



Ice and Cold Storage House.
While many farmers consider an ice house a luxury that is not for them, a building such as is shown in the cut may be erected at small cost, and if the ice can be had for the cutting and drawing it will be found profitable. Even in sections where ice is scarce such a structure would be worth all it cost to a fruit grower who desired to hold back his products in cold storage. To make the house cheap build it of any lumber obtainable, the essential thing being to have it with an inner wall a foot from the outer wall



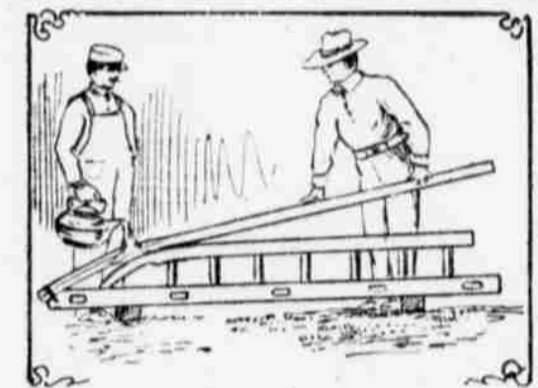
SIMPLE ICE HOUSE.

and this space filled in hard with sawdust, straw, leaves or any similar material. Then pack on the bottom of the floor a foot of straw or hay or sawdust and on this lay the cakes of ice, filling in between them cracked ice, and, if the weather is freezing, pouring water over each layer as it is filled in. Divide off a portion of the space for a cold storage room, as shown in the lower part of the illustration and one has a place where fruit, milk and butter may be kept in good condition during the warmest days of summer. Try an ice house, even though it be but a small one, and you will be surprised to see how little it will cost and how useful it is.

Half-Soling the Sled.

Soles made of poles are almost a thing of the past since the sawed ones have come into use. There are still some who do not use the sawed soles because of not knowing how to put them on, after they have become dry, without breaking or splitting them.

The illustration shows how the trick is done. A teakettle full of boiling water, poured on very gradually while the sole is being sprung, is all that is necessary in almost every instance. The steam should be no larger than a lead pencil, and poured on continually. Any one who has never tried this method will be surprised how



BENDING THE SLED SOLE.

quickly the sole will bend down into its place.—R. A. Gallher, in Farm and Home.

Winter Fruit Tree Pruning.

While the early spring pruning and the summer pinching back of the small shoots covers the main pruning of the fruit trees, much good work may be done during the open days of winter which will, at least, save time in the spring. Broken limbs may be removed and many of the inside limbs which are overlapping the fruiting twigs can be cut off during the winter as well as in the spring. The work of pruning should always be done with a saw on limbs too large to cut with a sharp knife; in pruning saw from the under side of the limb first, sawing up a quarter or a half through and finishing from the top. This will result in a clean cut and there will be no splintering, as would be the case if a heavy limb was cut through from the top. In the winter pruning of orchards keep your eyes open and note the condition of the tree, so that at the proper time any remedy for any trouble found may be applied.

Maturity of Fowls.

The Leghorns may mature in six months, but with the larger breeds a fowl is not matured if under one year of age, and it is a settled conclusion that neither animals nor poultry should be used for breeding until the system has had time to develop and make complete growth. Pullets sometimes begin to lay before they are fully matured, but in such cases their eggs should not be used for hatching purposes. The use of eggs from pullets that have not completed their growth is sure to injure the flock if the practice is continued for several years.

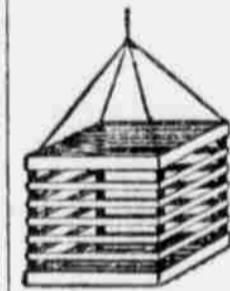
Cost of Raising Corn.
The present low price of corn and the enormous quantity which is piled up in bins and warehouses everywhere in this country is the most emphatic evidence that corn can be produced at a very low cost, and it is plain from the experience of hundreds of corn raisers that there is a profit in producing corn on a large scale, even at the present low prices, for many thousands of farmers have made a good living and laid some profit by from their corn lands.

It is perfectly true that the man with a small farm, devoted exclusively to corn raising, can get only a very precarious living out of corn when the price is under 25 cents on the farm. But even the small farmer can assure himself of a substantial surplus with the prospect of a substantial surplus, some years, if he devotes a part of his land to raising the products which he needs for his family, and raises corn, well cultivated and carefully cared for, on the rest of it.

It must not be forgotten that the present low price of corn is due to two years of very extraordinary yields, and though this year's crop is moderate, by comparison with those years, the surplus in the country, added to what was produced this year, makes the supply in the country about as large as it was ever known to be, and the cost of production of the corn which most farmers have on hand at the present time, must be figured on the basis of large yields, so that, even at present low prices, the great bulk of the corn in the country represents a good deal more than what it has cost the farmer to produce it.

For Sitting Hens.

Mrs. Amanda Wilson writes to the Iowa Homestead: "I have been very much annoyed at times with persistent sitting hens. I have tried several methods of preventing them from becoming broody, and have at last hit upon a simple coop about two feet square and two feet high made of lath, and attached to a rope, as shown in the illustration. Place



the hen inside the coop and let it swing about eighteen inches from the ground. The excitement of the curious chickens which stand around the outside will quickly dispel the hatching idea from the most persistent sitting hen. Feed and water should be given the same as usual."

Advantages of Farm Life.

It is the farmers' boys who are most likely to succeed, whether in business or in professional life. Spending most of their time under the open sky breathing fresh air, and eating simple food, they are more likely to have vigorous health and strong constitution than are their city cousins. Brought into constant contact with nature, they absorb a great deal of useful knowledge, and acquire habits of observation. Then, too, the regular farm work, the "chores" and numberless other little things keep them well occupied and enable them to feel that they are earning their way, thus giving to them a sense of independence and cultivating a spirit of self-reliance and manliness. The performance of a deal of drudgery is an indispensable preparation for all real success in life, whatever the occupation. A boy who is afraid of work or of soiling his hands need not expect to accomplish much in the world. Country boys have their full share of fun, but there are many disagreeable duties on a farm which farmers' boys learn to accept as a matter of course. Edward Eggleston speaking of the value of his farm training when a boy, once said to me "I learned one thing of great value and that was to do disagreeable things cheerfully."—Josiah Strong, in Success

Indiscriminate Feeding.

On some farms all kinds of poultry are fed together, old and young, an geese, ducks, turkeys and chickens. There are always domineering individuals in all barnyards, hence it will be an advantage to separate the older from the younger stock when feeding. The natural consequence of promiscuous commingling of fowls is that the largest and strongest take their choice and leave the refuse to be eaten by the weaker, whereas the best should be given to the poorest in order to help them to a condition of thrift and growth. It is also more economical to make some distinction when feeding especially when a profit is desired.

The Milkman's Steady Job.

A veteran New York State dairyman who has been in the business over half a century says that commencing in 1876 he was away from home but on night in about twenty-two years. He always used to do his own milking. His average for many years was no less than twenty cows night and morning. He milked one cow nineteen years and about ten months in the year. In the year 1879 twenty cows gave him 100,000 pounds of milk, which netted him from the cheese factory \$1,000, besides having his whey to feed to the hogs and calves.

EDITORIALS

Opinions of Great Papers on Important Subjects.

Matrimony and Dyspepsia

It is not good for man or woman to eat alone. Thus medical authority has spoken for years. The solitary diner out, having no company before him, other than his food, swallows it improperly masticated, hurries one course upon another before the stomach can properly adjust itself to the conditions that tax it, and acquires a dyspepsia that distress him severely and makes life a blue print.

The increase in dyspepsia and kindred ailments, so one who has been gathering information asserts, is largely due to the independence manifested by both sexes regarding matrimony. In other words, were there fewer bachelors and bachelor maidens there would be less demand for tonics to brace up an impaired digestion.

In spite of the orthodox joke about the young wife ruining her husband's digestive apparatus by her attempts at cookery, it is established that there are, in reality, much fewer cases of dyspepsia among the wedded than among those who choose to remain single.

Food consumption should be a task of slow process, and the mind should be free from care and unnecessary excitement during the meal hour. This is best established when two persons dine together and enjoy such good-natured chaff, railery or interesting chat as diverts them for the moment.

A few are so gifted as to be able to dine alone and dine deliberately by the amusement derived from their surroundings, but the rule is, as the restaurant-keepers can well testify to, that the single diner eats his meal in from one-third to one-half the time taken by those who dine in company.

The inference, of course, established by this research is that matrimony is a good thing for dyspepsia, and possibly this fact may establish a new line of thought in some empty bachelors and fussy bachelor maidens, who are unable to eat a meal without topping it off with a few specially prepared tablets and nostrums to help out their poor stomachs.—New York Telegram.

Farming a Great Industry.

THE annual report of the Secretary of Agriculture shows that farming is still the chief business of the people of the United States. Fast as our other industries have grown, especially within recent years, agriculture still far surpasses any of them in the amount of its capital, in the value of its products and in the number of people engaged in it.

We have been boasting of the rapidity with which our exports of manufactured goods have increased, of our "conquests of the markets of the world," but Secretary Wilson shows that the balance of trade in all products except those of agriculture ran against us \$865,000,000 during the last fourteen years. The balance of trade in agricultural products was \$4,806,000,000 in our favor, however, so that the total balance in our favor, thanks to the farmer, was \$3,940,000,000. While we have not been able to turn out or, at least, have not turned out—enough of other commodities to supply our wants, we have raised enough farm produce not only to meet our own demands, but to feed a large part of the rest of the world; and the agricultural lands of the country still possess large resources that never have been exploited. In the course of time the country's industrial population no doubt will become so great as to consume all the food that the land can be forced to produce.—Kansas City Journal.

English as the World's Language.

HERE is a significance, more important and far-reaching than appears on the surface, in the announcement that the English language is to be the medium employed in the arbitration of the Venezuelan dispute at The Hague court. It has so long been the custom, still very generally in vogue, for such exchanges to be carried on in French that French has become recognized as the diplomatic tongue, the language to be observed in international courts and in the interchange of communications between nations. The first radical departure from this rule was in 1889, when English was used in the international parliament that settled the Samoan dispute between England, Germany, and the United States.

The growth of the United States as a world power has

BATTLING WITH AN ANCHOR.

To test to the cat-head an anchor weighing eight thousand pounds, with a gale of wind blowing and a tremendous sea rising, is a difficult task. The New York Sun tells how this work was undertaken on a warship in Hampton Roads. In order to raise the anchor to the deck of the ship the hundred-pound cat-block had to be fastened by the huge hook which depended from it to the ring in the balancing band on the anchor shank so that the power of the winch could be utilized.

The great anchor hung so that when the wave receded it was clear of the water, but each incoming crest submerged it several feet. As the ship tossed on the waves there was great danger that the enormous weight of the anchor would send the anchor through her thin plating. But with seas big enough to toss the ship about as easily as if she were a fishing-boat, and to swing that anchor back and forth like the pendulum of a toy clock, it was no child's game to hook the cat-block.

Two men were chosen, each a fine specimen of the American sailor. Just under the arms of each a line was

undoubtedly had a greater influence in this step toward making English the universal language than any other cause. This nation is now an interested party in any disputes that may arise in the Pacific. She has her interests in China, by reason of the united action of the Powers during the Boxer revolt, and her position as arbitrator and peace preserver in South America has become more pronounced with the development of that continent and its American continent. Russia, it is true, has a larger population than use any other tongue spoken in Europe or on the American continent; Russia, it is true, has a larger population than the United States and Great Britain combined, but millions of her citizens do not speak the Russian language. Aside from other considerations, there is a force and directness to plain English that are not found in any other tongue, and international relations are now such that plain, direct, concise terms are needed to avoid complications. The adoption of English as the diplomatic language is but a natural step in the right direction.—Washington Post.

How We Catch Colds.

THE London Hospital, a medical magazine, maintains that colds are caught, the colds that have nasal catarrh for their chief symptom, in the same way that other infectious diseases are caught, by the lodgment of a germ. The character of the germ is not specified. This is no new discovery or theory. Knowing persons have long been careful about exposing themselves to infection by persons who have a cold, lest they "catch" it. The old notion that a cold is result of exposure to draught or to cold air, or of getting the feet wet, has been abandoned, although it is true that one may get a chill in that way which will afford some of the symptoms and sensations of the nasal catarrh caused by a noxious germ. It is safer to avoid close contact, and all unnecessary contact, with a person who has this cold. A horse that has been wintered out often catches a cold upon being brought into the stable in the spring. Experiments with disinfectants have shown that it is not the warmth of the stable that induces the cold. Arctic voyagers are commonly free of colds until their return to a community where they prevail. In the small rocky island of St. Kilda, one of the Western Hebrides, Scotland, colds are unknown except when it is visited by some vessel, and it is said that the inhabitants can distinguish between the different kinds of colds brought by different ships. There is much similar evidence relating to the subject, and the Hospital declares that "some source of infection must be present before it is possible to catch cold." What appears to be needed is a specific germicide which may be used either for prevention or cure.—Boston Herald.

Fuel from the Marshes.

A series of experiments has lately been conducted under the auspices of the Massachusetts Institute of Technology, into the fuel value of marsh mud. Now the announcement is made that this material contains the elements of coal to an equal if not greater amount than peat. The fact is well known that the mud bogs of Holland, of some parts of Germany, and yet more of Russia, are being worked commercially on an extensive scale for the supply of what is in fact artificial coal, resembling it in appearance, in specific gravity, in heat units and in effective service. In this country, Mr. Edward Atkinson says, we may be justified in considering it proved that New England and many other sections, distant from coal mines, are in possession of material that can be converted into domestic fuel at lower cost than any coal can be secured, and in many respects of better quality for cooking and other domestic purposes. It is also available for gas production; also for conversion into coke at lower cost and of purer quality than any other fuel that can be obtained in New England. Mr. Atkinson considers the secret of conversion to be solved; and he also asks this question: "May it not be possible that the Irish peasants who have been converting the turf of their hill slopes into domestic fuel for generations have taught the scientists a lesson in heat and power which they had wholly overlooked?" As long as New England cannot have natural gas, she may find "mud coal" from the marshes a good substitute.—Buffalo Commercial.

his shoulders. The men on deck drew him in, unconscious but safe, and in ten minutes he was declaring to the officer in charge that he could surely hook that block next time.

But the captain had formed another plan. He determined to haul up the anchor as far as was possible, so that it should have the smallest room for play, and to make harbor. Just at midnight she reached quiet waters, and once more the unruly anchor was let go again.

A Good Start.

Two natives of the soil in a New England village were overheard discussing the prospects of one Jim Means, who had forsaken a factory for agricultural pursuits.

"I hear that Jim has gone to farming," said one of the village worthies. "Yaas, he has," was the drawling reply, "but he ain't went into it very steep yet. He has hired a boss for the summer an' rented a keow an' borrowed a hen to put a settin' of eggs under, an' his folks has give him a peeg, but he ain't farmin' it on the scale I bear they do out West."

"No," assented the other; "still, he's got considerable of a start, an' ort to do well if his eggs hatch an' his peeg thrives an' the keow is a good butter-maker."

It takes a lot of cold cash to melt a marble heart.