Aug. 27, 1957 G. M. HOOPER 2,803,850

STOP HINGE

Filed Aug. 27, 1954

Fig. 1

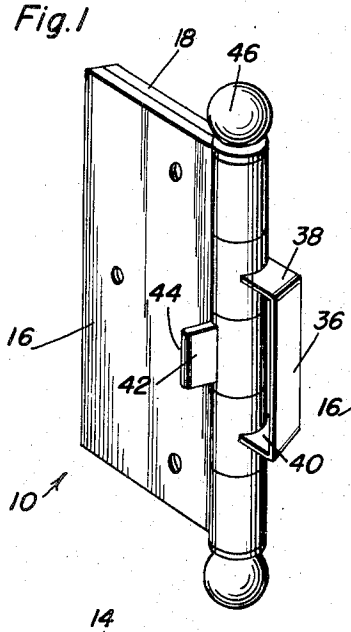


Fig. 2

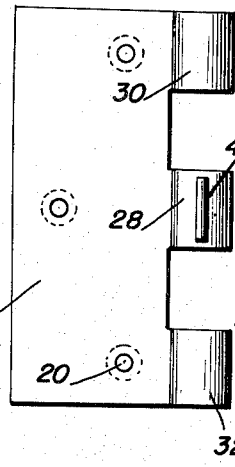
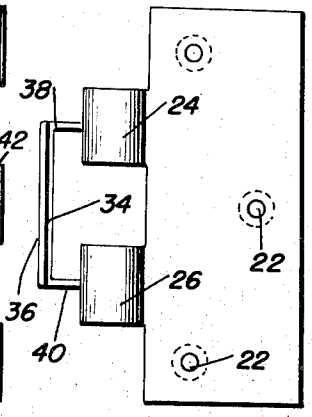


Fig. 3



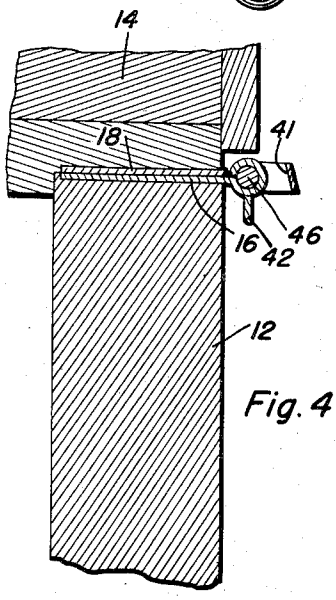


Fig. 4

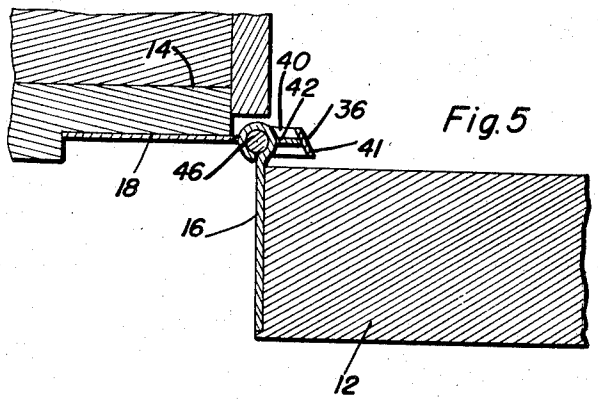


Fig. 5

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STOP HINGE

George M. Hooper, Abilene, Tex.

Application August 27, 1954, Serial No. 452,615

1 Claim. (Cl. 16—142)

This invention relates to a novel hinge for use on doors or other suitable closures for providing means for not only checking the movement of a door or closure, but for holding the door in an opened position.

The construction of this invention features a pair of hinge leaves, one of which has a substantially U-shaped stop member extending between a pair of spaced knuckles. The other of the hinge leaves has a centrally disposed knuckle adapted to be received between the pair of spaced knuckles carrying a lug adapted to engage the stop.

An object of the invention resides in the provision of a novel stop hinge which will eliminate the necessity of conventional door stops and the like.

A further object of the invention resides in the provision of a stop hinge which is adapted to perform the functions of both a hinge and a door stop.

Still further objects and features of this invention reside in the provision of a stop hinge that is strong and durable, simple in construction and manufacture, unobstrusive in appearance, and inexpensive to manufacture, thereby permitting wide distribution and utilization.

These, together with the various ancillary objects and features of the invention which will become apparent as the following description proceeds, are attained by this stop hinge, a preferred embodiment of which has been illustrated in the accompanying drawings, by way of example only, wherein:

Figure 1 is a perspective view of the stop hinge comprising the present invention;

Figure 2 is an elevational view of one of the hinge leaves incorporated in the invention;

Figure 3 is an elevational view of another of the hinge leaves;

Figure 4 is a sectional view of a door and door frame utilizing the stop hinge comprising the present invention and shown with the door in a closed position; and

Figure 5 is another sectional view similar to that of Figure 4 but showing the door in an open position.

With continuing reference to the accompanying drawings wherein like reference numerals designate similar parts throughout the various views, reference numeral **10** designates the stop hinge comprising the present invention. This stop hinge **10** is adapted to be utilized in conjunction with a door **12** and a door frame **14** to which the hinge leaves **16** and **18** are attached by suitable fasteners extending through the apertures **20** and **22** in the hinge leaves **16** and **18** and into the door **12** and door frame **14**.

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The hinge leaf **18** has a pair of knuckles **24** and **26** which are spaced from each other and adapted to receive a knuckle **28** attached to the hinge leaf **16** therebetween. Other knuckles **30** and **32** are formed on the hinge leaf **16** and adapted to overlie the knuckle **24** and underlie the knuckle **26**, respectively.

Welded or otherwise attached to the knuckles **24** and **26** and extending therebetween is a stop member **34** of substantially U-shape with the central connecting portion **36** thereof interconnecting the legs **38** and **40**. The central connecting portion **36** extends at an angle with respect to the hinge leaf **18** to form a locking surface **41**. The locking surface **41** is adapted to be engaged by a lug **42** having arcuate contact surfaces **44** so as to wedgingly receive the lug **42** therein. The lug **42** is affixed to the knuckle **28**.

A pintle **46** is provided for hingedly locking the hinge leaves together and extends through the various knuckles.

In operation, with the doors closed, the stop hinge **10** is adapted to serve as a hinge so that the door **12** may be readily moved relative to the door frame **14**. However, when the door **12** is opened to a sufficient extent, the lug **42** will be so positioned that the surfaces **44** will engage the surface **40** to wedgingly lockingly hold the door **12** in an opened position while limiting further movement of the door **12**, thereby eliminating the necessity of door stops and of door check members. The stop member **36** together with the lug **42** will therefore not only serve to stop further movement of the door, but will hold the door in an open position. When it is desired to close the door, all that is necessary is to push sharply on the door so as to release the lug **42** from the stop member **36**. The stop member **34** should be constructed of spring steel or other suitable material.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

A stop hinge comprising a pair of hinge leaves, a first of said hinge leaves having a pair of spaced knuckles, the second of said hinge leaves having another knuckle adapted to be interengaged between said pair of knuckles, a pintle extending through all of said knuckles, a substantially U-shaped stop member having legs and a central connecting portion, said legs being secured to said pair of knuckles, and a lug secured to and extending outwardly from said another knuckle, said stop member having a planar surface intersecting the arc of travel of said lug to wedgingly receive said lug.

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