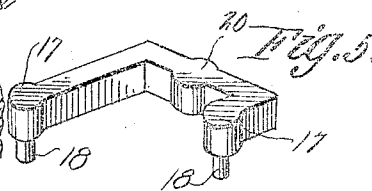
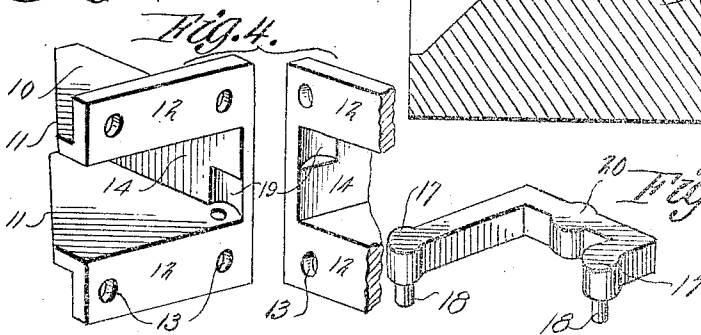
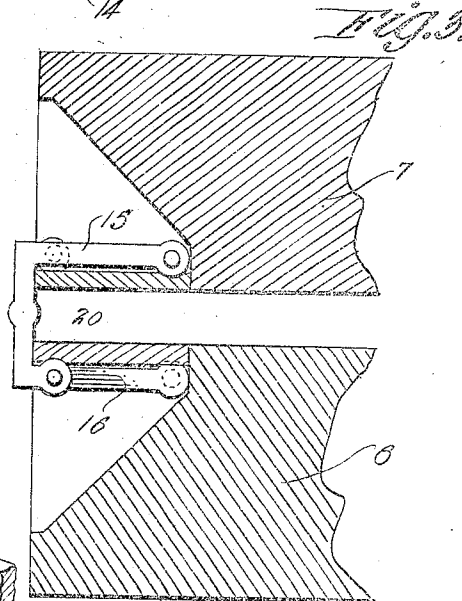
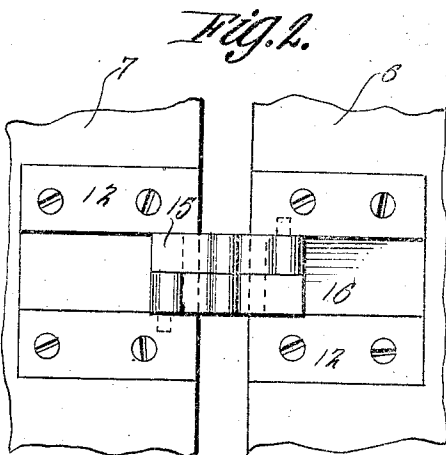
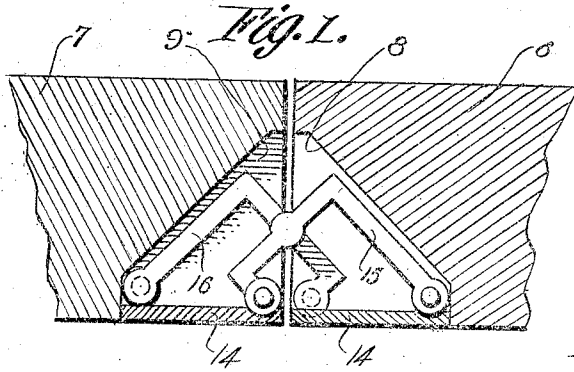


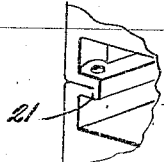
F. J. KORB.
 DOOR HINGE.
 APPLICATION FILED SEPT. 4, 1920.

1,382,654.

Patented June 28, 1921.



WITNESSES
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DOOR-HINGE.

1,382,654.

Specification of Letters Patent. Patented June 28, 1921.

Application filed September 4, 1920. Serial No. 408,287.

To all whom it may concern:

Be it known that I, FRED J. KORB, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Door-Hinges, of which the following is a specification.

This invention relates to door hinges and is especially designed as an improvement on my prior Patent No. 1282435.

The purport of this invention is to provide an invisible hinge which will permit the door to be swung completely open into a position parallel with the door-jamb if desired, without shearing the component parts of the hinge.

A further object of the invention is to provide a non-shearing hinge which is simple in construction and operation, at the same time, possessing the necessary characteristics of rigidity and durability.

The above and other objects of this invention will be in part described and in part understood from the following description of the present preferred embodiment of the invention, taken in connection with the accompanying drawings, wherein:

Figure 1, is a top plan view of a hinge constructed in accordance with my invention illustrating its application, the hinge being shown in a closed position.

Fig. 2, is a side elevational view of the hinge illustrating its application, the hinge being shown in an open position.

Fig. 3, is a top plan view of the device illustrating its application and showing the hinge in an open position.

Fig. 4, is a group figure, showing the hinge casings in perspective.

Fig. 5, is a perspective view of one of the hinge links, and

Fig. 6, is a fragmentary perspective view of a modified form of casing.

In the drawings, in order to illustrate the application of this invention, a portion of a door-jamb 6 is shown which has associated therewith a portion of a door 7. The adjacent margins of the jamb 6 and door 7 are mortised to provide substantially triangular shaped recesses 8 and 9 respectively.

Mounted in each of said mortises is a hinge casing 10, consisting of a metal plate of substantially oblong configuration with one side removed and the top and bottom thereof reduced to provide beveled margins 11. The outer ends of the casings

are upturned to provide securing flanges 12 through which screw openings 13 are formed. As shown in Fig. 3, the casings are set in the mortises of the jamb and door so that the side 14 of each casing will lie flush with the outer face of the jamb or door with which it is associated. The flanges 12 will be countersunk in the adjacent edges of the jamb and door as shown to advantage in Fig. 2.

The hinges consist of a pair of link members arranged in superimposed relation to provide upper and lower links 15 and 16 respectively. Each link consists of a substantially L-shape body, the ends of which are enlarged to provide terminal knuckles 17, each of which has a pintle 18 extending from one of its faces. One of said pintles on the upper link 15 is adapted to engage a recess in the upper wall of the hinge casing in the door 7 as shown to advantage by the dotted lines in Fig. 2, while the other pintle of said link 15 engages a corresponding opening in the door-jamb 6. It will be observed that the pintle which engages the casing in the door-jamb is arranged in proximity to the outer margin of the jamb, while the pintle of said upper link 15, which engages the casing of the door 7, is arranged remote from the outer margin of the door in proximity to the inner terminal of the recess 9. The lower link 16 is conversely arranged in said casings as illustrated to advantage in Figs. 1 and 3. Suitable recesses 19 are formed in the casings 10 to receive the knuckles 17. Each link has a circular enlargement 20 formed thereon which will be in superimposed relation when the links are assembled. These enlargements may, or may not be, equipped with a pintle as desired. However, the provision of these enlargements will prevent shearing of the links and will likewise facilitate initial movement of the door whether the latter be in an open or a closed position. Furthermore, the manner of formation of the pintles 18 and the method of associating them with the hinge casings 10 will likewise tend to prevent shearing of the hinges.

It is to be understood that the configuration of these links may be altered to conform to the shape of doors used, without departing from the spirit and scope of this invention.

In Fig. 6 a slightly modified form of casing is shown. In this form the wall of each

casing is pinched inwardly to provide a longitudinally extending rib "21" which is adapted to be interposed between the links "15" and "16". By providing a reinforcing rib of this nature, it will be apparent that the links will be maintained in a spaced apart position to better withstand the wear occasioned by opening movement of the door. This form of casing is especially adapted for use with heavy doors where the pressure of the hinges is very great. By forming the rib in the special manner shown, the cost of manufacture will be reduced to a minimum.

15 What is claimed is:

1. A door hinge including inflexible links each of which has one end pivoted to the door and the other end pivoted to the door jamb, each link being unconnected at any other point in its length, said links being substantially L shape to permit opening of the door to a position parallel with the door jamb.

2. A door hinge including casings mounted in the adjacent margins of the door and door-jamb, a pair of links, one of which has

one of its ends pivoted in the inner terminal of the door-jamb casing and its opposite end pivotally mounted in the outer end of the door casing, the other end of said link being arranged subjacent the first link and pivotally mounted in said casings in a manner converse to the manner of mounting the first said link, said links being arranged in superposed relation but not connected, and co-acting means on said links to prevent shearing thereof.

3. A door hinge including casings mounted in the door, each casing having its side wall pinched inwardly to provide a longitudinally extending reinforcing rib, a pair of links, one of which is pivoted in the casing above said rib and the other pivoted in the casing below the rib substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRED J. KORB.

Witnesses:

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LAWRENCE E. GORMAN.