

A. W. FRANCE.

HOSE CLAMP.

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1,032,664.

Patented July 16, 1912.

Fig. 1.

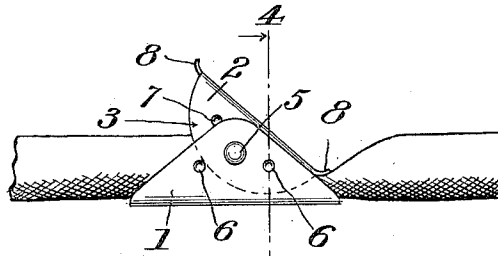


Fig. 2.

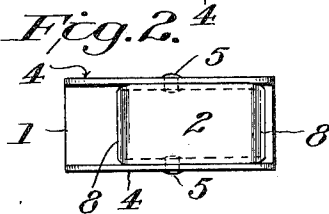


Fig. 3.

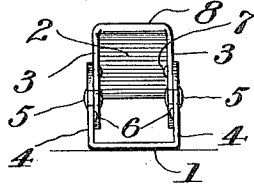
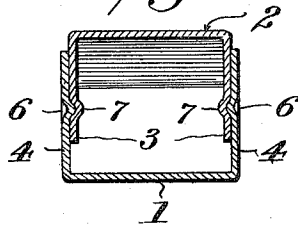


Fig. 4.



WITNESSES

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HOSE-CLAMP.

1,032,664.

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To all whom it may concern:

Be it known that I, ADAM W. FRANCE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Hose-Clamps, of which the following is a full, clear, and exact specification.

This invention relates to improvements in hose clamps and has for its object the provision of a clamp especially adapted for use on fountain syringes which may be easily adjusted to its open or its closed position and effectually held in the closed position, that is, the position in which flow through the hose or tube will be prevented.

The object of the invention is attained in such a device as is illustrated in the accompanying drawing and the invention consists in certain novel features which are hereinafter first fully described and then more particularly pointed out in the appended claims.

In the drawings: Figure 1 is a side elevation of a clamp embodying my invention applied to a hose and adjusted to cut off the flow therethrough; Fig. 2 is a plan view of the clamp; Fig. 3 is an end view of the same, and Fig. 4 is a transverse section on the line 4—4 of Fig. 1.

My improved clasp comprises two members 1 and 2 of similar form which, for convenience, I will call the outer and the inner member respectively. Both members are U-shaped in cross section, the outer member 1 being slightly larger than the inner member 2 in order that the side plates 3 of the inner member may fit between the side plates 4 of the outer member as shown. The edges of the side plates 3 form regular curves so that they may swing freely without hindrance from any part of the outer member and the two members are pivotally connected by pivot pins 5 inserted through the adjacent side plates. It will be readily noted that these pivot pins are only long enough to extend through the adjacent side plates which they connect, the interior of the clasp consequently offering no obstruction to the passage of the hose therethrough. Each side plate is upset or indented as shown at 6, the indentations being so spaced that the pivot lies between them and the stud or inner face of an indentation in the outer side plate is adapted to engage the outer or socket face of an indentation 7, in

the inner side plate as clearly shown in Fig. 4. The inner member is somewhat shorter than the outer member so that its ends may bear upon the bottom of the outer member and, to prevent cutting of the hose, the said ends are formed into convex lips 8. Being made of spring metal the lips 8 in use exert more or less spring or resilient pressure on the tube and tend to compress the same.

The operation of the device will be readily understood. When the top of the inner member and the bottom of the outer member occupy parallel planes, the hose or tube may expand to its full diameter and the liquid flow freely therethrough. When the flow is to be cut off, either end of the inner member is pressed toward the outer member until the indentations nearer that end engage thereby compressing the hose to cut off the flow and holding the members in this compressing position until they are released by pressure applied to the opposite end of the inner member. It will be readily noted that the clasp may be closed by pressure applied to either end and that the engaging indentations will hold the clasp firmly locked in the closed position against accidental release but will yield readily to the pressure applied to the clasp to open the same. The flow through the hose is thus entirely within the control of the operator and may be cut off or established instantly at will.

My clamp is exceedingly simple in construction and operation and is very effectual for the purposes for which it is designed. There are no springs to get out of order nor levers or cams to be accidentally released and while it is intended more particularly for use as a hose clamp it may also be used as a clip for holding papers or other articles.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is:—

1. A device of the character described comprising an outer member, an inner member pivotally mounted within said outer member at a point intermediate the ends of said members, whereby either end of the device may be utilized for the purpose set forth, and spaced indentations on said members adapted to interlock and retain the members in closed operative position.

2. A device of the character described comprising two members, one mounted with-

in the other, each having side plates, spaced indentations on said plates adapted to interlock when the members are in closed operative position, and pivots connecting the adjacent side plates at a point removed from either end of the members whereby either end of the device may be utilized for the purpose set forth.

3. A device of the character described comprising two members, one mounted within the other, each of said members having side plates, the free edges of the side plates of the inner member being curved, said inner member pivotally mounted within the outer member at a point removed from either end of the members whereby either end of the device may be utilized for the purpose set forth, and means for holding the members in operative closed position.

4. A clamp consisting of a substantially U-shaped member, a second U-shaped member, the free edges of the arms of which are curved and adapted to exert a spring pressure when in use, pivots connecting the adjacent arms of said members at a point centrally of the length thereof, and indentations on the arms of the U-shaped members

adapted to interlock and retain the members in closed operative position.

5. A clamp consisting of a substantially U-shaped member, a second U-shaped member mounted within the first mentioned member, pivots connecting the adjacent arms of said members at a point centrally of the length thereof, and means for retaining either end of the device in closed operative position.

6. A clamp consisting of a substantially U-shaped member, a second U-shaped member mounted within the first mentioned member, indentations on the arms of said U-shaped members adapted to interlock and retain the members in closed operative position, and pivots connecting the adjacent arms of said members at a point between the indentations on each arm.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ADAM W. FRANCE.

Witnesses:

JACOB W. BEBY,
T. K. FRANCE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."