

H. HAYWARD.

Improvement in Hinges.

No. 130,369.

Patented Aug. 13, 1872.

Fig. 1.

Fig. 1^a.

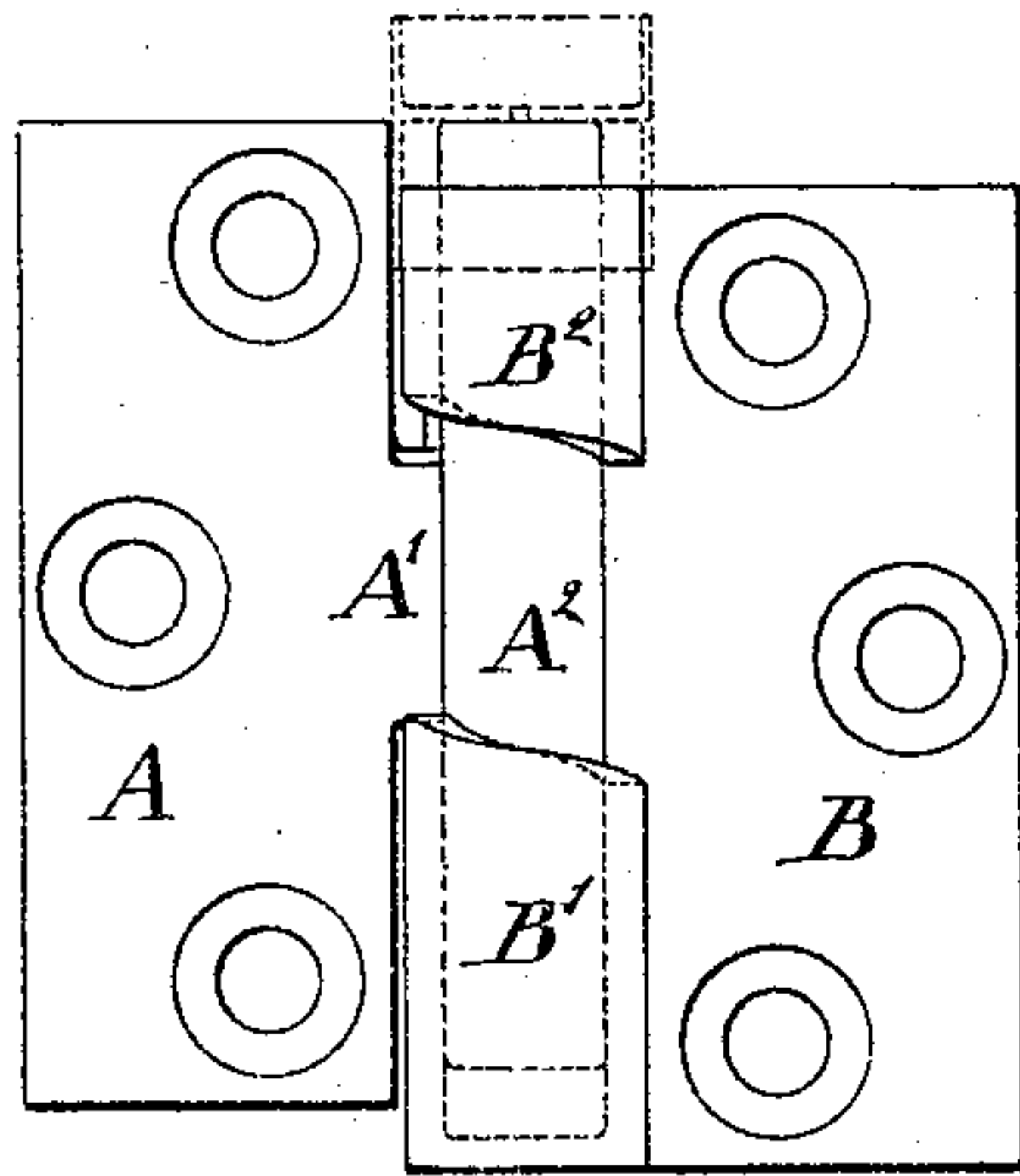


Fig. 1^b.

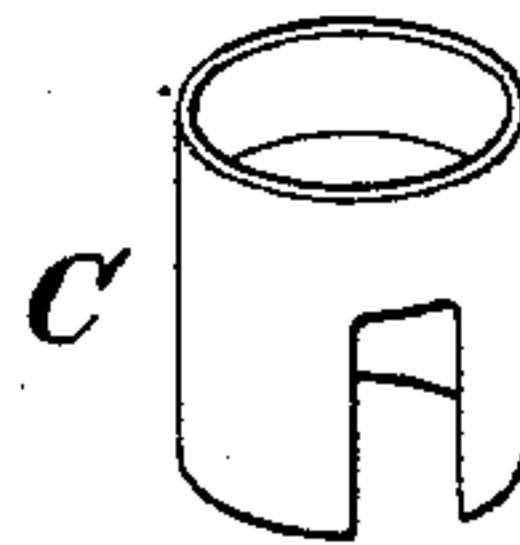


Fig. 2.

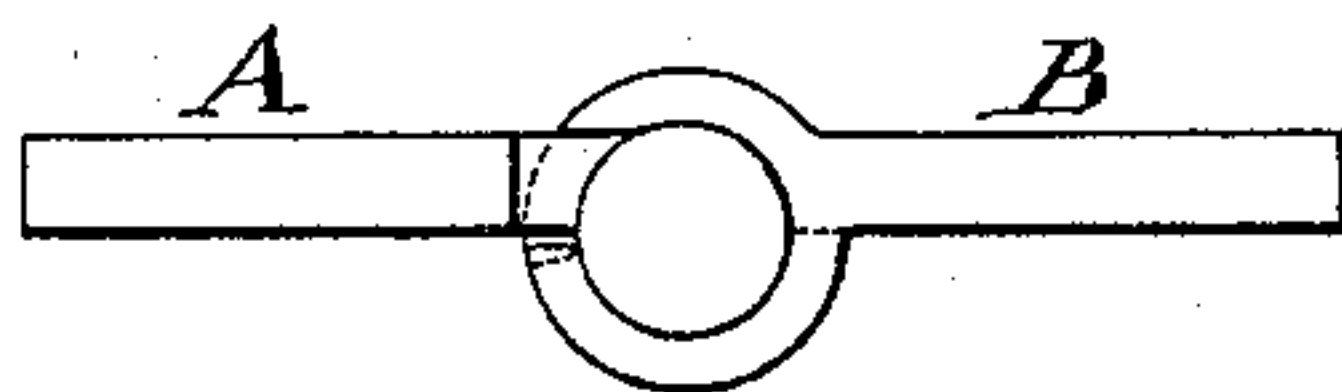


Fig. 3.

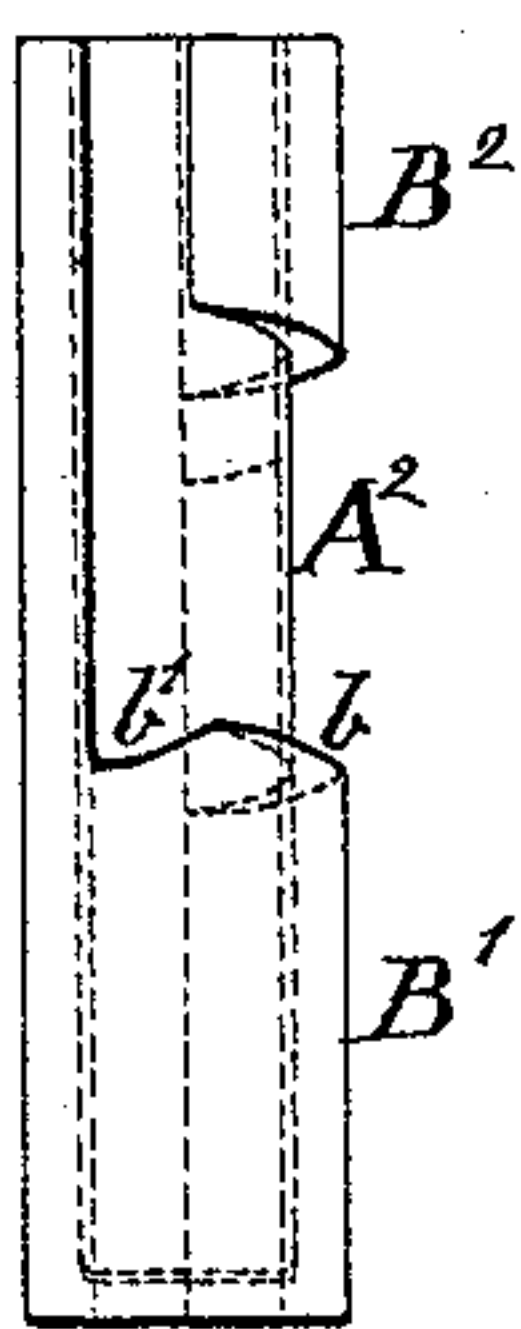
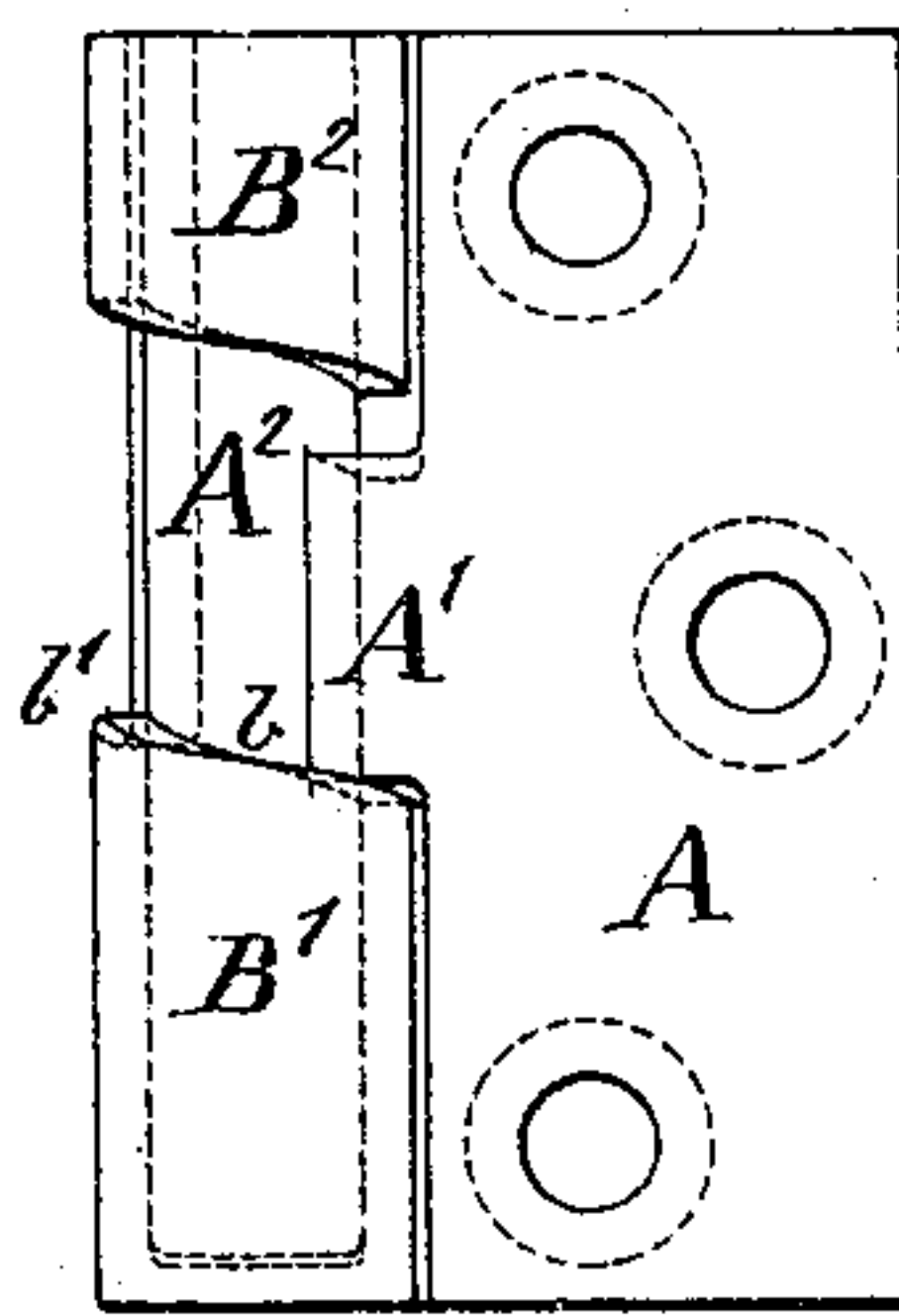


Fig. 4.



Witnesses;

Wm. C. Dey
Arnold Hermann

Inventor;

Henry J. Hayward
by his attorney *J. S. Nelson*

UNITED STATES PATENT OFFICE.

HENRY HAYWARD, OF PATERSON, NEW JERSEY.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. 130,369, dated August 13, 1872.

Specification describing a certain Improvement in Hinges, invented by HENRY HAYWARD, of Paterson, in the county of Passaic, State of New Jersey.

The following is a description of what I consider the best means of carrying out the invention:

The accompanying drawing forms a part of this specification.

Figure 1 is a side view of the hinge in the open position. Fig. 2 is a plan view of the same. Fig. 3 is an edge view of the hinge in the closed position. Fig. 4 is a side view of the same. Figs. 1^a and 1^b represent an attachment which is applied to produce a higher degree of perfection in the construction and working. The position of this attachment is indicated in dotted lines in Fig. 1. Fig. 1^a is a central vertical section. Fig. 1^b is a perspective view.

This invention consists in furnishing the slotted-eyed removable hinge with double inclines, the one serving to close the door, and the other to hold it when open, and with a removable cap to rest upon its upper part.

Similar letters indicate like parts in all the figures.

Designating the two parts generally by the single letters A and B, I will indicate certain portions of each by the marks A¹, B¹, &c. If the addition C be considered as a part of the hinge, to which it is not essential, although it contributes to its perfection, the hinge may be said to be formed of three separate pieces.

B¹ is a hollow cylindrical portion of sufficient size to receive the lower end of the bolt A². Its upper edge is a double incline, as indicated by *b b'*. The weight of the door induces a strong bearing of the lower edge of the neck A¹ upon this upper edge of the hollow cylinder B¹. The double incline induces the door to swing either into the shut or open position. The main incline *b* induces a motion toward the shut position; the shorter incline *b'* induces a motion toward the open position. The main function of this latter incline *b'* is to induce

the door to remain open firmly when in the open position. The top piece C is important in several relations. It increases the strength of the upper part B¹ by covering the open side or slot, and forming an additional lock or brace to hold it in the right position. It also forms a neat finish for the top of the hinge. The small hole in the center is intended to admit oil. The oil may be applied in the cup formed in the top of the piece C, and allowed to trickle down through the hole in the center; or, if preferred, the hole in the center may be omitted, and the cap C may be removed altogether to allow of oiling the hinge, and be replaced again after the parts have been lubricated.

I attach much importance to the fact that the bottom of the hollow cylindrical part B¹ is closed instead of being open directly through. Its being closed insures the retention of oil when it is applied, and the rising and sinking motion of the parts upon each other insures its distribution upon the wearing-surfaces above.

I am aware that hinges have been made before which would incline the door in one direction only. I do not claim such, neither do I claim any form of hinge cited in the references in this case.

I claim as my invention—

1. A hinge with a vertically-slotted eye capable of engagement and disengagement, and formed with double inclines *b b'*—the one serving to close the door, and the other to hold it when open—so as to constitute a hinge having all the several qualities herein set forth.

2. The removable cap C, adapted, as shown, to fit on the open or slotted part B², and combined therewith, as and for the purposes herein set forth.

In testimony whereof I have hereunto set my hand this 25th day of January, 1872, in the presence of two subscribing witnesses.

H. HAYWARD.

Witnesses:

WM. C. DEY,
ARNOLD HOERMANN.