

J. J. LOVELL.

Improvement in Hose-Couplings.

No. 114,575.

Patented May 9, 1871.

Fig 1

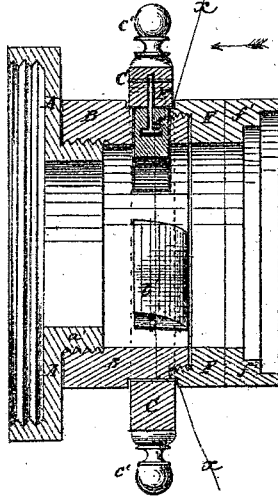


Fig 2

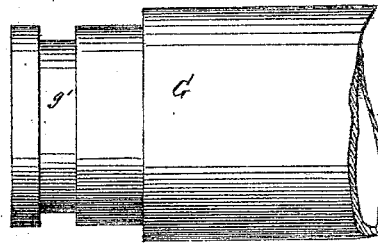


Fig 3

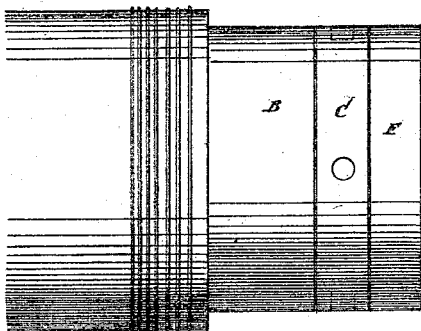


Fig 4

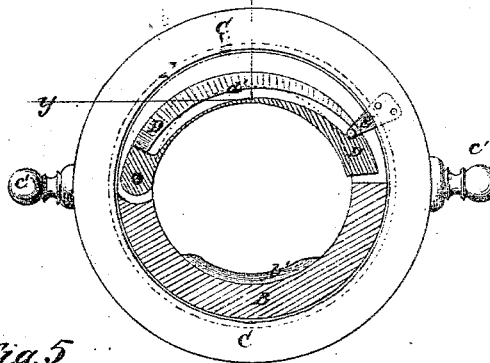
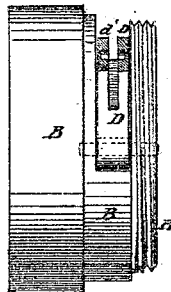


Fig 5



Witnesses.

A. W. Almqvist
Wm H. C. Smith.

Inventor.

J. J. Lovell.

PER Munn & Co
Attorneys.

United States Patent Office.

JOSEPH J. LOVELL, OF NEW YORK, N. Y.:

Letters Patent No. 114,575, dated May 9, 1871.

IMPROVEMENT IN HOSE-COUPINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH J. LOVELL, of the city, county, and State of New York, have invented a new and useful Improvement in Hose-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a detail sectional view of the female part of my improved hose-coupling, as arranged for coupling the suction-tube to the engine.

Figure 2 is a side view of the male part of the coupling.

Figure 3 is a side view of the female part of my improved coupling as arranged for coupling lengths of hose.

Figure 4 is a detail sectional view taken through the line *x x*, fig. 1.

Figure 5 is a detail side view of a portion of the same, part being broken away through the line *y y*, fig. 4, to show the construction.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved hose-coupling, which shall be simple in construction, safe, strong, durable, not liable to get out of order, and easily and quickly operated to couple and uncouple the hose; and

It consists in the construction and combination of the various parts of the coupling, as hereinafter more fully described.

A is a plate which is designed to be screwed fast to the engine, and upon the outer side of which, around the central perforation, is formed a flange, *a'*, having a screw-thread cut upon it, upon which is screwed the band B, which forms a portion of the female part of the coupling.

When the coupling is to be used for coupling lengths of hose the plate A is omitted and the band B, extended to receive the end of a length of hose.

The outer surface of the outer end of the band B is grooved to receive the band C, which groove upon one side of said band B is extended entirely through said side, and in the recess thus formed is placed a semi-circular bar, D, one end of which is pivoted to said band B, and the other end is left free.

In the outer side of the pivoted curved bar D is formed a dovetailed or cross-shaped inclined groove or slot, *d'*, into which fits the dovetailed or cross-head

end of the inner end of the arm E, the outer end of which is securely attached to the ring or band C, so that as the band C is turned in one or the other direction the pivoted curved bar D may be moved inward to project beyond the inner surface of the band B to couple the coupling, or drawn back into the recess of said band B to uncouple the coupling.

Upon the inner surface of the band B, directly opposite the pivoted curved bar D, is formed a lip or projection, *b'*.

The band C is kept in place upon the band B by a band, F, screwed upon the outer end of the said band B.

When the coupling is used to connect the suction-pipe to the engine the band F is made with an extension, *f'*, to receive a door to close the open end of the coupling when the suction-pipe is detached. When the coupling is used for connecting lengths of hose the extension *f'* is not required.

G is the male part of the coupling, to one end of which the end of the suction-pipe or length of hose is attached, and the other end of which is so formed as to fit into the female part of the coupling.

Around the forward end of the part G is formed a groove, *g'*, to receive the lip or projection *b'*, and the curved bar D to fasten the parts of the coupling to each other.

When the coupling is used for connecting the suction-pipe to the engine the band C may project beyond the outer surface of the rest of the coupling, as shown in fig. 1, and may have handles *c'* attached to it, for convenience in operating; but when the coupling is used for connecting lengths of hose the outer surface of the band C should be flush with the outer surface of the bands B F, so as to present no projecting parts to catch upon obstructions or be in the way. In this case the band C must be operated by a wrench.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The combination of the grooved and recess band B *b'*, band C, pivoted and grooved curved bar D *d'*, arm E, band F, and part G *g'*, with each other, substantially as herein shown and described, and for the purpose set forth.

JOSEPH J. LOVELL.

Witnesses:

E. P. MARTIN,
GEO. W. MABEE.

Assignor of three fourths of his right to George W. Millar of same p