

July 15 , 1924.

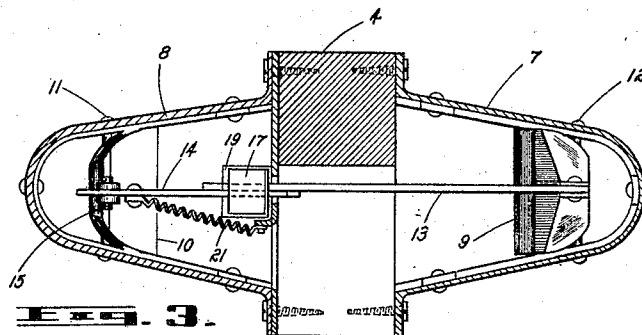
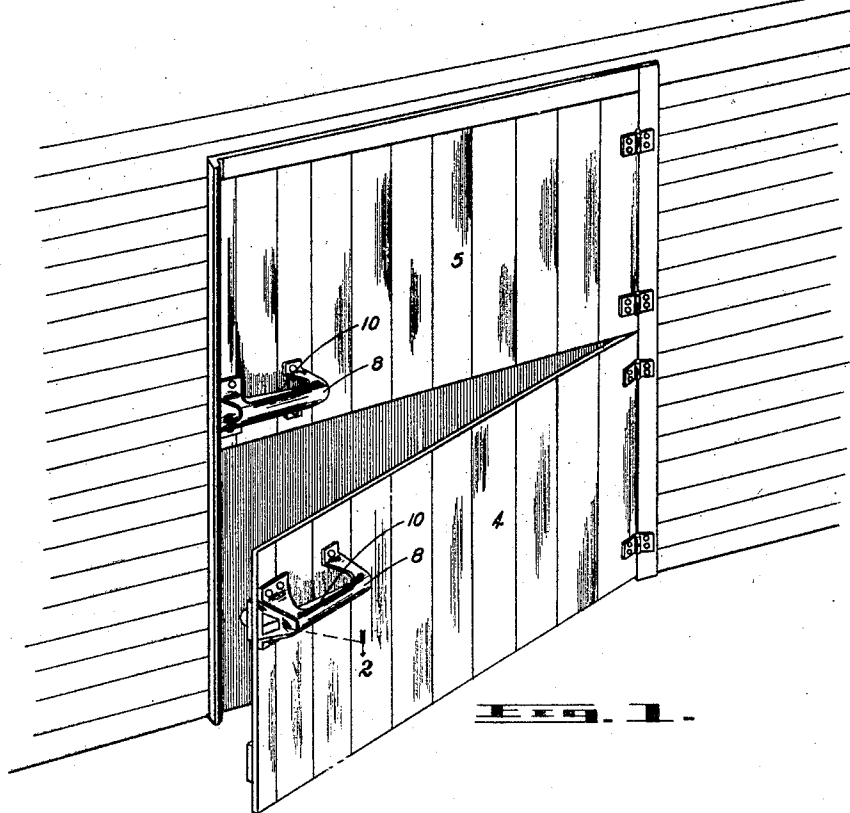
S. R. FERGUSON

1,501,208

DOOR LOCK

Filed Aug. 1, 1921

2 Sheets-Sheet 1



INVENTOR
SAMUEL R. FERGUSON
BY *E. A. Bond*
ATTORNEY

July 15, 1924.

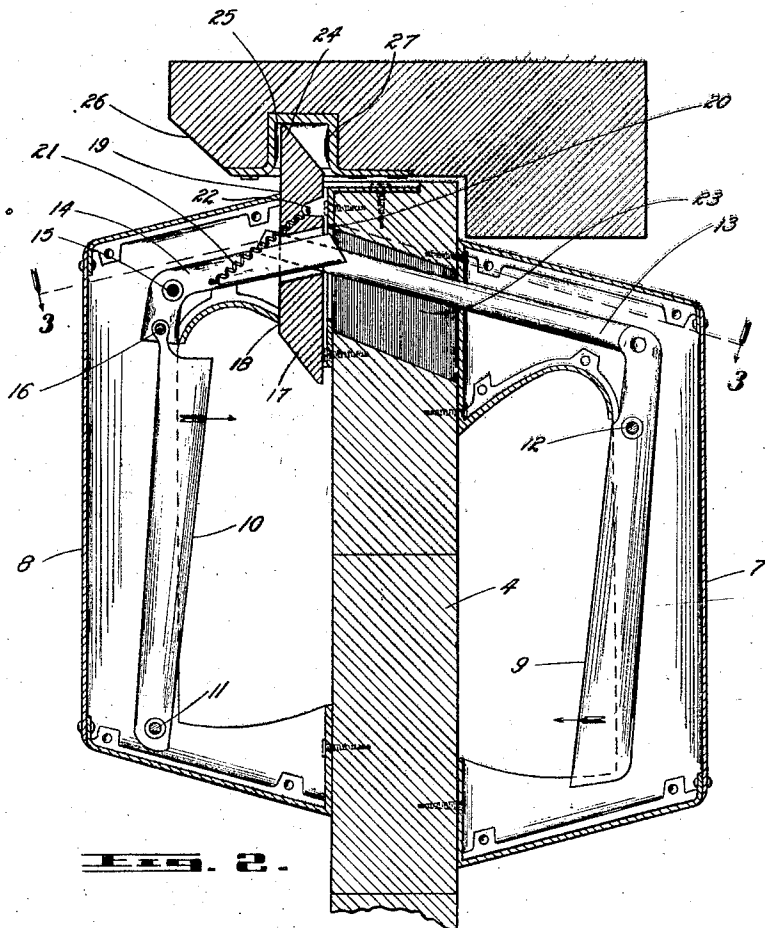
S. R. FERGUSON

1,501,208

DOOR LOCK

Filed Aug. 1, 1921

2 Sheets-Sheet 2



INVENTOR
STANLEY R. FERGUSON
BY *E. M. Bond*
ATTORNEY

Patented July 15, 1924.

1,501,208

UNITED STATES PATENT OFFICE.

STANLEY R. FERGUSON, OF ABERNETHY, SASKATCHEWAN, CANADA.

DOOR LOCK.

Application filed August 1, 1921. Serial No. 488,989.

To all whom it may concern:

Be it known that I, STANLEY R. FERGUSON, a citizen of the Dominion of Canada, residing at Abernethy, in the county of Saltcoats and Province of Saskatchewan, Canada, have invented certain new and useful Improvements in Door Locks, of which the following is a specification.

The present invention relates to automatic door locks. The principal object is to provide a simple and compact device of the character described which will automatically lock when the door on which it is positioned is closed.

A further object is to provide a lock of the character described which may be disengaged from the door frame by a straight pull exerted on the said door lock.

A further object is to provide a device of the character described which cannot be opened by animals.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts as will be hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereunto appended.

Figure 1 is a perspective view illustrating my improved door lock embodied on a pair of barn doors.

Figure 2 is a transverse vertical section taken on line 2—2 of Figure 1 and illustrating the construction of my improved door lock.

Figure 3 is a transverse cross section taken on line 3—3 of Figure 2.

Referring to the drawings, like numerals designate like parts in the various drawings.

The numerals 4 and 5 illustrate the doors on which my improved lock is positioned. 6 indicates the door frame. Referring to the lock member, the numerals 7 and 8 indicate the outer casing and have handles 9 and 10 pivotally connected in them by pivots 11 and 12. Lever 13 is secured to the pivot handle member 9. Lever 14 is fulcrumed on the pivot 15 and is pivotally connected at 16 to the handle member 10. The latch member 17 is preferably square and has its ends configured angularly as indicated diagrammatically. Apertures 18 and 19 are positioned in the outer casing 8 through which the latch member 17 reciprocates. The latch member 17 is actuated by the handles 9 and 10 by means of the levers 13 and 14 which

pass through an aperture 20 configured in the same, more clearly illustrated in Figure 2. Normally, the latch member 17 is in projecting position from the casing 8. Retractable spring 21 is connected on one end to a projecting lug 22 and at its opposite end to the lever 14. This retractile spring is functioned to tension the lever arm upwardly and this lever arm 14, being pivotally connected to the handle 10, tensions the said handle inwardly in the direction of the indicating arrow. The lever member 14 passing through the aperture 20 in conjunction with the lever 13 also tensions the handle 9 inwardly, as indicated by the indicating arrow. To permit movement of the lever arm 13, an opening 23 is positioned in the door through which the said lever passes. The angular end 24 of the latch member engages with a pocket 25 positioned in the door frame.

When the door is in open position and it is desired to lock the same, the door is first closed and the angular end 24 of the latch member strikes against the angular configuration 26 in the door frame. The angular end 24 causes the latch member 17 to slide backward into the casing 8. When the latch member passes the abutment 27 in the pocket member 25, the retractile spring 21 throws the latch member 17 forward, engaging the same in the pocket member 25.

When it is desired to open the door from the interior, the handle member 9 is grasped and an outward tension exerted on the same. The lever member 13, being secured to the handle member 9, actuates with it simultaneously and the latch member 17 is drawn inward by the downward stroke of the lever member 13.

When it is desired to open the door from the exterior, a tension is exerted on the handle member 10 and the same being pivotally connected to the lower end of the lever imparts a simultaneous downward movement on the same, thus drawing the latch member 17 inwardly and disengaging the same from the pocket member 25.

From the foregoing, it is thought that the construction of my invention will be clearly understood, and, therefore, a more extended explanation has been omitted.

What I claim as new is:

1. A door lock of the character described comprising primary and secondary outer casings, handle members pivotally mounted in the said primary and second-

ary outer casings, a latch member engageable with a pocket in the door frame and reciprocal in the said primary outer casing, means slidable through said latch member and engaging the said latch member with the said handle member.

2. A door lock of the character described comprising primary and secondary outer casings, handle members pivotally connected in the said primary and secondary outer casings, a latch member engageable with a pocket in the door frame and reciprocal in the said primary outer casing, means slidable through said latch member and engaging the said latch member with the said handle member and means whereby the said latch member will normally project from the said primary outer casing.

3. A door lock of the character described comprising in combination primary and secondary outer casings, a handle pivotally connected at one end in the said primary casing, a lever member fulcrumed intermediate its ends and pivotally connected on one end to the said handle member, a handle member fulcrumed intermediate its ends in the said secondary casing, a lever substantially mounted on its upper end, the said lever members slidable through and engageable

with the latch member reciprocally positioned in the said primary outer casing and means exerting an outward tension on the said lever.

4. A door lock of the character described comprising in combination primary and secondary outer casings, a handle pivotally connected at one end in the said primary casing, a lever member fulcrumed intermediate its ends and pivotally connected on one end to the said handle member, a handle member fulcrumed intermediate its ends in the said secondary casing, a lever substantially mounted on its upper end, the said lever members engageable with the latch member reciprocally positioned in the said primary outer casing and means exerting an outward tension on the said lever, said means comprising a retractile spring connected at one end to a relatively fixed member and on its opposite end to the first mentioned said lever.

In testimony whereof, I hereunto affix my signature in the presence of two witnesses.

STANLEY R. FERGUSON.

Witnesses:

N. B. WILLIAMS,

BARBARA S. WILLIAMS.