(No Model.)

C. T. BODIFIELD & J. ARNETT.

HOSE PROTECTOR.

No. 289,381. Patented Dec. 4, 1883.

Fig. 1.

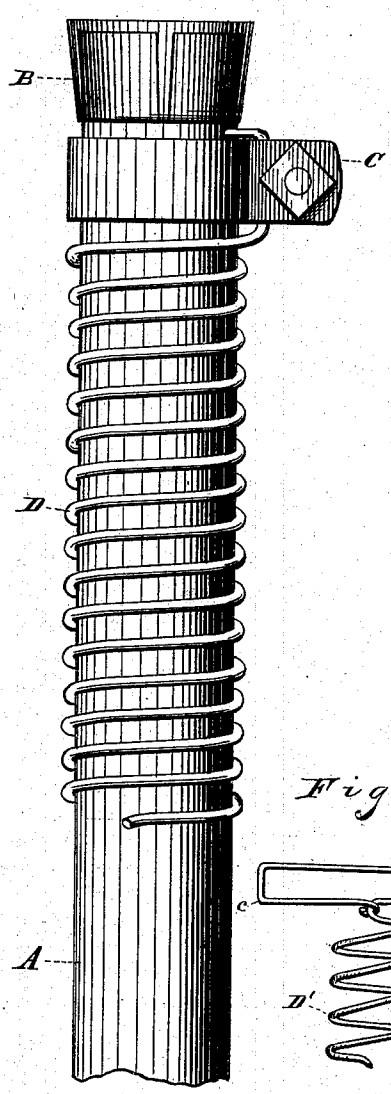


Fig. 2.

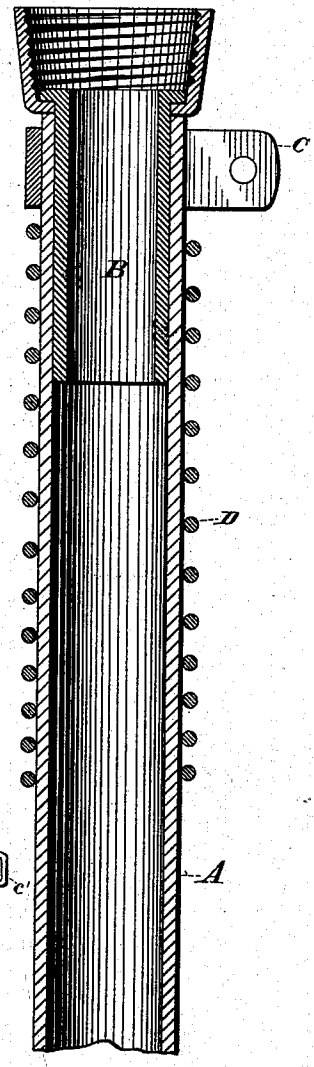


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES T. BODIFIELD AND JOHN ARNETT, OF CLEVELAND, OHIO.

HOSE-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 289,381, dated December 4, 1883.

Application filed September 4, 1883. (No model.)

To all whom it may concern:

Be it known that we, CHARLES T. BODIFIELD and JOHN ARNETT, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Hose-Protectors; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

Our invention relates to improvements in hose-protectors; and it consists in certain features of construction and in combination of parts, hereinafter described, and pointed out in the claim.

Hose, especially of the smaller kind, are usually broken and spoiled by bending them too short, and this occurs more frequently just at the end of the coupling.

Our protector consists of a coiled spring around the outside of the hose that will protect the hose from short bends and from being crushed. The protector may be made adjustable, so that it can be placed at any desired part where the hose may be most exposed to rough usage, or may be secured to the clasp that fastens the hose to the coupling.

In the drawings, Figure 1 is an elevation, and Fig. 2 a longitudinal section, of our improved protector applied to a hose. Fig. 3 is a plan view of a protector and clasp combined.

A represents the hose; B, the coupling; C, the clasp that holds the hose securely to the coupling; and D is the protector, consisting, preferably, of a spring-wire coiled around the hose, and, as shown in Fig. 1, is fastened to the clasp C.

When the protector is designed to be slid along the hose to protect any exposed part, it should not fit the hose so close but that it may be moved by hand. This protector will prevent that portion of hose that it incloses from being crushed when it is stepped on or when a carriage-wheel passes over it, and will also prevent those short bends so injurious to hose.

A manner of making the protector and clasp combined, and from a single piece of wire, is shown in Fig. 3.

When, instead of the clasp C, already described, the clasp C′ is made integral with the protector D′, as shown, the end of the loop *c* is wide enough to admit of the end *c′* passing through it. The protector is placed on the hose, as already described, and the tube part of the coupler inserted in the hose, as aforesaid, after which the loop C′ is wrapped around the hose in place of the clasp C, the end *c′* is passed through the end *c* and bent over in the usual manner of securing this kind of clasp.

What we claim is—

The combination, with a hose and clasp C, of a hose-protector, D, consisting of a coil-spring secured at one end to the clasp C and left free at its other end, substantially as set forth.

In testimony whereof we sign this specification, in the presence of two witnesses, this 18th day of August, 1883.

CHARLES T. BODIFIELD.
JOHN ARNETT.

Witnesses:
FRANK HUBBELL,
ALBERT E. LYNCH.