inventor of this improved valve is Mr. N. C. Walterthum, of 157 Hopkins Avenue, Jersey City, N. J.

#### THE GERMAN CROWN PRINCE AS AN INVENTOR.

While there is nothing startlingly novel in the design of the cuff buttons shown in the accompanying engraving, yet they are interesting as the creation of a royal inventor. No less a person than the Crown Prince of Germany has originated this form of cuff button. The cuff buttons are of the link type, each link being formed with an eye to receive the crossbar of a short chain. While it is not the first time that one of royal

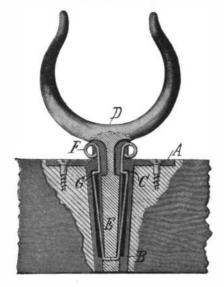


SLEEVE LINKS INVENTED BY THE GERMAN CROWN PRINCE.

blood has entered the ranks of inventors, it is not often that a royal personage has troubled to protect his invention with a patent. The Crown Prince of Germany has thought it worth while to apply for a patent on his cuff buttons, and has assigned the patent to the court jeweler, J. H. Werner, of Berlin.

### IMPROVED OAR LOCK.

The accompanying engraving illustrates an oar lock of improved construction, which is provided with resilient means for fastening it to the gunwales of a boat. The construction is very simple. A plate A is secured by screws to the gunwale, and is formed with a depending socket piece B, which constitutes the keeper of the oar lock. The socket, which is tapered. is constricted at the upper end to provide an annular shoulder C. The oar lock proper is indicated at D, and is formed with the usual shank E, in which recesses are cut at opposite sides to receive a pair of springs F. The lower ends of the springs are bent inward, to engage an opening near the bottom of the stem E. The springs near their upper ends are bent to form shoulders, adapted to engage the shoulder Cof the keeper. The recesses in the stem E are deepened near the upper end of the stem, as indicated at G, to make room for the springs F. When it is desired to remove the oar lock, the springs F are pressed inward to clear the shoulder C. When inserting the oar lock, the springs are automatically compressed until they snap out under the shoulder C. They then serve to hold the oar lock in its socket, and prevent it from being accidentally withdrawn. Mr. Charles

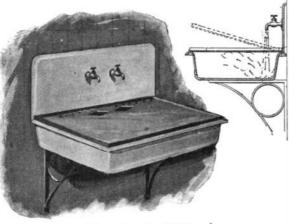


# Scientific American

revoked if no serious attempt at manufacture is undertaken within four years of the date of issue. The United States, on the other hand, has stimulated invention by its liberal patent laws, and makes no restriction on the absolute monopoly granted to an inventor, whether he be native or alien. Thus a foreign patentee receives better treatment in this country than in his own, whereas citizens of the United States cannot secure, the same advantages in foreign countries as they do at home. The status of foreign patentees is somewhat difficult to define. When an inventor discloses a secret, the patent rights he receives are granted as a reward by his country. The only purpose in granting such a reward is to stimulate invention, and work for the progress of the country. The difficulty, however, lies in the fact that when the secret is disclosed, the disclosure cannot be confined to one country. but is worldwide. The only advantage to a foreign country in granting a patent on an invention which has been patented here, is that we in our turn are willing to award the same rights to citizens of the foreign country. It would seem an injustice, then, for us to be granting a higher award to foreign citizens than they are granting to our citizens, particularly in view of the fact that no direct benefit is to be obtained from our award for a secret that has already been disclosed. The only solution of the difficulty would seem to be in reciprocity treaties with the various foreign countries. There is now a treaty pending, whereby Germany will agree to waive the three-year clause as far as it affects American inventors, in view of the fact that we are treating German inventors with such great liberality. The tariff provision should hasten the ratification of this treaty, and help to bring about similar treaties with other countries.

## KITCHEN SINK COVER.

Pictured in the accompanying engraving is a cover for kitchen sinks, which serves as a support for the



#### KITCHEN SINK COVER.

dish pan, and which is provided with openings to permit the water from the spigots to pass through. The cover thus serves as a temporary tray or shelf on which the utensils may be supported, and prevents the objectionable splashing of the ordinary sink. The inventor of this device has found that diamond-shaped openings in the cover are the best for permitting the water from the faucets to pass through. In case any water should splash out of the tray, it may readily be drained off by tilting it, as indicated in one of the illustrations, when the water will pass out through a series of small openings near the rear edge of the tray. It is claimed for this sink cover that it acts as a great saving of clothes, which are often soiled with water that splashes from the bottom of the sink while the faucets were running. This fact alone would be appreciated by the housewife who frequently has to be her own kitchen maid. Mr. Adam Giffen Demarest, of 216 West 26th Street, New York city, is the inventor of this sink cover.

**PNEUMATIC MILK CAN.** A recent invention provides a milk can which may be filled at the dairy, hermetically sealed, and kept in this condition until the entire contents of the can

are removed at the place of sale. This result is effected by the use of compressed air in the can, which forces out the contents, as needed. The compressed air is sterilized, and everything about the milk is kept perfectly clean. There is no danger from contamina-



THE MILK CAN SEALED AND READY FOR SHIPMENT.

tion by exposure to dust and dirt or flies and other insects. It is impossible to change or adulterate the contents of the can in any way from the time it leaves the dairy until the contents have been placed in the consumers' hands. The can is locked, and no liquid can be pumped into it without breaking the lock and removing the cover. Whenever it is desired to draw off a certain amount of milk, it is merely necessary to turn a valve, when the liquid will be forced out by the air pressure in the can.

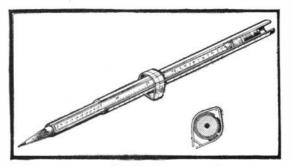
## ODDITIES IN INVENTIONS.

RUBBING POST FOR LIVE STOCK .- An inventor living

in Nebraska has carried the automatic idea to the extent of enabling live stock themselves to apply insecticide, or soothing oils to parts that are irritated or affected by vermin'. The invention consists of a rubbing post in which is a reservoir filled with the insecticide, and which may be placed at any suitable place convenient to the live stock. The rubbing post is formed with a central reservoir in which the oil is kept. Between this and the outer casing of the post is a felt-like filling. A wick serves to carry the oil from the reservoir to this filling. The outer casing of the post is perforated so that when the animal rubs against it the oil will exude from the perforations and be spread upon the affected part.

CALCULATING RULE AND PEN-CIL HOLDER.—For the benefit of the engineer and draftsman

who is required to make hasty calculations, a combined pencil holder and calculating rule has recently been devised. The calculating rule is of tubular form, and is fitted with a slide indicator, formed in the shape of a cuff. One part of the tube comprising the rule is provided with a slide member, which is graduated and



RUBBING POST FOR LIVE STOCK.

#### IMPROVED OAR LOCK.

Bestman, of Friday Harbor, Wash., has received a patent on this improved oar lock.

### RECIPROCITY IN PATENT LAWS.

The new tariff bill, now before the House of Representatives, contains a section which is most interesting to patentees. The section provides that the same patent regulations shall be applied to citizens of foreign countries as these countries apply to the citizens of the United States. This appears to be a retaliatory measure, and yet its purpose is not so much retaliation as reform. In nearly all European countries a penalty is imposed upon the owner of a patent for failure to manufacture within a certain period. In France the manufacture must be begun within three years after the date of filing the patent. In Germany the three-year term dates from the time of issue. England has just passed a law whereby a patent may be



DRAWING MILE FROM THE PNEUMATIC CAN.

CALCULATING RULE AND PENCIL HOLDER,

used in the manner of the ordinary slide of a calculating rule. Within the tube a pencil may be fitted. By thus combining the rule and pencil, the danger of mislaying the rule is avoided, and the combined instrument is of convenient form to carry in the vest pocket.

The annual production of nickel in Europe increased from 4,526 tons in 1900 to 7,600 tons in 1907. In America the production increased from 3,000 tons in 1900 to 6,500 tons in 1907. Of the European output in 1907, 3,200 tons were produced in England, 2,600 tons in Germany, and 1,800 tons in France.