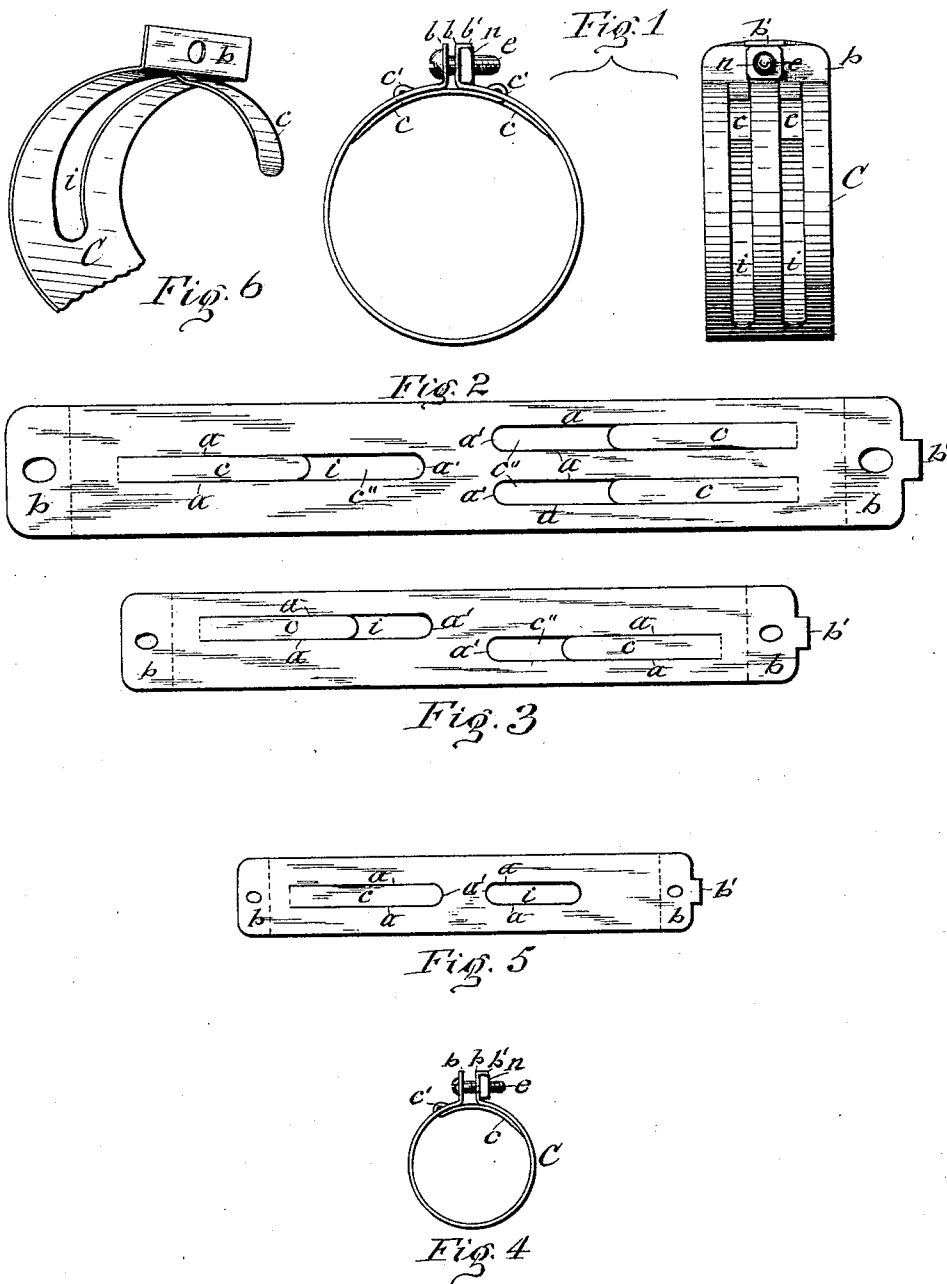


(No Model.)

L. H. REDFIELD.
HOSE CLAMP.

No. 480,515.

Patented Aug. 9, 1892.



WITNESSES:

J. J. Gaasz.
Mark W. Dewey

INVENTOR,

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BY

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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. 480,515, dated August 9, 1892.

Application filed January 18, 1892. Serial No. 418,373. (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
5 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 is a further improvement on the style of hose-clamp for which I have filed
10 applications for patents, Serial No. 378,054, January 16, 1891; Serial No. 406,726, September 24, 1891, and Serial Nos. 441,921 and 416,922, January 4, 1892.

My present invention relates specially to the formation of the fingers which span the space between the coupling-ears of the clamp to prevent the hose from being buckled or
15 crimped up and caught between said ears in the operation of tightening the clamp on the hose.

The object of this invention is to form said fingers on the band in a simple and inexpensive manner and with a minimum consumption of material; and to that end the invention
25 consists in the improved construction of the hose-clamp band, as hereinafter fully described, and specifically set forth in claims.

In the annexed drawings, Figure 1 shows an edge view and a side view of a hose-clamp embodying my improvements. Fig. 2 is a plan
30 view of the blank from which the hose-clamp band is formed. Fig. 3 is a plan view of a blank embodying a modification of my invention. Fig. 4 is an edge view of a small hose-clamp requiring only one finger for spanning the space between the coupling-ears. Fig. 5
35 is a plan view of the blank from which the latter hose-clamp is formed, and Fig. 6 illustrates a modification of my invention.

Similar letters of reference indicate corresponding parts.

C represents the hose-clamp band, which I form in one piece stamped out of suitable
45 sheet metal by means of suitable dies. In order to allow said band to obtain a firm hold on the hose, so as to prevent its slipping thereon, I form the band with longitudinal slots i , similar to those shown in my prior applications for patents; but in my present invention I utilize the portions hitherto wasted in

forming the slot by leaving said portions at one end integral with the blank. Figs. 2, 3, and 5 of the drawings illustrate blanks thus produced.

c c represent the fingers which span the space between the coupling-ears b b , as hereinafter stated. To form the said fingers, as well as the coupling-ears, integral with the band, I cut in the blank longitudinal slits a a ,
55 extending from points some distance from the end of the band toward the center of its length, and cause them to meet in a transverse slit a' , thus forming in the blank a narrow strip which is integral therewith at one end
60 and free at the opposite end, said strip constituting the finger c when bent as hereinafter described. Large bands require one or more such fingers on opposite ends of the main portion of the band, and in different positions in the width of the band, so that the
65 finger or fingers on one end can be lapped onto the inner side of the solid portions of the opposite end of the band, as hereinafter described. On a small narrow hose-clamp a
70 single finger c on each end, or on one end only, as shown, respectively, in Figs. 3 and 5 of the drawings, may answer the purpose. In either case the hose-clamp is formed by bending the main portion of the blank into circular
80 shape, bending the perforated end portions outward to form the ears b b , and bending the strips or fingers c back so as to lap onto the inner side of the opposite end of the main portion of the band. The slits a a may
85 be extended to the ears b b and the fingers c bent directly back, as aforesaid and as shown in Fig. 6 of the drawings; but in order to obviate this abrupt bend and resultant strain of the metal and also retain the ends
90 of the main portion of the band, or the portions adjacent to the ears b b , intact and in their full strength I terminate the slits a a some distance from the ears and bend the fixed end of the finger into an outwardly-projecting open loop c' and then fold the free
95 end of the finger back so as to lap onto and lie closely against the inner side of the main portion of the band, as shown in Fig. 1 of the drawings. In some cases the superfluous
100 length c'' of the finger c may be cut off.

The band is clamped onto the hose by means

of a bolt *e*, passing through the perforations of the ears *b b* and provided with a nut *n*, and in order to lock said nut, so as to prevent its turning, I form the ear *b* with a flange *b'*,
5 which bears on the edge of the nut, as shown in Fig. 1 of the drawings.

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

- 10 1. As an improved article of manufacture, a hose-clamp band formed in one piece of sheet metal, perforated in its ends, and having longitudinal slits extending from a point some distance from the end of the band toward the
15 center of its length and meeting in a transverse slit, the main portion of said band being bent circular shape, the perforated end portions being bent radially outward, and the

free end of the slitted portion being bent back and lapped onto the inner side of the opposite end of the main portion, substantially as described and shown. 20

2. The band *C*, composed of sheet metal and having the finger *c* formed integral therewith and bent into the outwardly-projecting 25 loop *c'* and folded with its free end back onto the inner side of the band and lapped onto the opposite end of the main portion of the band, substantially as described and shown.

In testimony whereof I have hereunto signed 30 my name this 14th day of January, 1892.

LEWIS H. REDFIELD. [L. S.]

Witnesses:

MARK W. DEWEY,
C. L. BENDIXON.