

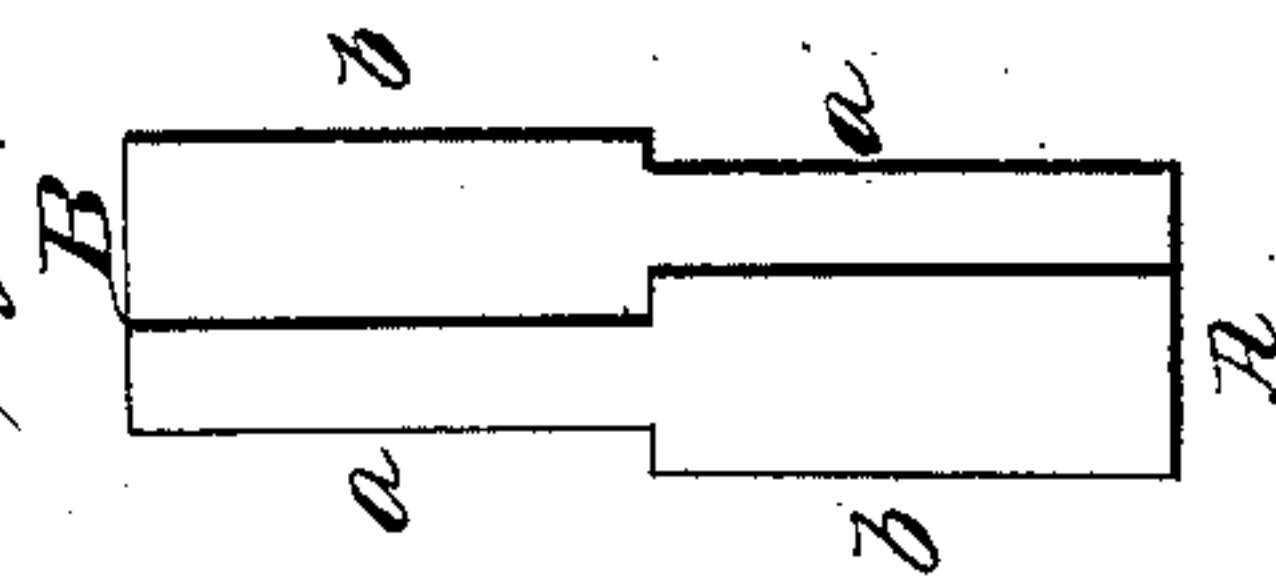
*J. H. Zinn,*

*Hinge.*

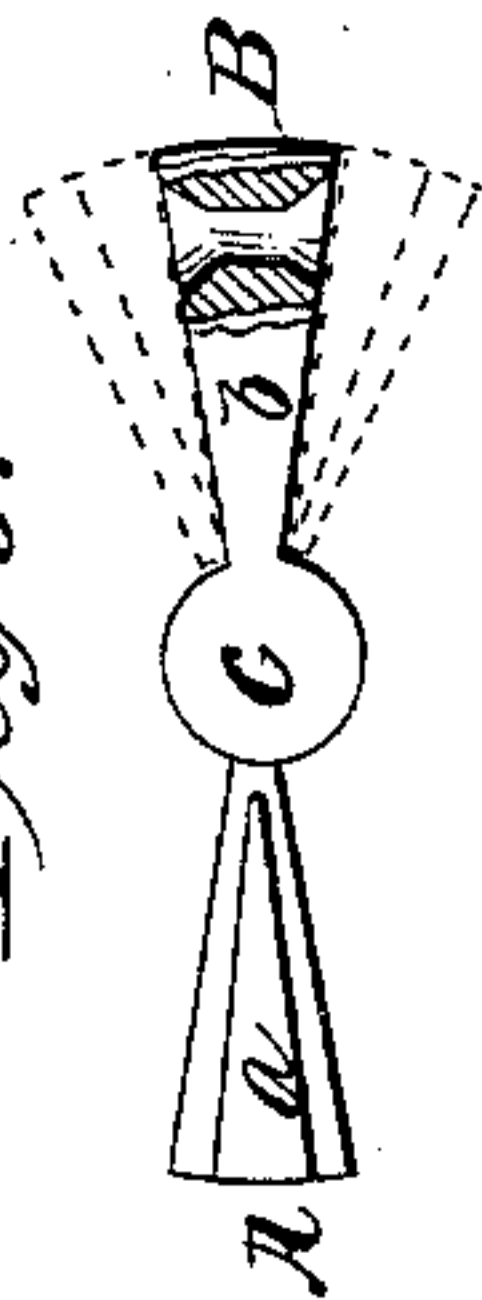
*N<sup>o</sup> 62,720.*

*Patented Mar. 5, 1867.*

*Fig 4.*



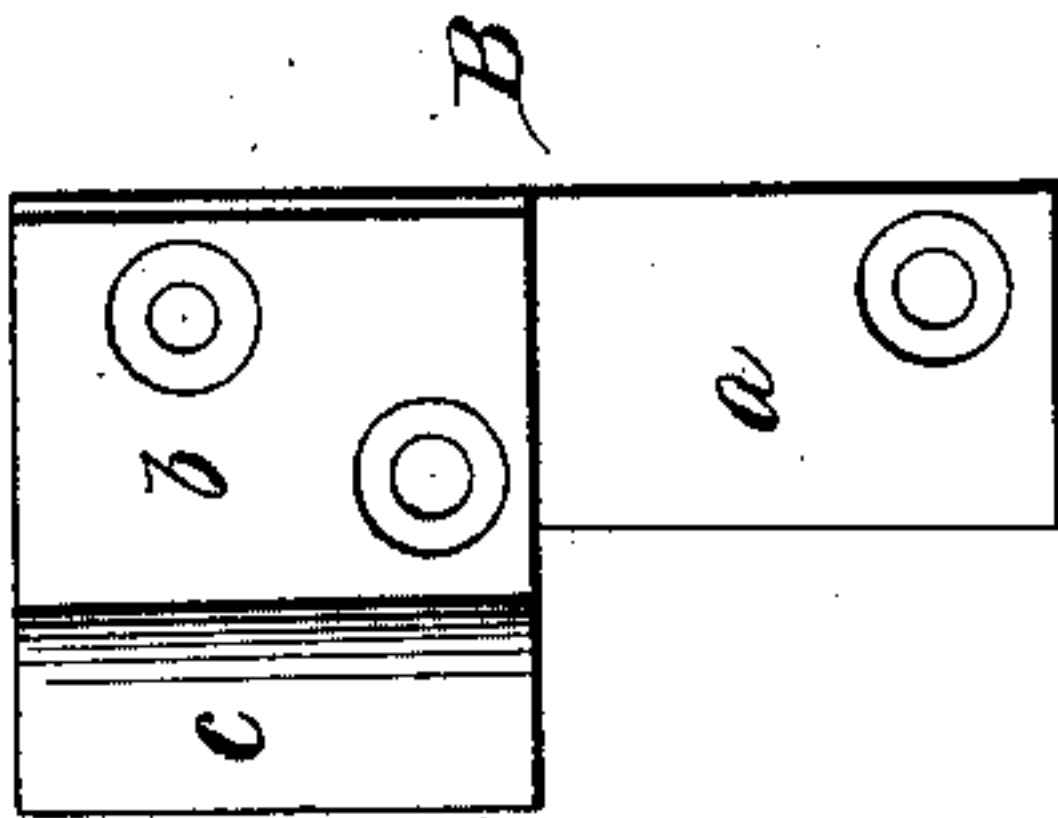
*Fig 3.*



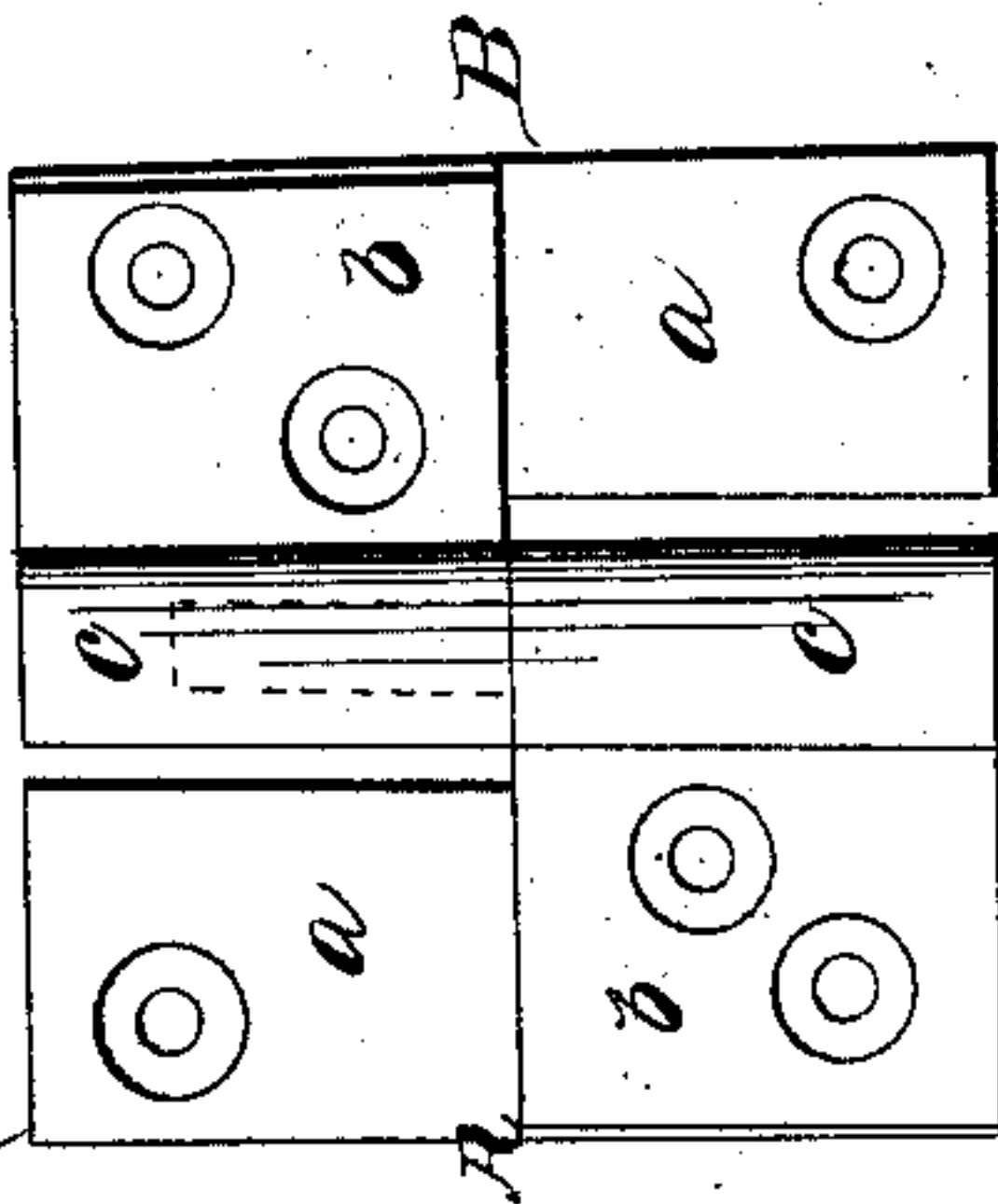
*Fig 5.*



*Fig 2.*



*Fig 1.*



*Witnesses.*

*P. J. Dodge  
Thomas Mullen*

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*J. H. Zinn  
By W. C. Dodge  
Attorney*

# United States Patent Office

JOHN HARTZELL ZINN, OF IDAVILLE, PENNSYLVANIA, ASSIGNOR TO  
HIMSELF AND PETER D. JOHNS.

*Letters Patent No. 62,720, dated March 5, 1867.*

## IMPROVEMENT IN HINGE.

*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 HARTZELL ZINN, of Idaville, in the county of Adams, and State of Pennsylvania, have invented certain new and useful Improvements in Butt Hinges; and I hereby declare that the following is a clear, full, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my improvement, I will proceed to describe it.

Figure 1 represents my improved hinge complete, ready for use.

Figure 2 represents one of the leaves or parts detached.

Figure 3 is an end view of the hinge.

Figure 4 is an edge view of the two leaves when the hinge is closed; and

Figure 5 represents a door or gate hung with the hinge.

My invention consists in so forming a butt hinge that it may be used either as a right or left hinge, at will.

I construct a hinge of two leaves, A and B, which are exactly alike in form, one having the pintle secured to it, and the other being provided with the socket for its reception in the ordinary manner of loose-joint butts or hinges. These leaves A and B, however, are made in a peculiar manner. They consist of a single piece made wedge-shaped, and being much thicker at their outer than at their inner edges. The leaf consists of two parts, the one part, *b*, to which the support *c* is attached, being about double the thickness of the remaining portion *a*, as shown in the drawings, there being an offset or shoulder on each side where the parts *a* and *b* unite, as shown clearly in fig. 4. The thick part, *b*, of the leaf A is placed at the bottom, while the thick part of the leaf B is at the top, so that when the two are united, as shown in fig. 1, and shut together, the part *b* will shut in against the part *a*, as shown in fig. 4. The support *c* is attached centrally to the part *b*, as shown in fig. 3, and projects equally on each side at the point of attachment, which enables the parts to turn upon each other, in either direction, with equal facility, until they come in close contact, as indicated in red in fig. 3, thus constituting it a right or left-hand hinge at pleasure. The screw-holes in the leaves are countersunk to receive the heads of the screws on both sides, as shown in fig. 3, where a portion is broken away for the purpose of showing this feature. It will thus be seen that my improved hinge may be attached with equal facility to the door frame or post, on either the right or left-hand side, without any change whatever of the parts. By bevelling the edge of the door or gate, as represented by D in fig. 5, and similarly bevelling the edge of the support or post *c*, the gate or door hung with this hinge may be opened with equal facility in either direction, as is often desirable in various situations.

Having thus described my invention, what I claim, is—

1. Attaching the socket or knuckle *c* to the leaf centrally, so as to project equally on each side of the leaf at the point of attachment, substantially as herein shown and described.

2. I claim the leaves A and B, constructed with the parts *a* and *b*, of different thickness, and arranged to shut together, as shown and described.

3. I claim a loose-joint butt hinge, constructed and arranged to operate as herein set forth.

JOHN HARTZELL ZINN.

Witnesses:

W. C. DODGE,

P. T. DODGE.