

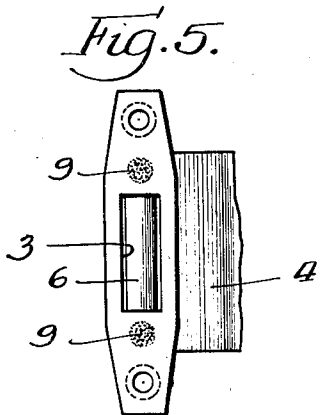
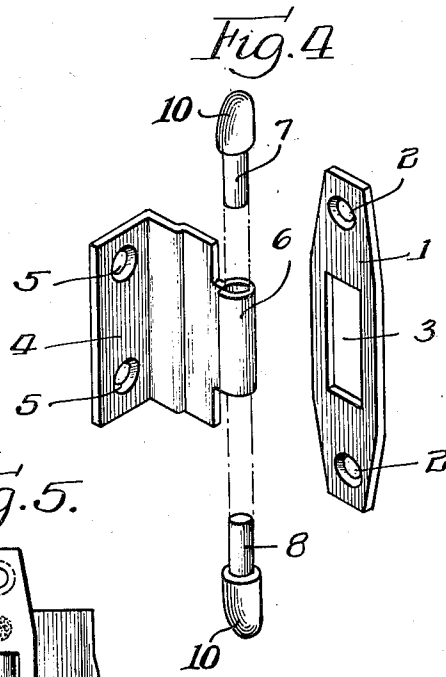
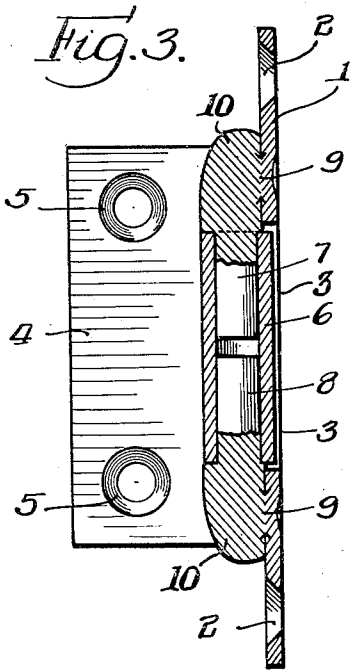
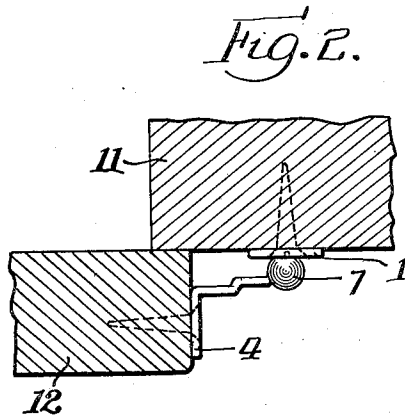
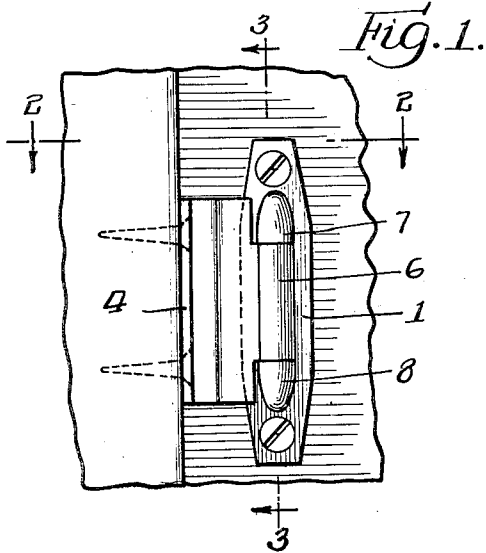
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HINGE

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HINGE

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2 Claims. (Cl. 16—128)

This invention relates to hinges, and more particularly to those for doors or the like.

Generally stated, the object of the invention is to provide a novel and improved construction and arrangement whereby two metal hinge plates, provided with a pintle connection between them, are of such character that the two plates are not separable, but are permanently hinged or pivotally connected together.

It is also an object to provide a novel and improved construction and arrangement whereby two hinge plates, although having a knuckle and pintle connection between them, are of such character that one plate is without any knuckle, so that the construction is simple and comparatively inexpensive.

Another object is to provide an improved construction and arrangement whereby a pintle connection is provided between two hinge plates, but of such character that the pintle is not separable or removable, being permanently fastened to one of the plates.

It is also an object to provide certain details and features of construction and combinations tending to increase the general efficiency and desirability of a hinge of this particular character.

To the foregoing and other useful ends, the invention consists in matters hereinafter set forth and claimed and shown in the accompanying drawing, in which—

Fig. 1 is a front elevation of a hinge embodying the principles of the invention, showing the same fastened in position to support a door.

Fig. 2 is a horizontal section on line 2—2 in Fig. 1 of the drawing.

Fig. 3 is an enlarged vertical section on line 3—3 in Fig. 1 of the drawing.

Fig. 4 is a perspective of the parts of the hinge in separated condition.

Fig. 5 is a rear elevation of the hinge shown in Fig. 1 of the drawing, with a portion thereof shown broken away for convenience of illustration.

As thus illustrated, the invention comprises a flat hinge plate 1, having screw holes 2 near the ends thereof, and having a central vertically disposed opening 3 in the middle portion thereof.

The flat hinge plate 4 has screw openings 5 and a cylindrical knuckle 6, which latter is adapted to receive the upper and lower pintles 7 and 8 when the hinge is assembled.

As shown more clearly in Figs. 3 and 5, it will be seen that the enlarged heads of the pintle sections 7 and 8 are spot-welded to the plate 1, at 9 and 9, and that the pintle heads are flattened on their rear sides for this purpose. In assembling the parts, the two pintle sections 7 and 8 are inserted in the knuckle 6, and the latter is then placed opposite the opening 3, with the

heads of the pintles in position to be welded to the plate 1, in the manner shown. In this way, the two hinge plates are inseparably connected together, by a knuckle and pintle connection of such character that one plate has no knuckle, and that the pintle is permanently fastened to one plate. This results in a strong and simple and inexpensive construction of hinge.

It will be seen, therefore, that it is the act of welding or otherwise permanently fastening the entire pintle, comprising the sections 7 and 8, to one and the same plate, while the parts are all in assembled relation, that thereby instantly and permanently connects the two hinge plates together, and whereby only one knuckle is necessary. When the pintle sections are welded to the plate 1 they are, in effect, integral therewith. And, as indicated in Fig. 1 and Fig. 3, the pintle does not rotate. As the heads 10 are left exposed, they can be and are, as shown, ornamental in form. In use, it will be seen that the plate 1 is fastened to the support 11, which may be a door frame, and that the plate 4 is fastened to the edge of the door 12 shown in Figs. 1 and 2 of the drawing.

With the construction shown and described, therefore, the plate 4 has an attaching portion that extends at right angles to the plane of the plate 1, and has a portion extending at right angles to said attaching portion and overlying the plate 1, spaced from the latter, but extending parallel therewith, as shown in Fig. 2 of the drawing. The entire pintle, formed by the two sections 7 and 8, is thus held stationary relative to the plate 1 with the hinge mounted as shown in the drawing, as the plate 4 rotates about the axis of the hinge, while the plate 1 is held fixed in stationary position as shown.

What I claim as my invention is:

1. A hinge comprising a plate formed with a single pintle bearing, a second plate, two pintle sections inserted toward each other in said bearing and provided with enlarged heads spaced apart by said bearing, with a flat inner side for each head, and means permanently fastening the inner side of each head flatwise to the outer side of the second plate, so that the latter and the first plate are permanently hinge connected together, and whereby the entire pintle thus formed by the two sections is held against rotation, the second plate having a slot therein to receive the inner side of said bearing.

2. A structure as specified in claim 1, said first plate being movable about the axis of the hinge, and said second plate being fixed in stationary position, with said slot unoccupied except by said bearing.