No. 763,191. PATENTED JUNE 21, 1904.

J. B. MARVIN.

HOSE MENDER.

APPLICATION FILED DEC. 2, 1903.

NO MODEL.

Fig. 1.

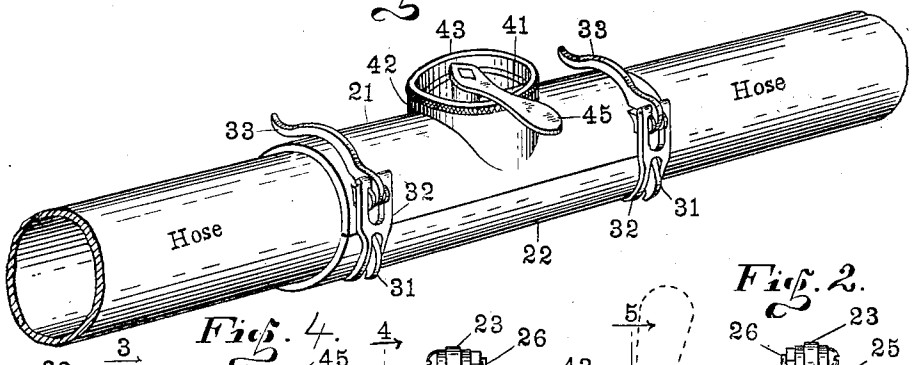


Fig. 2.

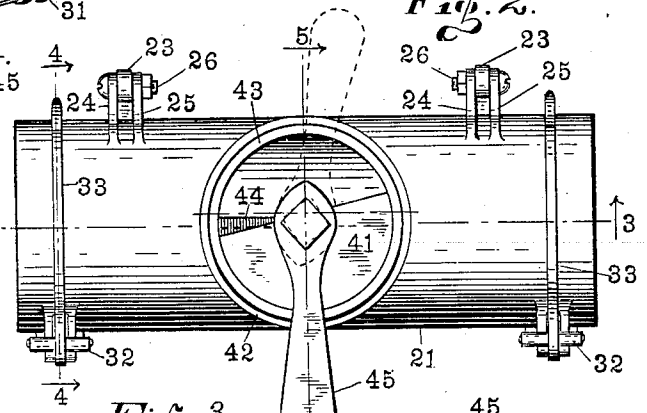


Fig. 4.

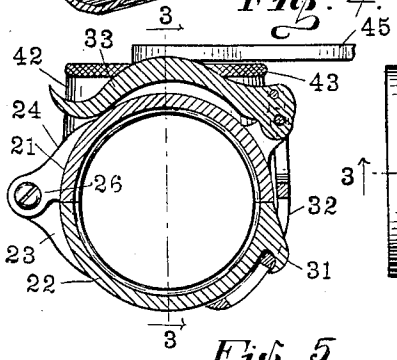


Fig. 5.

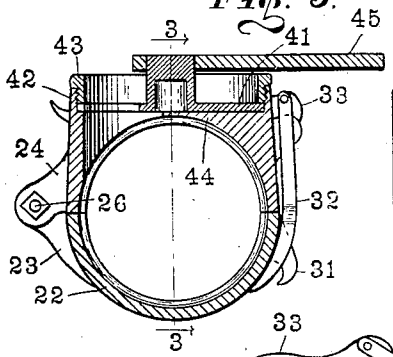


Fig. 3.

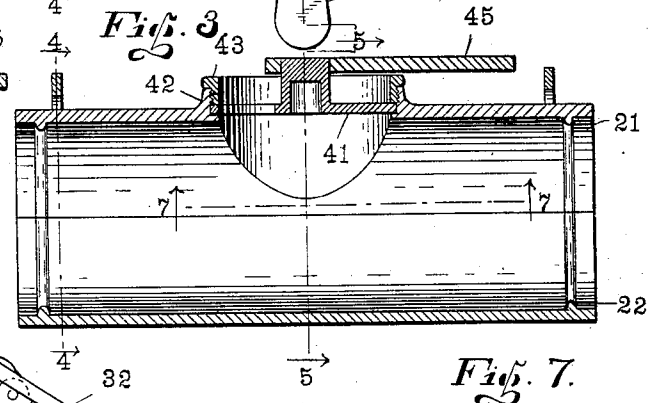


Fig. 6.

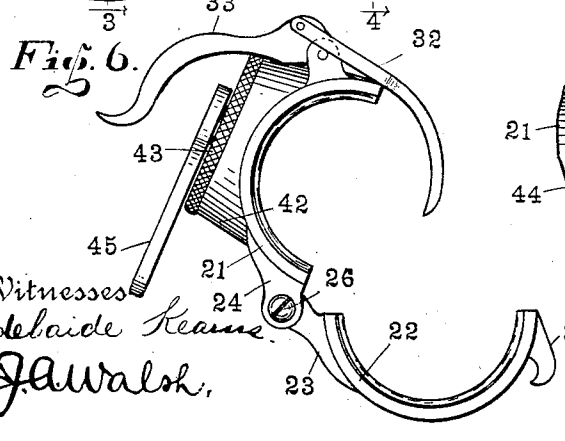
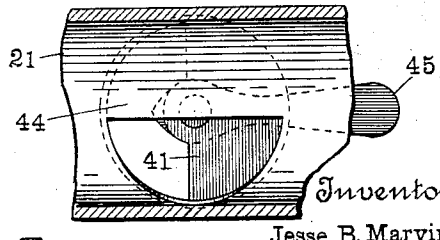


Fig. 7.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 763,191. Patented June 21, 1904.

UNITED STATES PATENT OFFICE.

JESSE B. MARVIN, OF FRANKFORT, INDIANA.

HOSE-MENDER.

SPECIFICATION forming part of Letters Patent No. 763,191, dated June 21, 1904.

Application filed December 2, 1903. Serial No. 183,445. (No model.)

To all whom it may concern:

Be it known that I, JESSE B. MARVIN, a citizen of the United States, residing at Frankfort, in the county of Clinton and State of Indiana, have invented certain new and useful Improvements in Hose-Menders, of which the following is a specification.

It frequently happens that the delay occasioned by the bursting of a hose during the time of a fire results in a considerable loss or destruction of property. This is because it is necessary that the pressure be shut off (and the throwing of water on the fire thus temporarily discontinued) while the mending operation is being performed or a new section of hose substituted, as it is impractical to apply a hose-mender to the bursted portion of a hose while the water continues to emerge from the orifice under fire pressure.

It is the object of my invention to provide a hose-mender which can be applied to the hose at any time, even when under full fire-pressure, without difficulty.

Said invention principally consists in a suitable casing adapted to be clamped onto the hose and containing in one side an orifice which may be left open while the hose-mender is being applied, (thus allowing the escape of water issuing from the bursted portion of the hose until the mender is securely affixed,) and provided with a valve which may be closed after the mender is secured in position.

It further consists in the construction and arrangement of parts hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a perspective view of a fragment of a fire-hose having my improved mender applied thereto; Fig. 2, a plan view of said mender, showing a suitable form of valve therein when open, the closed position being indicated by means of dotted lines; Fig. 3, a central longitudinal sectional view thereof at the point indicated by the dotted lines 3 3 in Figs. 2, 4, and 5; Figs. 4 and 5, transverse sectional views at the points indicated by the dotted lines 4 4 and 5 5, respectively, in Figs. 2 and 3; Fig. 6, an end elevation of the hose-mender open as when ready to apply to a hose, and Fig. 7 a detail under side plan of the valve as seen when looking upwardly from the dotted line 7 7 in Fig. 3.

My improved hose-mender consists of two semicylindrical parts 21 and 22, preferably secured together at one side by suitable hinges. Said hinges are each shown as composed of one rigid member 23 on one part, two corresponding members 24 and 25 on the other part, and a hinge-pintle 26 passing through said members. Two such hinges are shown. The form and number of these hinges may, however, of course be varied as desired. At the opposite sides from the hinges the parts are provided with detachable fastening devices, hook-like projections 31 being arranged upon one part and suitable links 32 and locking-levers 33 being secured to the other part and adapted to engage with said projections as shown. The arrangement of the bearing-points of these locking devices is such as to throw the line of strain inside the line of the said points when the two parts are secured together, as is best shown in Fig. 4, thus holding said locking devices from becoming unfastened accidentally. One of the members of this hose-fastener has a valve (arranged substantially centrally thereof) of a character which may be left open while the hose-mender is being applied to the hose, so that the water which is issuing from the bursted place in the hose may still pass out through the opening of said valve, and thus enable the valve to be applied to the hose over such opening without difficulty. When the mender has been applied, the orifice is completely and effectually closed by simply shutting off the valve.

The form of valve which I have chosen to illustrate my invention is in the form of a semicircular plate 41, mounted in a groove in the body of the mender member which carries it. This groove or valve bearing is produced by forming a circular seat and cutting a thread in the upper portion of the surrounding rim 42 and then (after inserting the valve) screwing in an annular follower 43. The valve 41 is mounted over a web 44, extending partly across the valve-body, and it is itself provided with a substantially half-circular opening to

correspond. Said valve is turned from open to closed or from closed to open position by means of a handle 45. While I consider this a desirable form of valve for the purpose, I do not desire to limit myself to such form or construction, but may use any form of valve suitable for the purpose—as, for example, a common gate-valve.

The hose in bursted condition is apt to be swelled somewhat, and thus make it difficult to bring the hose-mender down into its final position by a single operation. I therefore make the links 32 double, (or with two loops,) as is best shown in Fig. 4. By this means I am enabled (in applying the hose-mender) to first engage one of the projections 31 with the outer loop of the adjacent link and draw the hose-mender partly together by operating the lever attached to said link. This brings the two halves of the hose-mender near enough together so that the inner loop of the other link may be engaged with its projection and the two parts of the hose-mender thus drawn closely together. The inner loop of the first-mentioned link can then be engaged with its projection and drawn down into place. This secures the hose-mender firmly at both ends, after which the valve may be closed, as previously explained.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a hose-mender, of two parts hinged together, a clamping device for holding the same onto the bursted hose, consisting of members pivoted to one part and engaging members therefor upon the other part, and a valve forming part of one of said two parts whether opened or closed, whereby the valve may be left open during the time the hose-mender is being applied and afterward closed to complete the mending, substantially as and for the purpose set forth.

2. The combination, in a hose-mender, of the two parts hinged together, the quick-action clamping device for holding the same closed, an opening in one side of said hose-mender, and a valve consisting of a stationary half on one side and a revoluble half mounted in a way alongside said stationary half.

3. The combination, in a hose-mender, of the two parts hinged together, and a clamping device for holding the same closed consisting of suitable projections upon one part and links and levers upon the other part, one of the links being provided with two loops whereby the hose-mender may be drawn partly together at one operation and the remainder of the way together at another operation, substantially as set forth.

4. The combination, in a hose-mender, of two hose-embracing parts hinged together, coacting clamping members carried by said parts, and a valve forming part of one of said parts whether opened or closed, for the purpose set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 30th day of November, A. D. 1903.

JESSE B. MARVIN. [L. S.]

Witnesses:
CHESTER BRADFORD,
JAMES A. WALSH.