

(No Model.)

G. DAHLMAN.

HINGE.

No. 386,186.

Patented July 17, 1888.

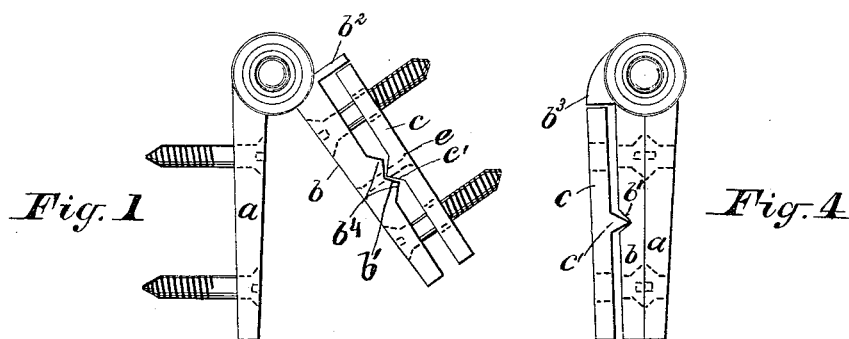


Fig. 2

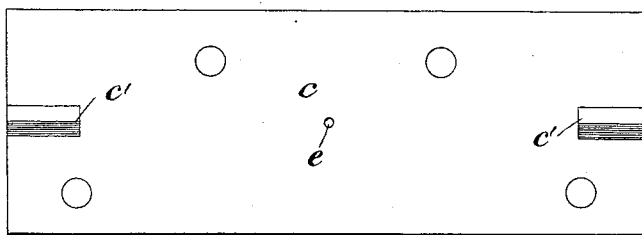
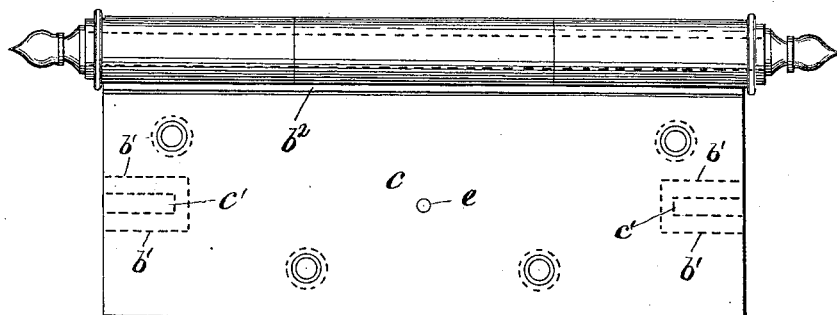


Fig. 3

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UNITED STATES PATENT OFFICE.

GEORGE DAHLMAN, OF ENGLEWOOD, ILLINOIS.

HINGE.

SPECIFICATION forming part of Letters Patent No. 386,186, dated July 17, 1888.

Application filed December 27, 1887. Serial No. 259,003. (No model.)

To all whom it may concern:

Be it known that I, GEORGE DAHLMAN, a citizen of the United States, residing at Englewood, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Door-Hinges, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is an end view of my improved hinge partly opened, and Fig. 2 is a longitudinal side view of the same. Fig. 3 shows the adjusting-plate *e* of Fig. 2 on its reverse or interior side. Fig. 4 is an end view of my hinge constructed in a modified form from that shown in Fig. 1. *a* and *b* are the wings of the hinge.

Like letters refer to like parts.

The object of my invention is to construct a door-hinge, by means of which a door may be adjusted to its frame by means of the same screws which hold the door to the hinge. To attain said end, I construct my improved hinge substantially as follows, viz: Upon the outer side of either one or both wings, as may be preferred or found most desirable, is attached an adjusting-plate, *e*. The three outer edges of said plate correspond in length and width with those of the wing it covers, while the remaining edge nearest the pintle moves freely near a ridge or projection formed as shown either in Figs. 1 and 2 or 4. In about the center of said plate *e*, and facing the hinge, is formed a bearing, *c'*, preferably prism-shaped, as shown at *c'*. Said prism may run either the entire length of the plate or so as to form short prisms anywhere along its length, as near its ends, as shown.

Upon the back or outer face of the wing *b* is formed a groove or bearing, *b'*, either by means of two ridges, *b'*, as shown in Fig. 1, or by cutting a groove in the back of the wing, as shown in Fig. 4. Said plate is also provided with screw-holes registering with those of the hinge through which the screws pass. Said holes ought to be made oblong in the direction of the rocking motion of the plate, so as to allow sufficient room for such motion; but they may also be made larger in diameter, as herein shown, which will answer all practical purposes. To hold said plate *e* to the hinge, a very slender rivet, *e*, is passed through it and the hinge, to hold said parts together until they are applied to a door.

A guard or projection rising from the back

of the wing of the hinge, formed either as shown in Figs. 1 and 2 or 4, at *b*² and *b*³, respectively, hides the gap, which would otherwise be seen between said parts, and thus avoids any unsightly appearance.

It should be observed that when the hinge is attached to a door and its post the relative motions of the parts change, so that instead of the plate rocking, as on the free hinge, the wings of the hinge rock relative to the plates, which lay embedded and immovable in the door or post.

A door hung by means of such hinges may have its position in its frame adjusted, as desired, by simply loosening the set of screws on one edge or side of the bearing *c'* and tightening the other set. By this means the edges of a door are thrown either out from or toward the hinge, and the ends of the door may be moved in opposite directions in its plane.

By means of my hinges all taking down and cutting and fitting of doors is avoided now, so often required through seasoning or swelling of wood or settling of walls after doors are once hung.

What I claim is—

1. In combination with a door-hinge, a plate upon the back of the wing and a ridge between said wing and plate, and longitudinal rows of screws on both sides of said ridge, substantially as specified.

2. In combination with a door-hinge and its screws, said hinge having a groove about midway between the longitudinal rows of screws, placed near its inner and outer edges, a rocking plate having a ridge or bearing fitting into said groove, and enlarged screw-holes registering with those of the hinge, substantially as specified.

3. In combination with a door-hinge having a guard, a plate placed upon the back of the wing, and a ridge between said wing and plate, and longitudinal rows of screws on both sides of said ridge, substantially as specified.

4. In combination with a door-hinge, a plate upon the back of the wing, united thereto by a rivet, and a ridge between said wing and plate, and longitudinal rows of screws on both sides of said ridge, substantially as specified.

GEORGE DAHLMAN.

Witnesses:

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