

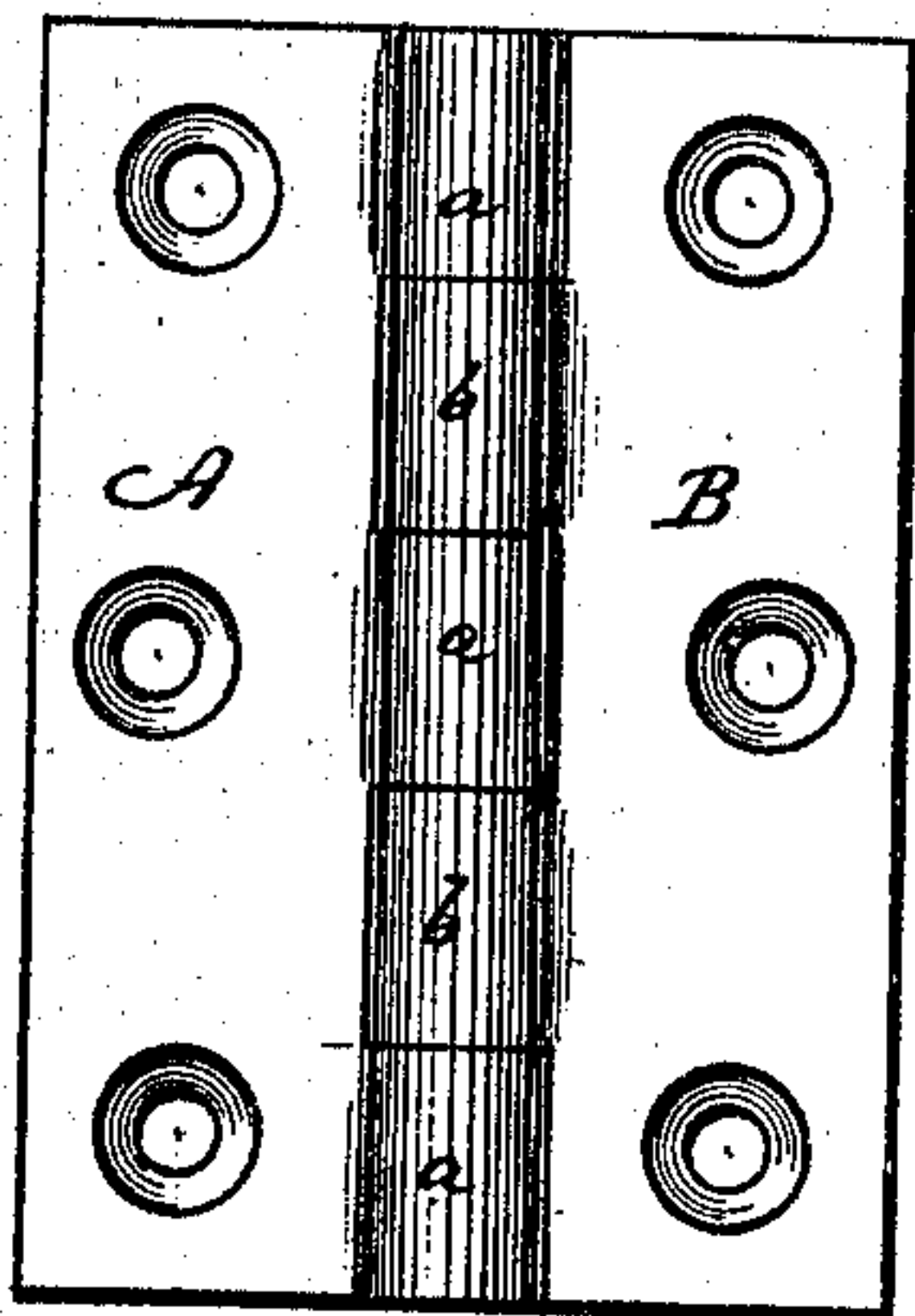
*J. W. Carleton,*

*Bull Hinge.*

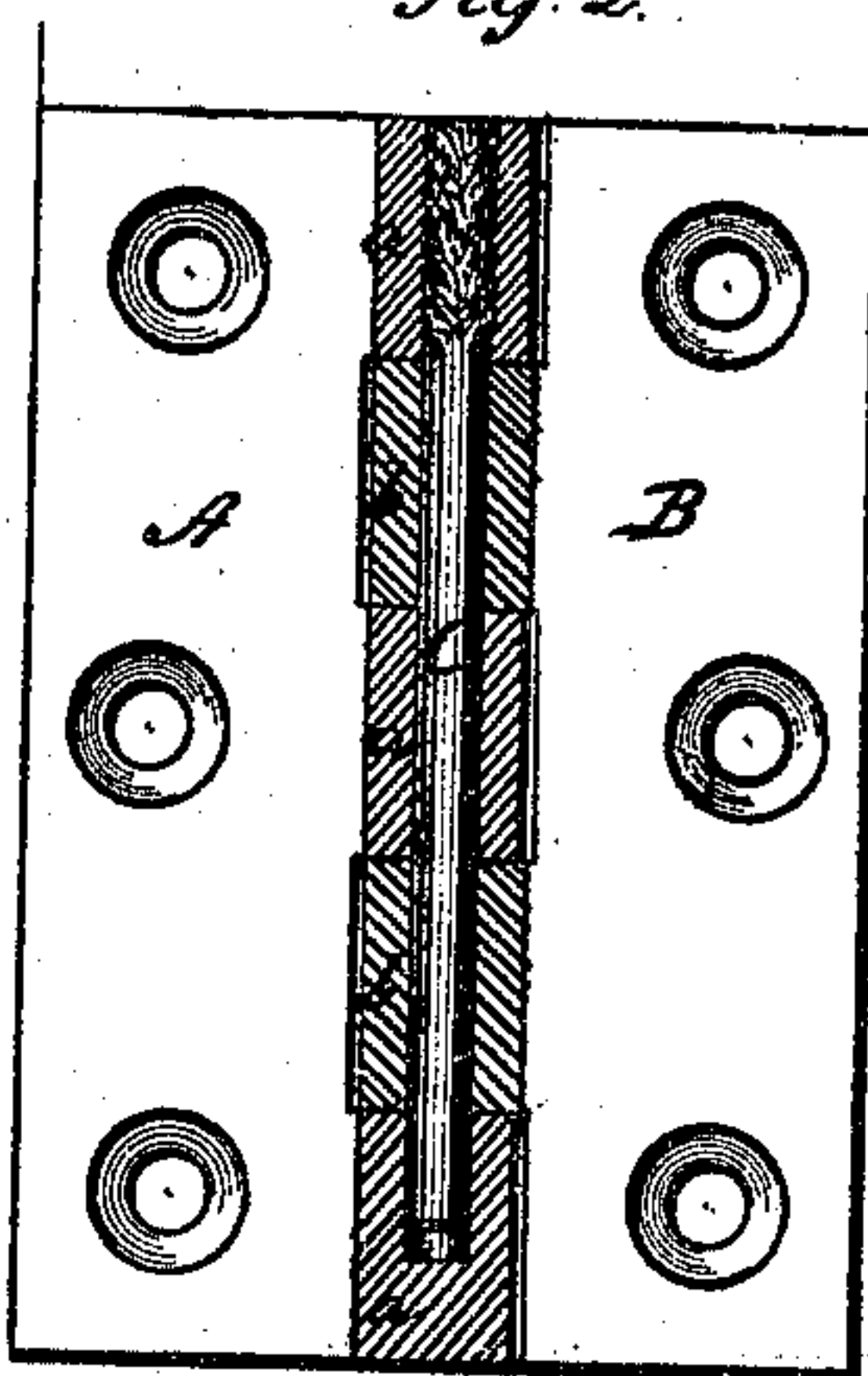
*No. 112,417.*

*Patented Mar. 7. 1871.*

*fig. 1.*



*fig. 2.*



*fig. 3.*



*fig. 4.*



*Witnessed,  
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Inventor  
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# United States Patent Office.

JOHN W. CARLETON, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE UNION MANUFACTURING COMPANY, OF SAME PLACE.

Letters Patent No. 112,417, dated March 7, 1871.

## IMPROVEMENT IN BUTT-HINGES.

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, JOHN W. CARLETON, of New Britain, in the county of Hartford and State of Connecticut, have invented a new Improvement in Butt-Hinges; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents in—

Figure 1, a front view of the butt open;

Figure 2, the same, showing a sectional view of the pintle portion of the hinge; and in

Figures 3 and 4, modes of construction of the pintle.

This invention relates to an improvement in what are termed fast-joint butt-hinges.

Heretofore this class of hinges have been drilled through their entire length, a wire pintle inserted and riveted at both ends. This operation of riveting frequently upsets the wire pintle and makes the joint stiff and difficult to turn. Others have been formed by casting the metal around the wire. This necessitates no inconsiderable trouble in the process of molding, and does not overcome the difficulty of stiff, hard joints.

The object of my invention is to overcome these difficulties and produce butts at less expense; and

My invention consists in preparing the pintle at one end by roughening, bending, or upsetting, and then, after having drilled the hinge, driving the said pintle into the hinge, the preparation of the pintle preventing its removal after once inserted.

A is one part, and B the other part of a common butt-hinge, each part constructed with corresponding

ears *a* and *b*. The two parts are placed together and drilled through all the ears to the last, and that partly through, as seen in fig. 2.

The pintle C, corresponding to the hole drilled, is cut from wire the required length; then the upper end, or that part of the pintle which will, when inserted, occupy the first ear drilled, is roughened by cutting, as in fig. 2, or slightly bent, as in fig. 3, or upset or flattened, as in fig. 4, or roughened by rusting, or otherwise prepared, so that when inserted into the hole drilled, and that prepared portion driven or pressed into the one part, will firmly hold or adhere therein and prevent the removal of the pintle.

As no riveting is required the hinge is not drilled through, therefore the pintle may be shorter than the entire length of the hinge, thus saving in each hinge a certain portion of the wire, which in the many hinges is no inconsiderable amount; but, if preferred, the hinge may be drilled entirely through, and the pintle extend entirely through; but such is not essential, it only being necessary to extend so far as to get a bearing on the lower die. By thus inserting the pintle it cannot by any possibility be upset so as to bend or enlarge it within the ears; hence the bearing is always free and smooth.

I claim as my invention—

In the manufacture of butt-hinges, the pintle, previously prepared by roughening or equivalent devices, and inserted into the hinge after the two parts are set together, substantially in the manner described.

JOHN W. CARLETON.

Witnesses:

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