J. McCULLAH.

END GATE LATCH.

APPLICATION FILED DEC. 17, 1909.

966,349. Patented Aug. 2, 1910.

FIG. 1

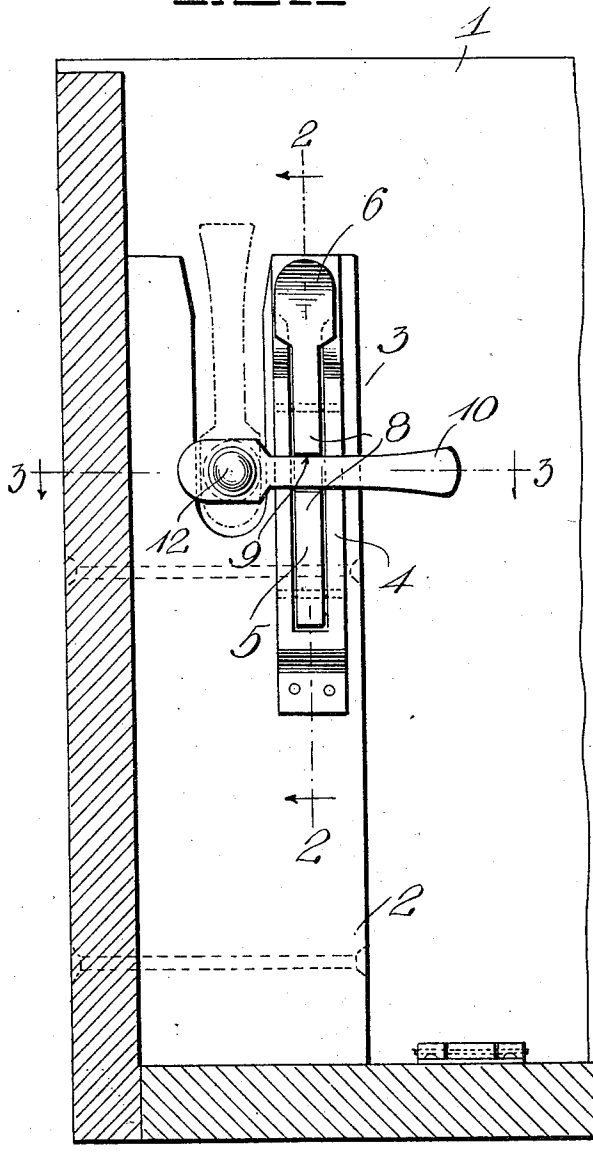


FIG. 2

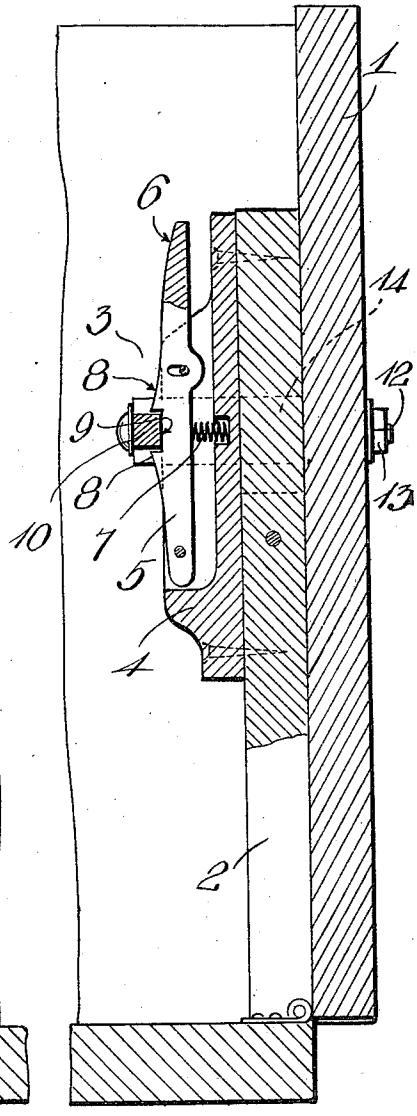
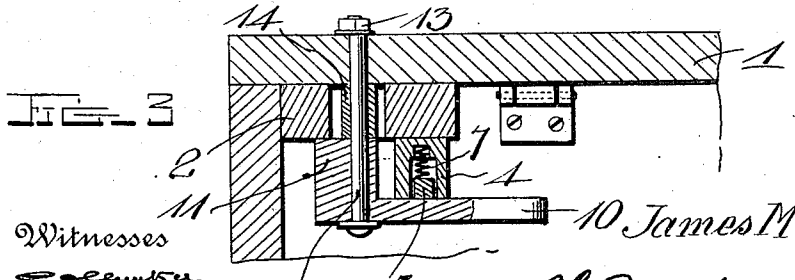


FIG. 3



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES McCULLAH, OF ALPHA, MINNESOTA.

END-GATE LATCH.

966,349. Specification of Letters Patent. Patented Aug. 2, 1910.

Application filed December 17, 1909. Serial No. 533,531.

To all whom it may concern:

Be it known that I, JAMES McCULLAH, a citizen of the United States, residing at Alpha, in the county of Jackson and State of Minnesota, have invented certain new and useful Improvements in an End-Gate Latch; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a latch device and while primarily designed and especially adapted as a latch for end gates, it is to be understood that it may be employed in any suitable connection in which a relatively removable part is to be connected with a stationary part. This latch is also adapted for use on refrigerators and analogous devices whose efficiency is dependent upon the tightness with which the doors or movable part is closed.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is an inside elevation of the end gate in raised position, illustrating the application of the latch device as a fastening for an end gate, the dotted lines indicating the position of the locking arms of the latch devices when released from the catch members. Fig. 2 is a vertical section taken through the end gate and one of the latch devices on the line 2—2 of Fig. 1, and, Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 1.

Referring to the drawings, which are for illustrating purposes only, and are therefore not drawn to scale, the numeral 1 indicates the end gate, 2 the standards to which the usual fastening means for the end gate are applied, and 3 the latch devices, one being arranged at each end of the end gate. As illustrated in the drawings, each of the latch devices comprises a hollow casing 4, in which is pivotally mounted the catch member 5 having an upper flattened terminal portion 6 forming a finger piece to provide for the convenient manipulation or depression of the catch member. A resilient member, preferably in the form of a coil spring 7, is interposed between the bottom edge and free end of the catch member and the bottom of the casing 4, the function of which is to normally hold the catch member in elevated or locking position. When the catch member is in such position, the upper edge 8 thereof, which is slightly convex and projects somewhat beyond the outer edge of the casing, is provided with a central notch or recess 9 adapted to receive the inner end of the adjacent locking arm 10. Each of the locking arms is provided with a locking head or cam 11, which is eccentrically pivoted upon a bolt 12, passing through said head, and the end gate nuts 13 screwing on the outer ends of said bolts to provide for their retention in place. Tubular spacing collars 14 are arranged on each of the bolts 12 to provide bearings for the locking heads or cams 11 and to hold said heads or cams in position to engage the inner faces of the standards when the locking arms 10 are swung into engagement with the notches of the catch members, whereby the end gate is locked in closed position.

As stated in the introductory remarks, while my improved catch device is shown and described as a fastening means for end gates, it may be employed in any other connection where a fastening device having the advantageous features of mine would be desirable.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined in the appended claims.

What is claimed as new is:—

1. A latch device of the character described, comprising a casing and latch member pivoted therein adjacent one end and having a notched outer face, a resilient element adapted to hold the free end of the latch in projected position, a locking member pivoted to swing adjacent the latch member and comprising an eccentrically mounted locking head, and a locking arm adapted to engage in the notched portion of the latch member when swung into a position at right angles thereto.

2. In combination with a stationary mem-

ber, a latch member pivoted thereto adjacent one end and having a notched outer face, a coil spring adapted to yieldingly hold the free end of the latch member in projected position, a movable member adapted to be connected with the stationary member, a locking member pivoted to the movable member to swing in the arc of a circle, and comprising an eccentrically mounted locking head adapted to engage the stationary member when the locking member is swung into closed position and a locking arm adapted to engage the notched portion of the latch member.

3. In combination with a stationary member, a latch-supporting member attached thereto, a movable member hinged to the stationary member and adapted to swing against the latch-supporting member, a casing arranged longitudinally of and upon the outer face of the latch-supporting member, a latch pivoted at one end in said casing, provided at its free end with a finger piece and in its outer face with a notch, a coil spring engaging the inner face of the latch opposite said notch, a locking member pivoted to the movable member, and comprising an eccentrically mounted locking head adapted to engage the latch-supporting member when the movable member is swung into closed position and a locking arm extending from one end of the locking head and adapted to engage in the notched portion of the latch member when swung across the casing.

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

JAMES McCULLAH.

Witnesses:
J. S. Crawley,
Wm. H. Moore.