C. B. CLARK.

HINGES.

No. 182,269. Patented Sept. 19, 1876.

Fig. 1.

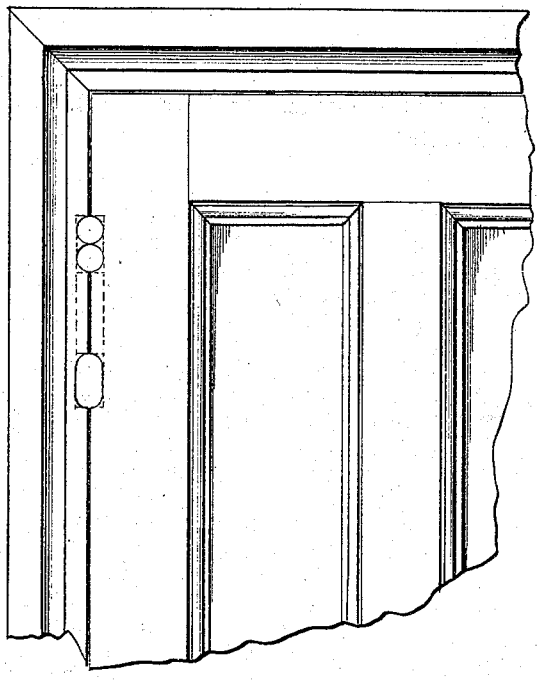


Fig. 3.

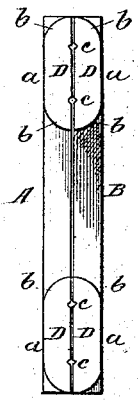


Fig. 2.

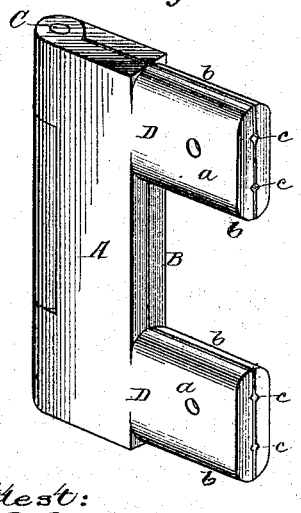
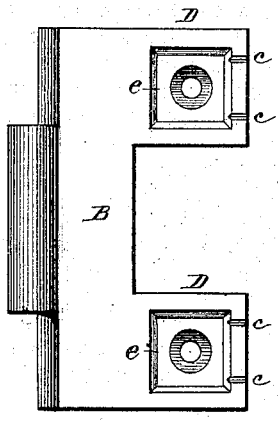


Fig. 4.



Attest:
H. L. Perrine.
W. L. Coombs

Inventor.
Charles B. Clark.
By James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

CHARLES B. CLARK, OF BUFFALO, NEW YORK.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. **182,269**, dated September 19, 1876; application filed February 24, 1876.

To all whom it may concern:

Be it known that I, CHARLES B. CLARK, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Hinges, of which the following is a specification:

This invention relates to certain improvements upon that class of hinges which are applied to doors and blinds, the mortise being made with a bit and chisel, and then inserting the hinge in the openings so made, and afterward applying the screws.

The object of the present invention is to produce a hinge of that class above mentioned, which avoids the ordinary tedious process of cutting out of the casing and door, and also avoids increasing the thickness of the hinge at that point, whereby I am enabled to mold the hinges as readily as in the ordinary kind.

My invention consists in providing each leaf of a hinge with one or more elongated, independent, and separated wings or extensions, which are constructed with flattened sides and rounded ends, in such manner that when the leaves are brought together the ends of the wings or extensions approximate an elliptical or oblong contour; and also in constructing the end of each wing or extension with a notch or recess, so that the gage of the required borings can be readily obtained, this being accomplished by placing the points of a compass in said notches, thereby securing the correct distance apart, and then marking the line-joint of the casing with the points of the compass. The holes are then bored out at the points indicated, and the space between the two borings chiseled out, thereby leaving oblong apertures of the form of the wings or extensions.

In the accompanying drawing, Figure 1 represents a portion of a door and casing, with one mortise finished, and the other in the process of being finished; Fig. 2, a perspective view of the hinge, with the leaves brought together; Fig. 3, an edge view of the same; and Fig. 4, an inside view of one of the leaves.

Referring to the drawing, the letters A and B represent the two leaves of a hinge, which are pivoted together by an ordinary pintle, C. Each leaf is constructed with wings or extensions D D, the space between them being independent of each other, and having flattened or plain outer sides, as at *a*, and rounded ends, as at *b*. The outer ends of the wings or extensions are provided with two notches or recesses, *c*, the object of which is to ascertain the exact distance apart to bore the holes in the casing and door to accommodate the rounded ends of the wings or extensions, this being accomplished by placing the points of a compass, or other similar instrument into the notches, and then marking the line-joint of the door. The holes are then bored out at the places indicated, and the intervening portion of wood, between the holes, is chiseled out in order to create an opening, which will have straight sides and rounded ends of the same shape as the wings or extensions on the leaves, when the latter are brought together. The hinge is then inserted in this opening, while the door is wedged in a closed position, and the door is then removed and the hinges screwed into place as ordinarily. The inside leaf of each hinge, at the points where the countersunk screw-holes are, is dished out, as shown at *e*, for the purpose, and for the purpose of decreasing the depth of the said countersinks, that they may be as easily molded as in the ordinary hinge; also, to use the least metal consistent with the strength of the hinge.

By this improvement I can place the hinges in place with great celerity and dispatch, and with great accuracy; and, moreover, by the peculiar construction of the hinge I am enabled to mold the hinges with extremely thin wings, and by the construction of the flattened sides of the wings or extensions I can pack the hinges in boxes very closely, as much so as the ordinary butt-hinges; and, moreover, by reason of the flattened sides and rounded edges of the wings or projections, with the marking-recesses properly arranged, I am enabled to form the recess for the reception of the hinge with great facility, as it can be made by simply boring two holes and cutting

out the intermediate space, in which the wings or extensions fit snugly without further cutting.

What I claim, and desire to secure by Letters Patent, is—

A hinge the leaves of which are constructed with wings D, having flattened sides *a* and semi-cylindrical edges *b*, the end of each wing being constructed with the marking-notches *c*, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

CHARLES B. CLARK.

Witnesses:
M. R. MARKS,
E. H. TOMLINSON.