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SILO THAT PROVED A MONEY MAKER

After a few years of careful thought and consideration on the question of putting in the silo I at last bought a good silo secondhand at a public sale, writes a Pennsylvania farmer in the American Agriculturist.

I plant my corn about one-fourth thicker than for a regular crop, as I want many good, large ears in the feed. When planted too thick the stems are too light and I do not get enough corn for a good feed. The silage if properly cut into short lengths and well packed so as to admit of no air to it will be juicy and nutritious, and, being palatable, cattle will thrive well on it and come out in the spring in good flesh and shed their hair much sooner than cattle kept alone on dry feed.

I begin to cut corn for silage when near the ripening stage—just when the corn on the ear is dented and nearly fit to cut for silage and before the lower leaves have died off too much. At this stage I seem to get about all the feeding value out of it, and there is still enough moisture in the stalk to make it pack well in the silo. If corn



Photo by Kansas Agricultural college.

Elizabeth of Juneau, world's champion Ayrshire cow, is owned by the Kansas Agricultural college at Manhattan. The world's best three-year-old Ayrshire finished her year's trial not long ago with 15,238 pounds of milk to her credit, 635 pounds more than the cow which has until now held the championship record. Elizabeth contributed during the year 536.84 pounds of butter fat, equal to 625 pounds of butter. The average test for the year was 3.52, per cent. Her ration has consisted of the general herd ration of four parts corn, two parts bran and one part timothy as a grain ration, and she has received all the alfalfa and silage she would consume.

gets too dry add enough water to make it pack well. When I am ready to fill the silo I try to get enough help to keep a cutter and engine busy.

There is much to be gained by having an extra man or more to handle the corn, for it is a heavy job. I aim to have two men in the silo to tramp and pack it well and distribute the corn and leaves into all parts of the silo. My silo is the round stave silo of cedarwood, and I figure I can grow the corn under ordinary conditions and put it into the silo for \$1.50 a ton, and I also figure that every ton of silage is worth \$4 to \$5 a ton when compared with other feeds. I live on a farm of 130 acres, where I grow a variety of crops, such as corn followed by oats, followed by wheat, and occasionally a second crop of wheat with which I seed over land to grass, timothy and clover. This hay I had formerly fed out to my stock. The cows, horses and sheep were also fed much of the corn and corn stover.

With a silo I can now hold over much more and better feed for my cows and sheep, and the silage is produced on much less acreage. This is a very strong point in favor of the silo. I can farm better without the automobile than without a silo. The fatteners of cattle for beef claim much larger gains by the use of silage for feeding. Silage seems to furnish just what the dairy cow wants and also what the steer wants for taking on flesh.

I have paid for the silo many times over by selling the hay I would have fed to my cattle, sheep and other stock, and there is no food to equal good corn silage if properly put up.

Feed For the Colt.

Too few of the colts on most farms receive any other means of sustenance except their mothers' milk till they are ready to wean, writes a correspondent of the Iowa Homestead. Of course the colt will graze some, but it will not develop and thrive as well on grass and milk as it would if properly fed on a little grain and mill feed stuff. We begin to tempt the colt to eat of a little grain, mill feeds and clean, bright roughage just as soon as possible. With a small trough containing some grain and placed where the colt frequents, it quickly forms the habit of eating.

We have found a most satisfactory feed for the colt to be one part corn chop, one part bran and two parts oats. These form a ration that will furnish bone and muscular tissue for the young and rapidly growing body and at the same time supply sufficient material for putting on a little fat and keeping up the heat sometimes necessary.

Corn For the Silo.

It was formerly taught by the agricultural colleges that corn should be cut for silage just when the grain was in the "dough" stage, but experience has demonstrated that good silage may be made at almost any stage after that, but never before. Silage corn cut too soon lacks substance and feeding quality. It is too watery. If cut after it is dead ripe it may be necessary to run water into the blower, but it will make silage.—Kansas Farmer.

THE SWINEHERD.

Never kill a pig for market or home consumption until it is ripe for it.

The cause of unthrifty pigs can often be traced to a filthy swill barrel.

Prepare to keep the young pigs growing from the hour they enter the world.

Hogs are among the most cleanly animals if they are given a fair chance.

A lot of hogs in a hog lot well grown with clover will convey a lot of money to their owner's pocket.

Be sure that the hog herd, large or small, has an abundance of fresh, clean water to drink all the time.

The hog that is fed on one thing all the time makes slow growth and little pork.

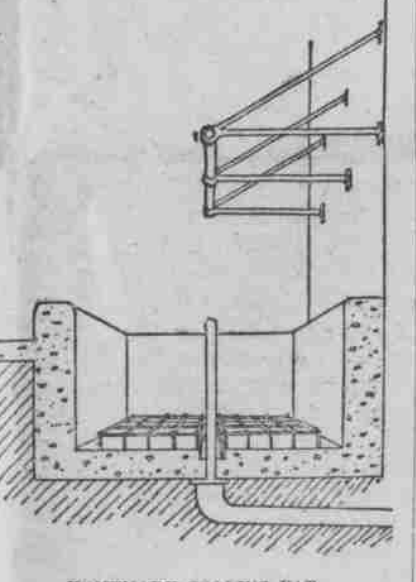
CONCRETE COOLING VAT.

Homemade Iceless Refrigerator For Country Use.

Many country homes which cannot have ice must depend on other means for keeping milk, butter and farm products cool, says the American Cultivator. Nothing is better and cleaner than a concrete vat sunk in the ground in the milk house and fed by a spring or with water from the well on its way to the stock watering tanks. The size of the vat is dependent on the needs. For a farm with a small dairy sufficient space is to be had in a tank four feet two inches by seven feet two inches in the clear, by twenty-three inches deep and with five inch walls and bottom. This vat will hold eight regulation shipping cans spaced six inches apart.

In a corner of the milk house dig the pit for the vat five feet wide, eight feet long and twenty-two inches deep. If the water is to be fed and removed by iron pipes, these should be laid at once with their ends provided with screw or sleeve couplings five inches above the earth bottom of the pit.

Build a box form without top or bottom four feet two inches wide by seven feet two inches long, outside measurements, and twenty-three inches deep. Mix the concrete mushy wet of one bag of portland cement, two cubic feet of sand and four cubic feet of screened gravel or crushed rock, or one part cement to four parts pit gravel. Place a cork in the ends of the pipes and lay the five inch bottom with a strip of woven wire fencing in the concrete within two inches of the top. Quickly finish the bottom smooth with



HOMEMADE COOLING VAT.

a wooden float and a steel trowel and at once set the box form in the pit so as to leave a space of five inches on all sides. Fill this space with concrete. Around the corners of the tank, near the top and bottom, imbed an old iron rod. Bring the outside walls to full height above floor level by using a width of board along the side and end. Round the edges and finish the top of the walls with a trowel.

When the tank is two days old carefully remove the forms. Rub down the walls with a soft brick and paint them with a creamy mixture of cement and water. Five days later the vat may be used. In the coupling of the outlet pipe place a section of overflow pipe nineteen inches long, which will draw off the warm water at the top of the tank. The overflow pipe should be at least one-half inch greater in diameter than the inlet pipe so as to remove all danger of flooding the milk and the dairy house. Make a grating of one inch slats or gas pipe to place on the bottom of the vat to provide a circulation of cool water under the milk cans. As an aid in lifting the cans fix a hand rail at a convenient height above the tank.

For this vat there will be required one and one-half yards of crushed rock or screened gravel, three-quarters yard of sand and ten bags of cement at a total cost of about \$8. Two men can build it in one day. Larger cooling tanks should have walls six inches thick. Filled with cool water from the spring or well, such a vat will keep the cream sweet and will in many other ways take the place of an ice refrigerator.

Hog For the Dairyman.

One of the best breeds of hogs for the dairyman to raise is the Hampshire. He is a good hog anywhere you put him; but, as he was originally bred as a bacon hog, he seems to like plenty of milk in his diet and is mighty willing and able to pay for it. Any good hog is a good hog for a dairy farmer to keep, and the color of his hair doesn't matter. So select the breed you like best and stay with it, and it will stay with you.

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The population of atoms in the smallest particle of matter visible under the microscope is greater by far than the total human population of the globe since the race developed. And a little instrument composed of two fragments of gold leaf makes it possible to perform the miracle of counting these denizens of the realm of infinite littleness.

Within the smallest atom there is something almost 2,000 times smaller than the atom itself—a something that is detachable from the atom and susceptible of being measured as to its mass and tested as to its electric charge with the aid of apparatus actually in use in the laboratory. This ultimate particle of matter is called the electric corpuscle or electron. We owe our knowledge of it chiefly to Sir Joseph Thomson. It is the smallest thing in the world, and it is probably the basal substance out of which all matter of whatever character is built.

As regards bulk, the electron is, according to the French physicist Jean Becquerel, billions of billions of times smaller than the atom. To make the comparison vivid Becquerel likens the electrons in an atom to a swarm of gnats gravitating about in the dome of a cathedral.

As we penetrate thus far and further into the realm of the infinitely little, soe in imagination the smallest visible particle of matter resolved into myriads of molecules, each molecule into sundry atoms and each atom into its teeming swarms of electrons, the question naturally arises, What lies beyond?—Dr. Henry Smith Williams in Harper's Magazine.

Cementing Antiques.

Old stone monuments, statues and building fronts that are crumbling from long exposure to the weather can now be patched up cheaply, the patches not being noticeable, by means of one of the latest adaptations of concrete. With proper selection of materials and coloring, most building stone, if has been discovered, can now be imitated. The crumbling stone is chipped away until sound stone is reached and the original shape is restored in concrete. By following the lines of the original stone blocks the effect is as good as if the entire blocks had been replaced at heavy construction cost. The crumbling pillars of a German city hall and some badly broken statues on another German public building have been effectively restored in this way.—Exchange.

FOR SALE—Ten 40-gallon oak barrels, \$2.00 each. Palace Hotel.

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