Nov. 25, 1924.

1,517,205

E. FLAGG

DOOR HINGE

Filed April 15, 1922

Fig. 1.

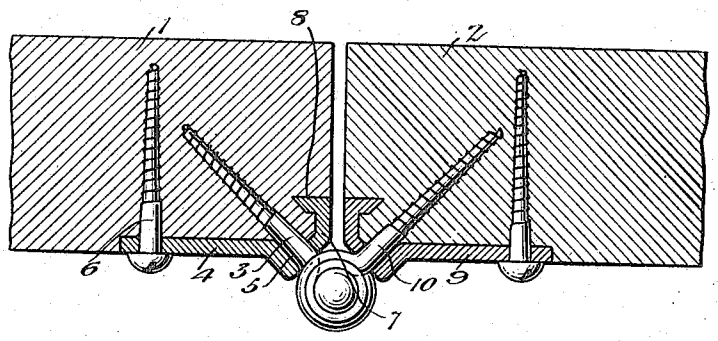
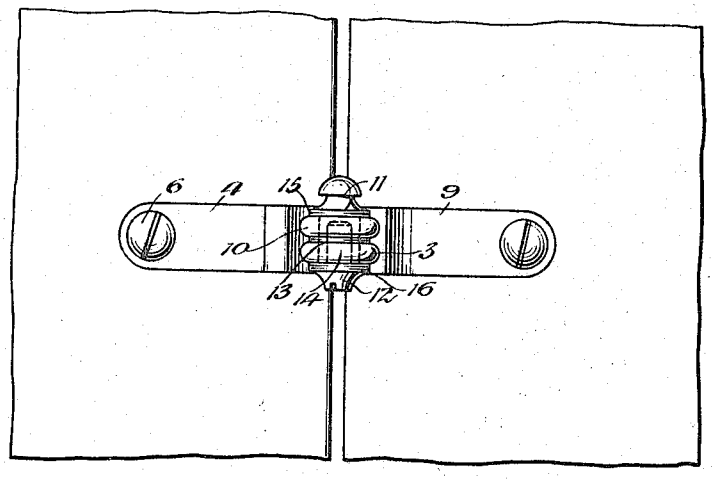


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

ERNEST FLAGG, OF NEW YORK, N. Y.

DOOR HINGE.

Application filed April 15, 1922. Serial No. 552,902.

To all whom it may concern:

Be it known that I, ERNEST FLAGG, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Door Hinge, of which the following is a full, clear, and exact description.

This invention relates to a hinge construction, and has for an object the provision of a simple, strong hinge which can be applied to any suitable surface, such as between doors and door jambs, and is made of stock material whereby the cost of the hinge and the time and labor involved in the application thereof are considerably reduced.

Another object resides in the provision of means whereby the hinge elements are more firmly than hitherto supported in the door and jamb or other surfaces in which they are embedded.

A further object resides in the particular construction and arrangement of parts which are hereinafter described and claimed and shown in the accompanying drawings.

The invention is illustrated in the drawings, of which—

Figure 1 is a horizontal section taken through a door and the jamb showing my hinge applied thereto.

Figure 2 is a front view of the construction.

The form of the invention shown in the drawings is a preferred form, although it is understood that modifications in the construction and arrangement of the parts and in the character of the materials used may be adopted without departing from the spirit of the invention.

As shown in the drawings, the preferred form of my invention is adapted to be applied to any suitable surface or surfaces, preferably in connection with a jamb or stationary member 1, with respect to which a door or other pivoted member 2 is disposed. In the usual application of my hinge, I insert in the jamb member 1 a screw eye 3, which may be of any well known form and may be of stock material. This screw eye is preferably inserted into the jamb from the edge and at an angle of about 45°, as shown in Fig. 1. In order to provide that the eye will not wear loose or sag, due to the weight of the door supported thereon in the manner hereinafter described, I provide a reinforcing or supporting plate 4 which is adapted to be placed and fastened against the surface of the jamb at and around the point where the eye 3 is introduced. This plate is provided with an aperture 5 to receive the stem of the eye. The plate is fastened against the surface or jamb 1 by any suitable means, such as screws 6, and it may be bent at an angle as at 7 to pass around the corner of the jamb, and be provided with an inwardly projecting tongue 8 which can be embedded in the material of which the jamb 1 is made, which is preferably wood. This embedding acts to firmly anchor the plate against the jamb. By reason of the passage of the stem of the eye 3 through the aperture 5 in the plate 4, which is firmly held against the surface of the jamb 1, the eye is prevented from sagging when the weight of the door 2 is supported thereon.

An exactly similar plate, indicated by the numeral 9, is applied to the door 2 and fastened thereto in the same manner, and is adapted to receive the stem 10 of another eye which is disposed at a higher level than the eye 3 and is supported on the eye 3 so that the door will swing around the hinge and be supported thereon. In order to hold the eye members in their proper relative position, I provide a pin. This pin is formed of two members 11 and 12. The member 11 is a plug or shell having a bore 13 into which a stem 14 on the member 12 is introduced. The bore and the stem are preferably threaded so that the engagement is a positive one and will hold the two members or elements of the pin together. Preferably the outside diameter of the shell or plug 11 is approximatelv equal to the inner diameter of the bore of the eyes so that the hinge acts smoothly without any free play. The pin members are provided with shoulders 15 and 16 so that when they co-operate these shoulders will bear against the adjacent surfaces of the eyes.

It will thus be seen that I have provided a simple, strong hinge construction whereby ordinary stock material may be used and in which the hinge elements are efficiently pre-

vented from sagging in any such material as wood under the weight of the device supported thereby.

This invention is an improvement on my co-pending application, Serial No. 489497, filed August 3, 1921, entitled "Hinge."

What I claim is:

A hinge construction which includes a screw eye projecting into a door jamb, a plate having an aperture through which the screw eye passes, said plate disposed and fastened against the surface of the jamb, a projecting tongue on said plate embedded in the surface of the jamb to anchor the plate therein.

ERNEST FLAGG.