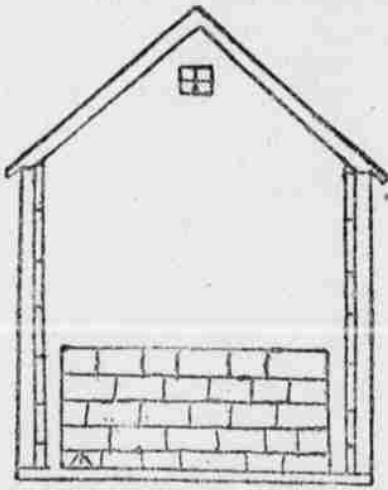


FARM AND GARDEN

Cheap and Simple Ice House.

An icehouse is one of the simplest of farm buildings; in fact, many farmers make a mistake in putting up too elaborate a building, which fails to endure and to afford sufficient ventilation for keeping the ice. The simple building shown in the drawing, which is reproduced from Farm and Home, was put up with about one day's labor. The framework was made of refuse hard wood, some 2x4's and some 2x6's.



SECTIONAL VIEW OF ICEHOUSE.

Second-rate pine boards were used for siding, which was nailed on the inside of the frame. The roofing was made of similar material as the sides, but of a little better quality.

In filling, a space is left between the wall and the ice, to be packed with sawdust. The crevices between the cakes are filled with fine ice shavings, but no sawdust is used between or on top of the layers of ice until the filling is done, when about one foot of sawdust is placed on top.

Openings must be left near the peak of the roof to secure ventilation, and the sawdust filling at the sides must be kept firm and solid while the ice is being removed in summer. It is important to locate the icehouse where there will be good drainage. Poor drainage at the bottom of the ice or allowing air to circulate at the top will quickly spoil the contents of the house.

Light for the Barn.

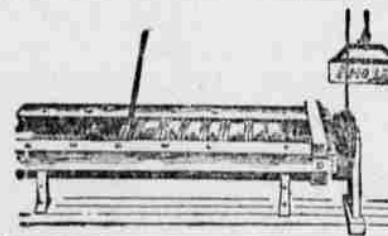
Light is one of the great sanitary conditions which promote vigorous health. If the germs of tuberculosis are exposed to the sun a short time their vitality is destroyed, but their infecting power can be preserved for several months if kept in a dark receptacle.

The State veterinarians who inspect dairy accommodations now recommend plenty of light, and the new dairy barns are featured with an increased number of windows. If possible the windows of a dairy barn should be so placed as to cause the sun at some portion of the day to shine on all parts of the floor, as the rays will search for disease microbes and destroy them. Sunlight acts as a powerful disinfectant, and nothing is cheaper nor more effective in preventing disease than sunlight.

Dark, underground stables are now condemned as insanitary and disease breeding. Dark stables are often also damp, and present especially favorable conditions for the evolution and propagation of tuberculosis. Cattle on the plains, which live only under the shelter of the firmament, are immune to tuberculosis and many other diseases, and barns for housing live stock should be constructed with plenty of windows to promote the sanitary condition of their occupants.—Goodall's Farmer.

Automatic Cheese Press.

This form of cheese press maintains a constant pressure for any desired length of time by means of a rope



wrapped around a pulley at the end and over a small pulley on a beam overhead. The 140-pound weight is sufficient to keep the screw pressed up to the cheese. A close cheese is obtained, free from any mechanical openings.

Better Results with Corn.

According to the estimate made by the government a few weeks ago, the average per acre of corn produced in Texas this year is only about five bushels below that of Iowa, one of the greatest of the corn-producing States. In the amount produced it was esti-

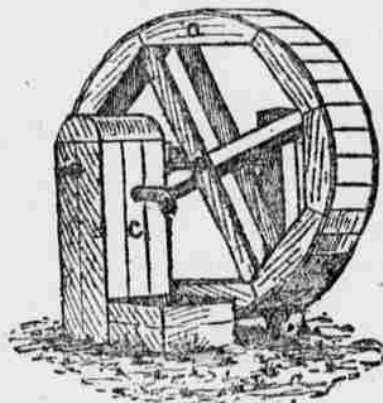
ated that Texas would be fifth in the States of the Union. This is a splendid showing compared with what it was only a few years ago, and is accounted for by the fact that the Texas farmer is beginning to realize the great advantage there is in raising his own meat and bread, and in the further fact that the Texas Corn Growers' Association has done some splendid work in not only pointing out the blessings to the farmer in growing corn, but also in promoting the study of seed selection and cultivation.—Galveston News.

Horse Value of Country.

Almost \$2,000,000,000 worth of horses are owned in the United States, according to the Year Book of the Department of Agriculture. It is probable that if the horses were taken at their real value, instead of their assessed value, this figure would be greatly increased. According to this report, there are 19,392,000 horses in this country, with a value of \$1,867,530,000, and the average value per head is \$93.40. Anybody knows that has tried to buy horses of late that the average per head is too small, for even an ordinary work horse is worth more than that. However, the showing is very encouraging. In the last ten or twelve years the number of horses in this country has almost doubled, and, instead of there being too many horses, there are not enough to do all the business that is required, and if it were not for the use of automobile trucks in the large cities the merchants of this country would be hard pressed for methods of transportation for their goods. With business increasing, as every sign indicates, there will be a greater demand than ever for horses during the coming year. In view of this, breeders can go on increasing their business, with every confidence that all the horses they can produce will find a ready sale at a good figure. As for good trotters, horses capable of going out and winning in their class, the demand is greatly in excess of the supply. Auction sale managers complain that there are not enough of the good ones to supply the gentlemen who are in the market for likely prospects. The coming year will be a banner one in the horse business, especially in the breeding business.

Making Use of the Dog.

This sketch shows an arrangement for making use of the dog for carrying water. It simply consists of a wheel, a, 8 ft. in diameter and 18 in. wide, with room enough inside for the dog to walk around, where he acts as a tread dog power for pumping water.



DOG POWER FOR PUMPING WATER.

a number of these dog-power pumps, which cost less than \$15. A good-sized dog can easily earn his living in an arrangement of this kind.—Farm and Home.

Winter Poultry Notes.

When your hens sing know that they are feeling good and will lay.

Hens will not lay well or thrive unless they have plenty of sunlight. Keep the windows clean.

Don't fuss around your hens too much. Like some people, they want to be let alone at times.

Take the chill off the water. Hens will not lay many eggs if they are compelled to drink ice water and eat corn mixed with snow.

Get rid of the useless cockerels and old hens. Stuff them and they will grow fat and tender—not too tender—but enough to grace a boarding house table.

Throw some rusty nails in the drinking trough. The hens need the iron as a tonic. But do not let anything else besides clean water go in with the nails.

Dressed fowls, wrapped in clean, white paper and packed in new boxes will bring enough more to pay well for the trouble. It is not hard to get top prices by a little thought and work.

Green bone is the thing that brings the eggs in winter. You cannot afford to do without it. It contains all the food elements necessary to make eggs. As it is a highly concentrated food it should be fed without clover or bran.

It is a sad mistake to feed laying hens or any other kind red pepper or any sort of stimulating food. That is one of the old-fashioned theories that do more harm than good. Do not do it because it acts like whisky on a man. The reaction is sure to come and leave the birds in worse condition than before.

Science AND Invention

Nine-tenths of the world's annual production of 2,000,000 tons of sugar comes from the sugar cane.

Every English family has at least one weak-minded member, according to a London medical magazine.

The so-called Chinese cement for joining wood, earthenware, glass, etc., is simply a solution of shellac in alcohol.

The wood of the alantus tree, despised because of its odor, resembles white ash and is capable of receiving a high polish.

At an altitude of 8,500 feet 25 per cent of the power of a gasoline motor is lost, owing to the decreased atmospheric pressure.

The name "torpedo" for under-water explosives was chosen for an invention in that line by Robert Fulton, of steamboat fame, in 1797.

In 1907 7,561 short tons of crude pyrites, worth \$3 per ton, were produced in the United States, almost entirely in California.

Of the 1,100 diseases to which the human body is liable, according to a German physician, there are forty-eight peculiar to the eye.

The seeds of the parasitic plant jinkungo, a native of Mozambique, yield an oil that is said to be superior to the salad oil of commerce.

The introduction of Japanese handlooms into China promises to greatly increase the importation of foreign yarns by that country.

A Massachusetts man has been given a patent on a spring clip with which new seats may be attached to chairs with a minimum of labor.

About 2,500 acres of abandoned farms in New England have been planted in trees this year as a part of a general reforestation scheme.

Prof. H. C. Wilson shows that the conditions in which Halley's comet will make its appearance in 1910 are similar to those which existed in 1066, when it was an object remarkable grandeur. The comet is expected to cross the orbit about March 1, 1909. Efforts will be made to discover it by photography next winter.

Count Zeppelin's fifth air ship is to have a balloon made of gold-beaters' skin. The envelope will comprise six layers, and it is estimated that the skins of 600,000 cattle will be required before the work is finished. The material is very strong and light, and by a secret process the skins are so joined that no seams are visible. The balloon, divided into 15 sections, is to have a capacity of 600,000 cubic feet. The envelope is to be made at Highbury, in England.

Prof. W. Phillips read recently, before the Royal Sanitary Institute in England, a paper detailing his observations on the limit of school children's capacity for attention. He concludes that two intervals of rest of 10 minutes each during an ordinary school session are more useful than one of 20 minutes. The attention wanes more rapidly in the afternoon, and consequently the studies which most severely tax the attention, like mathematics, should be confined to the morning hours. Professor Phillips concludes that gymnastics is not of necessity a mentally recuperative agent. If the teacher is a strict disciplinarian in gymnastics, the fatigue exhibited by the children may be of a pronounced character.

PERIL OF "ONE MAN" BANKS.

Most Impressive Lesson of the Morse Conviction Is This Fact.

By far the most impressive lesson of the Morse-Curtis trial and its outcome, apart from the terrible warning that it projects to those who would achieve financial influence and leadership through any but the old-fashioned straight and narrow paths, is that conveyed by the testimony concerning the carelessness or the indifference, or both, of the officers of the National Bank of North America other than the two whose conviction on serious criminal charges has been reached. From the outset it must have been as plain as a pikestaff to anybody having to do with the conduct of this institution, even in the most subordinate capacity, that Morse had it completely within his own personal control; and, that being apparent, it ought to have been equally plain—and no doubt was—that the sole purpose of this control was his own individual benefit—not that of the bank or of anybody or of anything else. Still, with this full and early knowledge of the situation and with a complete understanding of Morse's business methods, practices and ambitions, they permitted the Bank of North America at the very beginning of his connection with it to be a "one man" bank of the most pronounced type, for the influence of any such "one

man" institution, even when operated with no shadow of wrongdoing, is something inherently vicious.

In this instance, however, the very fact that practically the only use that the "one man" had for the bank was to borrow its money or to employ it in any way that he saw fit, ought to have constructed a danger signal at the very outset. And it is not a little remarkable that among all the officers of this institution with authority to act and to take a stand that would put a stop to the thing, not one except Curtis so much as raised a finger in protest or did anything to prevent the outcome that must have appeared to be something almost inevitable.

MAPPING OF GREENLAND COST EXPLORERS' LIVES.

The completed map of Greenland, the largest island in the world, has at last been published. About forty years ago Dr. A. Petermann spread the view that Greenland probably extended across the pole and down the other side of the earth to the neighborhood of Bering Straits. Then, in 1865, the Duke of Orleans pushed over 100 miles to the north of Cape Bismarck, but fog prevented him from making a satisfactory survey of the coast line. Meanwhile Dr. Mylius-Erichsen formed the plan of making a complete survey. He started on the steamer Denmark from Copenhagen on June 25, 1866. On March 28, 1867, the great sledge journey was begun.

As Mylius-Erichsen and his two companions emerged from Denmark Flord they met Lieut. Koch and his party, who had pushed directly on to Peary Land across the sea ice and had not only connected their surveys with Peary's at Wyckoff Island, but had also resurveyed the coast as far north as Cape Bridgman. Koch and his men had done everything they set out to do and returned to the ship in safety.

Mylius-Erichsen and his comrades determined to risk everything to complete their survey of the mainland coast. At last, however, they joined their surveys with those of Peary.



COMPLETED MAP OF GREENLAND.

They had completed the map of Greenland. The precious survey sheets were put into a bottle and thus they were preserved. Then they pushed south to Denmark Flord again.

When they lacked all other food, dogs were killed to supply a meager ration for men and animals. On Oct. 19 the sun disappeared beneath the horizon and still they stumbled southward in the semi-darkness. Two of the men never reached this goal. Hagen died on Nov. 15 and Mylius-Erichsen ten days later. Bronlund reached it in the moonlight, and when the spring search party this year found his body there it was evident that he had lived for several days after his arrival.

With trembling hand he filled several pages in his notebook with a description of their wanderings and sufferings and told where his comrades had died. He and his comrades now lie on the great island whose mapping they completed.

It was wonderfully fortunate that the bottle containing the survey sheets was found slung around the neck of Bronlund. Perhaps the great result of this exploration would never have been known if it were not for this fortunate circumstance. It is thought that Mylius-Erichsen probably did not venture to carry his diaries and collections over the inland ice with him, but left them in some safe depository at Denmark Flord, where they may ultimately be recovered.

Self-Conscious Englishmen.

The ordinary Englishman hates to be suspected of anything but the matter of fact. The more deeply he feels the more intent he is on slurring it over with a joke or a bit of useful slang.—Truth.

If you can make your scheme good, you are a very unusual man.

FUTURE RULER OF ITALY IS PROUD OF HIS MANY UNIFORMS



THE PRINCE OF PIEDMONT

This little boy will be king of Italy some day. The picture is a very recent one and shows the youngster in the uniform of a colonel of the guard. The prince, who is the only son of King Humbert and Queen Helena, is a robust, merry child, who delights in donning his various uniforms and "playing soldier" with his little friends. He was born Sept. 15, 1904 and rejoices in the name of Humbert Nicholas Thomas—the first after his paternal grandfather, the second after his maternal grandfather, the ruler of Montenegro, and Thomas after the Duke of Genoa, his father's cousin.

TALKS ON ADVERTISING

When the dimpled baby's hungry, what does the baby do? It doesn't lie serenely and merely sweetly coo: The hungry baby bellows with all its little might Till someone gives it something to curb its appetite. The infant with the bottle which stills its fretful cries A lesson plainly teaches: It pays to advertise.

The lamb lost in the hillside when darkness closes round Stands not in silence trembling and waiting to be found: Its plaintive bleating echoes across the vales and meads Until the shepherd hears it, and, hearing, kindly heeds, And when its fears are ended, as on his breast it lies, The lamb has made this patent: It pays to advertise.

The fair and gentle maiden who loves the bashful boy Assumes when in his presence a manner that is coy: She blushes and she trembles till he perceives at last, And clasps her closely to him and gladly holds her fast, And as he bends to kiss her and as she serenely sighs, This fact is demonstrated: It pays to advertise.

Confusing English. "I see one of our battleships reported fast in the mud." "Well?" "I was just thinking that a ship fast in the mud ought to be a record breaker on the open sea."—Pick-Me-Up.