A. A. STIMSON & C. T. SABIN.

DOUBLE-ACTING HINGE.

No. 192,305. Patented June 19, 1877.

Fig. 1.

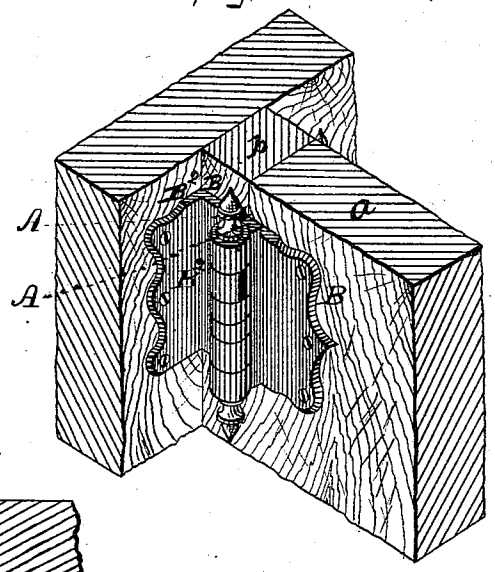


Fig. 4.

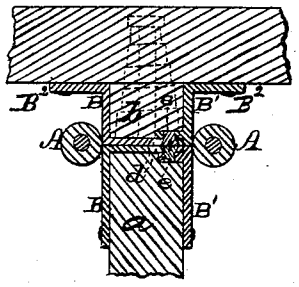


Fig. 2.

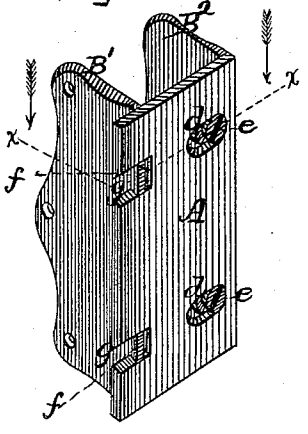
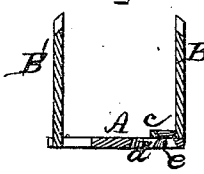


Fig. 3.



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UNITED STATES PATENT OFFICE.

ASHBEL A. STIMSON AND CHARLES T. SABIN, OF MONTPELIER, VERMONT.

IMPROVEMENT IN DOUBLE-ACTING HINGES.

Specification forming part of Letters Patent No. **192,305**, dated June 19, 1877; application filed February 12, 1877.

To all whom it may concern:

Be it known that we, ASHBEL A. STIMSON and CHARLES T. SABIN, of Montpelier, in the county of Washington and State of Vermont, have invented certain new and useful Improvements in Double-Acting Hinges; and we do hereby declare that the following is a full, clear, and exact description thereof, which 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 of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a perspective view of our improved double-acting hinge. Fig. 2 is a similar detached view of the flanges, showing two methods of rendering them adjustable. Fig. 3 is a transverse section through the dotted line *x x* of Fig. 2, and Fig. 4 is a similar view, taken through Fig. 1.

Corresponding parts in the several figures are denoted by like letters.

This invention relates to a certain improvement in double-acting hinges for facilitating the putting on and taking off of the same, and adapting them to doors of varying sizes; and it consists in providing one of the leaves or plates with lateral flanges, embracing the jamb and angular flanges abutting against the door-casing; secondly, in providing the leaves or plates with both adjustable and fixed flanges; and, lastly, in the employment, in connection with one or both of the flanges, of peculiar adjusting mechanism, substantially as hereinafter more fully set forth and definately claimed.

In the annexed drawing, A A refer to the leaves of the hinge, with one side of each of which is cast, or otherwise permanently secured thereto, a flange, B, and to the opposite side of said leaves or plates are adjustably or otherwise connected similar flanges B^1, as hereinafter set forth. The flanges B B^1 are suitably perforated for the reception of screws or other fastenings.

By means of the flanges B B^1 connected to the door and jamb, it will be observed that the hinges can be put on and taken off without having to hold their leaves apart against the pressure of the spring ordinarily used to connect them together and close the door, as the screws or other fastenings can be inserted and driven through the said flanges, instead of through the leaves themselves, as heretofore practiced, which is attended with the disadvantages above stated.

These flanges also strengthen the door-stile and casing or jamb, which may be further aided—the strengthening of said parts—by extending the flanges upon the front or door leaf nearly or entirely across the stile *a*, and those upon the rear or back plate or leaf at right angles, as shown at B^2 in Fig. 1, by which they are caused to embrace the abutting strip or jamb *b*, and fit against, and be fastened to, the door-casing.

A flange, B^1, upon each leaf may be rendered adjustable to vary the distance between it and its parallel flange to adapt the hinges to doors of different thicknesses, among others, in the following ways: Upon the inside of said flanges, one on each leaf of the hinge, construct ears *c*, having female screws, and in the leaves elongated slots *d d*, through which insert screws *e e*, entering the female screws of the ears *c;* or, in lieu of the ears *c* and screws *e e*, we may form dovetailed projections or extensions *f f* upon the flange or plate B^1, and slip them into open correspondingly-shaped slots *g g* in the leaves of the hinge.

The use of adjustable flanges is not essential to carry out the object of our invention, as they may be omitted and but a single flange on each leaf of the hinge be used and the desired result be obtained.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A hinge-plate having lateral flanges embracing the jamb and angular flanges abutting against the door-casing, substantially as and for the purpose set forth.

2. In a double-acting hinge, the leaves A A, provided with the fixed flange B and the adjustable flange B^1, substantially as and for the purpose set forth.

3. The hinge-leaves A A, having the flanges B and B^1, rendered adjustable by means of the perforated ears *c*, slots *d d*, and screws *e e*, substantially as set forth.

In testimony that we claim the foregoing as our own we hereunto affix our signatures in presence of two witnesses.

ASHBEL A. STIMSON.
CHARLES T. SABIN.

Witnesses:
HIRAM CARLETON,
CHARLES T. BATCHELDER.