J. JORGENSON.

DETACHABLE HOSE COUPLING.

APPLICATION FILED FEB. 17, 1919.

1,335,582. **Patented Mar. 30, 1920.**

Fig. 1.

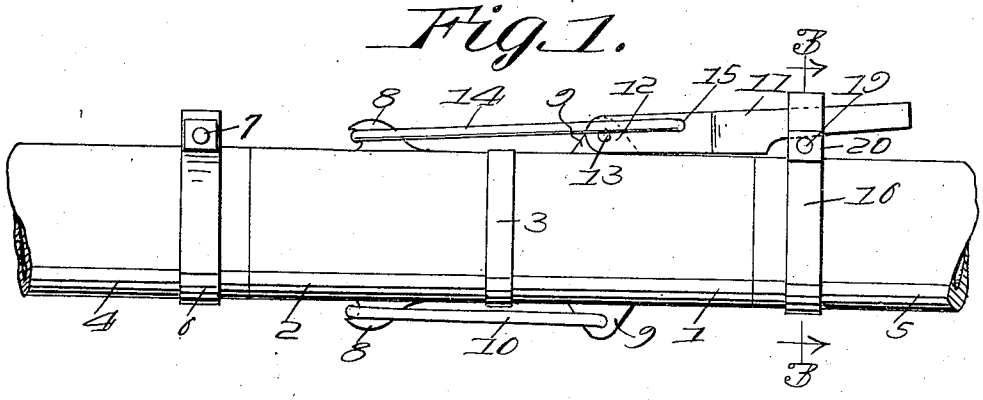


Fig. 2.

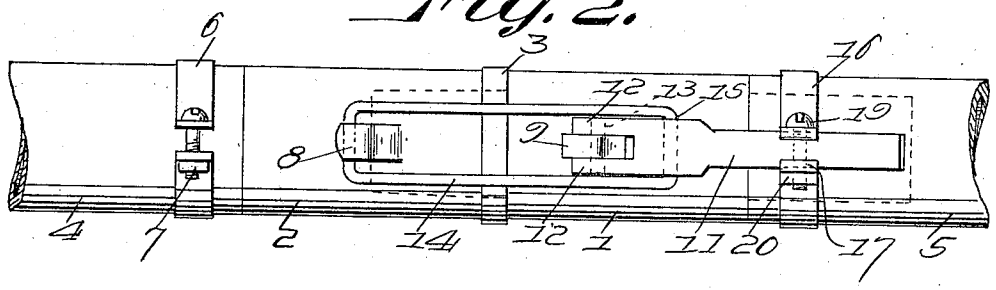
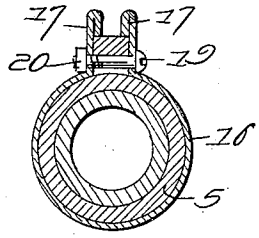


Fig. 3.



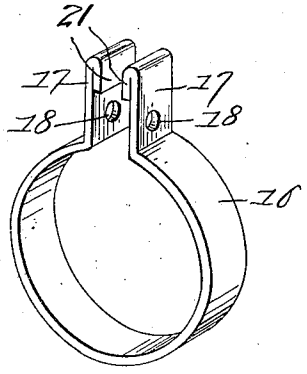


Fig. 4.

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UNITED STATES PATENT OFFICE.

JOHN JORGENSON, OF WHEELOCK, NORTH DAKOTA.

DETACHABLE HOSE-COUPLING.

1,335,582. Specification of Letters Patent. Patented Mar. 30, 1920.

Application filed February 17, 1919. Serial No. 277,661.

To all whom it may concern:

Be it known that I, JOHN JORGENSON, a subject of the King of Norway, residing at Wheelock, in the county of Williams and State of North Dakota, have invented new and useful Improvements in Detachable Hose-Couplings, of which the following is a specification.

This invention comprehends generally improvements in that class of inventions known as water distribution and more particularly relates to a detachable hose coupling.

This invention has for its principal aim and object to provide a device of the above mentioned character designed for engagement with the adjacent ends of hose sections and capable of being actuated so as to be readily clamped to each other.

More particularly this invention contemplates the provision of a device of the above mentioned character wherein coöperative fastening means is mounted on the male and the female members for releasably holding the members in engagement with each other.

It is a more specific object of this invention to provide a device of the above mentioned character wherein the clamp which holds the hose section on one of the members is designed to form a resilient latch for releasably receiving and retaining the operating lever of the connecting means to prevent accidental disengagement of the members.

Among the other aims and objects of this invention may be recited the provision of a device of the character described with a view to compactness, and in which the number of parts are few, the construction simple, the cost of production low and the efficiency high.

Other improvements and novel details in the construction and arrangement of the various parts of the apparatus will be brought out more in detail in the description to follow, which for a clear understanding of the invention should be considered in connection with the accompanying drawings forming a part hereof, and wherein is disclosed for the purpose of illustration a convenient and satisfactory embodiment of the invention. It is to be noted in this connection that minor changes in the construction and arrangement of parts may be made without departing from the principle of operation of the various parts.

The invention is clearly illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of the device.

Fig. 2 is a top plan view thereof.

Fig. 3 is a section taken on line 3—3 of Fig. 1, and

Fig. 4 is a perspective detail of the improved clamping band.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now, more particularly, to the accompanying drawings, there is provided a male member 1 designed to be detachably received in the female member 2 while arranged about the reduced portion of the male member 1 is a gasket 3 which in turn is abutted by the meeting edges of the members 1 and 2 when the latter are in engagement with each other. Receivable about the outer ends of the members 1 and 2 are hose sections 4 and 5 respectively. A clamping band 6 is now disposed about the hose section 4 and has its free ends connected by a nut and bolt arrangement 7 which controls the tension of the band and serves to consequently clamp the section 4 to the member 2.

With a view toward providing improved means for detachably holding the members 1 and 2 in engagement with each other lugs 8 are formed at diamterically opposite points on the member 1 while ears 9 are formed at diametrically opposite points on the member 2. An elongated rectangular link 10 has one end pivotally engaged in one of the ears 9 and its opposite end designed to be engaged about one of the lugs 8 at the time the member 1 is inserted in the member 2. An operating lever 11 is employed and has one end bifurcated to provide spaced ears 12 which are disposed about the other ear 9 and swingably connected thereto by means of the pintle 13. Another elongated rectangular link 14 has one end swingably arranged through an opening 15 in the operating lever eccentrically of the pintle 13 while the opposite end of this link 14 is designed to be engaged about the other lug 8 whereby when the lever is swung downwardly toward the member 2 a clamping of the members 1 and 2 will be effected, as is apparent.

As intimated, improved means have been provided for clamping the hose section 5 to the member 1 and for releasably latching the lever with respect to the member 1.

In reducing this feature of the invention to practice a resilient clamping band 16 is

provided and is disposed about the section 5. This band is formed from a single strip of resilient metal and is of open formation while projecting from the ends of the band are upright arms 17 arranged in opposed relation with respect to each other and formed with openings 18 in which is fitted a bolt 19 the projecting terminal of which is engaged by a nut 20 which serves to clamp the band and consequently the section 5 to the member 1. In addition this bolt serves to hold the inner portions of the opposed arms substantially rigid relative to each other. The outer portions of the arms 17 are bent inwardly to provide guards 21. In this connection it is to be observed particularly that the arms are arranged in the path of movement of the lever 11 and provide a resilient latch for releasably receiving and retaining the outer portion of the lever 11 therebetween subsequent to the downward swinging of the lever for the clamping of the members 1 and 2 with respect to each other and thereby prevents accidental disengagement of the members 1 and 2.

It is believed in view of the foregoing description that a further detailed description of the operation of the invention is entirely unnecessary. Likewise it is believed that the advantages of the invention will be readily apparent.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limited sense. It is also to be understood that the language used in the following claims is intended to cover all the generic and specific features of the invention herein described and all statements of the scope of the invention which as a matter of language might be said to fall therebetween.

What is claimed is:

1. A device of the character described comprising in combination interengageable male and female members, hose sections engaged about the members, a clamping band for securing one of the hose sections to one of the members, coöperative means for fastening the members together, a lever swingably connected to one of the members for operating the fastening means, another clamping band disposed about the other hose section, and opposed resilient latch arms formed on the band for releasably receiving and retaining the lever subsequent to the clamping of the members together.

2. A device of the character described including in combination interengageable male and female members, hose sections disposed about the outer ends thereof, a clamping band for securing one of the hose sections to the adjacent member, opposed lugs formed on one of the members, opposed ears formed on the other member, an elongated link swingingly engaged in one of the ears and designed for engagement with one of the lugs, an operating lever swingingly connected to the other ear, another elongated link swingably and eccentrically connected to the lever and designed for engagement with the other lug, a clamping band formed from a single piece of resilient metal disposed about the other hose section, resilient latch arms continuing from the ends of the band and arranged in opposed relation with respect to each other and formed with openings, a nut and bolt arrangement for clamping the band in position and for holding the inner portions of the latch arms rigid with respect to each other and the latch arms being provided near their outer ends and on their inner faces with guards for facilitating the retention of the outer portion of the lever between the arms subsequent to the clamping of the members 1 and 2 together.

In testimony whereof I affix my signature.

JOHN JORGENSON.