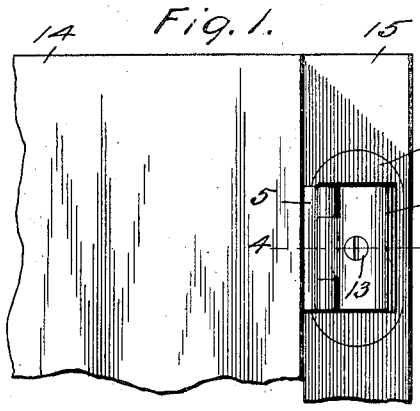
R. W. HUBBARD.

HINGE.

APPLICATION FILED APR. 1, 1914.

1,126,764. **Patented Feb. 2, 1915.**

Fig. 1.



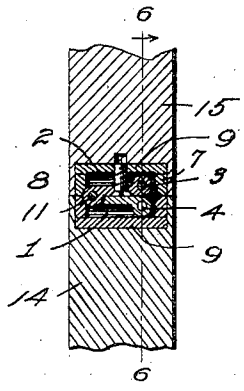


Fig. 5.

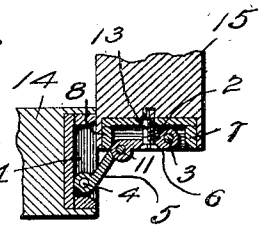


Fig. 4.

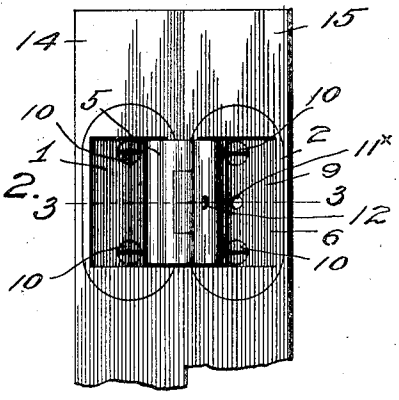
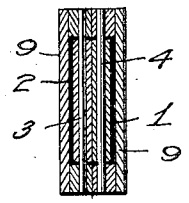


Fig. 2.

Fig. 6.



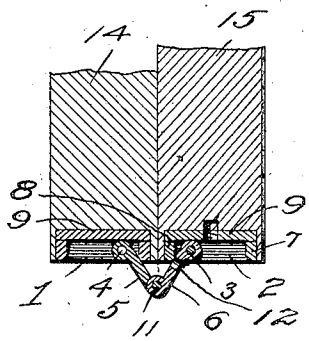


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

RICHARD W. HUBBARD, OF ASHTABULA, OHIO.

HINGE.

1,126,764. Specification of Letters Patent. Patented Feb. 2, 1915.

Application filed April 1, 1914. Serial No. 828,898.

To all whom it may concern:

Be it known that I, RICHARD W. HUBBARD, citizen of the United States, residing at Ashtabula, in the county of Ashtabula and State of Ohio, have invented new and useful Improvements in Hinges, of which the following is a specification.

My invention pertains to hinges, and it contemplates the provision of a type of hinge for use more particularly on automobile doors, pianos and the like, where it is desirable to have the hinge concealed for the purpose of neatness and appearance, yet one which may be readily removed and replaced with a new hinge and this with but a small amount of effort on the part of a person applying the same.

The invention also contemplates the provision of a hinge capable of use on the doors of buildings and especially fire doors, and is constructed and arranged so that when the door is closed it will be snugly held against the frame and thereby rendered fireproof.

Other advantageous features of my novel hinge will be readily understood and appreciated from the following description and claims when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is an elevation of my novel hinge applied to a vehicle body and the door thereof, and showing the door in its open position. Fig. 2 is an elevation of the hinge as applied to a house door, and showing the set screw removed, thereby permitting the door to swing clear around against the door frame; Fig. 2 showing the side of the hinge opposite to that shown in Fig. 1, and also showing the hinge reversed. Fig. 3 is a section taken in the plane indicated by the line 3—3 of Fig. 2, and showing the manner in which my hinge is secured in a house door and door frame. Fig. 4 is a similar view taken in the plane indicated by the line 4—4 of Fig. 1 and showing the manner in which my novel hinge is secured in the vehicle body and door thereof. Fig. 5 is a section showing the hinge, door and door frame in a closed position. Fig. 6 is a section taken on the line 6—6 of Fig. 5, showing the hinge in closed position as applied to a door and door frame.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

Among other features my novel hinge comprises the body members 1 and 2, and 3 and 4 are pintles through the medium of which the leaves 5 and 6 are pivotally connected to the said body portions 1 and 2. Each of the body members 1 and 2 are preferably of oval shape in elevation, and are provided with side walls 7 and 8, and are also provided at their back portions with a plate 9, which plate is secured to the said body members through the medium of screws that pass through said plates and into threaded apertures in the upper and lower ends of the body members 1 and 2. This is the preferred construction, but, of course, do not wish to be limited to the same. The plates 9 are provided with apertures for the reception of screws 10, which screws retain the hinge members in their proper positions in the door 14 and door frame 15. The pintles 3 and 4 take into apertures in the upper and lower forwardly extending faces of the body portion, and are retained in proper position by the said apertures.

The leaves 5 and 6 of my novel hinge are of the ordinary well known construction, being held together through the medium of a pintle 11, and in the face of one of the said leaves is an aperture 12 for the reception of a set or adjusting screw 13, which set screw serves a very important function, as will be noted hereinafter. It will be seen by reference to Fig. 2 that the body portion 2 is also provided with an aperture 11^x for the reception of the said set screw 13.

In the application of my hinge to an automobile, cab, coach and the like, where it is desirable to have a hinge that does not show when the door is in a closed position, it is simply necessary to bore two holes in the door 14 and door frame 15, cut away wood left on either side between the holes, slip the body members 1 and 2 into the recesses and then drive the screws 10 home. In doors such as automobile, cab and the like, it is desirable that the door be open only half-way or thereabout, and in other hinges for this purpose they require a leather strap or the like in connection with the door and door frame, but with my device it will be seen

that by means of the set screw 13 it is simply necessary to turn the same with a screw-driver or the like, so that it will be seated in the aperture 12 and be received by the aperture 11× of the body member, which will tend to retain the door at a right-angle position to the frame thereof when the door is in an open position. By simply loosening the screw the opening can be governed to a certain extent, and for this purpose it is also desirable to provide the leaf 5 with a beveled or swelled portion, the said beveled portion tending to cause the door to open to a slight extent when the set screw 13 is loosened.

When it is desirable to open a door clear around against the wall, as in the case of house doors or metal covered doors used as fire doors, the set screw is dispensed with entirely, and the hinge is applied upside down which allows the door to swing around to a parallel position with the casing, and at the same time when the door is closed the crack between the door and the jamb will be perfectly tight, giving fire no chance to get through between the edge of the door and the door frame. This hinge can be used as well for a double-acting door as for a single acting door, and by using one or more leaves 5 in connection with those shown in Fig. 2, I can throw the door clear around against the wall in either direction. I can also provide the door with a spring attachment either to the hinge or the door proper, and in this way make the door self-closing, and by adjusting the spring can make it not only self-closing in either direction, but in addition make it a perfect check when the door is thrown in either direction.

It will be readily appreciated from the foregoing that my novel hinge is compact and well able to withstand the rough usage to which hinges of this character are subjected, and I would also have it understood that the hinge can be made very cheaply, and applied to a door without the use of skilled labor.

I would have it understood that in the future practice of my invention such changes and modifications may be made as fairly fall within the scope of the claims appended.

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

1. The combination with the jamb of a door frame, and a door, of receptacle-shaped members open at their outer sides, said members being secured in the edges of the jamb and door and arranged flush with said edges and one of the members having a threaded aperture in its bottom, leaves arranged opposite each other and in the same plane and flexibly connected together and each flexibly secured in one of the receptacle-shaped members and relatively arranged to be swung into and out of its respective member, the leaf complementary to the member that has the threaded aperture in its bottom being provided with an aperture opposite said threaded aperture, and a headed screw removably arranged in the aperture of the leaf and the threaded aperture of the member.

2. A hinge comprising receptacle-shaped members, and leaves flexibly connected together and flexibly connected with said members; one of the leaves being constructed and arranged to be swung into and out of its complementary receptacle-shaped member, and means adjustably connecting the other leaf with its complementary receptacle-shaped member.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RICHARD W. HUBBARD.

Witnesses:
C. J. STARKEY,
W. N. SMITH.