H. B. TODD.

DUPLEX CONTINUOUS HINGE.

APPLICATION FILED MAY 17, 1915.

1,157,065. Patented Oct. 19, 1915.

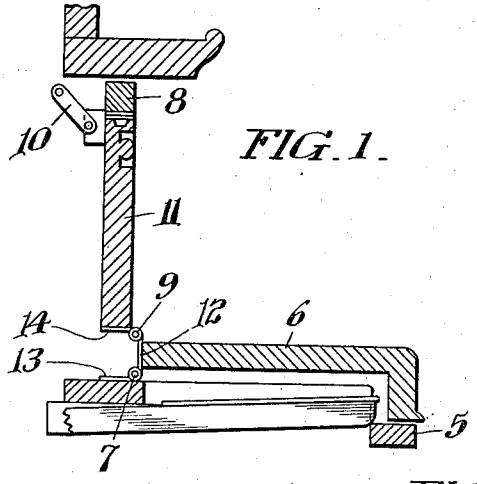


FIG. 1.

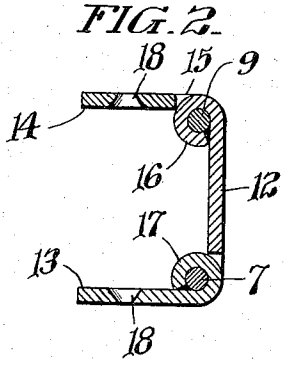
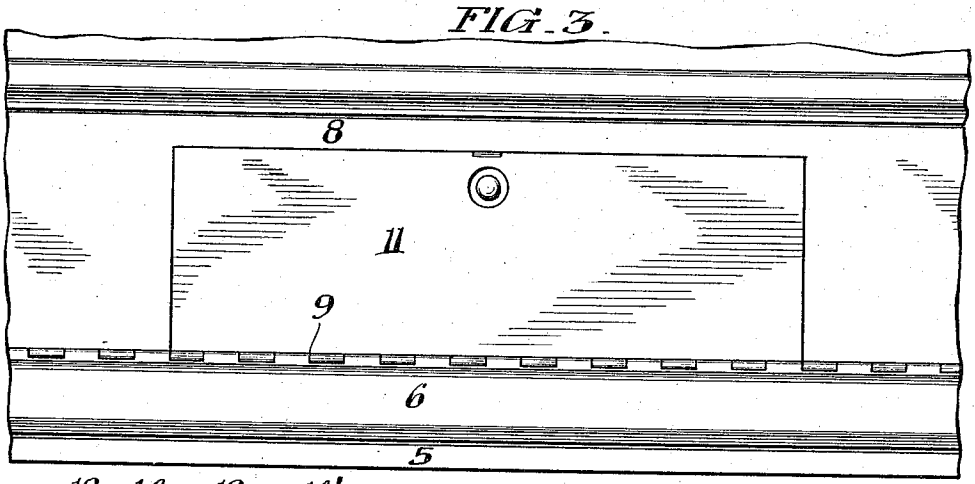


FIG. 2.

FIG. 3.



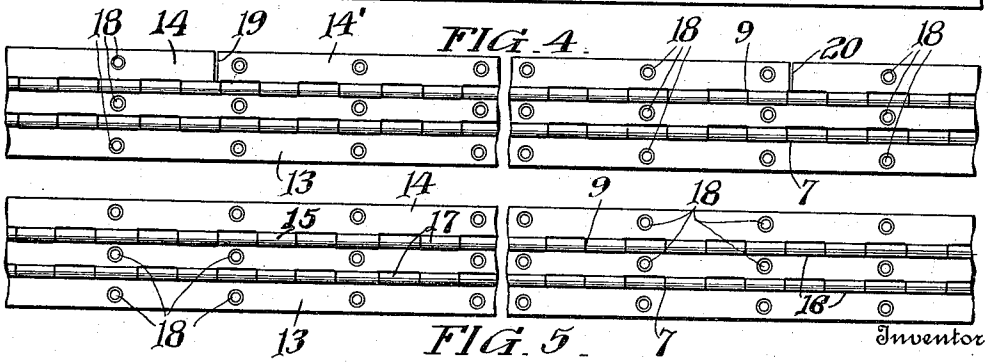


FIG. 4.

FIG. 5.

Witnesses

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DUPLEX CONTINUOUS HINGE.

1,157,065. Specification of Letters Patent. Patented Oct. 19, 1915.

Application filed May 17, 1915. Serial No. 28,758.

To all whom it may concern:

Be it known that I, HAROLD B. TODD, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented a certain new and useful Duplex Continuous Hinge, of which the following is a specification.

The purpose of my invention is to provide for reliable fixed spacing laterally and maintained parallelism in contiguous pintles of adjoining continuous hinges, which I secure by using a common plate as one hinge member for each of two contiguous hinges and securing this common member to an object to be hinged.

A further purpose of my invention is to form a three part hinge with the middle part adapted for attachment to an object.

A further purpose of my invention is to hinge plates or strips on opposite sides of a common attachment plate, providing a different number of plates on one side thereof from that on the other.

I have preferred to illustrate my invention by forms thereof which are practical, efficient and inexpensive and which at the same time well illustrate the principles thereof.

Figure 1 is a broken section of an upright piano fall board and adjoining structure utilizing my invention. Fig. 2 is an enlarged sectional view of the hinge shown in Fig. 1. Fig. 3 is a broken front elevation of the structures seen in Fig. 1. Figs. 4 and 5 are broken front elevations of two forms of continuous hinge embodying my invention.

This application is a continuation, for certain purposes, of the applications which resulted in my Patents Nos. 1,139,926 and 1,139,927, both of May 12, 1915.

I have selected for illustration of one use of my invention structure common to both of the above named applications, found in the piano art. In this the front piece 5 is shown below the fall board 6 of an upright piano.

The fall board is hinged to the key strip by a hinge pintled at 7 and to the back board 8 by a hinge pintled at 9. A link 10 guides the upper part of the back board. Within the lower part of the fall board and extending part of the length of the board only is an opening closed by door 11. The hinge of the door is in line with the hinge of the back board.

To secure reliability of spacing of the pintles 7 and 9 as well as parallelism between them, convenience in application, neatness, strength and balance I make combination continuous hinges using the same plate 12 for both hinges from which one butt extends at 13 and another at 14.

The bends 15, 17 upon the butts 14 and 13 respectively alternate with the bends 16 of the plate 12 to produce a pair of "continuous" hinges which are shown as uninterrupted throughout the length of the structure upon one side in both Figs. 4 and 5 and on both sides in Fig. 5. The screw holes for attachment are shown at 18 both in the common plate 12 and in both butts.

In Fig. 4 the "continuous" type of hinge is shown as cut on one side at 19, 20 to provide for separate hinging of the door from the back board, giving a different number of butt parts on this side from the number, one, on the opposite side of the common plate.

It will be evident that the butt members in Fig. 4 may be regarded as three in number on one side of the common plate, as compared to but one in number, on the opposite side thereof, and I have so considered these members in one of my claims. However, even from this viewpoint, each part of the butt or each butt member, being made up of a plate and a plurality of eyes and spaces, would respond to the term "continuous" in its coöperation with the common plate.

The bend of the butts and intermediate plate are effective to produce eyes for cooperation with the pintles used. It is recognized that the hinging could be effected by other means which would be a fair equivalent of this structure.

It will be evident that the division of the butt into several members upon each side of the common plate may be desirable even where the number of members is the same upon both sides of the plate.

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

1. A duplex continuous hinge comprising a pair of butt members having alternating spaces and pintle-receiving eyes in combination with an intermediate plate common to both butt members and having eyes for the spaces of the butt members, both plate and butt members being apertured for attachment to objects hinged, and pintles joining the butt members and the plate.

2. A duplex hinge comprising a central plate, apertured for attachment to an object hinged and carrying eyes on opposite edges, butt members, similarly apertured upon opposite sides of the plate and plural in number upon one side of the plate, having eyes alining respectively with the eyes upon the opposite edges of the plate and coöperating pintles connecting the eyes of the butt members and plate.

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Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."