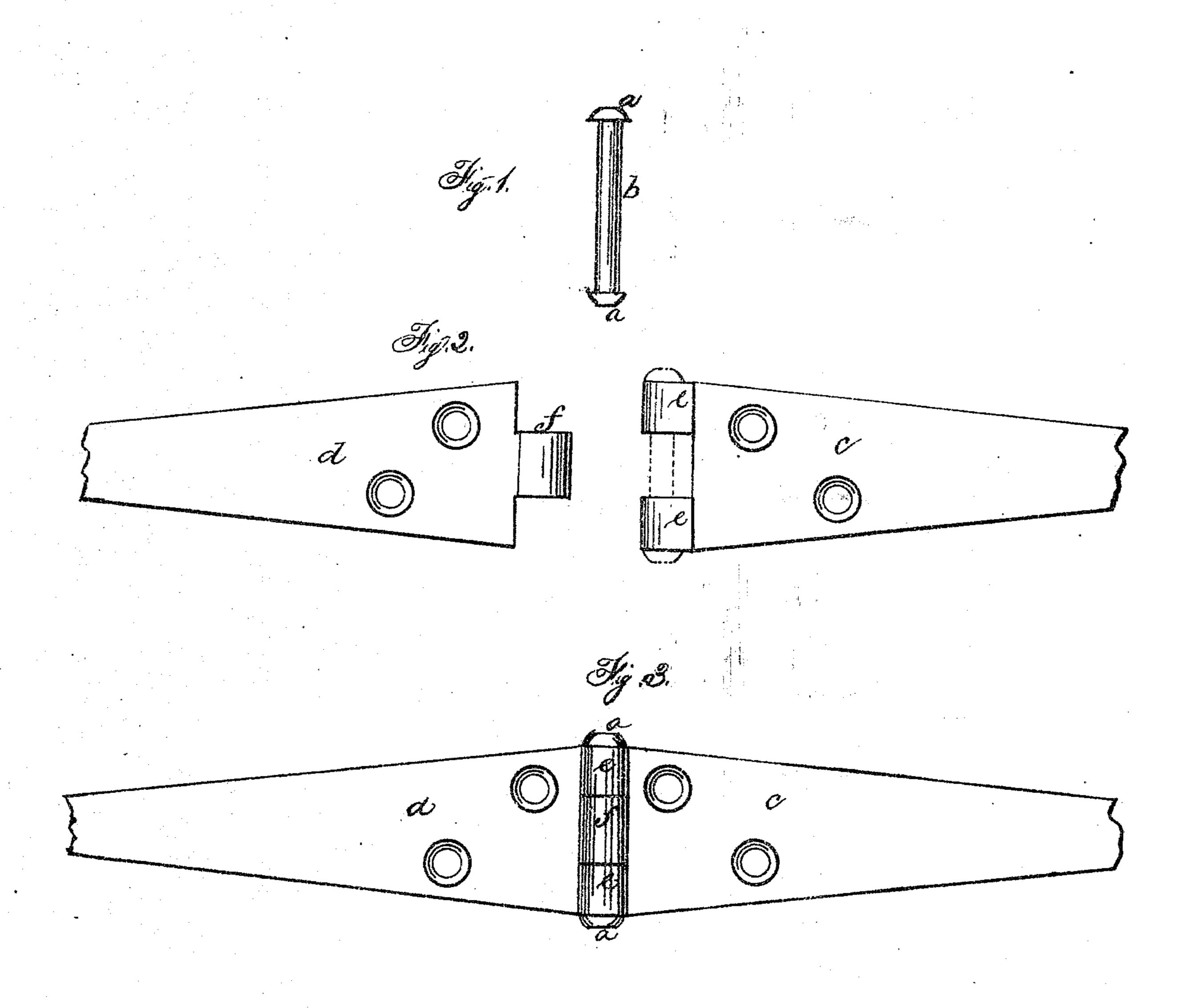
J. Adt.

Hinge.
76034 Patented Mar. 31,1868.



Witnesses Charf Smith Geo. Dralker In All Serrell Aug.

## Anited States Patent Pffice.

## JOHN ADT, OF WOLCOTTVILLE, CONNECTICUT, ASSIGNOR BY MESNE ASSIGN-MENTS TO WILLIAM H. HART AND GEORGE S. HURFORD.

Letters Patent No. 76,034, dated March 31, 1868.

## IMPROVEMENT IN HINGES.

The Schedule referred to in these Xetters Patent und making part of the same.

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, John Add, of Wolcottville, in the county of Litchfield, and State of Connecticut, have invented, made, and applied to use a certain new and useful Improvement in Hinges; and I do hereby declare the following to be a full, clear, and exact description of the said invention; reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is an elevation of the hinge-pin prepared with a head at each end previous to being introduced in the hinge.

Figure 2 represents the two halves of a strap-hinge ready for the hinge-pin, which is shown in its position by red lines; and

Figure 3 is an elevation of the hinge when completed.

Similar marks of reference denote the same parts.

Heretofore it has been usual to form the hinge-joint of wrought hinges by turning the sheet metal over to form the tube for the hinge-pin, and to rivet up one or both ends of the said hinge-pin after it is in place. This operation frequently bends the hinge-pin, preventing the hinge opening or closing freely, and the rivet heads at the ends of the pin are rough and unsightly.

The nature of my said invention consists in a pin for hinges formed with a solid head at both ends previous to being introduced into the hinge, so that the riveting up of the head is effected independent of the hinge, and hence the said hinge-pin can be made with two perfect heads and a straight shank, and when introduced in the hinge causes the same to be much more perfect, both in appearance and construction, than the hinge-pins riveted up after they are introduced into the hinge.

In the drawing, a represents the riveted ends or heads of the hinge-pin b. These heads are solid with the pin, and formed upon said pin by suitable machinery that shall preserve the size and straightness of the pin while the heads are being pressed or riveted up, or said pin may be formed of malleable metal, and trued by suitable turning or milling-tools. The strap-hinges are formed of the halves c and d, with tongues e e on the part c that are to be bent up to a U-form with the strap, and receive the hinge-pin b, as seen by red lines in fig. 2. The tongues e e are then closed down around the hinge-pin by any usual or suitable dies. The tongue f of the strap d is then to be hooked in around the hinge-pin b, and closed down around the same to complete the construction of the hinge-joint. By this method of forming the hinge-joint, the pin will not be bent or injured, because the dies employed to bend down the tongues keep the metal of said tongues in the proper position, so that there is no tendency to bend the hinge-pin. With cast hinges my said pin, with the riveted heads, can be coated with clay or other suitable material, to prevent the adhesion of the casting, and laid in the mould, and the hinge will be of the best character, because the pin will be perfectly straight, and the heads at the ends will effectually prevent the pin being driven out.

What I claim, and desire to secure by Letters Patent, is-

A hinge-pin, formed with a head at each end previous to being introduced into the hinge, in the manner set forth.

JOHN ADT.

In witness whereof, I have hereunto set my signature, this 13th day of July, A. D. 1867.

Witnesses:

F. L. HUNGERFORD,

E. M. Judd.