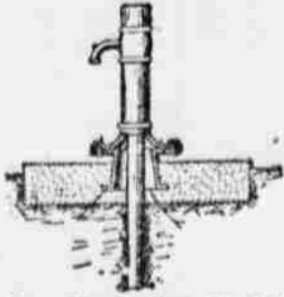


## New Inventions and Appliances

### FOUNDATION FOR PUMPS.

ONE of the greatest sources of typhoid fever and other diseases is contaminated well water. One of the best preventives then is to keep the well water from becoming contaminated. This means to keep everything out of the well.

This means a tight platform; a platform into which the pump itself fits snugly and into which the well pipe is fastened in such a way that



water from the surface, or overflow water from the pump platform, cannot get down into the well. In the case of dug wells the platform must fit snugly over the entire top of the well.

Concrete is a very excellent material for use in making well platforms which shall comply with these necessary features. The accompanying drawing shows a unique method of fastening pump and well pipe into a concrete platform in such a way as to keep all surface water from entering the well.

### A Novel Sugar Server.

Some people put their teaspoons into the sugar bowl. They even do it when the spoon is wet with coffee or tea. It has even been known for a man to put his teaspoon almost direct from his mouth into the sugar bowl. This is the sort of thing which keeps the people who care for the niceties of life away from the cheap restaurants.

To overcome this disagreeable habit, a sugar server has been devised and the illustration here with shows it in the position held by the user. It looks like a small carafe or water bottle. You pour sugar from it as you would pour water from a water bottle.

But you can pour only one teaspoonful at a time, so there is no danger of spoiling your tea or coffee by an overdose of sugar. The server is made of two glass parts, which unscrew. Between them there is a measuring device which holds just a teaspoonful of sugar. When the server is inverted over a cup the contents of the measure pour forth. Meanwhile, the sugar in the lower half of the server is pouring upward. When the server is returned to an upright position, this sugar flows back to its original place, leaving behind in the measure another teaspoonful ready for pouring. There can be no waste of sugar; it cannot become contaminated with dirt or disease germs, nor can any person defile the contents by helping himself with a wet spoon or by putting his fingers into the bowl.

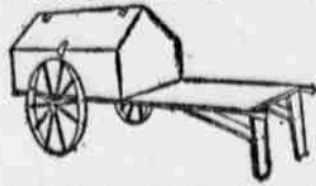
### Safety First.

Self preservation is said to be the first law of nature. Self protection is equally important. The inventor of the "safety first" device for sharp-pointed hat pins evidently thought so. And, at the same time, he proved that he considered his fellowmen entitled to the same degree of protection. Did you ever have to dodge the sharp point of a hat pin which bobbed around as its wearer's head bobbed? If you have, then you will appreciate just what the simple safety device illustrated in the accompanying picture means to a long-suffering people. It consists of a piece of wire in the shape of a coil. It is intended to slip over the point of the hat pin after the latter has been placed in the hat. It is not the most artistic thing in the world, but it certainly is practical. If women must wear hat pins, they should certainly be willing to respect the eyes of people who might have to come within range of the pin points if unprotected. There is no objection to women wearing them. They serve the purpose of keeping the hat in place and at the same time they have been known to form a reliable weapon of defense. But "safety first"—use a protector.



### WORK BENCH WITH TOOL BOX.

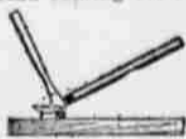
THERE are more reasons than there is space to name why every farmer should have a tool box and bench combined—one which he can easily move from one part of his farm to another as the occasion demands. The illustration shown here is a portable repair shop in



which all kinds of tools, nails, bolts, nuts, washers, wire and innumerable others things can be kept. As is seen in the illustration, it includes a work bench. This wonderfully convenient device can be easily constructed. All you need are some boards, two small wheels, two hinges to hang the lid of your tool box on and a few nails.

### To Pull Big Nails.

The strain on the average hammer handle in the drawing of large nails is often the cause of the hammer head coming off or the handle breaking.



A simple, yet wonderfully practical device to overcome this difficulty is shown in the accompanying illustration. A two-foot length of a suitably sized pipe is used as a second face of the hammer head. When drawing a nail, the pipe is used as a second lever; a small block of wood is placed underneath the hammer to give it the proper leverage. By using the device, it can be seen that the entire force of the drawing is placed on the hammer head and the nail is removed with greater ease and with practically no strain at all on the handle of the hammer.

### For Deep Sea Diving.

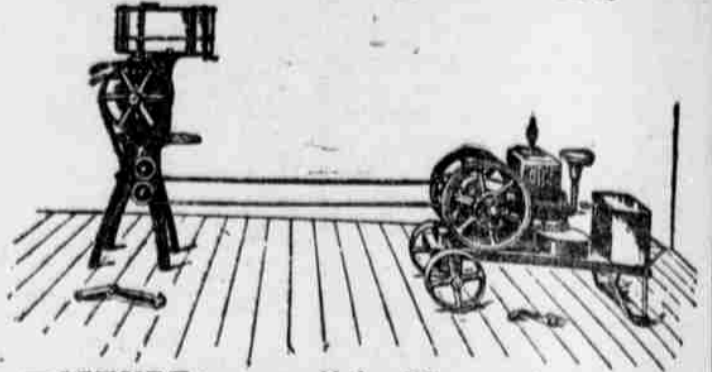
A New Yorker believes he has solved the problem of real deep sea diving by the invention of an all-metal diving suit. The ends of the arms or side projections are armed with hook and clamp pieces with which the diver works when under water.

Heretofore, the difficulty in reaching depths of any considerable consequence was that the terrific sea pressure made the feat impossible. The inventor of this deep sea contrivance claims that it may be successfully used at any depth of water. The total weight of this suit is 500 pounds. While the suit has not all the comforts of a home, it has a telephone and an electric light. Through a heavily reinforced rubber tube, attached to the suit at the shoulders, the telephone cord is let down, as is also the cord for the electric light, which is attached to the left arm. The transmitter of the phone is fixed in the helmet and a receiver such as is used by "central" is fitted over the head.

There is a large lamp used with the outfit that reminds one somewhat of an arc-light. It is suspended on a spar and operates on a cable and pulley, so that it may be swung around to suit the diver's convenience and demands. The globes are inclosed in a bell-shaped outer casing of crystal-clear glass, with a flat, thick plate-glass bottom. The six lamps give a total candlepower of 1500, and at a depth of 200 feet in "dark" water, this means an illumination of not to exceed a 10-foot radius.

What will this suit do? It must be remembered that no one has ever attempted to search depths below 200 feet. This suit makes such a feat practicable. There are millions of dollars both in coin and cargoes which lie at the bottom of the sea too far beneath the surface to permit of recovery when using the old forms of diving apparatus. It is to recover these valuables that this suit was invented. It will be tested next year when search will be made for the steamer Merida, which sank off the Virginia capes in collision with the Admiral Farragut in May, 1911. The cargo of the sunken vessel contained \$90,000 worth of valuable lumber, which will not be damaged by the salt water. There was also thousands of dollars belonging to Mexican refugees on board. The result of the experiment will determine the worth of the invention. In the meantime Neptune is on the rampage in his resentment of the pending intrusion of his heretofore impenetrable depths.

## International Harvester Cream Separators



PICTURE to yourself the difference in the amount of actual work done, between setting milk in any of the old-time ways and skimming it with an I H C cream separator. What a job it is to wash the pans or crocks. How many handlings they need. What a lot of time it takes to fill them and set them away, to protect them from dirt, to do the actual skimming, to dispose of the cold skim milk, to purify the crocks or pans.

Now note the difference. With an I H C separator the milk is skimmed while still warm from the cows, the separator is washed in a few minutes and everything is ready for the next milking.

You want the separator that will help you most. There are other things than the saving of work to be considered. There is saving of cream, value of the machine, service in case of accident, and many other things to be thought of before you buy a separator.

Take time enough to buy a cream separator. The more carefully you go about it, the more comparisons you make, the more clearly you will see that one of the International Harvester separators—a Dairymaid, Primrose, or Lily, will serve you best. See the I H C dealer. Get catalogues from him or write to us for them.

### International Harvester Company of America

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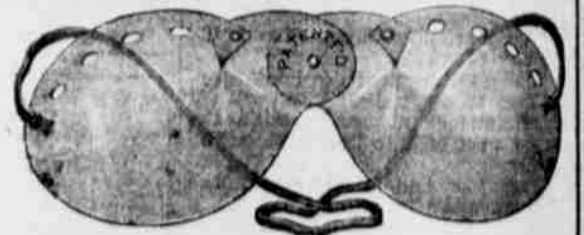
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