

K. E. CUNNINGHAM.
 PROTECTING CAP FOR STOP PLUGS.
 APPLICATION FILED JAN. 27, 1912.

1,030,390.

Patented June 25, 1912.

FIG. 1.

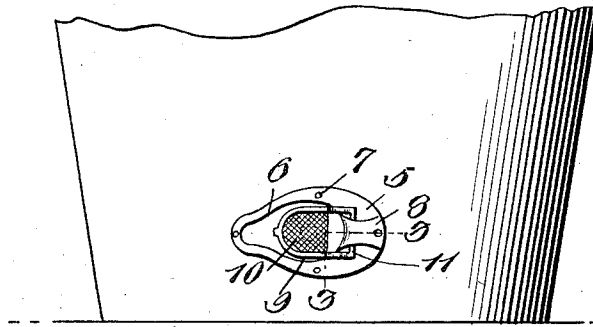


FIG. 2.

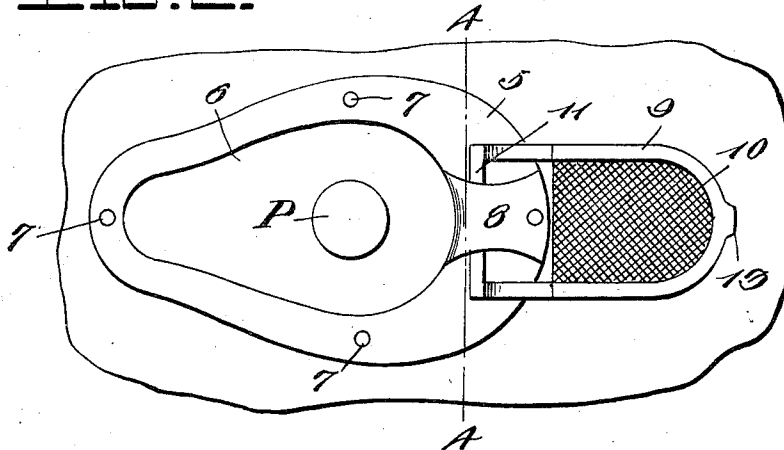


FIG. 3.

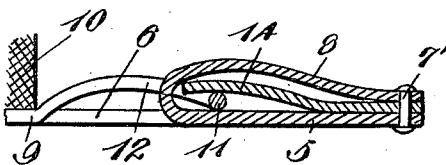
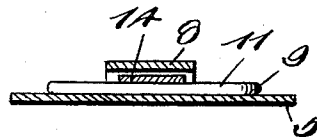


FIG. 4.



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UNITED STATES PATENT OFFICE.

KITTIE EDITH CUNNINGHAM, OF STEELE, NORTH DAKOTA.

PROTECTING-CAP FOR STOP-PLUGS.

1,030,390.

Specification of Letters Patent.

Patented June 25, 1912.

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To all whom it may concern:

Be it known that I, KITTIE EDITH CUNNINGHAM, a citizen of the United States, residing at Steele, in the county of Kidder and State of North Dakota, have invented certain new and useful Improvements in Protecting-Caps for Stop-Plugs, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain new and useful improvements in protecting caps for stop plugs such as are commonly employed for closing the outlet of a liquid container receptacle.

The invention has for its primary object the provision of a simple and effective device which will prevent the inadvertent or accidental removal of the plug from the opening in the wall of the receptacle.

A further object of the invention is to provide a protecting cap which is securely retained in its operative position over the plug and at the same time may be easily and quickly moved to its inoperative position so that the plug can be extracted and the contents of the receptacle released.

With the above and other objects in view, the invention consists of the novel features of construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a water receptacle or tub such as is commonly employed in clothes washing machines, showing my improved plug protecting cap applied thereto; Fig. 2 is a similar view on an enlarged scale showing the cap in its inoperative position; Fig. 3 is a section taken on the line 3—3 of Fig. 1; and Fig. 4 is a section taken on the line 4—4 of Fig. 2.

Referring in detail to the drawing 5 indicates a base plate which may be of any desired form, the greater portion of the body of which is cut out to provide the opening 6 through which the stop plug P in the wall of the receptacle projects. This base plate is secured to the wall of the receptacle by means of a plurality of screws 7. One end of the base plate is provided with a relatively narrow portion 8 which is integrally formed on the edge of the opening 6 and is reversely bent upon the body of the base plate and longitudinally curved as clearly shown in Fig. 3, the opposed surfaces of the

portion 8 of the plate and the base thereof being disposed in spaced relation.

The protecting cap proper includes the metal loop or frame 9 to which a basket or cup-shaped body 10 of wire mesh or other reticulated material is secured. However, this body may also be formed of solid sheet metal if desired. The loop 9 is of a general rectangular elongated form and the end bar 11 which connects the longitudinal bars at one of their ends is of cylindrical form and is disposed between the base plate and the reversely bent portion 8 of the same. The side bars of the loop or frame 9 adjacent to the cross bar 11 are longitudinally bent or curved as indicated at 12 and the ends of these curved portions of the side bars at their point of connection to the longitudinally extending portions of said bars project into the opening 6 in the base plate as shown in Fig. 3 so that the end portion of the frame to which the cup or basket is secured lies closely upon the wall of the receptacle. The free end of the loop 9 is provided with a suitable finger-piece 13 by means of which the cap may be readily manipulated.

A heavy plate of spring steel 14 is disposed between the base plate 5 and the curved portion 8 thereof and bears at its free end upon the cylindrical end bar of the frame 9. The end of the curved plate 8 and the spring are rigidly secured upon the base plate by means of the attaching screw 7'. The engagement of the spring 14 with the end of the frame prevents any casual movement thereof when disposed in either its operative or inoperative positions.

In the use of the device, the plate 5 is secured to the wall of the receptacle or vessel so that the closure plug P projects through the opening 6 thereof at a point adjacent the attached end of the closure cap. This cap is now lifted by grasping the finger-piece 13 and moving it from the position shown in Fig. 2 to the position illustrated in Fig. 1 where it is arranged over the plug, said plug being inclosed and protected by the cup-shaped body of the cap. When in this position, the spring 14 prevents any movement of the cap, the end portion of the frame 9 being disposed inwardly of the fulcrum of said frame. When it is desired to remove the plug, the cap may be readily lifted or swung outwardly to the position shown in Fig. 2.

From the foregoing it is thought that the construction and manner of use of my improved plug protecting cap will be fully understood. The device is simple, efficient and of great convenience and utility in practical use. Owing to the few parts employed it will also be obvious that the invention can be manufactured at a comparatively small cost.

10 While I have shown and described the preferred construction and arrangement of the various parts, it will be understood that the device is susceptible of considerable modification without departing from the essential feature or sacrificing any of the advantages thereof.

Having thus described the invention what is claimed is:—

1. In a device of the character described, 20 the combination of a base plate adapted to be secured to the wall of the receptacle over a stop plug therein, said plate having an opening surrounding the plug and through which the same projects, a loop fulcrumed 25 upon one end of the base plate and movable into the opening thereof to closely engage the wall of the receptacle, and a reticulated housing carried by said loop to receive said stop plug and protect the same against accidental displacement.

2. In a device of the character described, the combination of a base plate adapted to be secured to the wall of a receptacle over a closure plug therein, said plate being provided with an opening through which the 35 plug projects, and a spring held protecting cap for the plug fulcrumed upon said base and including a loop the side bars of which

are longitudinally bent adjacent to its fulcrum point whereby the major portion of the loop is disposed within the opening in the base plate and closely engages the wall of the receptacle when the cap is in its effective position.

3. In a device of the character described, 45 the combination of a base plate adapted to be secured to the wall of a receptacle and having an opening therein to receive a closure plug in the wall of said receptacle, said plate having a reversely bent portion extending from one edge of the opening and in spaced relation to the base plate and fixed at its free end thereto, a protecting cap including an elongated loop having a cylindrical end portion extending between the 55 base of the plate and the reversely bent portion thereof and rotatable therebetween, a spring secured between said base plate and the fixed end of said reversely bent portion and bearing at its free end upon said cylindrical end of the loop, the side bars of said loop being longitudinally curved adjacent to the fulcrumed end thereof and adapted to extend into the opening of the base plate so that the major portion of the loop closely 65 engages the wall of the receptacle when the cap is in its effective position, and a protecting housing carried by the loop to receive the stop plug.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

KITTIE EDITH CUNNINGHAM.

Witnesses:

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H. G. REYNOLDS.