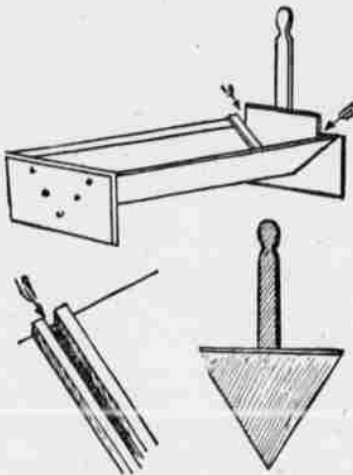




Cleaning Hog Troughs.

Much of the health of the swine depends upon the cleanliness of the troughs used for swill and for mixed foods of various kinds. With the ordinary trough it is almost impossible to keep them clean, because there is no way of cleaning them thoroughly. Here is a plan for building the ordinary V trough in such a manner that it may be thoroughly cleansed. Build the trough

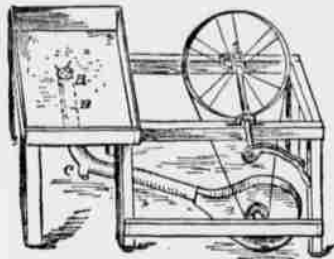


FOR CLEANING THE HOG TROUGH.

in the usual manner, except at one end the piece is made movable. Cut the standard so that it will fit just to the edges of the sides and nail fast, as usual. Then cut a V piece which will fit snugly between the sides, but instead of nailing in this end piece arrange slots on either side of the trough, on the inside, so that the piece may be slipped in between the uprights forming the slots. To make this plan more useful fasten a handle to this V-shaped upright, which will enable one to lift the piece out readily when it is desired to clean the trough. With this one end removed it is an easy matter to thoroughly scour the trough, because all of the cleansing water may be swept out thoroughly. The illustration shows each detail of this trough plainly so that any handy man can build it. —Indianapolis News.

New Homemade Forge.

Take the fan off an old hand corn sheller; put in position as shown. Take band wheel 18 inches in diameter. Put on shaft with end filed to fit grindstone crank. From end of fan, at point A to B, use tin pipe 3 inches in diameter. B is the skeln out of an old rake wheel, with a small plate fitted in end; plate is full of small quarter-inch holes, which distribute the draft evenly under fire. C is a cut-off, fitted with a cap on end, which catches all small cinders and ashes. The box around fire is 2 feet square, 6 inches deep, waist high. End of flue extends up from bottom of box 3 inches; around this pack clay to top of box, leaving a hollowing place around flue end. Although very crude looking, it does splendid work. With this a handy man has very little use for the village



HOMEMADE FORGE.

smith, leaving many dollars at home for other use. Another point is the saving of time spent going and coming from shop. —Exchange.

The Dog's Bedding.

Straw or pine shavings form the best bedding for a dog's kennel, and are much superior to hay or sawdust, which are often used. Great care should be taken to see that the bedding is always dry, and that it is changed at least once a week. In the hot weather bedding is not required at all, the dog preferring to lie on the uncovered floor of his kennel. —Home Chat.

Farm Facts.

In pruning young trees, never leave limbs too close together.

Feed your cow in milk right. Let the dry cow tackle the straw stack.

Shivering cows produce little milk. It pays to have warm stables for your cows.

When sawing off limbs of trees, always paint the wound. This will prevent decay.

If people would eat apples judiciously instead of swallowing dyspepsia tablets there would be less invalids.

Now is a good time for farmers to organize agricultural clubs for studying and discussing farm problems.

Plan to attend the short course at some dairy school this winter if you can. It pays to know your business.

Fill in around your water tanks to keep the water from freezing. Sawdust is a good nonconductor of heat.

Much fall plowing has been done—thanks to the splendid autumn weather. This means a good start next spring.

Field Pumpkin's Value.

The field pumpkin contains, according to the analyses quoted by Professor Henry, in his "Feeds and Feeding," 9.1 per cent of dry matter; dent corn, 81.9 per cent. In fifty bushels of corn there would be 2,800 pounds, about 2,500 pounds of dry matter. In a ton of pumpkins there would be 182 pounds of dry matter. Therefore, as we figure it, it would require about fourteen tons of pumpkins to equal fifty bushels of corn. The dry matter of corn contains 7.9 parts protein, 66.7 carbohydrates and 4.3 parts of fat. Multiplying the fat by 2.4 to get its equivalent in carbohydrates and adding this result to the carbohydrates, and then dividing by the protein, you have a ratio of 1 to 9.8. Treating the dry matter of the pumpkin in the same way, multiplying 3 per cent of that by 2.4, adding to the carbohydrates 5.8, dividing by the protein, 1 per cent, would give a ratio of 1 to 6.5, a balanced ration in itself for shoats.

Cow Tail Holder.

A very ingenious device, the invention of a Washington farmer, is shown in the illustration. Its primary object is to hold a cow's tail that the animal will be unable to switch it around to the annoyance of the person milking the cow. Although this may seem to be a unique way to overcome this annoyance, we would suggest that it would be much simpler to simply cut the cow's tail off. Providence obviously provided a cow with a tail to keep off flies and other troublesome insects, and if she is going to be deprived of this means of defense by having her tail tied up and put out of commission



it might just as well be effectively done by removing it permanently. The device is exceedingly simple, and it would seem useless for the inventor to patent it, as anyone could readily make one. The end of the tail is caught in a clamp, which is attached to the center of a chain having hooks at both ends. These hooks are secured to the cow's legs. What would happen if the cow should kick with one leg is not mentioned, but might easily be surmised.

Special Purpose Food.

There is no perfect food for all purposes. Everybody depends upon what is to be accomplished. If the object is to fatten an animal the food should contain a large proportion of corn; that is, if the desire is to promote growth. Of the various foods, grass is equal to any, as it is rich in mineral matter and is also an assistant in fattening, because it promotes digestion and is eaten slowly. For milk production grass may be assisted by the concentrated foods, and also by hay, but only a variety of food is perfect for any purpose.

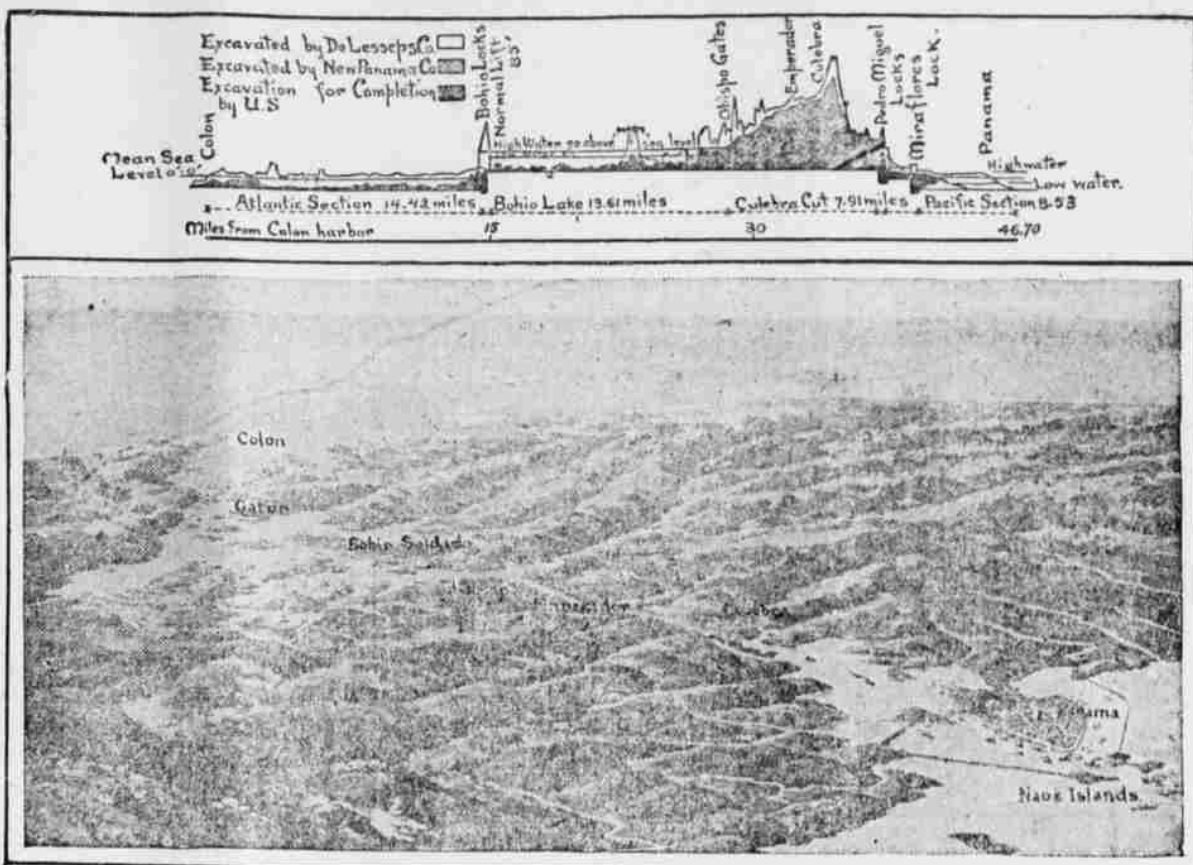
Turning Corn Into Wool.

For its value there is no farm product that can be carried 1,000 to 2,000 miles so cheaply and so safely as wool. A ton of wool is worth \$750, at 25 cents a pound, or \$500 at 25 cents. A ton of wheat is worth about \$32 and corn about \$16. The freight is about the same for each, and is thus twenty-five times more for corn than wool. This is worth considering, and shows how much better it is to turn corn into wool than to sell it.

Where Are Your Implements?

Here is a timely reminder: It gives the careful farmer a lot of comfort to know that his farm implements are all under shelter. Fortunate, indeed, is the farmer who has a large machine shed. Not to have one is hard for the man who lives on a rented farm, where the landlord does not realize that a place to shelter expensive tools is a paying investment. On many a farm there is scarcely room to shelter live stock, and it is no easy matter to find a place for machinery. It is so easy to fall into the habit of neglecting farm implements.

UNCLE SAM'S HERCULEAN TASK OF DIGGING THE PANAMA CANAL.



PANORAMIC VIEW OF THE ISTHMUS OF PANAMA, SHOWING THE LINE OF THE CANAL.

Most familiar of sights, most homely of sounds greet you on stepping from the train at the Pacific Terminus of the Panama Railway, writes a recent visitor to the scene of the great work. The road is up, and gangs of workmen, men of all shades, from brown to black, are digging and laughing, jabbering crooning at their work.

A big notice stares you in the face, "Prohibido de Pasar," the Spanish equivalent of "No thoroughfare." You look upon a hundred yards of fine paving highway, and then a stretch of mud and upturned road as far as the eye can see.

These are the men who are performing one of the chief works in the successful building of the canal across the Isthmus of Panama. They are laying down its new water mains, they are completing a system of modern sewerage; in short, they are the tools of the Isthmian Canal Commission, slowly but surely converting the plague-stricken Panama into a healthy abode for civilized white men.

You hear it said that nothing is being done on the Isthmus, that no progress is being made in the work of excavation, that no policy is formed as to the ultimate character of the canal, that the United States government does not know if the canal is to be sea-level or locked. With the exception of the last indictment these statements are wrong in every particular. The Americans are doing mighty work. They have 15,000 men at work on the Isthmus, 10,000 of these excavating on the canal.

The work that is being done on the Isthmus to-day is as follows:

- (1) The building of the terminal docks at Colon and Panama.
- (2) The excavation of the canal from the "Boco" to the Culebra Cut, a distance of about twelve miles.

(3) Excavations in the hard rock on the great Culebra Cut between Culebra and Empire station.

(4) The thorough sanitation of Colon and Panama. On the actual work of excavation and terminal construction about 10,000 men are employed to-day, but the main work is being done in Panama and Colon.

Along the proposed route of the canal the dwellings of the laborers are being thoroughly overhauled and repaired, or, where necessary, rebuilt.

All along the route arrangements are being made for the sanitary housing of the black laborers when the time shall come for pressing on with the canal construction in real earnest.

The Americans are starting at the beginning, laying a solid foundation to their house before beginning with two walls, let alone the roof.

To further this end they are doubling the track of the Panama Railroad, they are relaying the metals, they are strengthening the bridges, and bringing from the States a good supply of very powerful engines to cope with the heavy extra freights necessitated by their canal works.

They look to compete the paving of the streets and make their sanitary arrangements thoroughly efficient within a year. Long before this period is up the number of laborers on the canal will be double, the final surveys and plans will be decided on, the route will be chosen, and the advisory committee will have decided whether the canal should be built at sea level or with locks and lakes—the greatest engineering problem of the century. America means to cut a canal which has defied the efforts of the most competent engineers, backed up by almost unlimited money. Where others have failed America is going to succeed.

VANITY OF RICHES.

Wealth Often Makes Commonness of Its Owners More Noticeable.

One thing that I wish is for flashy rich people to learn their real position in the world of real things. This is the most hopeless of all my wishes.

You couldn't make a man who enjoys doing the "swell" thing before the admiring gaze of the public know that unless a man has brains and real worth he isn't to be counted

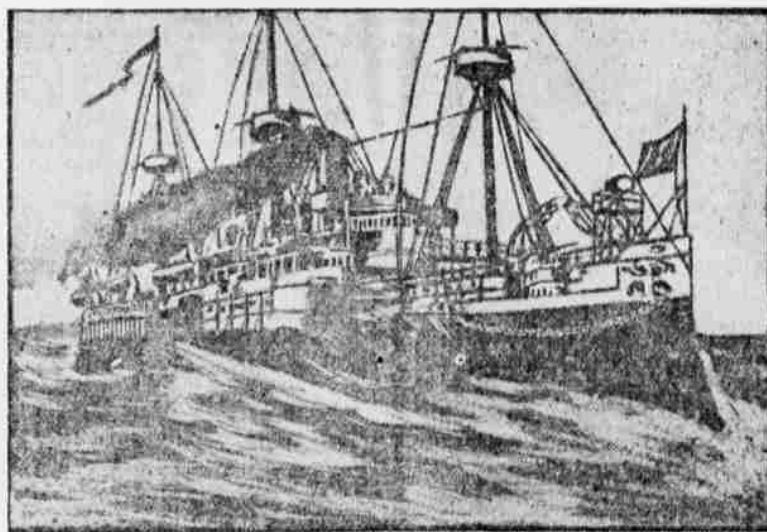
MRS. J. V. STRAUSS when the sons of God present themselves.

I hope I haven't a prejudice against rich people. It would be natural enough that a poor beggar like me should be envious; but then I do care so little for the things that money can buy in comparison with personal gifts, some of which I have, that envy can scarcely be laid to my door. However, I do wish that people who confuse money with greatness could be made to see how foreign the two are and how much cheaper the trappings of wealth make common people appear.

I think the most pitiful object in nature is a stupid rich woman. She is always haughty and overbearing, glaring about lest some person of moderate means might by some misfortune have gotten into the circle. The misfortune would be to the person of moderate means, supposing said person had a few brains, and it is likely he would have. There seems to have been some impartiality—the money has been given largely to mediocre people and the brains scattered among the poor devils.

I recently saw some very rich people and examined them rather critically. They were too rich and great to associate with any one, though there were 300 people under the same roof. There were types of mankind galore, all sorts of people, some of them nice, some bright, but the vast majority (including my very rich ones) not bright. Now these people dressed very elaborately many times during the day; they drove and rode out in state, and I invariably detected them glancing around to see if their grandeur was duly appreciated.

BRAZILIAN WARSHIP WHICH WAS BLOWN UP.



The Agulhas, sunk by the explosion of its magazine at Jacarepagua, seventeen miles southwest of Rio de Janeiro, was a duplicate of the ill-fated Maine of the United States navy, except in size and in details of gun equipment and boilers.

Was there no still, small voice to whisper to them that if the people around them were their inferiors it was low as well as silly to dress at them, and do things to attract attention?

Is there any way by which men can learn that greatness can only be attained through simplicity, and that people are only truly great when they have renounced the pomps and vanities and become simple-hearted brothers of men? I believe one is justified in being a trifle vain over certain things—though none of us is so endowed as to justify much of a swagger—but I do think nothing quite so contemptible as being vain over wealth and position.

The expression "I could buy and sell you" is such a poor little boast. When all the millions in the world can not bring sight to a blind eye, or buy a sweet nature, or an appreciative mind. We are born with our advantages. It is futile to claim that the rich can buy them. Some polish, some luster of experience and travel, money can add to a naturally fine mind, but it is like gilding refined gold. And what hopeless creatures are those who, having had every "advantage" that money can give, and still remain dull—and how many there are of them. This, then, my wish for common

rich people to know that they do not count is never likely to be realized. To be sure they can't help being common, and perhaps they can't help being rich, but they really ought to try, for if they were rid of their riches their commonness would not be noticed so much.—Juliet V. Strauss, in Chicago Journal.

Better Taste.

The Oriental monarch amused himself by giving a hungry guest a phantom banquet. Squire Hamilton, says the Boston Herald, one of the best-known members of the Maine legal profession many years ago, once sat at a meagerly laden board, and in this case the starving guest was the humorist.

The dining room had been newly and splendidly furnished, whereas the dinner was very slender. While some of the guests were flattering the host on his taste in decoration, Squire Hamilton said:

"For my part, I would rather see less gliding and more carving."

Absolute.

"Who is 'The Autocrat of the Breakfast Table'?"

"Our Hired Girl."—Cleveland Leader.

Speaking of music, the tailor's favorite is ragtime.