

(No Model.)

L. H. REDFIELD.
HOSE CLAMP.

No. 477,227.

Patented June 21, 1892.

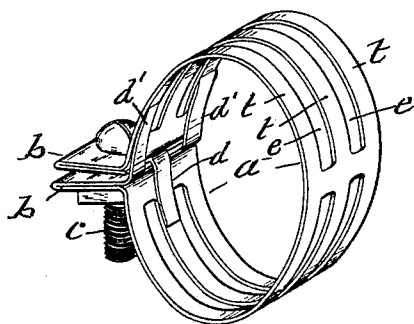


Fig. 1

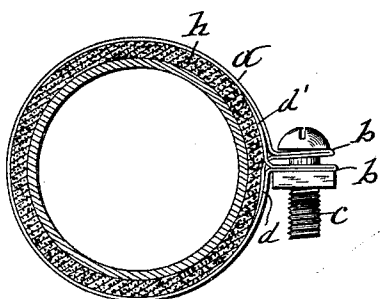


Fig. 2

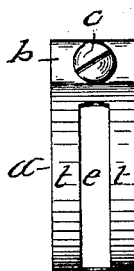


Fig. 3

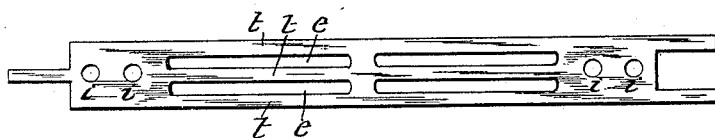


Fig. 4

WITNESSES:

J. J. Laass.
H. M. Seaman

INVENTOR:

Lewis H. Redfield
By Smith, Laass & Smith
his ATTORNEYS.

UNITED STATES PATENT OFFICE.

LEWIS H. REDFIELD, OF SYRACUSE, NEW YORK, ASSIGNOR OF ONE-HALF
TO J. RICHARD CLANCY, OF SAME PLACE.

HOSE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 477,227, dated June 21, 1892.

Application filed September 24, 1891. Serial No. 406,726. (No model.)

To all whom it may concern:

Be it known that I, LEWIS H. REDFIELD, 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.

This invention relates to the class of hose-couplings in which a band embraces the end of the hose and terminates with perforated ears or lugs for the reception of the bolt by which said band is tightened on the hose.

My present invention consists in a novel construction of a clamp-band formed in one piece, stamped out of sheet metal and bent and folded near its ends so as to form ears or lugs of double thicknesses of metal, and thus amply reinforced, the extremities of the band being of the form of lips lapping onto the inner side of the adjacent opposite ring portion, all as hereinafter more fully described, and specifically set forth in the claim.

In the annexed drawings, Figure 1 is a perspective view of a hose-clamp embodying my invention. Fig. 2 is a transverse section of a hose with my improved clamp applied thereto. Fig. 3 is a side view of said clamp detached; and Fig. 4 is a plan view, on a reduced scale, of the blank from which my improved clamp is formed.

Similar letters of reference indicate corresponding parts.

a denotes the band which embraces the hose *h*, as represented in Fig. 2 of the drawings. *bb* are the perforated ears or lugs on the ends of the said band.

c represents the bolt by which the clamp is tightened on the hose, and *d d'* the lips which extend from the ends of the band and lap onto the interior thereof to guard against the buckling up of the hose in the operation of tightening the clamp. The said band *a*, with its ears or lugs *b b* and lips *d d'*, I form from a single blank of the shape shown in Fig. 4 of the drawings, which blank I stamp out of suitable sheet metal by means of a press provided with a die or dies of the requisite shape. In the central or main portion of the said blank I preferably cut longitudinal parallel slots *ee* to form bars *ttt*, by which to obtain a firmer hold on the hose to which the band is to be applied. Said central or main portion of the blank I bend into the

shape of a ring or annular band *a* to embrace the end of the hose *h*, as shown in Fig. 2, and then bend each end of the blank first radially outward and then inward, so as to fold upon the outward bent portion at the side, facing the opposite end portion, to produce the two-
ply ears or lugs *b b*, and finally terminate one end of the blank with the central lip *d*, which laps onto the interior of the opposite and adjacent end portion of the band *a*, while the other end of the blank terminates with the lips *d' d'* at or near the edges of the blank, which latter lips lap onto the interior of the opposite adjacent end portion of the band *a*. The blank is formed with two perforations *ii* in each end, and each end portion is folded double, as before described, and on a line midway between the perforations, and thus the latter are made to coincide, said perforated doubled portions constituting the ears or lugs *bb*, through which passes the clamping-bolt *c*.

A hose-clamp thus constructed can be rapidly and cheaply manufactured and possesses superior strength and durability and is most efficient in its operation, and aside from this it is very easily and conveniently applied, inasmuch as it is not incumbered with loose members which are inconvenient to handle, fit, and assemble.

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

As an improved article of manufacture, a hose-clamp consisting of a band of sheet metal provided with coinciding perforations at each end and terminating with a tongue extending from the center of its width at one end and with tongues extending from the opposite end at opposite sides of the center of its width, said band being bent annular-shaped and thence outward and folded inward on lines central between the perforations, and the tongues of each end being bent to lie on the inner side of the opposite end of the main portion of the band, substantially as described and shown.

In testimony whereof I have hereunto signed my name this 18th day of September, 1891.

LEWIS H. REDFIELD. [L. s.]

Witnesses:

H. M. SEAMANS,
C. L. BENDIXON.