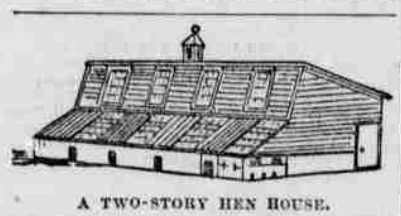


A Two-Story Hen House.

Poultry keepers, as a rule, are not capitalists who need not count their dollars when they are about to begin business. Economy with them is the first consideration, and as it is much less cost to build a two-story house than one of a single story, it seems to be a sort of want of wisdom that two-story houses are not the rule for keeping hens, instead of the rare exception. The accompanying illustration shows an excellent two-story hen house, in which there is a very pleasant roosting apartment above the ground floor. The lower floor is used for an exercising house, and for laying. At one corner is a separate pen for hens with broods, each of which has a pen to itself, in which it is enclosed until the chicks may be safely let out into the yards around the building. It is intended that this house should stand in the center of a plot of two acres, divided into four yards, into which the fowls may be let.

This house is supposed to be fifty feet long and twenty-five feet wide. This is wide enough for any purpose, but the length may be increased to any extent desired for larger flocks. There is a slatted ventilator on the top, which is closed at will by a sliding door in the bottom of it. The lower floor is seven feet high to the floor above, a broad sloping way is made, with a slatted floor, for the hens to go up to roost, and as there is nothing for them to roost upon below, they must go up.



A TWO-STORY HEN HOUSE.

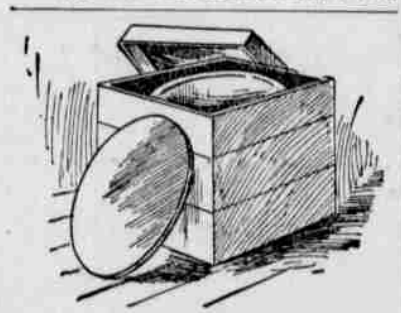
feet high to the floor above, a broad sloping way is made, with a slatted floor, for the hens to go up to roost, and as there is nothing for them to roost upon below, they must go up.

Steam Engines for Farm Use.

Because farmers always have horse power on the farm it does not follow that it must be used for every purpose where additional power is required. There are many kinds of jobs where a small engine, which any farmer can easily learn to run, will give better satisfaction and be far less expensive than keeping a horse. With the proper connections so as to furnish the power such an engine will do the churning or run the milk separator. It will do the washing and turn the grindstone in summer, a job that has disgusted more boys with farming than any other. One of the best uses of the engine is to make it turn a lathe, where the young people can cut out various kinds of wooden utensils and learn skill in handicraft that will be useful to them all their lives.

To Cook Feed.

The Iowa Homestead presents a plan for cooking feed for poultry or pigs at times when it may not be convenient to build a fire. Place an old keg or half barrel in a box and pack around it with straw or chaff. Provide both barrel and box with tight fitting lids. Then, having mixed the feed with hot water, put it in the inner receptacle and



COOKING IN A KEG.

place both lids in position. The mess will cook in the time elapsing from one feed to the next. It is surprising how long the water will remain hot, even in very cold weather.

Cattle Industry Changes.

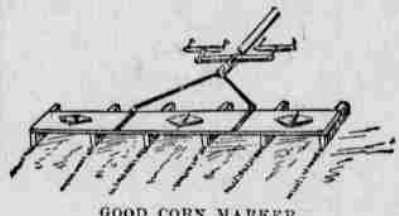
The tendency to feed cattle and not raise them is growing more popular with the farmers of the Middle West every year. This is a short cut to quick returns, and saves about two years' time. Of course, somebody has to raise the stock cattle, but as this part of the industry can be carried on more cheaply on the big ranches, farmers who raise corn prefer to let them have a monopoly on the breeding and raising end of it. The number of range cattle that are being fed on corn each winter is growing rapidly. This fact is just as noticeable with sheep as with cattle, for naturally the same conditions and results obtain.—Chicago Drivers' Journal.

Cotton Seed Meal.

After extolling the merits of cotton seed meal for years leading agriculturists are taking the stand that it is an unsafe food, as it varies greatly according to the conditions of the growth of the plant and the treatment of the seed after it is removed from the bolls. Cotton seed meal is the product of ground seed that has been subject to pressure

in order to remove the oil, the seed itself being immature, as the bolls are picked before the seed can fully ripen. There is no unanimity regarding the merits of cotton seed meal, however, on the part of those interested in its discussion, and the experiment stations will now have plenty of work to do in investigating it.

A Corn Marker.
Take a plank 15 feet long, 10 inches wide, 2 inches thick. Make six short runners 18 inches long, sloped enough to run easily. Fasten them to the plank underneath with two 4-inch wood screws. One foot and a half from each end cut your plank in two and put on a good hinge. Bolt on two iron straps 4 1/2 feet from each end, fasten two iron braces to them and fasten the braces to a tongue, and you have a complete corn marker. Drive the team so that the outside runner will run in the track previously made. You can turn up the



GOOD CORN MARKER.

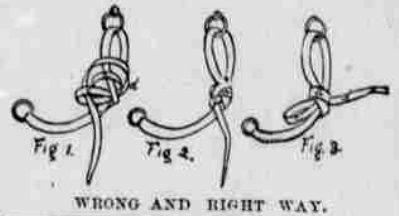
two ends to turn. The hinge in the center will make it mark all of the ground, even if it is not very level.—Farmers' Advocate.

The Middleman a Necessity.

The middleman is a necessity. If a farmer had a thousand bushels of wheat to sell he could never retail it. He is compelled to sell in bulk or lose more time than the wheat is worth. The middlemen are the distributors, and they are also consumers. The farmer can get rid of the middleman to a certain extent by seeking markets near home for articles that are readily salable, such as butter and eggs, but if he buys from his neighbor any of the articles he sells them he, too, becomes a middleman, as he handles the product of his neighbor between the producer and consumer.

How to Tie a Strap.

The illustration shows both the right and the wrong way of tying either leather straps or ropes, says a correspondent of Farm and Fireside. Fig. 1 is not reliable, although it may answer for a temporary hitch. But if I wanted to be positively sure that my horse could not get loose I would not stop short of the tie, Fig. 2. This is the same as Fig. 1, except that every part of it is drawn up tight. To make it, tie the common bowknot, Fig. 3, drawing the knot (a) fairly tight; pass the end



WRONG AND RIGHT WAY.

(b) of the strap through the bow or loop (c), and draw the loop by pulling at strap (d) until it hugs the end (b). When doing this, the knot (a) is liable to loosen, which must be prevented by holding it with thumb and forefinger of one hand while the other does the pulling. Then draw the end (b) through the drawn-up loop (c), Fig. 2, as far as possible, and you will have a tie that no animal is able to undo.

Old Ideas.

There are hundreds of farmers who are opposed to "book farming," or what they term "fancy farming," or what believe in giving a sick cow a piece of salt beef to "bring back her cud." When a cow is sick she refuses to eat; it is then decided that she has "lost her cud," and she is treated for its restoration, when in fact the chewing of the cud by a cow is simply the forcing of the food into the mouth from a large storage stomach to be chewed and then swallowed, the food passing into a smaller stomach for digestion. Hundreds of cows, however, are treated for "loss of cud," and their horns are bored as a remedy for "hollow horn."

Pioneer Farming.

In the general work of the farm it is impossible to lay down rigid rules and live up to them for any considerable length of time without loss. Conditions of soil and season vary so much from year to year that only elastic rules intelligently fitted will stand the strain, even when kept within the bounds of the same farm on which they were adopted, while with a change of location difficulties increase. The pioneer must work out many problems for himself, there being no "experience of others" to go by.

Why He's Slow.

The farm hand working in the field, (Time is a lagard—slow to yield), Watches the sun with anxious eyes, And slowly brushes off the flies. The day is long, the sun is hot; He smells the dinner in the pot. He's working by the mouth, you know, And that's what makes the man so slow.

Whitewash.

When making whitewash use lime and skim milk and the whitewash will last longer. If a red color is desired use fresh bullock's blood, which will still further improve it. The mixture soon becomes almost insoluble.

MISSIONARIES TO ALASKA.

Two Pioneers Who Invaded the Frozen North to Spread the Gospel.

Christianity invaded Alaska before gold seekers made that the end-of-the-century Mecca. The Presbyterian Church sent a missionary and his wife to that frigid land to care for the souls of the grimy natives long before the yellow metal became the motive of pilgrimage. Rev. V. C. Gambell and his wife went north as missionaries for the Presbyterian Church and as government teachers of the natives. It was quite a while ago, when few persons but the tottem pole Indians lived in the acquired territory, that Mr. and Mrs. Gambell departed for their unpromising field of labor. It will be seen that they speedily adopted the cumbersome and uncouth but comfortable garb of the Indians. Nothing less would make life there possible, even to those born in that land. They believed before going that gold was not the only thing to be found in Alaska. Gold is nothing to these earnest, faithful laborers in comparison to human souls. They have lived among the natives long enough to have become contented with their lot and to love the people to whom they have devoted their lives. In the course of their ministrations they have traveled all through the portion of the territory where the gold finds have been most prolific of wealth. They know as much or more of the customs and habits of the natives than any persons who



REV. GAMBELL AND WIFE.

have visited Alaska. They have in their work lived among the Indians until they are thoroughly familiar with the domestic lives of the natives.

SITTING DHURNA IN INDIA.

The Maharratta Method of Settling Debts.

Many queer stories are told of the persistence and clever devices of the collectors of bad debts; but even a professional humorist would find it hard to invent anything more absurd than the method actually in use among the Maharrattas—at least, if travelers' tales are to be trusted.

In that country—so they say—when a creditor cannot get his money and begins to regard the debt as desperate, he proceeds to sit "dhurna" upon his debtor, that is, he squats down at the door of his victim's tent, and thereby, in some mysterious way, becomes master of the situation. No one can go in or out except by his sanction. He neither himself eats nor allows his debtor to eat, and this extraordinary starvation contest is kept up until either the debt is paid or the creditor gives up the siege, and in the latter case the debt is held to be canceled.

However strange it may appear to Europeans, this method of enforcing a demand is an established and almost universal usage among the Maharrattas, and seems to them a mere matter of course. Even their "Scindiah," or chieftain, is not exempt from it.

The laws by which the "dhurna" is regulated are as well defined as those of any other custom whatever. When it is meant to be very strict, the claimant takes with him a number of his followers, who surround the tent, and sometimes even the bed of his adversary, to make sure that he obtains no morsel of food. The code, however, prescribes the same abstinence for the man who imposes the ordeal; and, of course, the strongest stomach wins the day. After all, we have little right to ridicule this absurdity; for our own laws provide, nominally at least, for starving a jury into a verdict.

A similar custom was once so prevalent in the province and city of Benares that Brahmans were sometimes systematically put through a course of training to enable them to endure a long time without food. They were then sent to the door of some rich person, where they publicly made a vow to remain fasting until a certain sum of money was paid, or until they perished from starvation. To cause the death of a Brahmin was considered so heinous an offense that the cash was generally forthcoming; but never without a resolute struggle to determine whether the man was likely to prove staunch, for the average Oriental will almost as soon give up his life as his money.

Pruning Lilac Wiegela.

Both lilac and wiegela bear their flowers on their young or green shoots, and if pruned in autumn or winter the bloom will be much reduced. These plants need very little pruning, as a rule, beyond cutting away any dead wood or unnecessary branches, but if at any time it should be thought desirable to shorten or head back the branches, the proper time for doing it is immediately after the plants have finished their blooming.—Viek's Magazine.

Even Worse than Death.

"Why are the Dashiigh girls in mourning?"
"An uncle of theirs was accepted as a juror last week."

CHINKS IN A MUSS.

Whatever may be the matter with China and other countries, it is said that for the reason that most of them have so little to feed upon and so very much hard work to do they suffer greatly with neuritis. It is doubtful if they could suffer more than our people do, owing at times to the extremely damp, chilly atmosphere in winter, which seems to have a peculiar influence upon the nervous system so as to produce this affection, but happily for our comfort and the cure of the pain, St. Jacobs Oil is recognized as its sovereign remedy. With pain produced from cold there is an absolute need of the warmth and strength which St. Jacobs Oil gives, and through this means it performs its office promptly and surely.

If an Egyptian dies before noon the funeral must take place the same day. If death occurs after noon, the funeral may not be delayed after the next day.

CUSTOMS CASES DECIDED.

The general appraisers of goods passing through the Custom House have made several decisions lately which are passed upon by the Secretary of the Treasury, will hold good. But while there is stability in that quarter, no system falling in strength can be properly sustained without the aid of Hostetter's Stomach Bitters, a genial tonic and remedy for malaria, rheumatism, dyspepsia, constipation and biliousness.

The largest telegraph office in the world is in the general postoffice building, London, over 3,000 operators being employed.

The Power of Schilling's Best baking powder is wonderful.

A Summer Novelty.

A summer novelty in jewelry will be studs and buttons and pins of carved pink and mother-of-pearl set in silver, or with skeleton silver patterns cut out over the pearl.

SHAKE INTO YOUR SHOES.

Allen's Foot-Ease, a powder for the feet. It cures painful, swollen smarting feet and instantly takes the sting out of corns and bunions. It's the greatest comfort discovery of the age. Allen's Foot-Ease makes tight-fitting or new shoes feel easy. It is a certain cure for chilblains, sweating, damp, callous and hot, tired aching feet. We have over 100,000 testimonials of cures. Try it today. Sold by all druggists and shoe stores. By mail for 25c. In stamps—Trial package FREE. Address Allen S. Olmsted, Le Roy, N. Y.

According to Nilsson, the zoologist, the weight of the Greenland whale is 100 tons, or 224,000 pounds, or equal to that of 88 elephants or 440 bears.

AN OPEN LETTER TO MOTHERS.

We are asserting in the courts our right to the exclusive use of the word "CASTORIA," and "FITCHER'S CASTORIA," as our Trade Mark. I, Dr. Samuel Fitcher, of Hyannis, Massachusetts, was the originator of "FITCHER'S CASTORIA," the same that has borne and does now bear the fac-simile signature of CHAS. H. FLETCHER on every wrapper. This is the original "FITCHER'S CASTORIA" which has been used in the homes of the mothers of America for over thirty years. Look carefully at the wrapper and see that it is the kind you have always bought, and has the signature of CHAS. H. FLETCHER on the wrapper. No one has authority from me to use my name except The Centaur Company of which Chas. H. Fletcher is President.

The largest hotel in the world is the Waldorf-Astoria, in New York city, a \$10,000,000 establishment, built by millionaires for millionaires.

FITS Permanently Cured. "His or her's illness after first day's use of Dr. Kline's Great Nerve Restorer. Send for FREE TRIAL BOTTLE and treatise. DR. R. H. KLINE, 164, 330 Arch street, Philadelphia, Pa.

Pneumatic Crutch.

A new crutch for cripples has an oscillating arm rest pivoted to the top of the crutch and fitted with a pneumatic cushion set in the upper part of the rest.

I believe Piao's Cure is the only medicine that will cure consumption.—Anna M. Ross, Williamsport, Pa., Nov. 12, '98.

It costs \$5.74 per million gallons to pump water to Chestnut Hill reservoir, Boston. The engines pump 8,938 on one pound of coal.

After being swindled by all others, send no stamp for particulars of King Solomon's Treasure, the ONLY renewer of manly strength. MASON CHEMICAL CO., P. O. Box 747, Philadelphia, Pa.

To Prevent Trolley Accidents.

To prevent accidents on trolley cars the trucks are provided with forked frames, which extend on each side of the wheels and end in small wheels, resting on the track to push a person out of the way if he falls under the car, the wheels being so small that they will not pass over anything lying on the track.

Safety Lamp.

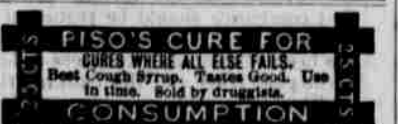
To prevent the escape of oil when a lamp is upset a plug of cork is fitted around the wick tube to form a tight joint with the reservoir tube when the burner is in position.

A fibrous preparation of steel, made in the same manner as the so-called "mineral wool," by passing an air blast through molten steel, is coming into use for cleaning, polishing, etc., instead of sandpaper.

Two New York men have invented an electric dental mallet for use in hardening tooth filling, the tool having a central bar, which slides back and forth as the current is made and broken.

In 1774 Philadelphia was the largest town in the American colonies. Estimates of the population, which are all we have, differ widely, but it was probably not far from 30,000.

Adding pencils are being made which have a sliding register plate set in the side of the pencil case to be raised by pressing the point of the pencil against the paper or desk and register any number of points.



A New Charm.

Evidently women have tired of the rabbit's foot as a charm, for they are now wearing a turkey's foot mounted in gold or silver, either as a chatelaine ornament or as a pin. Just what luck the turkey's foot is supposed to carry with it is not known even to the enterprising jewelers who are selling these trinkets like hot cakes. It gives the average man a shiver to meet a pretty, dainty-looking girl with her Ascot tie held in place by a big turkey's foot, with outspread toes and long, skinny shank. He is apt to remark, not what will women be wearing next, but what won't they be wearing. Everybody who knows anything about it at all knows that the only rabbit's foot which has occult power is the foot of a molly cottontail that has been "killed in the full of the moon at 12 o'clock at night in a graveyard by a red-headed nigger." A certain young woman who wears one of the charmed, but by no means charming, turkey's feet, says the foot is no good unless it belonged to a big fat gobbler which has been saved by the owner for some special occasion and stolen by a straight-haired darkey parson at midnight when the moon is new.

Kitchen Table.

A handy device for kitchen use is a table having the top made of a series of shelves attached to a tilting frame by which the row of shelves can be raised to a vertical position and used as a cupboard.

The Oldest Bank Note.

The oldest bank note in the world was printed in China in 1388—32 years before Gutenberg, the reputed inventor of printing, was born. It was issued 300 years before bank notes were circulated in Europe.

Notwithstanding all the efforts of inventors, no one has been able to discover a substitute for leather. For shoes, belting, harness and a thousand other uses, "there's nothing like leather."

A resolution appropriating \$5 to purchase a copy of the Bible was recently introduced in the Georgia legislature, it having been discovered that there was no copy of the book in the state library.

HOME PRODUCTS AND PURE FOOD.

All Eastern Syrup, so-called, usually very light colored and of heavy body, is made from glucose. "Tea Garden Syrup" is made from genuine cane and is strictly pure. It is for sale by first-class grocers, in one-half, one and two pound bottles. Manufactured by THE PACIFIC COAST SYRUP CO. All genuine "Tea Garden Syrup" have the manufacturer's name lithographed on every can.

Double End Toe Clips.

Double-ended toe-clips are being made in England for use on bicycles, the toe pieces extending on opposite sides of the pedal and balancing in any position.

CATARH CANNOT BE CURED.

With local applications, as they cannot reach the seat of the disease, catarrh is a blood or constitutional disease, and in order to cure it you must take internal remedies. Hall's Catarrh Cure is taken internally, and acts directly on the blood and mucous surfaces. Hall's Catarrh Cure is not a quick medicine. It was prescribed by one of the best physicians in this country for years, and is a regular prescription. It is composed of the best tonics known, combined with the best blood purifiers, acting directly on the mucous surfaces. The perfect combination of the two ingredients is what produces such wonderful results in curing catarrh. Send for testimonials, free. F. J. CHENEY & CO., Props., Toledo, O. Sold by druggists, price 75c. Hall's Family Pills are the best.

Lake Erie is the lake of the "wild cat," the name given by a fierce tribe of Indians exterminated by the Iroquois.

Baker's Chocolate.
Established 1780.
celebrated for more than a century as a delicious, nutritious, and flesh-forming beverage, has our well-known Yellow Label on the front of every package, and our trade-mark, "La Belle Chocolatiere," on the back.
NONE OTHER GENUINE.
MADE ONLY BY WALTER BAKER & CO. Ltd., Dorchester, Mass.
MAP OF ALASKA—Endorsed by the Department of the Interior and to be used by U. S. army officers detailed to Alaska. The best and most detailed map of Alaska in existence. Will be mailed upon receipt of price (\$2) in 2c stamps, or money order. RUDOLPH KRAFT, Publisher P. O. Box 111, Portland, Or.

CHILDREN YEETING.

Washburn's Foot Powder is always best for children's feet. It soothes the skin, softens the grain, always all pain, cures wind, and is the best remedy for diarrhea. Twenty five cents a bottle. It is the best of all.

FAT FOLKS REDUCED.

15 to 25 pounds per month. HARMLESS; no starving; no exercise. NOURISHING. Address DR. SNYDER, P. O. Box 111, Portland, Or.

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WOMAN TO WOMAN.

Women are being taught by bitter experience that many physicians cannot successfully handle their peculiar ailments known as female diseases.



menstruation, pains in groins, bearing-down sensation, palpitation, "all gone" feeling and blues, she at once takes Lydia E. Pinkham's Vegetable Compound, feeling sure of obtaining immediate relief.

Should her symptoms be new to her, she writes to a woman, Mrs. Pinkham, Lynn, Mass., who promptly explains her case, and tells her free how to get well.

Indeed, so many women are now appealing to Mrs. Pinkham for advice, that a score of lady secretaries are kept constantly at work answering the great volume of correspondence which comes in every day.



Weak Kidneys, Lumbago, Rheumatism and Sciatica Are Cured by Dr. Sanden's Electric Belt.

It conveys a steady, soothing current of electricity into the weakened muscles, giving them a healthy nerve power which revives them. It makes them strong. It is curing hundreds every month. Book about it free, by mail, or at the office. Address SANDEN ELECTRIC BELT CO. 253 West Washington St., Portland, Or. Please mention this paper.

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grow paying crops because they're fresh and always the best. For sale everywhere. Refuse substitutes. Stick to Jerry's Seeds and prosper. 1808 Seed Annual free. Write for it. D. M. FERRY & CO., Detroit, Mich.

BUY THE GENUINE SYRUP OF FIGS
... MANUFACTURED BY ... CALIFORNIA FIG SYRUP CO. NOTE THE NAME.

FOR 14 CENTS
We wish to gain 100,000 new customers, and hence offer... Baker's Chocolate... WHEAT... Make money by successful speculation in Chicago. We buy and sell wheat on margins. Fortunes have been made on a small beginning by trading in futures. Write for full particulars. Best of reference given. Several years' experience on the Chicago Board of Trade and a thorough knowledge of the business. Send for our free reference book. DOWNING, HOPKINS & Co., Chicago Board of Trade Brokers. Offices in Portland, Oregon and Seattle, Wash.

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YOUR LIVER Is it Right? Get it Right. Keep it Right. Moore's Revealed Remedy will do it. Three doses will make you feel better. Get it from your druggist or any wholesale drug house, or from Stewart & Holmes Drug Co., Seattle.

RODS for tracing and locating Gold or Silver Ore, lost or buried treasures. M. D. FOWLER, Box 37, Southington, Conn. N. P. N. C. No. 9, '98.

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