(No Model.)

M. CAMPBELL.

HINGE.

No. 332,487. Patented Dec. 15, 1885.

Fig. 1.

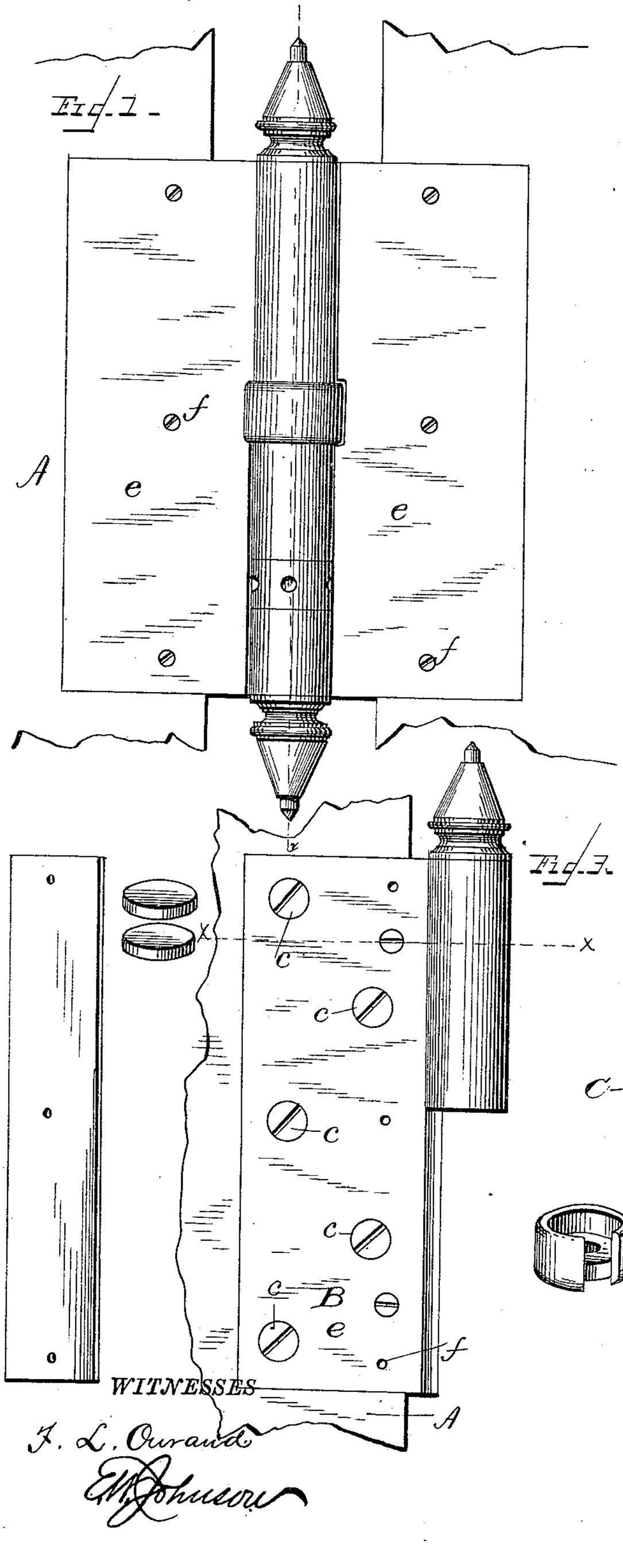


Fig. 2.

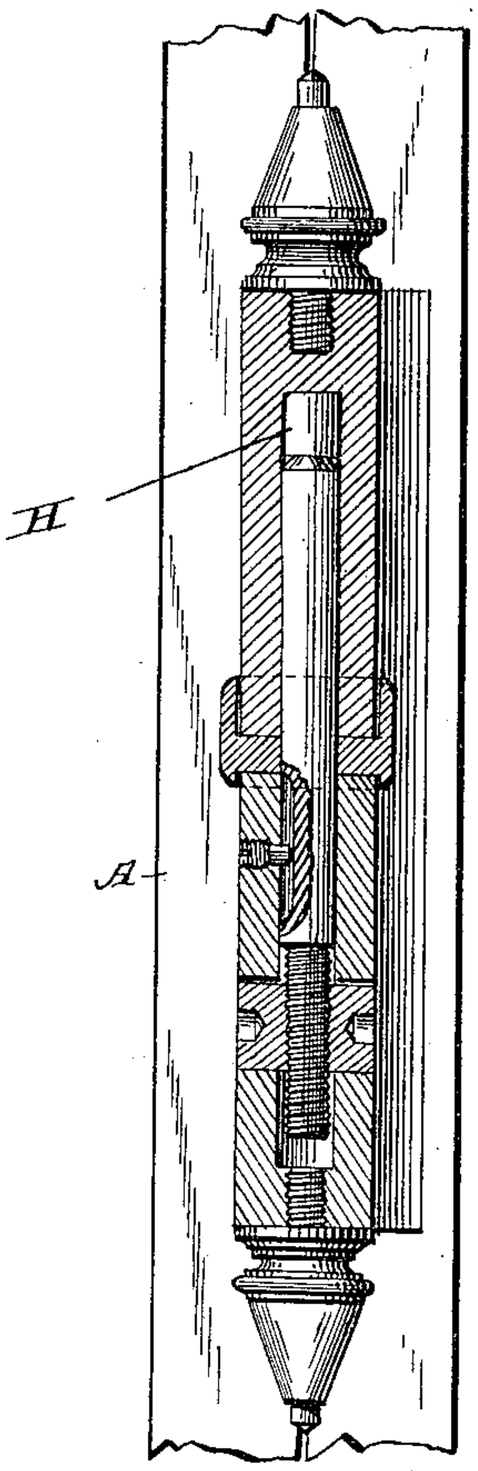


Fig. 4.

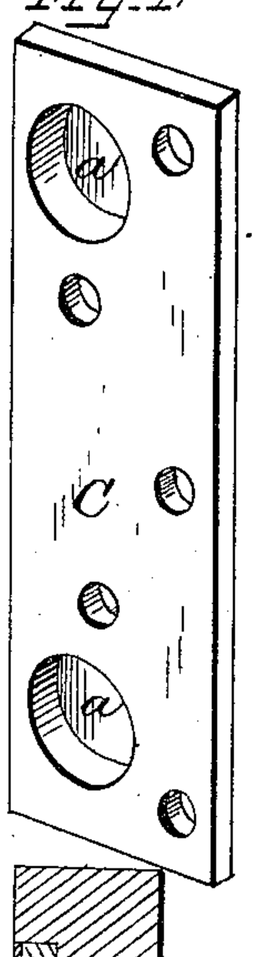


Fig. 5.

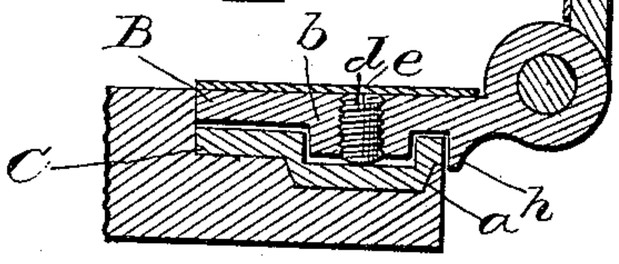
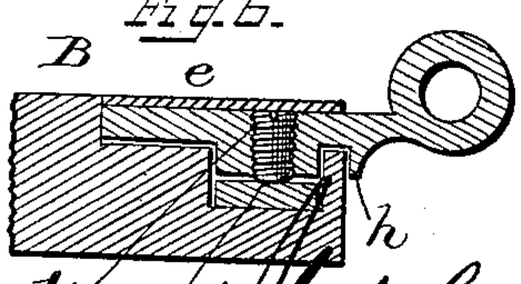


Fig. 6.



WITNESSES

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MALCOLM CAMPBELL, OF AMESBURY, MASSACHUSETTS.

HINGE.

SPECIFICATION forming part of Letters Patent No. 332,487, dated December 15, 1885.

Application filed July 23, 1885. Serial No. 172,462. (No model.)

To all whom it may concern:

Be it known that I, MALCOLM CAMPBELL, a citizen of the United States of America, residing at Amesbury, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Hinges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to hinges; and it consists in the improvements hereinafter set forth, whereby comparatively new and simple arrangement is provided for adjusting the hinge-plate relative to the door-frame, in order to provide against irregularities in the position of the door, generally caused by the door sagging or the frame moving out of line.

The invention further consists in certain features or construction, the office and advantages of which will be readily understood from the following description.

In the accompanying drawings, forming a part of this specification, Figure 1 is a front elevation of a hinge embodying my invention. Fig. 2 is a central vertical section. Fig. 3 is a front elevation of one of the hinge-sections having the covering or face-plate removed. Fig. 4 is a perspective view of the bearing-plate which is interposed between the hinge-plate and the part to which it is secured. Fig. 5 is a transverse section on the dotted line *x x* of Fig. 3, and Fig. 6 is a transverse section illustrating the modification.

The door or frame A (in the present case the door) is provided at the portion to which the hinge is attached with a vertical rectangular depression, which is of sufficient depth to receive the plate B of the hinge, and beneath the plate B a second bearing-plate, C. (See Figs. 4 and 5.) This latter plate is provided near its upper and lower ends with circular depressions *a*, which present on the under face of said plate circular offsets, which are let into depressions therefor in the bottom face of the recessed portion of the door. The hinge-plate B has two circular offsets, *b*, which, when the plate B is placed in position, enter the depressions *a* of the plate C beneath, in order that the upper face of the plates B will be flush with the surrounding portions of the door or frame to which the section is attached. Both the plates B C are perforated to register with each other for the passage of a series of retaining-screws, *c*, which serve to hold the plates B C against the door. Each lug *b* has a threaded perforation for the passage of a screw or stud, *d*, which is of such a length as to enable it to project beyond the lug or offset *b* and bear against the face of the depression *a* beneath.

Now, from the foregoing it will be apparent that when the door hangs in an irregular position, frequently resulting from sagging, the retaining-screws may be loosened sufficiently to enable either or both of the studs *d* to be screwed farther in toward the plates C, the end of the said stud or studs bearing against the depression *a* and forcing the plate B from the plate C. By adjusting one of the said studs the resulting position of the plate B will be an incline, the direction of which will be dependent upon the stud which is manipulated.

Instead of the form of plate C, as described, I may use the arrangement illustrated in Fig. 6, in which arrangement one portion of the recessed part of the door is much deeper than the remainder, so that an elongated plate can be let into said deeper portion and form the bearing against which the screws *d* abut.

Inasmuch as the plate B, by reason of the various adjustments, will be at a slight distance from the plate C, it is desirable that the opening or space referred to be covered, so as to not show open joints and exclude dust. To provide for this contingency the plate B carries integrally a depending rib, *h*, which is located adjacent to the edge of the door A. Now, therefore, it will be apparent that as the plate B is adjusted to and from the plate C the space between them will always be covered by the rib *h* at the edge of the door.

By reference to Fig. 2 it will be observed that the recess in the upper hinge-section, in which the pintle is located, is somewhat longer

than the portion of the pintle to receive and contain a steel step or block, H, against the lower face of which the upper face or end of the pintle I bears. By this arrangement a positive and secure bearing is secured for the pintle, and one by which undue wear of the parts is prevented.

I claim—

1. The combination, in a hinge, of a hinge-plate suitably perforated for the passage of the securing-screws, independent perforations, and adjusting-studs therefor, and a bearing-plate against which said studs abut, substantially as set forth.

2. The combination, with the upper socketed section of a hinge, of a plate, C, and a plate B, perforated as described, and having a rib, *h*, screws or studs passing through said perforations and bearing against the plate C, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

MALCOLM CAMPBELL.

Witnesses:
GEORGE TURNER,
J. A. FITZHUGH.