VAN DORN KIPLE.

DOOR HINGE.

APPLICATION FILED FEB. 13, 1908.

904,620.

Patented Nov. 24, 1908.

2 SHEETS—SHEET 1.

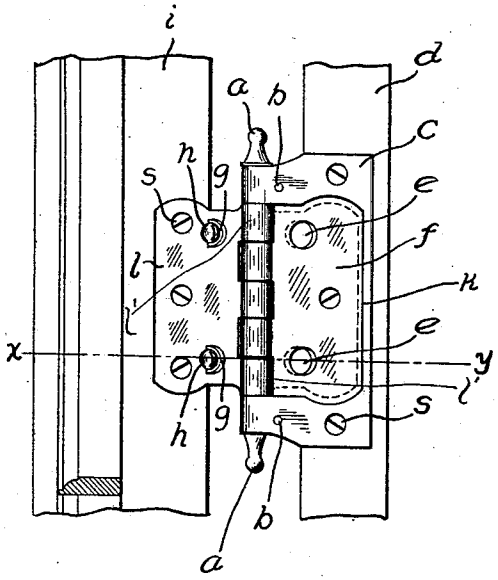


Fig. 1.

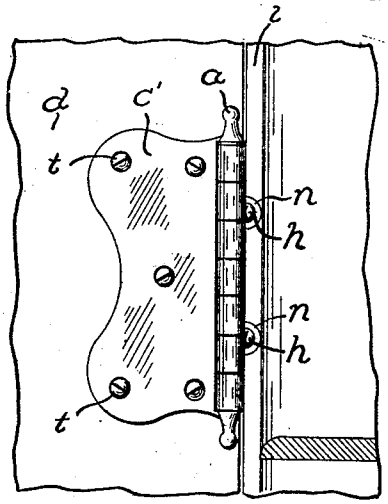


Fig. 2

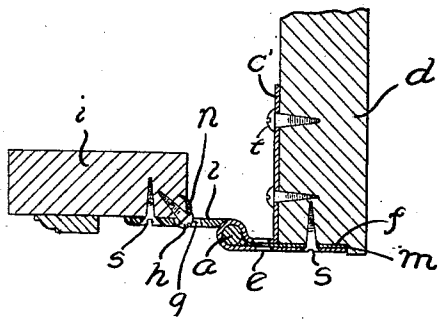


Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 4.

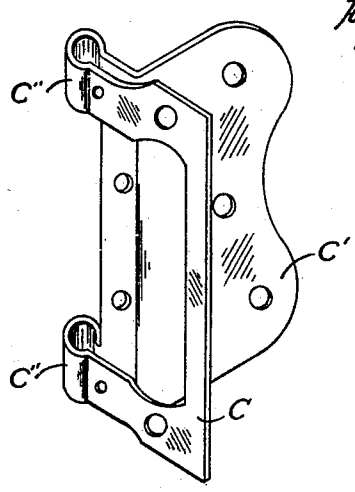


Fig. 5.

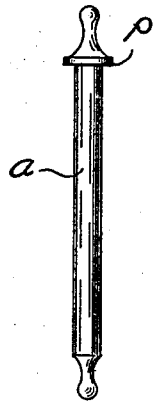
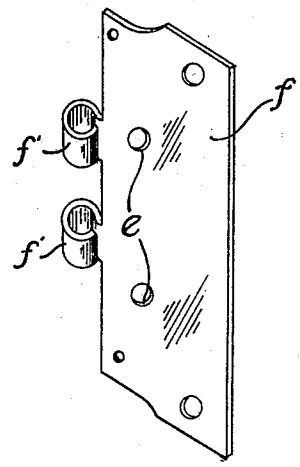


Fig. 6.



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DOOR-HINGE.

No. 904,620. Specification of Letters Patent. Patented Nov. 24, 1908.

Application filed February 13, 1908. Serial No. 415,793.

To all whom it may concern:

Be it known that I, VAN DORN KIPLE, a citizen of the United States, residing at West Union, in the county of Fayette and State of Iowa, have invented new and useful Improvements in Door-Hinges, of which the following is a specification.

My invention relates to improvements in door-hinges, and the object of my invention is to provide a hinge which shall be self-alining to the jamb, and having special securing means and other modifications of structure such as are adapted to render the fitting of the hinge in place easy as well as accurate. This object I have accomplished by the means which are hereinafter fully described and claimed, and which are illustrated in the accompanying drawings, in which:

Figures 1 and 2 are elevations of my improved hinge as secured to a door and its jamb, the former representing the door as swung open and the latter the said door closed against the jamb. Fig. 3 is a horizontal section of said hinge taken on the line *x*—*y* in Fig. 1. Fig. 4 is a perspective of the hinge member *c*—*c'* as disengaged from the parts *f* and *l*. Fig. 5 is an elevation of the removable pintle *p* of the hinge. Fig. 6 is a perspective of the part *f* as separated from the hinge member *c*—*c'*.

Similar characters refer to similar parts throughout the several views.

My improved hinge consists of the members *l* and *f* having projecting knuckles *l'* and *f'* respectively adapted to receive a pivot-pin or pintle *a* in a well-known manner. One end only of said pintle *a* is shouldered, so that the hinge may be reversed by simply withdrawing the pintle and then reintroducing it in said knuckles from the opposite end. Beside the members *l* and *f* I use a plate *c* adapted to overlap one face of the member *f*, such plate also having knuckles *c''* to register with the knuckles *l'* and *f'* of the members *l* and *f* at each end of the hinge, the plate *c*, after forming such knuckles *c''*, being bent at a right angle to the member *f*, the member *f* being introduced between the alined parts of *c* and secured thereto by the rivets *b*. The plate *c* is centrally cut away at *k* so as to uncover all of the outer face of the member *f* but its margin, the space thus provided being a little larger in extent than the area of the member *l*, so that when the latter is closed against *f* it lies in such cut-away space as indicated by the dotted line in Fig. 1. The member *l* in practice is made about twice as thick as the plate *c*, so as to provide for a close contact with the member *f* at all times, or when the door shrinks or warps.

In hanging a door *d*, the hinge is placed so that its member *f* fits into a recess *m* in one vertical edge of said door, the corner of the door fitting into the reëntrant angle of the parts *f* and *c'*, and alining itself with the hinge. The parts are then secured to said door by screws *s* and *t* respectively.

In order to render it unnecessary to channel the jamb *i*, I have adopted the following described means whereby the hinge may be alined with such jamb. In parallel alinement with the pintle *a*, I punch a plurality of orifices *g* in the member *l*, so as to leave a lip or tongue *n* extending from each of said orifices on the side of *l* which is to contact with said jamb, such tongue extending at a right angle with the member *l* and having its tip curved and pointed slightly so as to engage and enter the outer face of the jamb when the member *l* is fitted thereover. The angle of the member *l* and tongue *n* is perforated to receive a screw *h*, which runs into the angle of the jamb obliquely, as shown in Fig. 3, so as to prevent the hinge from pulling apart from the jamb. When the tongues *n* are set over the angle of the jamb, they cause the hinge to rest in proper alinement upon said jamb, at which time the screws *h* may be driven home, and, the door *d* being swung out, the screws *s* are set in place to secure the member *l* to the inner face of the jamb *i*. The incurved points of the tongues *n* enter the wood of the jamb and secure the member from displacement before it is fastened by the screws *s*. It is obvious, therefore, that my invention reduces the labor of fitting a door, and alining it to its casing. The hinge is reversible, and needs no recessing of the jamb. To receive any projecting parts of the heads of the obliquely-directed screws *h*, I provide orifices *e* in the member *f*.

The number and proportions of parts of my invention may be varied to suit the purpose and location of the door or doors to be hung, and the self-alining means may be varied specifically without departing from the principle embraced in my invention and without departing from the scope of its protection.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is:

1. A door-hinge, comprising members pivoted together, one of such members having on one side a socket adapted to receive the other member when such members are closed together and on the other side self-alining means for securing such member to a door, and the other member having a plurality of alined spurs for alining and attaching it to a door-jamb.

2. A door-hinge, comprising pivoted members, each member having self-alining means for securing them respectively to a door and to a supporting jamb, and one of such members having a depression adapted to register with and receive therein the other member when such members are closed together.

3. A door-hinge, comprising pivoted members, one member having self-alining means for engaging it to a door-jamb and also having means for securing it to the angle and to the two meeting surfaces at such angle of such jamb.

4. A door-hinge, comprising pivoted members, one member having self-alining means for engaging it to a door-jamb, the other member being partly covered by an overlaid plate which is recessed to receive the first-mentioned member when such members are closed together, said overlaid plate also extending about such second-mentioned member to form self-alining means on the other side thereof adapted to engage such member to a door, spurs thereon for attaching and alining the first-mentioned member to a door-jamb, and means for securing the second-mentioned member to a door.

5. A door-hinge, comprising pivoted members, one member having a depression to receive the other when such members are closed together, the depth of such depression being less than the thickness of such received member.

VAN DORN KIPLE.

Witnesses:
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F. E. HOYT.