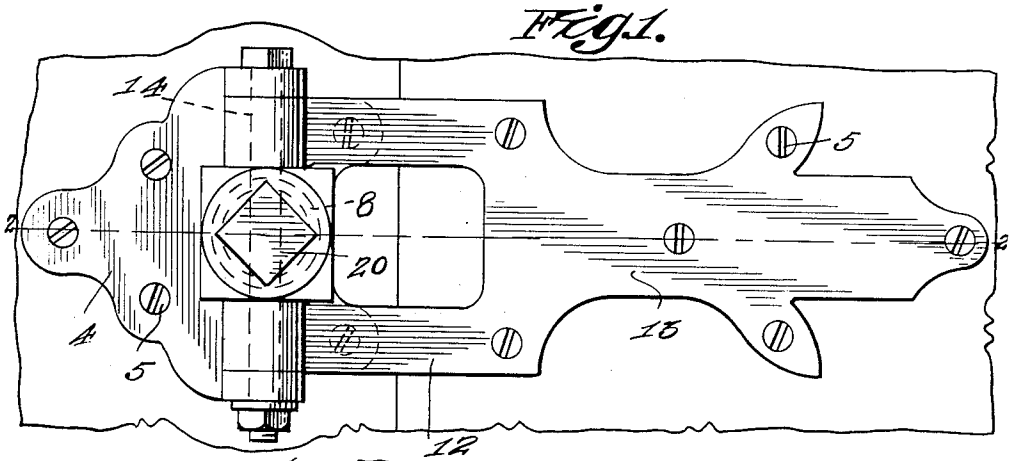
Jan. 5, 1932. E. J. REINHART 1,840,211

HINGE

Filed July 14, 1930

Fig. 1.



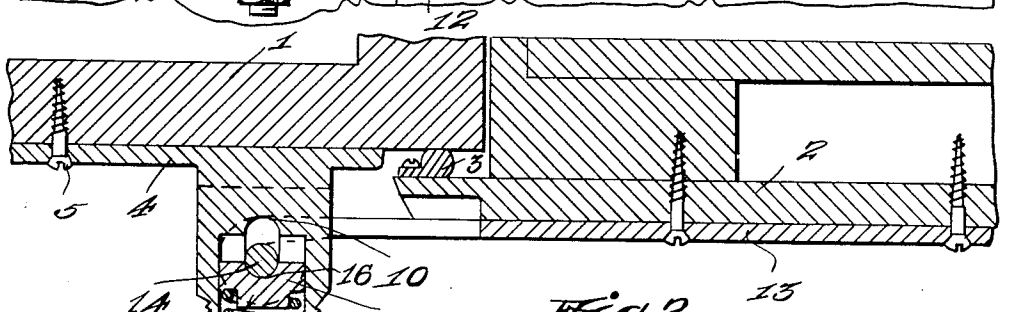


Fig. 2.

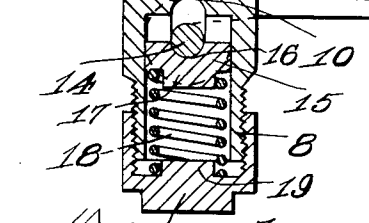


Fig. 3.

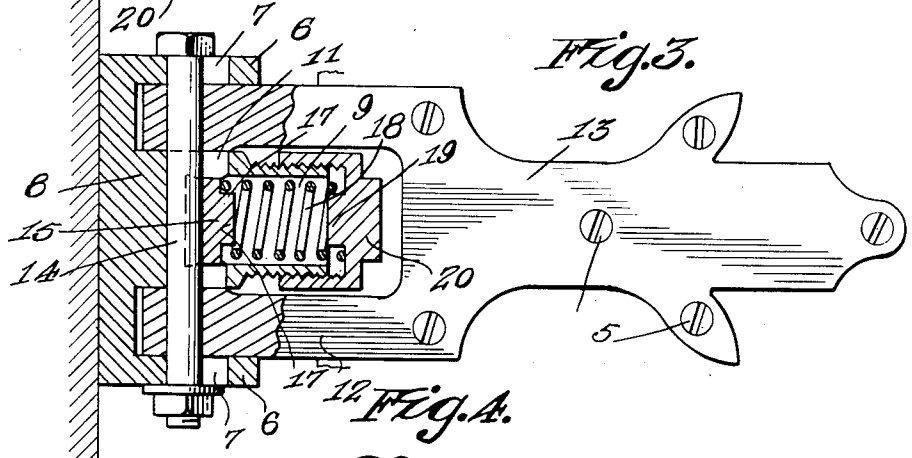
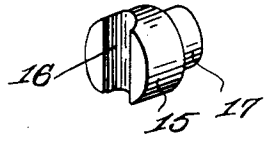


Fig. 4.



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1,840,211

UNITED STATES PATENT OFFICE

EMANUEL J. REINHART, OF CHESTER, PENNSYLVANIA

HINGE

Application filed July 14, 1930. Serial No. 467,862.

The object of this invention is the provision of a hinge construction designed for use on the doors of ice boxes or refrigerating plants of a construction whereby the door will be forced against the body of a block and a compressible bead carried by the flange of the door will be forced against such block to practically hermetically seal the plant when the door is closed.

A still further object is the provision of a hinge of this character which shall be comparatively simple and cheaply manufactured and which will perform its function with ease and accuracy.

To the attainment of the foregoing the invention consists in the improvement hereinafter described and definitely claimed.

In the drawings:

Figure 1 is a plan view of the improvement in applied position.

Figure 2 is a sectional view therethrough approximately on the line 2—2 of Figure 1.

Figure 3 is an elevation partly in section with the door swung to open position.

The body of an ice box or like refrigerating plant is indicated by the numeral 1, the same having the usual stepped opening that is closed by the door 2. In the present instance the door 2 has an outer continuous flange, upon whose inner face there is fixedly secured a compressible bead 3 which is preferably of rubber. The bead is positioned to contact with the body of the refrigerator 1.

The hinge which constitutes the improvement includes a plate 4 in the nature of a butt which is attached to the refrigerator body 1 by screws or like elements 5. The plate 4 has its upper and lower edges formed with outwardly extending ears or flanges 6, respectively, provided with centrally arranged somewhat elongated openings 7, respectively whose end walls are rounded. The plate 4, centrally between the ears 6, is integrally formed with an outstanding boss 8 which is round in cross section and which, from its outer portion, is hollow. The bore of the boss is for distinction indicated by the numeral 9 and the inner wall thereof has a central rounded vertically disposed concavity 10 disposed to aline with the openings 7 in the ears 6. The concaved wall 10 forms the inner wall of a vertical slot 11 that passes through the boss 8, the said slot, together with the groove or concavity 10 being of a length equalling that of the opening 7 in the ears 6. There is arranged between the ears the arms 12 on the bifurcated inner end of a strap plate 13 that is secured by screws to the outer face of the door 2, and a pintle 14 passes through openings in the arms 12 as well as through the alining openings 7 and 11. The openings in the arms 12 through which the pintle passes are of a size to snugly receive the pintle therethrough or in other words are not elongated as are the openings 7 and 11.

In the bore 9 there is a presser block 15 that has its outer face or head formed with a central round depression 16 to receive therein approximately one-half of the cross sectionally round pintle 14. The block 15 is round in plan and has its outer face provided with a reduced extension 17 that receives therearound one of the end convolutions of a coil compression spring 18. The second or outer convolution of the spring 18 is arranged around a lug 19 that is centrally formed on the inner face of a flanged cap 20 which is adjustably threaded on the outer and open end of the boss 8.

From the foregoing description it will be noted that the spring at all times influences the presser block 15 into frictional engagement with the pintle 14, so that when the door 2 is swung to open position the pintle will be forced against the rear walls of the openings 7 and into the groove or depression 10. The spring pressed block always influences the pintle in this direction but when the door is closed the spring will be partly compressed so that the pintle 14 will rest against or in close proximity to the outer walls provided by the openings 7 and 11. The pressure against the pintle when the door is closed is always sufficient to compress the bead 3 between the flange of the door 2 and the body of the refrigerator 1 so that the door, when closed effectively and practically hermetically seals the refrigerator.

The construction and advantages of the

improvement will be apparent to those skilled in the art to which such invention relates so that further description will not be required. Obviously I do not wish to be restricted to the specific details herein set forth and, therefore, hold myself entitled to make such changes therefrom as fairly fall within the scope of what I claim.

Having described the invention, I claim:

1. A hinge for the doors of refrigerators or the like, comprising a plate fixed to the body of the refrigerator and having outstanding ears and a boss between the ears and said boss and ears being provided with elongated alining slots, a strap plate secured on the door, and having a bifurcated end whose arms are received between the ears and the boss, a pintle passing through the ears, boss and arms and a spring influenced presser member carried by the boss and contacting with the pintle.

2. A hinge for holding a closed flanged door of a refrigerator or the like in closed position, said hinge comprising a plate which is hinged to the refrigerator and which has upper and lower outstanding ears provided with elongated slots, a central boss between the ears provided with an elongated slot which alines with those of the ears, said boss having a hollow outer portion, a strap plate secured to the door having a bifurcated portion whose arms are received between the ears and the boss, a pintle freely received through the openings in the ears and boss and snugly received through the openings in the arms, a notched presser block in the hollow boss for contacting the pintle and a spring for influencing the block into such contact.

3. A hinge for holding a closed flanged door of a refrigerator or the like in closed position, said hinge comprising a plate which is hinged to the refrigerator and which has upper and lower outstanding ears provided with elongated slots, a central boss between the ears provided with an elongated slot which alines with those of the ears, said boss having a hollow outer portion, a strap plate secured to the door having a bifurcated portion whose arms are received between the ears and the boss, a pintle freely received through the openings in the ears and boss and snugly received through the openings in the arms, a notched presser block in the hollow boss for contacting the pintle and a spring for influencing the block into such contact and adjustable means on the outer end of the boss engaging with the spring and regulating the tension thereof.

In testimony whereof I affix my signature.

EMANUEL J. REINHART.