

No. 790,970.

PATENTED MAY 30, 1905.

J. F. McELROY.
HOSE COUPLING.

APPLICATION FILED MAR. 25, 1904.

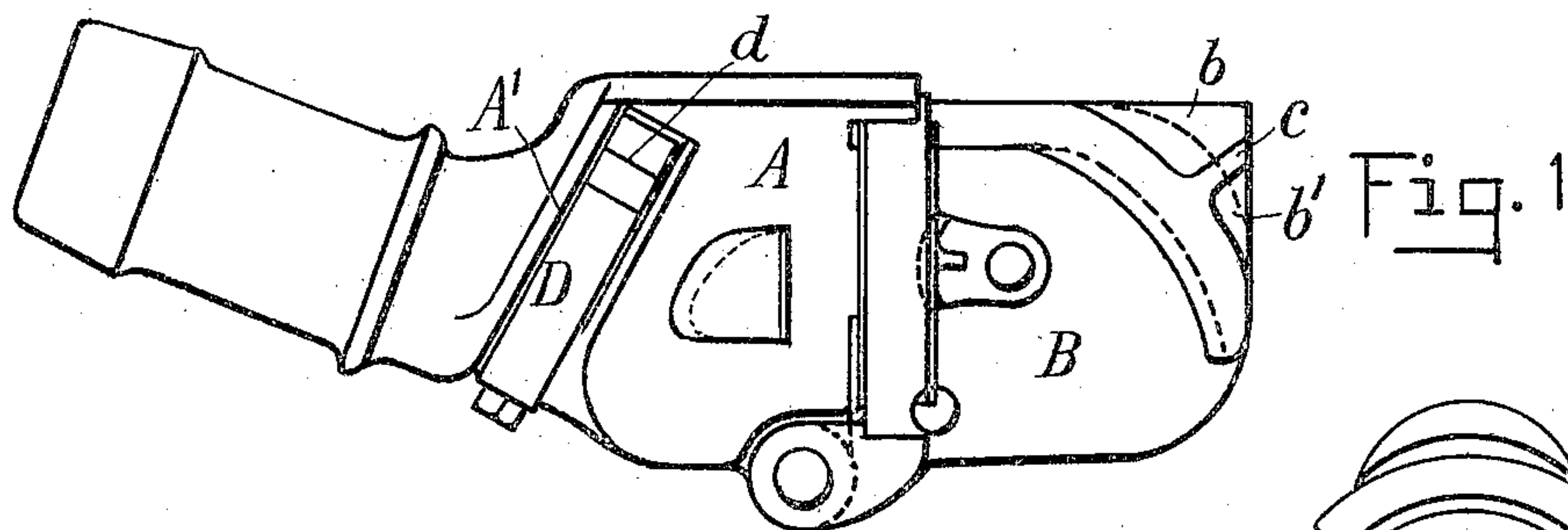


Fig. 1

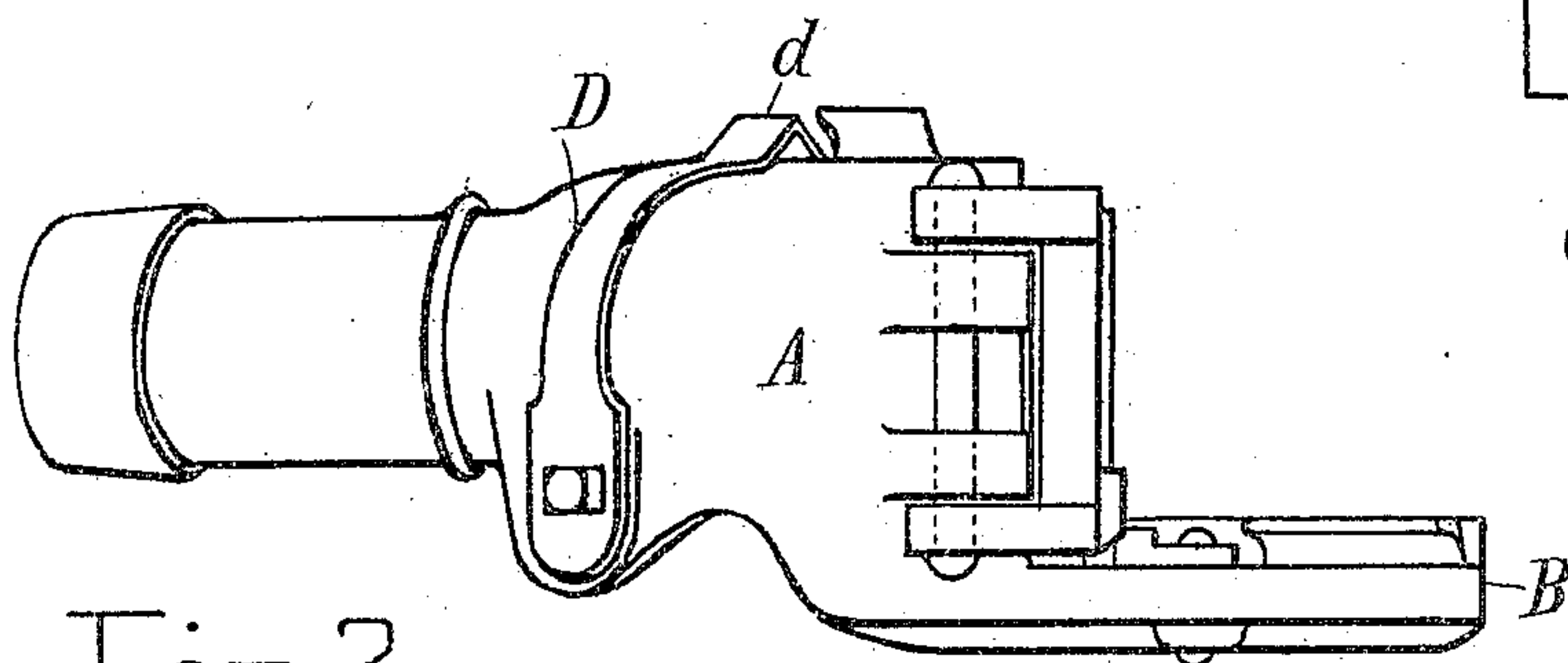


Fig. 2

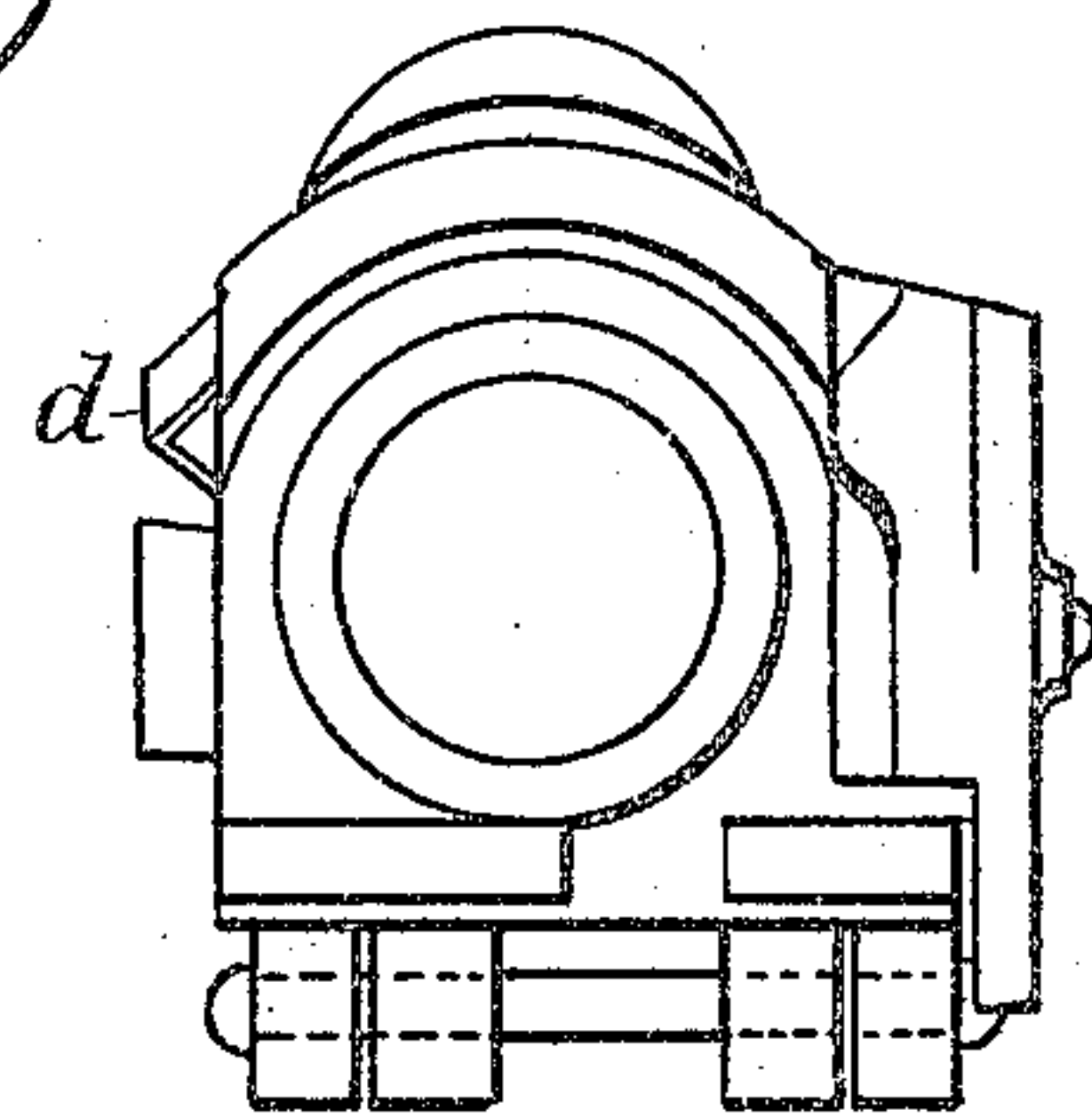


Fig. 3

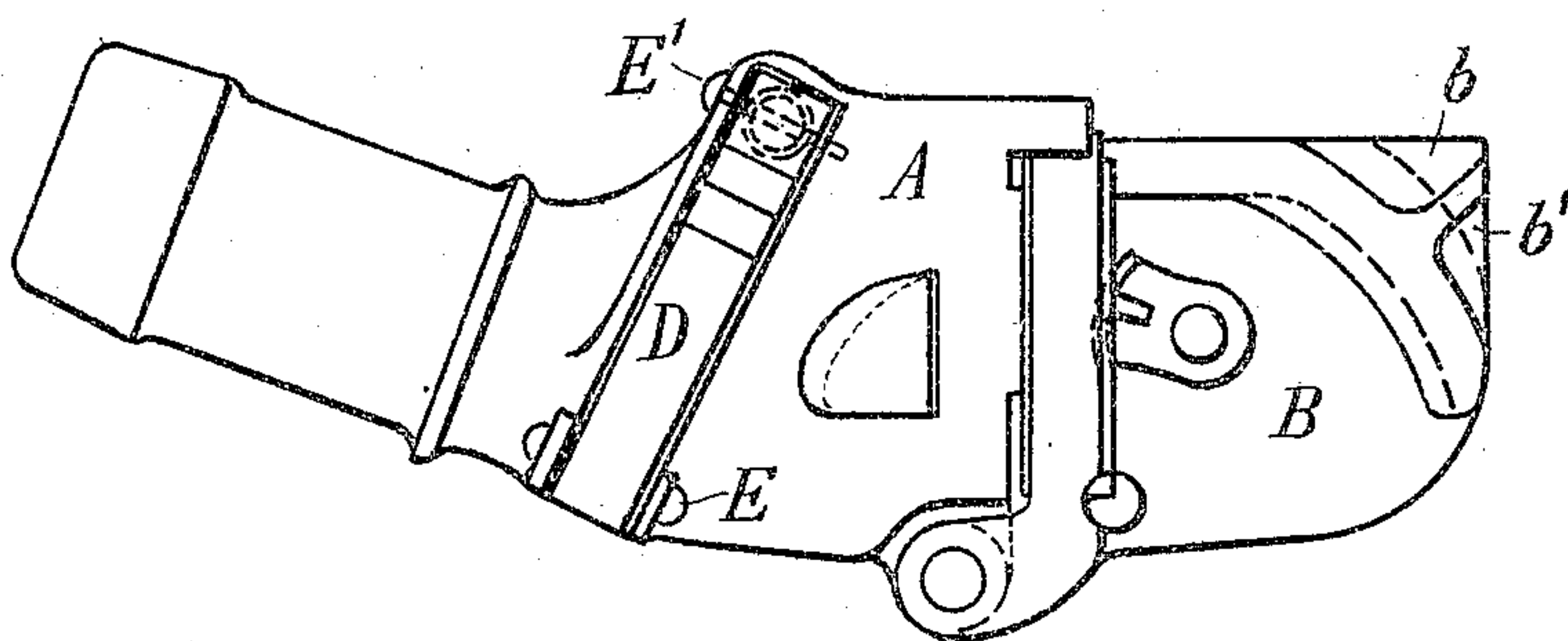


Fig. 4

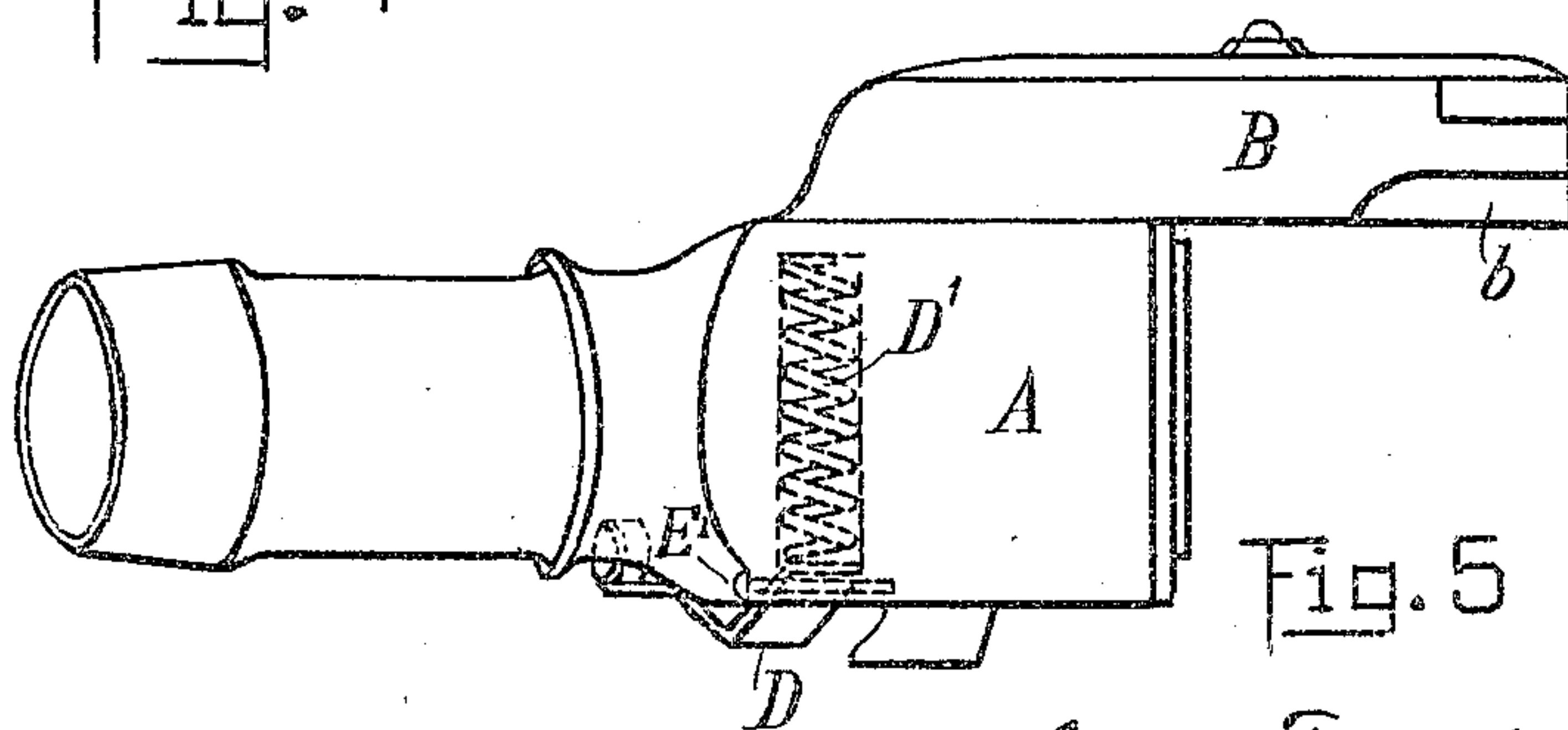


Fig. 5

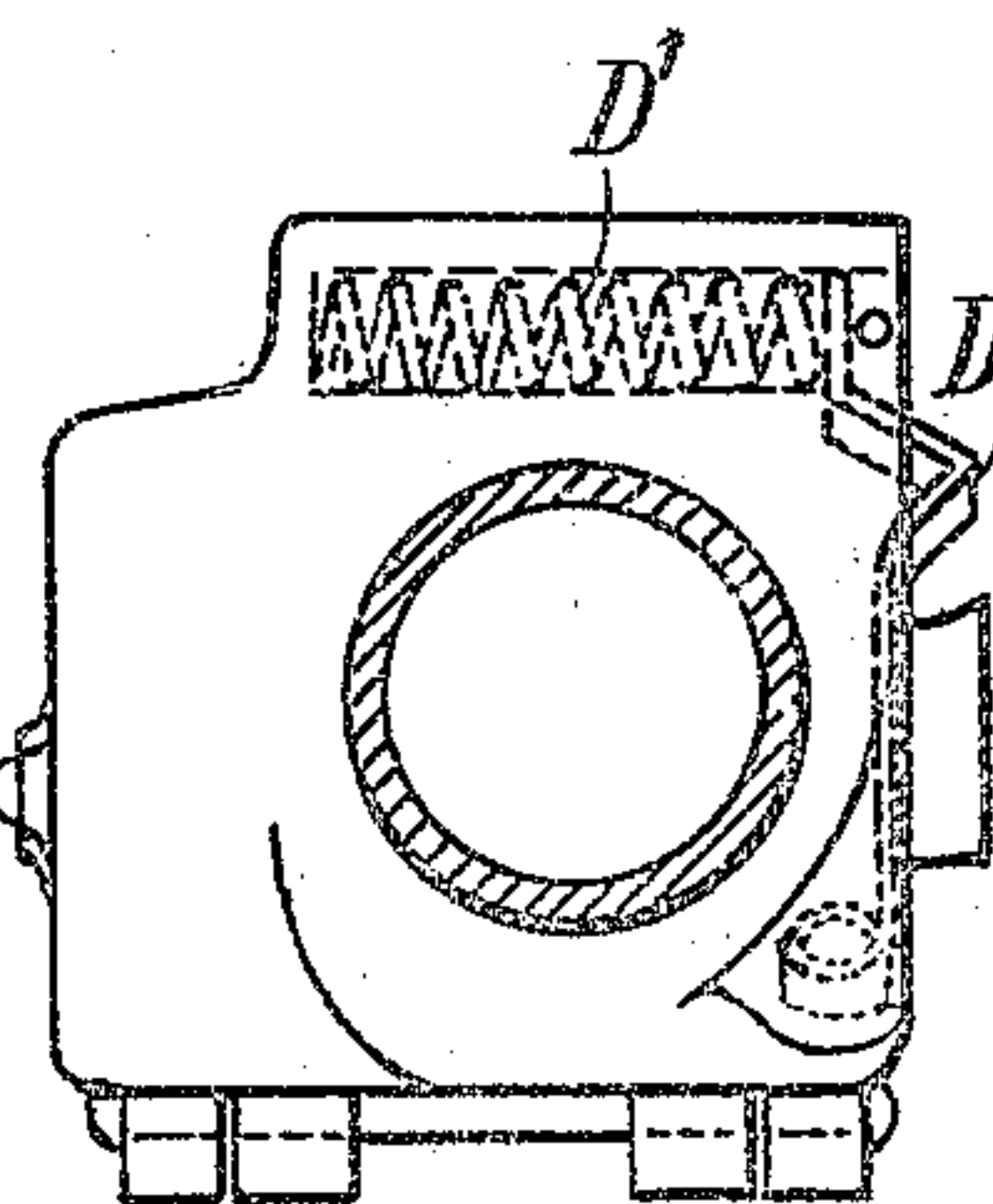


Fig. 6

Witnesses:
L. J. Shaw
S. P. Clark

James F. McElroy Inventor
by E. M. Brintley Atty.

UNITED STATES PATENT OFFICE.

JAMES F. McELROY, OF ALBANY, NEW YORK, ASSIGNOR TO CONSOLIDATED CAR HEATING COMPANY, OF ALBANY, NEW YORK, A CORPORATION OF WEST VIRGINIA.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 790,970, dated May 30, 1905.

Application filed March 25, 1904. Serial No. 199,903.

To all whom it may concern:

Be it known that I, JAMES F. McELROY, a citizen of the United States, residing at Albany, county of Albany, and State of New York, have invented certain new and useful Improvements in Hose-Couplers, of which the following specification and accompanying drawings disclose, as an illustration, one embodiment thereof which I now regard as the best out of the various forms in which the principles of the invention may be applied.

In the drawings, Figure 1 is a side elevation of one part of a coupler embodying my improved attachment. Fig. 2 is a view of the under side of the same. Fig. 3 is a front elevation thereof. Fig. 4 is a side elevation of the modification. Fig. 5 is a plan of the modified form; and Fig. 6 is a rear elevation thereof, partly in section.

My invention relates to hose-couplers such as are commonly employed in steam-heating apparatus of railway-vehicles, and particularly to that type thereof in which a spring-latch is employed to maintain the connection of the couplers, but permitting them to be drawn apart when sufficient force is applied.

The invention consists in an automatic spring-latch attached to one of the complementary parts of the coupler and automatically engaged by the wing of the other part when the two are coupled together.

Referring to the drawings, A represents the body portion of this well-known type of coupler, and B the side wing thereof, adapted to overlap and engage with the body portion of the complementary part when the two are coupled. As is well known, the coupling of two such parts is effected by approaching them until the lower edges of the abutted faces are in contact and then turning them about the said edges as a center, and so causing the overlapping wings to sweep downward beside the body portion of the complementary half and interlock with a retaining-lug thereon. In the face of the body portion A and on one side thereof I form a depression A', extending obliquely across the face and ap-

proximately tangential to the arc of movement of the wing of an engaging complementary part, and in this depression I place a spring D, which is secured at one end to the under side of the coupler, as shown in Fig. 2, and at its upper end is formed with a projecting angle d , which rises above the face of the body portion A, so as to be engaged by the wing of the complementary part. The said wing is formed, as shown in Fig. 1, with oppositely-beveled surfaces b b' on opposite sides, respectively, of a ridge c about flush with the face of the wing at that point.

When the two parts of the coupler are brought together as above described, the angular projection d will be engaged by the beveled face b' on the wing of the complementary part, and thereby depressed until the ridge c passes by the angle d , and the latter then rides over the oppositely-beveled face b and by the pressure it exerts thereon serves to retain the two parts of the coupler in engagement one with the other, while by the application of sufficient force the parts may be disengaged by a series of movements the reverse of those just described.

In Figs. 2, 3, and 4 a modification is shown wherein the spring D at its lower end is held by a pivot E passing through a loop in the end of the spring, while its outer end is slipped under the pin E' and rests against the outer end of a supplementary compressing-spring D'. The function and mode of operation of this form of device is the same as the form first described.

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

1. The combination with a hose-coupler comprising two parts engaging by a hinging movement on an axis off the axis of their ports, of a swinging spring-latch fixed by one end and occupying a depression in the coupler-body off said hinge-axis and inclined to the port-axis, said latch having on its movable end a latching projection.

2. The combination with a coupler of the type described having a body portion A and

a wing thereon with inner surface formed with oppositely-beveled faces, of a spring D on the side of the body portion A opposite said wing and formed with a projecting part d lying in the path of movement of the wing of a complementary part and adapted to engage with similar beveled faces on the latter.

3. The combination with a coupler of the type described having two parts engaging by a hinging movement about their lower edges and each provided with a wing adapted to overlap the other part and having beveled faces on its inner surface, of a spring D secured at its lower end to the lower part of the body portion of the coupler part and provided at its outer end off the hinge-axis with an angular projection d adapted to engage the bev-

eled faces on the overlapping wing of the complementary coupler part.

4. The combination with a coupler of the type described, of a plate-spring applied to the side faces of the body portion and formed with an angular extension projecting above the surface of said plate so as to engage with the overlapping wing of the complementary part of the coupler and a supplementary coil-spring bearing against the plate-spring aforesaid.

In witness whereof I have hereunto set my hand, before two subscribing witnesses, this 22d day of March, 1904.

JAMES F. McELROY.

Witnesses:

ERNEST D. JANSEN,
BEULAH CARLE.