(No Model.)

P. RIEHL, Jr.

HOSE COUPLING.

No. 603,366. Patented May 3, 1898.

Fig. 1.

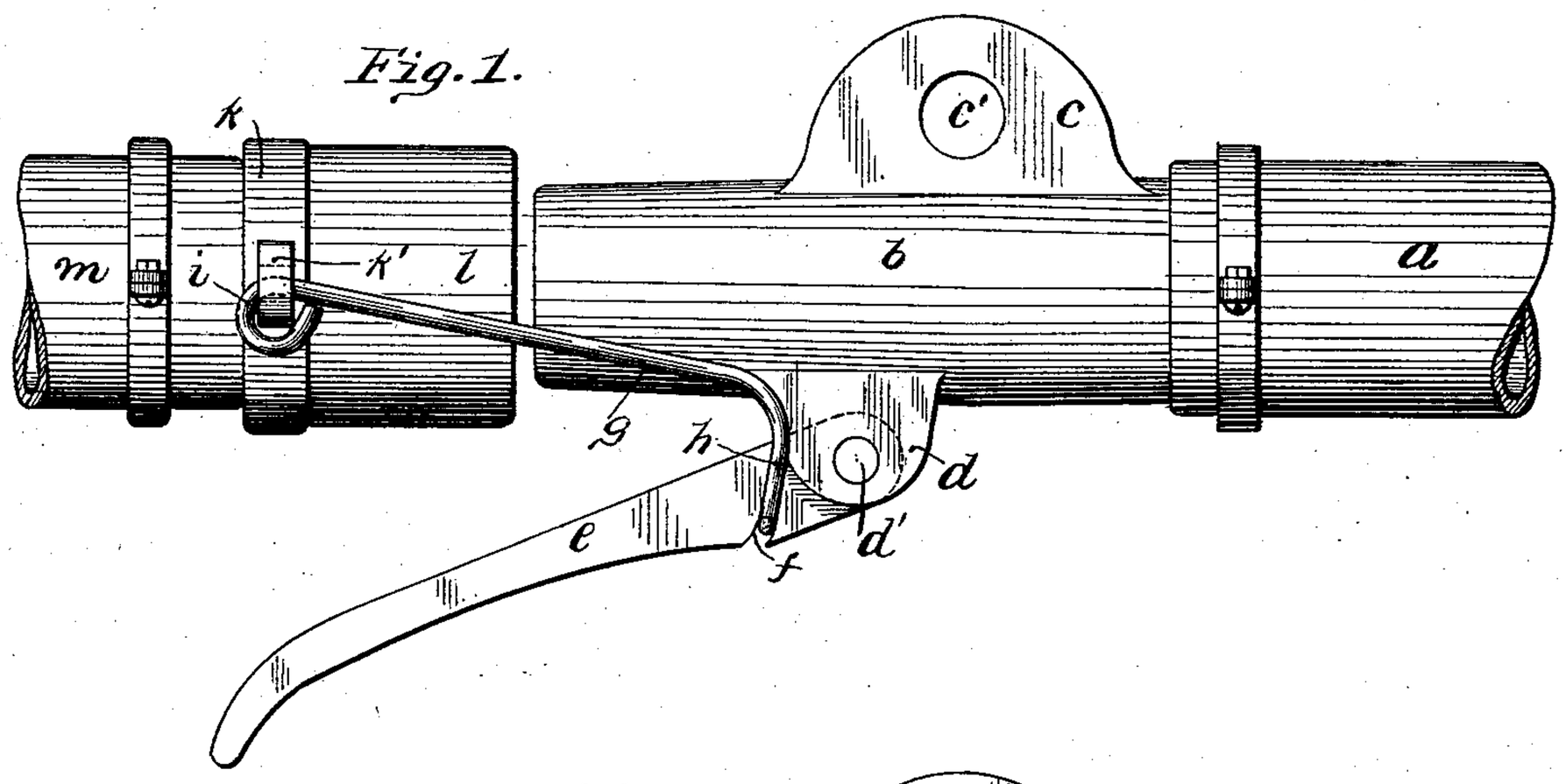


Fig. 2.

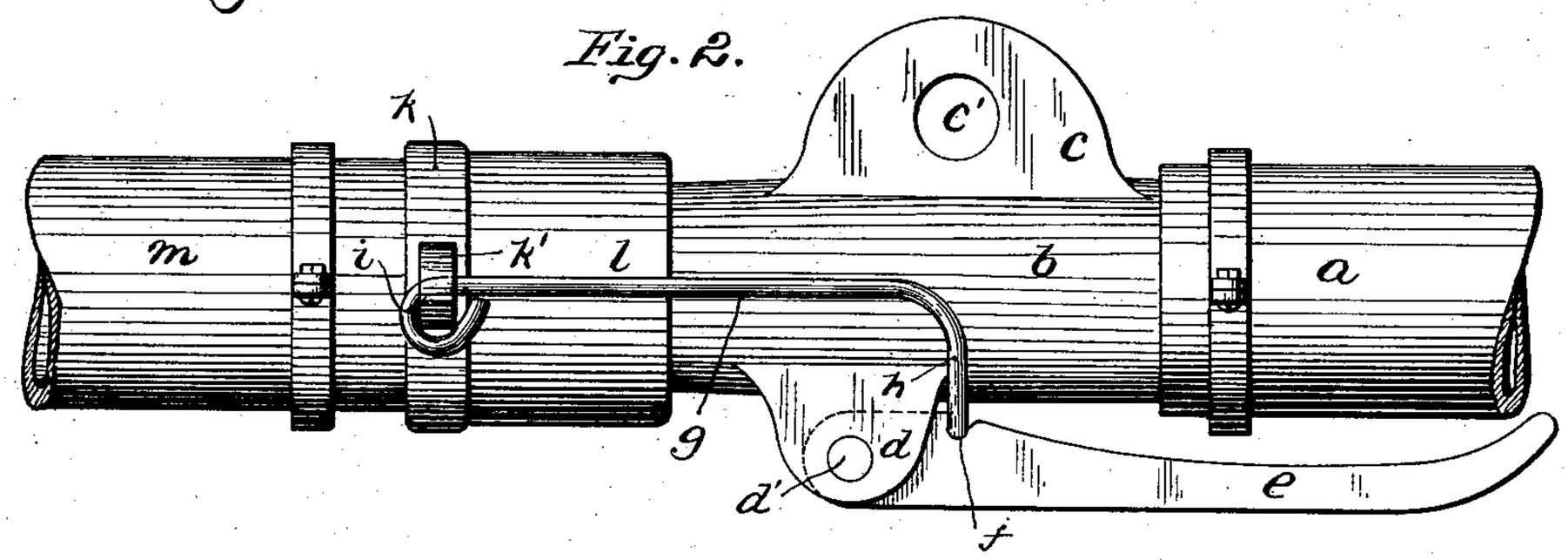


Fig. 3.

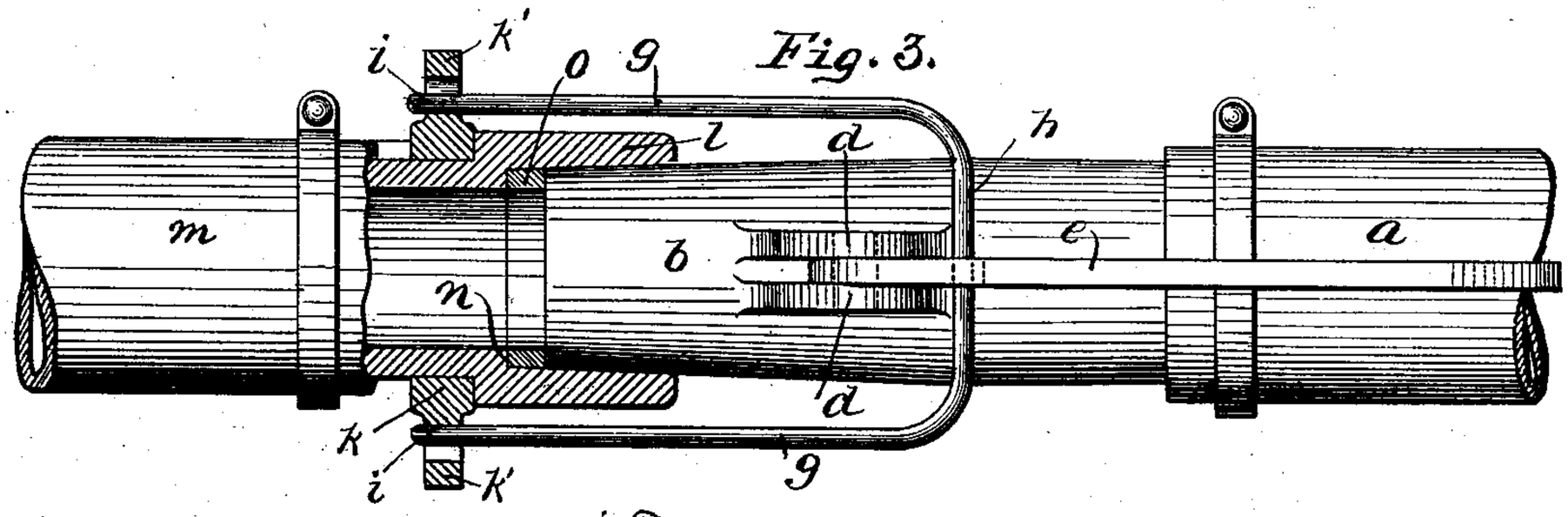
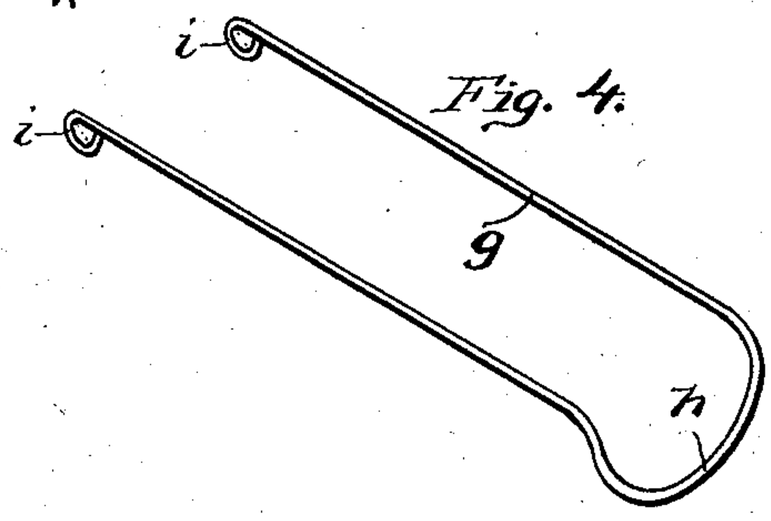


Fig. 4.



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PETER RIEHL, JR., OF PITTSBURG, PENNSYLVANIA.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 603,366, dated May 3, 1898.

Application filed October 16, 1897. Serial No. 655,392. (No model.)

To all whom it may concern:

Be it known that I, PETER RIEHL, JR., a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Hose-Couplings; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to hose-couplings.

The object of my invention is to construct a hose-coupling which is simple in construction and at the same time one in which the parts can be quickly and securely joined so as to form a tight joint.

To these ends my invention comprises certain novel features, all of which will be fully hereinafter set forth and claimed.

To enable others skilled in the art to make and use my invention, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 is a side view of my improved coupling with the parts in position for coupling. Fig. 2 is a like view showing the parts coupled. Fig. 3 is a bottom plan view, partly in section, of the parts coupled; and Fig. 4 is a perspective view of the spring-bail.

Like letters indicate like parts in each of the figures.

I will describe and illustrate my invention as applied to coupling the hose of a water-tank with the hose on a locomotive for feeding the boiler, although I do not wish to limit myself to any particular use.

In the drawings, *a* designates a portion of a length of hose to which the tubular connection *b* is attached in any suitable manner. The connection *b* has the enlargement *c* formed thereon with the opening *c'* therein, so that the hose when not in use may be suspended from a hook or like support.

Pivoted between the lugs *d*, by means of the pintle *d'*, is the lever *e*. The lever *e* has the seat or groove *f* formed therein, with which the spring-bail *g* is adapted to engage. This spring-bail *g* is formed of metal with sufficient strength and resiliency for the required purpose, more fully hereinafter set forth.

The spring-bail *g* is so bent as to form the portion *h*, substantially at right angles to the main portion of the bail. By this construction this bent portion *h* embraces a part of the connection *b* when the parts are coupled, as will more fully appear.

The ends of the spring-bail *g* are bent to form hooks *i*, which are adapted to engage the studs *k'* on opposite points in the circumference of the ring *k*. This ring *k* encircles the connection *l*, being loosely mounted thereon and free to turn. The connection *l* is attached to the hose *m*. A shoulder *n* is formed within the connection *l*, said shoulder forming a seat for an elastic washer *o*.

When my improved coupling is in use and it is desired to connect the hose on a water-tank with the hose on a locomotive, the parts are brought into their relative positions as shown in Fig. 1. The spring-bail *g* has its hooked ends engaging with the studs *k'*, while the bent portion *h* engages with the seat *f* in the lever *e* while the outer end of the connection *b* is in position to enter the connection *l*. By throwing the lever *e* over into the position shown in Fig. 2 the spring-bail is carried to the other side of the pivotal point of the lever *e* while still held within the seat *f*. The effect of this operation is to draw the two connections *b* and *l* closely together, the inner end of the connection *b* being forced into close contact with the elastic washer *o* within the connection *l*, whereby a very tight connection is made. As the inner end of the spring-bail passes beyond the pivotal point of the lever *e* in the coupling operation the bent portion *h* of the bail springs up around the connection *b*, in the position shown in Fig. 2. The spring-bail in this position locks the lever *e* in position, so that it cannot be displaced by a sudden jolt or shock in such a manner as to disconnect the coupling before desired. The pull of the bail is on a line substantially central of the connections, so that the joint is equally tight at all points around the washer *o*.

By the use of the spring-bail when the lever is thrown into the position shown in Fig. 2 the connections are more powerfully forced against each other, and consequently a tighter joint is secured.

When it is desired to uncouple, it is only necessary to apply sufficient force to the lever *e* to throw the bail beyond the pivotal point, when the portion *h* of the bail can be readily disengaged from the seat *f* in the lever *e*.

By the employment of a swivel-ring *k*, arranged to turn freely on the connection *l*, the studs *k'* may be quickly brought into the requisite position for coupling. This is a point of advantage, as the hose may be twisted and yet the coupling operation may be performed without the delay of untwisting to bring the parts into the proper position for coupling.

When the bail is not in use, its hooked ends *i* are held in the studs *k'*, said bail hanging therefrom.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a hose-coupling, the combination with the tubular connections, of a lever pivoted to one of said connections, and a spring-bail secured to the other connection and releasably engaging said lever, substantially as set forth.

2. In a hose-coupling, the combination with the tubular connections, of a lever pivoted to one of said connections, a spring-bail secured to the other connection and releasably engaging said lever, said bail having its looped end bent at an angle to the main portion thereof, substantially as set forth.

3. In a hose-coupling, the combination with the tubular connections, of a lever pivoted to one of said connections, a spring-bail secured to the other connection and releasably engaging said lever, said bail having its looped end bent at right angles to the main portion thereof, substantially as set forth.

4. In a hose-coupling, the combination with the tubular connections, of a lever pivoted to one of said connections, said lever having a recess formed therein, a spring-bail secured to the other connection and engaging said recess in said lever, said bail having its looped end bent at an angle to the main portion thereof, substantially as set forth.

5. In a hose-coupling, the combination with the tubular connections, of a lever pivoted to one of said connections, a spring-bail, a swivel-ring on the other connection, said bail having its ends secured to said ring, said spring-bail being releasably connected at its looped end to said lever, substantially as set forth.

6. In a hose-coupling, the combination with the tubular connections, of a lever pivoted to one of said connections, a spring-bail having hooks formed on its ends, a swivel-ring on the other connection, projections on said ring with which said hooks engage, said spring-bail being releasably connected at its looped end to said lever, substantially as set forth.

7. In a hose-coupling, the combination with the tubular connections, of a lever pivoted to one of said connections, a swivel-ring on the other connection, and a connecting member between said lever and said ring adapted to engage said ring and hold said connections together, substantially as set forth.

In testimony whereof I, the said PETER RIEHL, Jr., have hereunto set my hand.

PETER RIEHL, JR.

Witnesses:
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