No. 721,721. PATENTED MAR. 3, 1903.

E. A. MOORE.

HINGE.

APPLICATION FILED MAY 23, 1902.

NO MODEL.

Fig. 1.

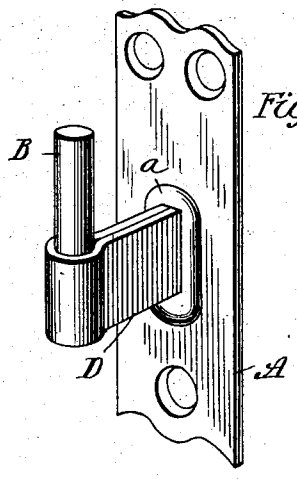


Fig. 2.

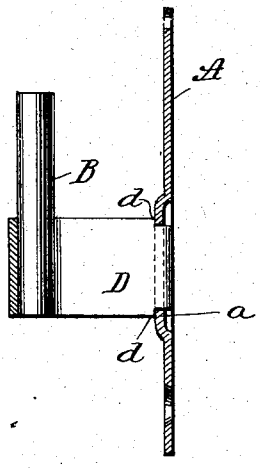


Fig. 3.

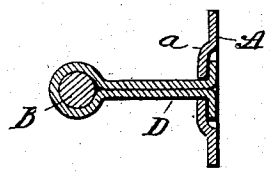
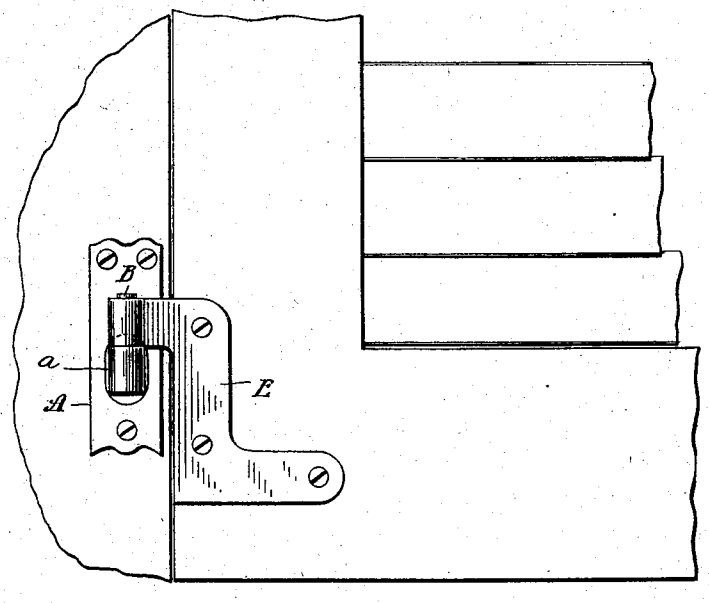


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

ETHELBERT A. MOORE, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE STANLEY WORKS, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

HINGE.

SPECIFICATION forming part of Letters Patent No. 721,721, dated March 3, 1903.

Application filed May 23, 1902. Serial No. 108,640. (No model.)

To all whom it may concern:

Be it known that I, ETHELBERT A. MOORE, a citizen of the United States, residing at New Britain, in the county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Hinges, of which the following is a full, clear, and exact description.

My invention relates to hinges, and is particularly useful in connection with that type of hinges commonly employed for window-blinds and the like, although it is obvious that it is not confined to articles intended only for such use.

In hinges of the character referred to and to which this invention relates there is a backing or reinforce plate which is secured to the wall by ordinary screws, and projecting from this plate is a shank carrying toward its outer end a pintle upon which the companion leaf or member of the hinge is mounted so as to swing.

The main objects of my invention are to improve the construction of such a hinge, to increase the strength and rigidity of the supporting plate or backing, and to so secure the parts together as to give great and increased strength over what has been heretofore employed.

Another object of this invention is to so assemble the parts that when the hinge is placed against a flat wall the backing-plate will rest snugly against said wall and so secure a firm seat or bearing, thus preventing the tilting of the backing-plate and the working out of the screws or other fastening devices employed as the means of connection between the wall and said backing-plate.

In the drawings, Figure 1 is a perspective view of that part of a hinge in which the improvement is made. Fig. 2 is a vertical section of the hinge part shown in Fig. 1. Fig. 3 is a horizontal section. Fig. 4 is a front view of the hinge as applied.

A is a backing-plate of any suitable outline. As shown, the backing-plate A is formed of a thin sheet of metal having parallel sides and similarly-shaped ends. This permits the successive production of these backing-plates from a continuous strip of metal without waste.

B is a pintle arranged substantially in line with the backing-plate and parallel thereto. The pintle B is secured to the backing-plate by means of a shank, which, in the form shown, is a strip of metal bent in the middle and closely embracing the lower end of the pintle, so as to securely hold the same. The double ends of the strip are arranged close together to form the shank D. The end of the shank D is narrowed by notching the upper and lower edges. These notches form short shoulders *d d*. In the backing-plate A a corrugation *a* is formed, providing a cavity on the rear side of said backing-plate, for the purpose hereinafter described. The shank is connected to the backing-plate adjacent to the corrugation *a* in the manner hereinafter described, and the function of the corrugation is not only to give added strength and rigidity to that portion of the backing-plate immediately adjacent to the connection of the shank D, but it also performs the added and valuable function of a cavity or pocket to receive the upset end of the shank D when the parts are assembled.

The parts are assembled as follows: A hole is formed in the backing-plate A of the proper size to receive the narrowed end of the shank D. The length of this narrowed end of the shank is greater than the thickness of the metal constituting the backing-plate. The parts are put together so that the shoulders *d d* rest against the outer surface of the backing-plate A upon the elevated surface formed by the corrugation *a*. When the parts are thus assembled, it will be seen that the extreme end of the shank, whether or not the shank is in one or two thicknesses of metal, projects through the backing-plate. That portion of the shank D projecting through the backing-plate A is then upset and headed down into the pocket formed by the corrugation *a* and so that it will lie substantially flush with the general plane of the rear surface of said plate. The device thus constructed will have great strength at the vulnerable point where the heaviest strains are

applied. It is not essential that the corrugation should extend throughout the greater portion of the backing-plate; but it is simply essential that it should extend throughout that portion where the connection of the shank and plate is joined and where the twist and strain are directly applied. The device thus formed can be secured flatwise against the woodwork, and practically the entire rear of the backing-plate will make a smooth unbroken contact therewith, as would not be the case were the head of the shank permitted to project beyond said rear surface.

E is a companion leaf, which is pivoted on the pintle B. The companion leaf E may be secured to the blind in any desired manner—for example, as shown in Fig. 4—while the backing-plate A is secured to the window-casing adjacent thereto.

What I claim is—

1. A hinge member comprising a backing-plate having a corrugation therein forming a pocket at the rear side thereof, an opening through the corrugated portion of said backing-plate, a pintle-supporting shank passing through the opening in said plate, the extreme ends of said pintle-supporting shank being upset and contained within the pocket at the rear side of the backing-plate, substantially as described.

2. A hinge member comprising a plate having a corrugation therein forming a recess at the rear side thereof, and an opening through the corrugated portion of said plate, a pintle-supporting shank adapted to pass through said opening in said plate, that portion of the shank projecting through said plate being riveted or upset and contained within the recess at the rear side of said plate.

3. A hinge-hook comprising in its construction a metal plate, an arm upset within a slot formed in said plate, a pintle held by said arm, said plate being recessed at its rear face to bring said arm out of contact with the surface to which the hinge-hook may be applied, substantially as described.

Signed at New Britain, Connecticut, this 20th day of May, 1902.

ETHELBERT A. MOORE.

Witnesses:

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