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HINGE

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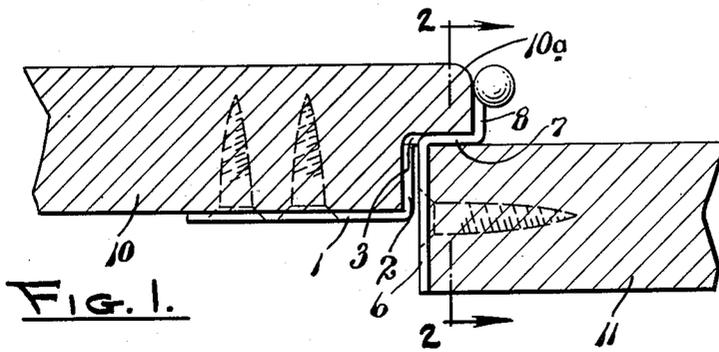


FIG. 1.

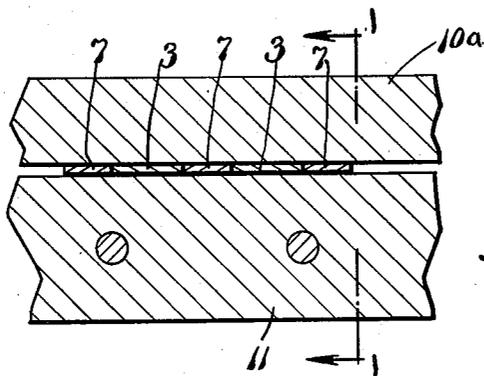


FIG. 2.

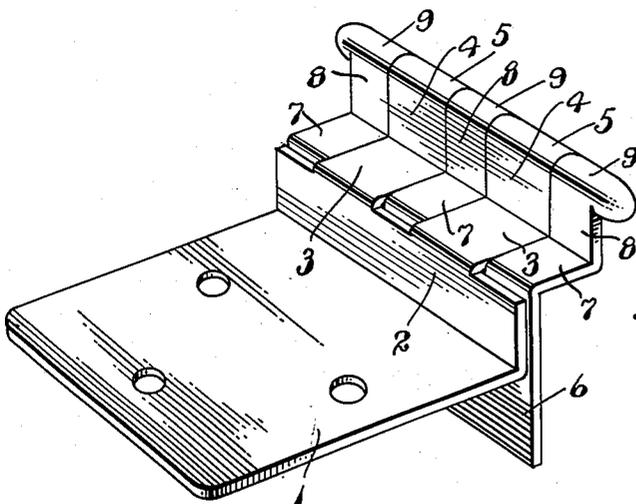


FIG. 3.

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HINGE

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1 Claim. (Cl. 16—135)

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This invention relates to a novel and simple hinge made from two parts of sheet metal essentially, and including in addition only the hinge pintle, and which in practice is intended for use in hinge connecting cupboard doors to the adjacent cupboard bodies at a side of door openings, the doors ordinarily having overlapping risers at their edges which extend partly over the adjacent portions of the cupboard around the door opening.

It is an object and purpose of the present invention to provide a hinge which in the main is concealed when the door is closed, and in which those parts of the hinge between the riser on the door and the adjacent sides of the cupboard around the opening nest together so that there is only a single thickness of the metal between the face of the cupboard and the adjacent portions of the door. The hinge structure also permits the door to be swung completely open or through an arc of nearly 180°. The hinge structure is very practical and useful.

An understanding of the invention may be had from the following description, taken in connection with the accompanying drawing, in which,

Fig. 1 is a fragmentary horizontal section on line 1—1 of Fig. 2, through adjacent portions of a door and cupboard, the hinge being shown in plan or end elevation,

Fig. 2 is a vertical section substantially on the plane of line 2—2 of Fig. 1, and

Fig. 3 is a perspective view of the hinge of my invention.

Like reference characters refer to like parts in the different figures of the drawing.

The hinge comprises two leaf members pivotally connected together at adjacent ends. One of said leaf members includes a flat generally rectangular section 1 from which, at one end edge, a section 2 is bent to extend at right angles. From the section 2 a pair of narrowed sections 3 are bent to extend at right angles to the section 2 and in a plane parallel to the first described section 1. Such sections 3 are spaced from each other and also have their outer edges inset from the ends of the section 2 a distance substantially equal to the space between the two sections 3. Each of the sections 3 is bent generally to extend at right angles in a terminal section 4, the two sections 4 being in a plane substantially parallel to the plane of the section 2, and each of the sections 4 at its free end is formed in a hinge roll 5.

The second hinge leaf includes a rectangular section 6 which, when the hinge is in closed position, is parallel to and spaced a short distance from the section 2 of the first hinge leaf. At one

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edge it is continued in a plurality of spaced sections 7 shown as three in number, bent to extend at right angles from the section 6 of the hinge leaf and adapted to nest with the sections 3 of the first leaf, the width of the sections 7 being such that the intermediate section 7 passes between the two section parts 3 and the outer sections 7 extend beyond their outer edges, the outer edges of the sections 1, 5 and 6 and the two outer side sections 7 being substantially flush with each other. Each of the sections 7 terminates in a right angle section 8, each at its free end having a hinge roll 9, the sections 4 and 8 nesting when the hinge is closed. The several rolls 5 and 9 are located in alignment and a hinge pintle passed through to connect the hinge leaves together.

The first hinge leaf is secured to the inner side and at one edge of a door 10, the riser 10a of which is of conventional form and is in thickness generally slightly less than one-half of the thickness of the door 10. The section 1 is secured by screws or other suitable fastenings to the door 10 with the sections 2 and 3 against the side of the groove or rabbet of right angle shape between the door and its riser while the terminal sections 4 extend outwardly at the edge of the riser.

The other hinge leaf has its section 6 secured by screws or equivalents to the edge of the cupboard at the door opening with the sections 7 lying against the outer face of the cupboard and the sections 8 extending outwardly in the same plane with the sections 4 of the first hinge member.

It is apparent that when the door is closed one thickness only of metal is between the riser of the door and the cupboard. The parts 7 and 8 of one hinge member and 3 and 4 of the other are in nested relation and occupy the same planes with the hinge pintle of the door at one end and adjacent the plane of the outer side of the door at one edge.

The hinge construction is one of novelty and practical utility. This hinge is largely concealed. The door may be swung through substantially an arc of 180° and therefore may be moved to wide open position. The metal used is of relatively thin gauge and substantially concealed hinges are obtained with but a slight outward positioning of the door at its hinged side from the cupboard and equal only to one thickness of the metal used in constructing the hinge.

It is, of course, to be understood that the number of nesting sections 3 and 7 and 4 and 8 may be increased on hinges of greater length dimensions and could be decreased either in the hinge shown or one of lesser length dimension. Other

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variations in structure but retaining the nested relation of the parts as described will occur to those skilled in the art without departing from the invention.

The invention is defined in the appended claim 5 and is to be considered comprehensive of all forms of structure coming within their scope.

I claim:

A hinge comprising, a hinge leaf having a body 10 of flat metal, said body having a section integral therewith at one end extending at right angles therefrom, and a plurality of narrow spaced sections extending from the first mentioned section at right angles thereto, in a plane parallel to 15 said body, each of said narrowed sections terminating in extensions integral therewith disposed in a plane parallel to the first mentioned section, each extension terminating in a pintle receiving roll, and a second hinge leaf having a 20 flat body located at right angles to the body of the first hinge leaf when the leaves are closed, and parallel to the first mentioned section thereof, said second hinge leaf having a plurality of narrowed spaced sections at one end, located in a plane at right angles to the body of the second 25

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leaf, each terminating in an end portion disposed in a plane parallel to and spaced from the plane of the body of second leaf, said narrowed sections of the second hinge alternating with and located in the plane of the narrowed sections of the first leaf and each also terminating in a hinge roll, the rolls of the two hinge leaves being located in longitudinal alignment for the passage of a hinge pintle therethrough.

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