as trampling does more harm than mowing.

Goats for Profit. Goats are first-class for cleaning up pastures, weedy fields, etc. In this respect they are better than sheep. Certain kinds of goats can hardly be confined as they soon learn to climb over almost any kind of rail or board fence. The modern wire fence, however, will keep them in, one three and one-half feet high being sufficient. If you are going into the goat business, why not try the angora? This goat is much easier handled than the common goat, can be kept in by means of an ordinary fence, has a splendid fleece of mohair which sells readily on the market. The flesh is also considered quite palatable.

Feeding Green Cut Bone. There is quite a diversity of opinion on the question of feeding cut bone, but we have found that best results are obtained when the hens are given about an ounce each every other day. It should be given as a separate feed, about noon, and followed by a full feed of grain later in the day. Hens fed on green bone will have a tendency to grow fat, so that one should be careful that not too much of other fattening foods are given. Green bone will unquestionably make hens lay more eggs, and will aid in making the eggs fertile. It will also make young chicks strong and healthy, and well repays any one for the labor of cutting. When fed to chicks it should be given in very small amounts, scarcely enough to hold on the point of a small knife at first, but may gradually be increased as the chicks grow older.—Home and Farm.

Barley as Animal Food. In the eastern states barley is in too much demand for malting purposes to be sold as food for animals. On the Pacific coast, where it is more grown, there is often some discolored that will not sell well for that purpose, and it is in demand for feeding to horses, especially such as are not kept at hard work. In Canada it is used for feeding to hogs, and is thought to make a better bacon hog than corn, though possibly not making as many pounds of gain for bushel of grain as would a bushel of corn. Such barley is often used as a poultry food, as the strain that injures it for the brewers does not hurt it for feeding purposes, and it is said that in fattening poultry it gives a whiter skin and flesh than corn, and as their English customers do not like yellow-skinned fowl, they feed on barley and barley meal when fattening for export trade. But at the experiment station in North Dakota they tried it for horses and mules, and found that while idle either would eat enough to keep them in fair condition, it did not prove worth as much per pound as oats when they were at hard work. It did not seem to suit the mules as well as the horses, and when they had barley and oats in equal weight in alternate months, they gained flesh on the oats. It has never been thought a good feed for milk cows, and is of doubtful value for sheep. It gives better results crushed than fine ground, as the meal makes a pasty substance.

Coloring and Packing Winter Butter. All winter butter should be colored a trifle. This is because the makers of the choicest grades do color, and unless you work up a special market you will lose two or three cents a pound just because you fail to please the eye. Here and there a creamery is selling at three-fourths of a cent a pound higher for leaving the butter unsalted and uncolored, but this is only for a special market, either for some foreign market or for what is known as the Jew market at home. Don't try to color with carrots or any home-made color. Get one of the standard commercial colors on the market. I am now using about a teaspoonful of color to 60 pounds of butter. Avoid red. It spoils the sale except for the southern market. A light straw color is all right. Churn at as low a temperature as will bring the butter in half to three-quarters of an hour. Draw off the buttermilk when the butter is in granules about the size of wheat kernels, rinse the granular butter in the churn with pure water of the right temperature to make it of the right consistency for work. It must not be hard or crumbly on one hand, nor soft and mushy on the other. If it comes soft, it was churned too warm. Don't do that again. Make it into pound prints, pack in ten-pound spruce tubs, or in ten-pound ash tubs, according to your market requirements. Suit the demand. Don't try to force the public to accept your peculiar tastes. It is fatal to success. Keep the milk clean. Keep the cream clean. Don't over-sour the cream. Don't over-churn it. Don't over-work the butter. Don't over-color, nor over-salt. Take special pains to examine the butter which sells at top prices in market. Take

that as your ideal and work to it, throwing inherited ideals and ideas to the winds. Nothing succeeds like success. Emulate the successful butter-maker regardless of previously formed convictions. Ideal butter is that which sells for the highest price. Take that for your ideal.—E. C. Bennett, in American Agriculturist.

Barrenness of Corn and Wheat. One of the greatest factors in the production of corn and wheat is the relative amount of barrenness in the stalks. Every farmer is familiar with fields of either grain which promise an abundant yield, but when the counting of the harvest is made there is a great disappointment. It is found that the crop was deceptive. There was more stalk than grain. Every third or fourth stalk in some fields is barren. When grain gets down to such a low state of productivity it is time that some other farming should be resorted to. Yet not a few farmers face this condition and continue to plant the same and hope for better times. Some will lay the blame to the soil, others to the season, and a few to the seed or method of cultivation. In my experience I have found that the seed is more at fault than anything else. Provide reasonably fertile soil and fair cultivation, and good seed will produce a pretty good crop, but on the finest soil, and with the best of cultivation, run-out seed will simply increase the stalk supply and not raise the yield of grain to 10 bushels. It is not soil or cultivation that will increase the yield of poor seed, but new and better seed. Not all of us appreciate the power of running out that is always present in seed. Unless systematically improved by "breeding" seed, corn or wheat will degenerate at least 10 percent. In a single year our crops are reduced almost one-half. All of our crops have been raised to their present high standard through artificial means or breeding and selection. Now the average man cannot breed and improve seed. That is not his work, but he can insist that seed be sold to him that has not been run out. By insisting upon wheat and corn that represent the highest possible productivity, the farmer can increase his yield per acre much better than by spending anxious moments and a good deal of money in fertilizing and cultivating the fields. The one absolute essential is wheat and corn that has been systematically bred to the point where the highest possible returns can be had from every single stalk that comes up. We want no barren stalks or very few, at least.—T. L. Ridding, in American Cultivator.

Getting Rid of Unprofitable Dairy Stock. The high prices of feeds are causing many farmers to dry off their cows and to turn them for beef. This condition may prove a blessing in disguise, if it only results in the sale of the poorer cows. Most farmers would find greater profit in keeping less stock if they could only be sure of selling the poorer animals. This leads to the suggestion that records of production should be kept by every farmer. Only by having yearly records for study can the feeder tell which have been the most profitable animals. Many farmers are finding milk production unprofitable where three cents or less per quart is obtained for milk and not over 28 to 30 cents per pound for butter fat. At the present prices of feeds a good ration for milk cows calls for an expense of from 11 to 12 cents for grain and about 8 cents more for coarse fodders, reckoning hay at \$10, stover at \$6.50 and corn silage at \$20, toner at \$6.50 and corn silage at \$20, toner at \$6.50.

A well-balanced ration, then furnishing a full supply of all the nutrients needed by a cow of fair productive capacity, will cost not far from 29 cents. There is little reliable data regarding the cost of caring for a herd of cows, but from the best evidence available I feel safe in placing this at from 8 to 10 cents per cow per day during the winter season. This means that a cow must produce approximately 10 quarts of milk daily, before she begins to pay a profit, with milk at three cents a quart.

What to do with the unproductive cows is a question that is puzzling many farmers today. Much of the stock on hand will not return the value of the feed needed to keep the animals until spring. If the poorer animals of the herd are old cows which have passed their period of usefulness for the dairy, I would advise selling for what they will bring as second quality beef. Old dairy cows will not return in their final value the cost of the feed necessary to fatten them. Heifers or cows in the prime of life may pay for fattening. This depends on the amount of feed which must be purchased and used in this way.

Home-grown corn and cottonseed meal are the most economical grains to use in fattening. I would advise feeding animals that are being fattened but little coarse fodder, and of this would use the poorer grades, such as second quality hay and corn stover, but would feed liberally of grain for from four to six weeks and then sell for what the animals will bring. A grain ration made up of 400 pounds of cornmeal and 200 pounds cottonseed meal should produce a rapid gain. This ration should be fed at the rate of six to ten pounds per day, according to the size of the animal. All animals will gain faster during the early part of the fattening period, but at the present prices of feeds will probably not gain enough to pay for the feed if the fattening process is followed up beyond a certain point. This point can only be accurately ascertained by frequent weighing, but will probably not be later than six weeks after feeding begins.—Professor C. S. Phelps of the Connecticut Experiment Station.