C. ADAMS.

PUMP-HANDLE LINK.

No. 169,755. Patented Nov. 9, 1875.

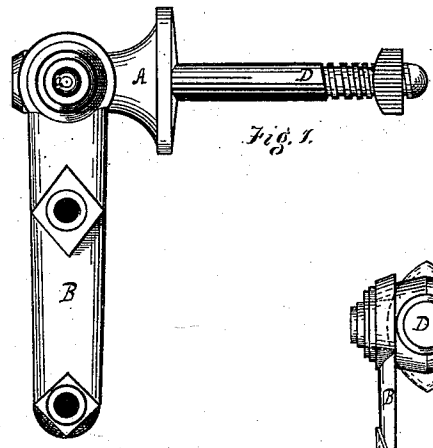

Fig. 1.

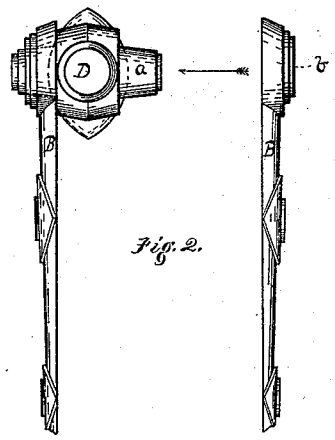

Fig. 2.

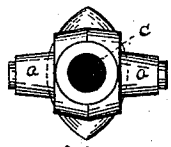

Fig. 3.

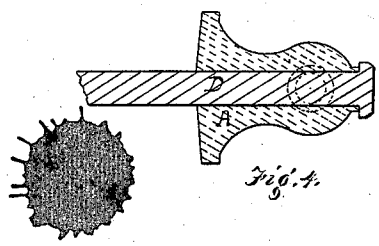

Fig. 4.

WITNESSES.

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UNITED STATES PATENT OFFICE.

CALVIN ADAMS, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO STEPHEN JARVIS AND S. J. ADAMS, OF SAME PLACE.

IMPROVEMENT IN PUMP-HANDLE LINKS.

Specification forming part of Letters Patent No. **169,755**, dated November 9, 1875; application filed September 25, 1875.

To all whom it may concern:

Be it known that I, CALVIN ADAMS, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented an Improvement in Pump-Handle Links, of which the following is a specification:

The peculiar feature of my invention, and the part of the link shown in the drawing, which needs to be described, is the head-piece A, and the manner of constructing it. This piece is made of cast-iron. The ears or projections *a a*, formed on either side, are made to project through and fit into the holes *b b* of the side pieces B B, thus doing away with the wrought-iron pin or bolt which is ordinarily cast into the head, to connect it with the side pieces. Through the longitudinal center of the head I form an opening, C, either at the time of casting or by subsequent drilling, large enough to receive a bolt, D, of suitable size and strength to fasten the link to the handle. Through this opening the bolt is passed, as shown in Fig. 1, and then goes through the handle, to which it is secured by a nut; or the process may be reversed, so as to first pass the bolt through the handle, and secure it to the head-piece A by cutting a thread in the opening C, into which the bolt can be screwed.

The advantage of this invention over the ordinary method of casting the head-piece on the bolt is in its superior strength, durability, and cheapness.

When the bolt and head are cast together the cast-iron is chilled and brittle, and the wrought-iron weakened, while in the invention shown and described, if by any accident the bolt is broken, it can easily be replaced without disturbing the other parts of the link.

I claim as my invention—

A link for pump-handles, made with an opening, into or through which the connecting-bolt is passed, substantially as and for the purpose shown and described.

CALVIN ADAMS.

Witnesses:
J. H. BALDWIN,
JAMES BLACK.