(No Model.)

F. T. WEIDAW

HOSE CLAMP.

No. 492,855. Patented Mar. 7, 1893.

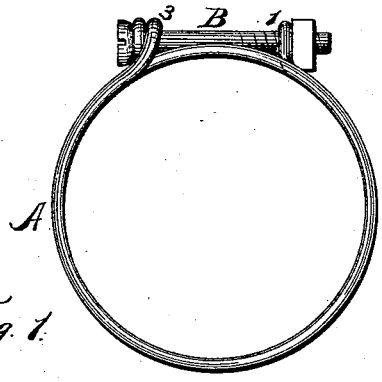

Fig. 1.

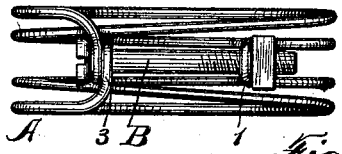

Fig. 2.

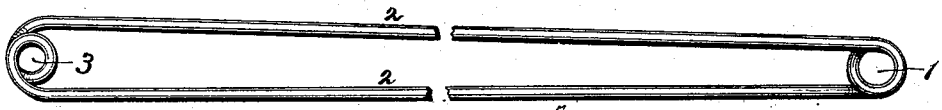

Fig. 3.

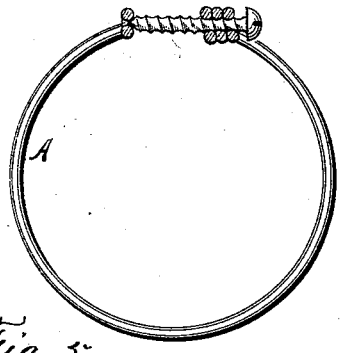

Fig. 5.

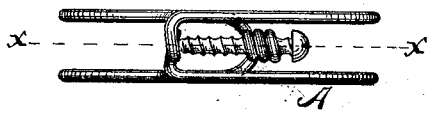

Fig. 4.

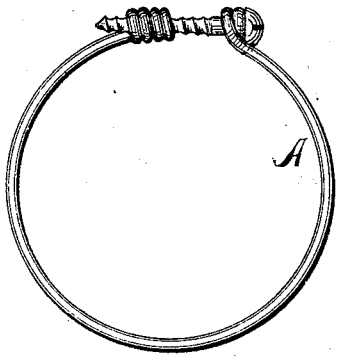

Fig. 6.

WITNESSES
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UNITED STATES PATENT OFFICE.

FRANK T. WEIDAW, OF SYRACUSE, NEW YORK, ASSIGNOR TO WARREN S. PURINGTON AND JAMES B. CASTERLIN, OF SAME PLACE.

HOSE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 492,855, dated March 7, 1893.

Application filed December 9, 1891. Serial No. 414,478. (No model.)

To all whom it may concern:

Be it known that I, FRANK T. WEIDAW, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Hose-Clamps, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to hose clamps by which a hose is secured upon a nipple or pipe.

My object is to construct a clamp from a single piece of wire, which will completely encircle the hose, and its free end will also partially encircle it, and is provided with a loop or eye through which the fastening bolt or screw is passed, and which operates to tighten said clamp by drawing said free ends toward each other, or by forcing them apart or away from each other, in either case tightening the clamp by reducing the size of the circle, wind or coil around, embedding it into the hose; and in either construction the piece of wire is primarily bent upon itself to form an oblong loop of wire, and the ends of the wire itself, are secured together, the ends of said loop forming and being the loops or eyes through which the bolt or screw is inserted.

My invention consists in the several novel features of contruction and operation hereinafter described and which are specifically set forth in the claim hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which

Figure 1, is a side elevation of the clamp, complete. Fig. 2, is a top plan thereof. Fig. 3, is a plan view of the loop of wire, which constitutes and creates the body of the clamp, made by bending the ends of the wire inwardly and soldering, brazing or otherwise securing the ends of the wire together. Fig. 4, is a top plan of a clamp made from a loop body, in which the free ends of the loop are so disposed by one passing through the other, that the screw operates to tighten the clamp body by forcing the free ends apart or away from each other, and in which the coil upon one end of said loop forms the nut which receives the screw, and that upon the opposite end simply forms a socket to receive the point end of said screw and in which it rotates. Fig. 5, is a sectional elevation of Fig. 4, on line x, x, therein. Fig. 6, is a side elevation showing the same construction as in Figs. 4 and 5, except that it is tightened by drawing the eyes toward each other.

A—, is the clamp constructed by first bending a wire to form loops or eyes —1— and —3— at the ends, and securing the ends of the wire together to form the intermediate clamp body —2—, composed of two strands, the same being diverging so that one end is wider than the other. This looped clamp body is then bent centrally to form a circle, the end carrying the loop or eye —1— being passed through said body, and the free ends of the loop are brought up either contiguous to each other as shown in Figs. 1 and 2, or are crossed, or the eye —1— again tucked through the body adjacent to the eye —3— so as to bring said eyes in opposite relations to those shown in Figs. 1 and 2, In either case, the eyes themselves are bent so as to stand at an angle as shown. In Figs. 1 and 2 said eyes are adapted to receive an ordinary bolt and nut; but in Figs. 4 and 5 the eye —3— consists of a coil formed transverse to the body of the clamp, coiled tightly, so that the convolutions form, in themselves, the threads which engage with the coarsely threaded screw.

In Figs. 1, 2 and 6, the clamp is tightened by drawing the eyes —1— and —3— inwardly or toward each other; and in Figs. 4 and 5 it is tightened by forcing them apart, or away from each other. In either case, the complete circle first made, by bending the body, creates two strands of wire around the hose, and the remainder of the bending creates two other strands extending nearly around it in Figs. 1, 2 and 6; and clear around it in Figs. 4 and 5, so that in the latter there are four strands around it all of which are tightened simultaneously.

What I claim as my invention, and desire to secure by Letters Patent, is—

A hose clamp, comprising a wire, bent to form a looped body, and eyes at its extreme ends formed by coiling the wire, the sides of said body diverging from the eyes toward

each other, and adapted to be wrapped clear around the hose, one end being passed through the body in wrapping it about the hose, said eyes being bent outward, substantially parallel to each other, and a bolt inserted through said eyes and means for securing it, as set forth.

In witness whereof I have hereunto set my hand this 12th day of November, 1891.

F. T. WEIDAW.

In presence of—
HOWARD P. DIMSON,
HERBERT A. CARHART.