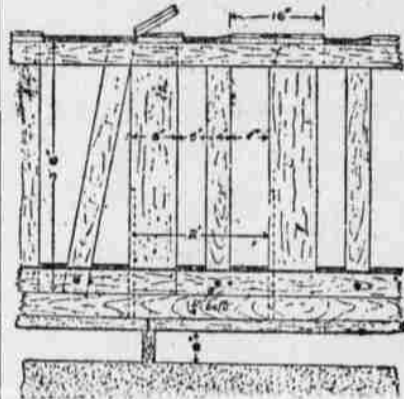


FARM NOTES

Calf Mangers.

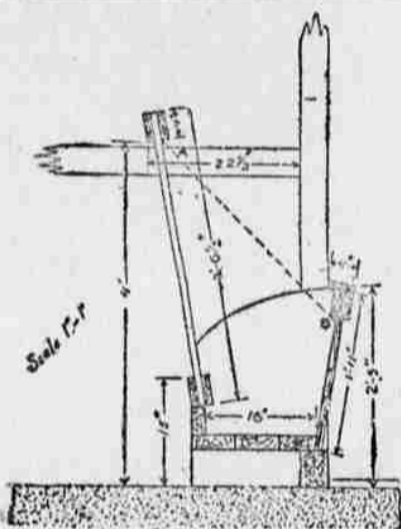
A form of combined stanchion and manger for calf feeding is illustrated in a bulletin published by the Michigan Experiment Station and is recommended as being very convenient. The principle on which the stanchion is built is not claimed to be new; the use dates back a number of decades, but the especial application and adjustment of the one hereafter described presents some new features. This particular model is produced as the result of three years' trial, having undergone several changes since the first one was installed. This appliance can be adjusted so as to accommodate the calf from birth up to twelve months of age. The calves are confined in the stanchions at feeding time only. After the calf has been secured the milk bucket is placed in the manger; when the milk is consumed the bucket is removed and ensilage and meal supplied, followed by hay. By using this stanchion method of feeding the maximum number of calves can be kept in a minimum amount of space in a clean, healthy, thrifty condition, providing they are given access to outdoor yardage. The average size of the four calf pens in the dairy barn, including manger space is 15 feet three inches by 12 feet three inches. Each pen accommodates eight calves up to five or six months of age. The average size of two pens in the grade herd barn accommodating six calves each, is 9 feet 9 inches by 14 feet 10 inches, and three occupied by five each are 10½ feet by 11 feet 9 inches. Of course, in all cases except one the calves have access to yardage at will. Referring to the illustration for detailed description, the bottom of the

of the stanchion resting on it. The top part of the manger over which the calf feeds is 15 inches above the floor and should not be made higher, as even this is rather high for the new born calf. The youngest calves can feed over this, but should not be left fastened during the day, as they could not lie down comfortably. The side of the manger next the feed alley is



VIEW SHOWING STANCHIONS.

practically 2 feet high and 2½ feet above the floor; the slope given to this part of the manger is a very decided advantage, especially in placing and removing buckets while the calf is fastened in the stanchion; even more slope than that indicated would be well. The manger is partitioned off every two feet; this should be the minimum width, for while it is ample room for the young calves, even more room would be desirable for the roughage of the older ones. The manger partitions extend upward as far as the curved line shown in the illustration, but this is the most faulty feature of the fixture, as it is possible for one calf to reach over and suck another one's ears if the meal and ensilage is not promptly supplied after the milk is consumed, though this rarely happens. A more perfect manger division will be made by boarding up from the manger to the dotted line shown between A B. The front or stanchion part of the fixture is 3 feet 6¼ inches high and slopes away from the manger to increase its capacity and give the calf the benefit of a little more spread in throwing the head up to remove it from the open stanchion. The stanchions are made of well-seasoned 1-inch elm and no breaks have occurred thus far. The youngest calves do not require more than five inches space for the neck when confined. The stanchion frames are bored with a number of holes so that the movable upright pieces can be shifted according to the size of the calf. As calves approach the yearling stage and their horns interfere with the working of the stanchion the movable piece may be removed and the animal allowed to go free while feeding. This system has given the utmost satisfaction, permitting calves to be fed individually according to their needs and entirely preventing the many bad habits so frequently acquired by the pail fed calf.



VIEW SHOWING MANGER.

manger, 18 inches wide, consisting of 2-inch hemlock, is 6 inches above the floor. As the front of the manger is built on rather than against the bottom it leaves the inside bottom measurement of the manger 16 inches. The side of the manger over which the calf's neck is placed in feeding is 8 inches above the bottom, one-half of this distance being taken up by a 2x4, the balance by the bottom frame-work

Materials for the Silo.

Ensilage is being used more and more for general farm stock, being fed to some extent to the calves, the market steers and the horses. It probably requires a little higher grade of skill to manage a farm with the silo system. There is room for judgment in putting up the silo, in handling the crop and filling the silo, to say nothing of its management winter and summer and the right plan of feeding. There is considerable to learn for the farmer who has always practiced the hay, grain and roots system. Yet the experience of those who have made the change seems to indicate that there is no need of making serious mistakes even the first year, while the new system nearly always gives satisfaction under the circumstances mentioned. Perhaps not every dairy farmer needs a silo, but it can not be denied that a great many more silos are needed than have yet been put up.

Rubber Covered Roads.

Experiments with rubber asphalt roadways covering a period of six years are reported to have shown very satisfactory results. Rubber asphalt is claimed to be more plastic and more adhesive than pure asphalt and resists higher temperatures. This product, which is manufactured under a patented process, permits cold applications of the asphalt, which are said to possess all the advantages of hot compressed asphalt without its drawbacks.

The Yolks of Eggs.

The color of the yolk of the egg seems often to be effected very noticeably by a change in the food. When

fowls are closely confined in winter or summer, it often happens, especially if a ration is deficient in green food, that the yolks are pale colored. In one instance a much deeper orange color in the yolk followed a change in feeding to green clover and alfalfa. One lot, where pale colored yolks were the rule, laid eggs with orange colored yolks after they had been given the run of a barn floor covered with dry clover chaff and leaves. A change in color of butter is often noticeable in the same way when cows are turned to pasture after dry feed.

Farm Notes.

It is better to sow rutabaga turnips in rows than broadcast.

The best cows are the ones that the careful dairyman raises for himself.

Rotation must be practiced in the garden or truck field to obtain the best results.

Black Winter or Spanish radishes should be sown in August or September with turnips.

It has been said that "weeds are the devil's flower." Certain it is that they play the mischief with a crop.

For best results in the vineyard plenty of water is necessary. During the hot season sub-irrigation is advisable.

A fall crop of potatoes will be found profitable, if the grower has kept his land in good tith during the summer.

Sunshine and air are essential to health in chickens as well as any other livestock on the farm. See that the place where they are kept has windows to let the sunshine in and ventilators to bring in the fresh air.

POPULAR SCIENCE

The government has obtained control of the patent on an automatic weighing machine designed to prevent frauds against the custom service.

Of 110 tons of sausage offered for sale at a recent fair in Paris, nine tons were made of horse meat and seventeen from mule or donkey flesh.

The first electric smelting plant in the world in which pig iron will be produced on a commercial scale is about to be installed in Norway.

A big railroad fill in New Jersey is being made by dumping earth from cars which are run out on a track suspended by cables from two towers.

A tube, containing incandescent lamps at one end to heat the air, to dry a woman's hair after bathing, has been patented by a New York man.

Two Swedish engineers have perfected a new microphone which is said to double the distance over which telephone communication now is possible.

In discussing the possibility of wireless communications up to distance of 6,000 miles, which he believes to be possible, Mr. Marconi recently called attention to a very interesting theoretical point, namely, that when the equator is passed, the waves may begin to converge, following the outline of the globe, and thus it may happen that at the antipodes messages can be received much more easily than half-way to the antipodes.

The United States Forest Service will begin this year the experimental introduction of eastern hardwoods in California. The trees selected for the first essay are hickory, red oak, chestnut and yellow poplar. They will be plant-

the proper moment arrives the ends of the rod are instantly pressed together by releasing a spring. The oxid skin bursts at the point of contact and is driven out, and the clean metal immediately unites, and makes a perfect joint.

CAME IN A WASHTUB.

An Apple Tree Brought from England in 1623 Bears Fruit.

An aged apple tree stands on the premises of Henry Coleman at Dover Neck, in the historic locality of the first permanent settlement of New Hampshire, says the Boston Globe.

Tradition says that the tree came over from England in a washtub. It is not known who brought it, nor in precisely what year it arrived, but in view of the fact that it is on land originally owned by the Hilton family, there is every reason to suppose that it voyaged with the first shipload of settlers, in the spring of 1623, when according to the earliest record, "the Hiltons set up their stages at Dover," others of the company having remained for a time at the first landing, near the mouth of the Piscataqua river.

The old tree is called the Millet apple tree, because Captain Thomas Millet, a noted sea captain, whose grandparents settled in Dorchester, Mass., in 1635, went to Dover with his young wife in 1721 and settled on the acres at Dover Neck, where the tree stood. For many years he was the leading man of the Dover settlement.

To-day the apple tree, as an example of tenacity of life and fruitfulness, probably is without a peer in America. Although the trunk is nothing but a shell, it bears fruit in great abundance from branches far more vigorous than those of many a younger tree. This year about two barrels of apples were produced, all perfect and

KEPT IN TRACK BY "GUIDES."



BLIND ATHLETES MAKE WONDERFUL TIME.

The Overbrook record for 100 yards is 10.45 seconds, very remarkable time when all things are considered. The runners being blind, it is obviously necessary that they shall have some means of knowing whether they are keeping to the right track or not. Therefore wire cables stretch the full length of the track. On these are rings large enough to run easily, and to these rings are attached short chains with handles. The racers hold such a handle, and are thus able to keep an exact course. The tape also takes a novel form. It consists of a hanging fringe of cords. This the blind runners strike with their faces, and so realize that they have reached the winning post. This fringe of cords is similar to that used on certain American railroads to warn the brakemen on the top of freight cars that a low bridge is near.—Illustrated London News.

ed near the rangers' cabins in the national forests, and if they succeed, larger plantations will be made. Although California has a great variety of native broad-leaved trees, there is said to be none ranking in commercial importance with the best Eastern hardwoods. The absence of such trees is ascribed not to climatic conditions, but mostly to unfavorable seed distribution.

An interesting instance of how a difficulty may sometimes be turned into an advantage is furnished by the aluminum-welding machine recently invented by S. Cowper-Coles. The trouble in soldering aluminum has always been that a film of oxid persistently forms on the surface of the metal while the operation is going on, and prevents permanent adhesion. Cowper-Coles turns this to advantage by butting the ends to be joined together, and then heating the joint in a blowpipe. The film of oxid retains the molten metal like a skin, and when

luscious, many weighing nearly a pound apiece.

The trunk is about four feet in diameter. One side is rotted away, so that anyone can walk into the shell, which is so roomy that two men could easily conceal themselves in it. The living walls of the shell are from two to six inches thick. The trunk is about seven feet tall, and is surmounted by one large branch, which has been sawed off fifteen feet from the ground. From this main branch the smaller fruit-bearing branches radiate.

Mr. Coleman, who is 75 years old, and a member of one of the oldest Dover families, has lived on the premises about thirty years. He venerates the old tree, and says he was its protector even when a small boy. In proof of this statement he shows a deep scar on his forehead, the mark of a stone bruise received when protecting the tree from a raid by other boys.

Catarrh

Is a Constitutional Disease

It originates in impure blood and requires constitutional treatment, acting through and purifying the blood, for its radical and permanent cure. The greatest constitutional remedy is

Hood's Sarsaparilla

In usual liquid form or in chocolate tablets known as Sarsatabs. 100 doses \$1. Nasal and other local forms of catarrh are promptly relieved by Antiseptics or Catarrhlets, 50c., druggists or mail. C. I. Hood Co., Lowell, Mass.

Florida's 70-Foot Bamboo.

Possibly the tallest bamboo in America grows in Arcadia, Fla., and is about 70 feet high. The clump has a spread of 50 feet and the diameter at the ground is 12 feet. The specimen is only 8 years old.

This is the common bamboo of India, probably brought to south Florida from the West Indies. In Jamaica it has become naturalized and is popularly supposed to be indigenous. It makes an astonishing growth during our rainy season, the canes often attaining their full height in six weeks, after which they begin to put on leaves. The canes are from four to five inches in diameter at their base. Unfortunately this species cannot stand low temperatures, and the specimen in Arcadia has frequently been damaged by cold.

A Good Business.

I'd like to own a street car line, it ought to pay. The people ride when it is fine, To heat allay. Of course they ride when it is wet, For then they wish To quickly under shelter get; Man is no fish.

And so a street car line, you see, May business find, No matter what conditions be With human kind. Then to another point is my Attention drawn; No other business profits by Its hangers on. —Louisville Courier-Journal.

Not on Democratic Principles. Perhaps it may be laid down as a general rule that a legislative assembly, not constituted on democratic principles, cannot be popular long after it ceases to be weak.—Macaulay.

Trying It on Nan. Nan—You look perfectly lovely in that gown. Fan—Thanks. That's all I wanted to know. Fortunately, I bought it on approval.

What Really Draws. A high-brow lecture given free, Would few entrance. The horrid men would rather see A barefoot dance. —Pittsburg Post.

Identifying Gussy. "What sort of a looking chap is Gussy?" "Well, if you ever see two men in a corner and one looks bored to death, the other one is Gussy."—London Opinion.

George's Discovery. "George," said the Titian-haired schoolmarm, "is there any connecting link between the animal kingdom and the vegetable kingdom?" "Yeth, ma'am," answered George promptly: "hah"—Everybody's.

Just Like a Woman! "The author of 'There is No Death' has married an undertaker," says a contemporary. How does she expect her husband to make a living?—Charleston News and Courier.

The average daily amount of meat consumed by each individual in New York City is 2.6 cents' worth, which is a falling off of about ¼ cent in five years.

Rivalee of Muckrakers. "Chicago people think their city almost as corrupt as San Francisco," said the Californian, warmly. "That's Chicago's nerve. Always trying to get into our class."—Philadelphia Ledger.

All Who Would Enjoy

good health, with its blessings, must understand, quite clearly, that it involves the question of right living with all the term implies. With proper knowledge of what is best, each hour of recreation, of enjoyment, of contemplation and of effort may be made to contribute to living aright. Then the use of medicines may be dispensed with to advantage, but under ordinary conditions in many instances a simple, wholesome remedy may be invaluable if taken at the proper time and the California Fig Syrup Co. holds that it is alike important to present the subject truthfully and to supply the one perfect laxative to those desiring it.

Consequently, the Company's Syrup of Figs and Elixir of Senna gives general satisfaction. To get its beneficial effects buy the genuine, manufactured by the California Fig Syrup Co. only, and for sale by all leading druggists.