

G. MARION.
HOSE CLAMP.
APPLICATION FILED NOV. 6, 1911.

1,047,962.

Patented Dec. 24, 1912.

Fig. 1.

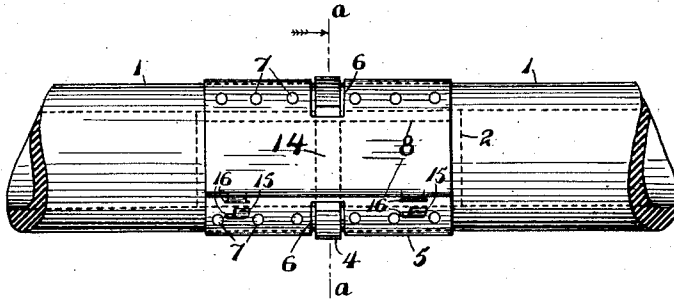


Fig. 2.

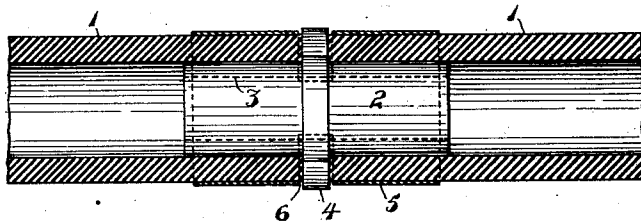


Fig. 3.

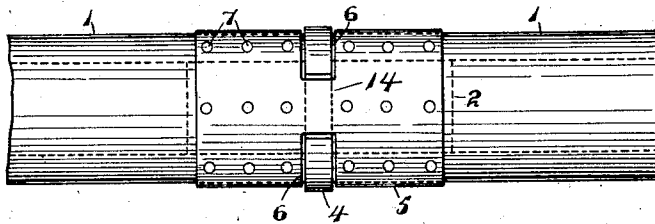
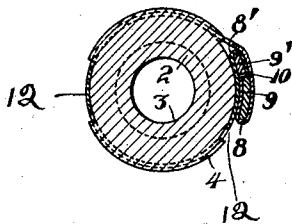


Fig. 4.



WITNESSES

H. C. Fiedner
Agnes Pringle

INVENTOR
Clarence Marion
BY *Lincoln Edmitag*
ATTORNEY

UNITED STATES PATENT OFFICE.

CLARENCE MARION, OF PETALUMA, CALIFORNIA.

HOSE-CLAMP.

1,047,962.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CLARENCE MARION, a citizen of the United States, residing at Petaluma, in the county of Sonoma and State of California, have invented certain new and useful Improvements in Hose-Clamps, of which the following is a specification.

My invention relates to certain improvements in hose-clamps.

The object of my invention is to provide an improved hose-clamp for mending hose which is simple in construction and durable, and which is very effective in resisting longitudinal separation of the parts of hose united by the device, and which is also very effective in resisting lateral pressure at the parts covered by the said clamp, as well as in preventing leakage at the ends of the sections of hose covered.

The invention consists in certain novel features of construction and in the combination and arrangement of parts hereinafter described by reference to the accompanying drawing and particularly pointed out in the appended claim.

I will now proceed to describe the device embodying my invention, making reference to the accompanying drawing.

In said drawing, Figure 1 is a view of said device, showing one side thereof; Fig. 2 is a central longitudinal section of said device as shown in Fig. 1; Fig. 3 is another side view of said device, showing the side thereof opposite to the side shown in Fig. 1; Fig. 4 is a transverse section of the device taken on line *a-a* of Fig. 1.

Making further reference to said drawings, the numerals 1 represent two sections of hose as united by said device. In my device I provide a tubular core 2 having opposite sections adapted to enter opposite sections of hose as shown in Fig. 2, the core having a passage or channel 3. The sections of the core are divided by annular flange 4, which is integral therewith, and the periphery of which is slightly above the sections of hose as shown. The flange has oppositely positioned notches 12 having the purpose hereinafter set forth. To secure the ends of the sections together, which respectively abut the sides of the flange I provide the clamping band 5 which consists of brass or other suitable material. The said clamping band has a plurality of slots 6 through which project the flanges 4 when the band is se-

cured around the sections 1 as united. The band has a plurality of perforations 7 which parts of the wall of the sections of hose, which is flexible and preferably of rubber, penetrate when pressure is applied on said wall by the band, and by which penetration additional provision is made for resistance to longitudinal strain or separation of parts or sections of hose as united by the tubular core 2. One of the longitudinal ends of the band has a bent portion 8 extending beneath the same and which is provided with a filler 9 therein, preferably of metal, for the thickening of the wall of said end. The other longitudinal end of said band is provided with a bent portion 8' turned over the same to form a cavity for the filler 9' therein and, also, preferably of metal, for thickening such wall. The backwardly bent longitudinal ends of said band as thickened by the insertion of said filler form abutting walls when the bent end 8 is caused to overlap the bent end 8' to secure the band over the united sections of hose as shown in Fig. 4.

The operation of applying my hose clamp is very simple. The ruptured sections of hose to be mended having been cut square so as to fit over the tubular core 2 and abut evenly against the respective sides of the flange 4, the sections of hose are united over said core so as to abut as mentioned, and the band is next brought over the united sections, the flange 4 penetrating the slots 6 as the longitudinal ends are caused to overlap and contact as shown in Fig. 4, the notches 12 being intended to accommodate the joining pieces 14 preserved in the cutting of slots 6 in the clamping band 5.

The engagement of the bent portions or flanges 8 and 8' forms an effective and strong lock for the band when applied, and the other features for gripping the united sections of hose, or holding them in position, make the device very desirable for the purpose intended.

In the construction of my device so that the ends of the band may meet evenly when caused to overlap, the filler 8' may be caused to engage the material on both sides as shown, while the filler 8 of the overlapping end may be caused to adhere to the same on the underside only.

To prevent the unintentional disengagement of the band when locked by the engagement of the ends thereof as shown, I provide straps, preferably of thin metal, designated

15, which extend from the overlapping end of the band, and which by insertion through the parallel slits 16 in the opposite portion of the band may be effectively secured
5 against such disengagement.

My device is so constructed that the ends of the band may be effectively locked and readily unlocked by manipulation without the aid of any tool or tools.

10 I claim:—

In a hose-clamp for flexible hose in combination with a tubular core for insertion in sections of hose to be joined and having a central annular flange and notches in said
15 flange dividing the same into sections, a band for tightly encircling said sections of hose, one of the longitudinal ends of said band having a transverse upwardly projecting flange and the other longitudinal end of

said band having a transverse downwardly
projecting flange for interlocking with said
upwardly projecting flange, and said band
having a plurality of central transverse slots
extending therethrough penetrable by said
flange sections, and joining bands in the
25 path of said slots seatable in said notches,
and said band having also a plurality of parallel slits in proximity to the upwardly projecting flange, and a plurality of straps projecting from the downwardly projecting
30 flange to penetrate said slits.

In testimony whereof I affix my signature in presence of two witnesses.

CLARENCE MARION.

Witnesses:

WM. WILDER,

R. H. SPOTTSWOOD.

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