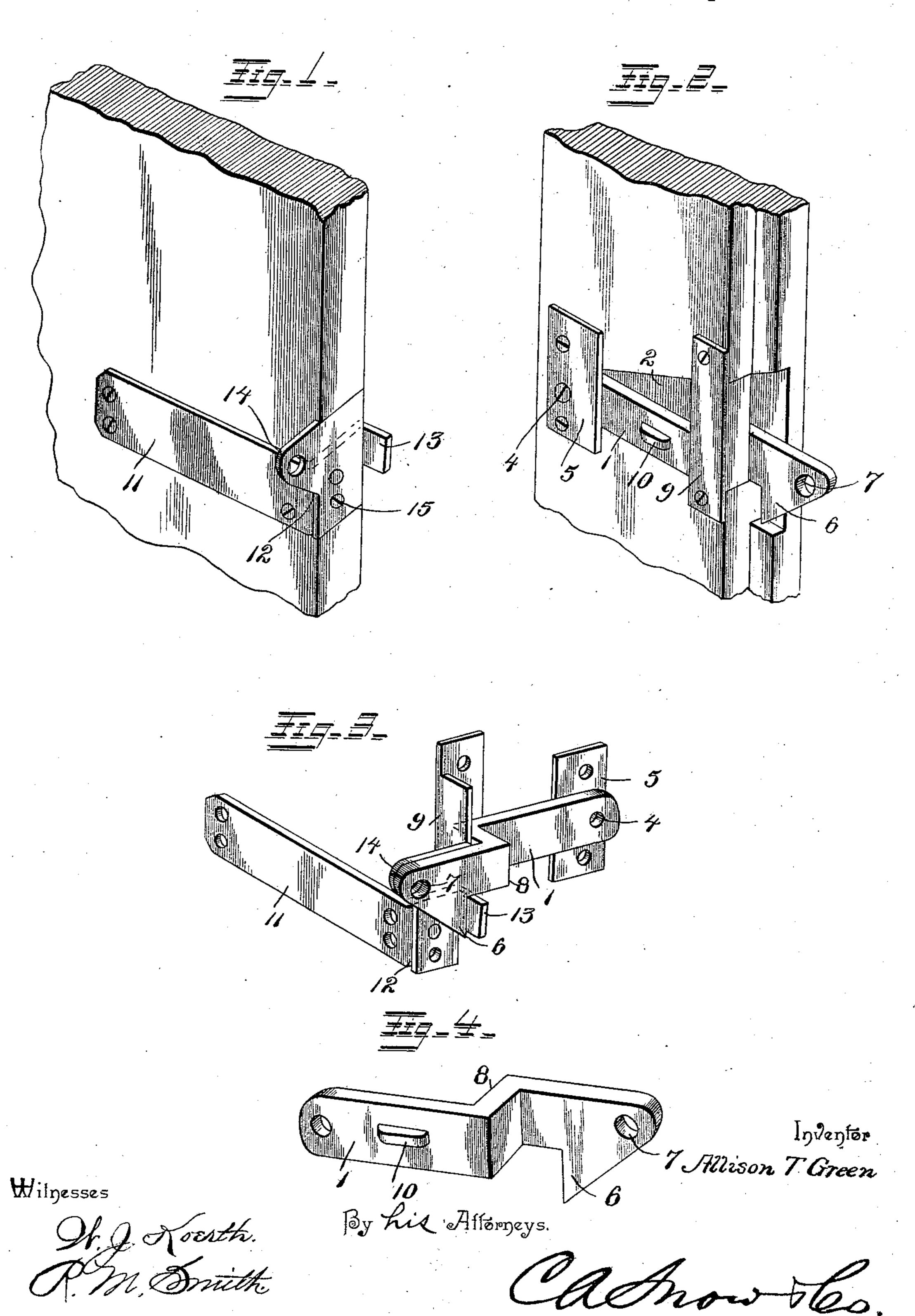
(No Model.)

A. T. GREEN. DOOR LATCH.

No. 557,578.

Patented Apr. 7, 1896.



United States Patent Office.

ALLISON T. GREEN, OF JEWELL CITY, KANSAS, ASSIGNOR OF ONE-HALF TO JAMES F. KELSEY, OF SAME PLACE.

DOOR-LATCH.

SPECIFICATION forming part of Letters Patent No. 557,578, dated April 7, 1896.

Application filed April 11, 1895. Serial No. 545,359. (No model.)

To all whom it may concern:

Be it known that I, Allison T. Green, a citizen of the United States, residing at Jewell City, in the county of Jewell and State of Kansas, have invented a new and useful Door-Latch, of which the following is a specification.

This invention relates to an improvement in door-latches.

The object of the invention is to simplify and improve the construction of devices of this nature, and to provide a latch which shall be especially adapted for use in connection with barn-doors or the doors of stables, &c., in which live stock is kept.

One of the principal objects of this invention is to produce a strong and durable latch the construction and arrangement of which shall be such that it cannot be operated by the stock rubbing against the same.

A further object of the invention is to construct and attach the latch mechanism in such manner that the same may be locked by means of the usual padlock, to which no strain shall be applied by reason of the stock pressing against the door, as is the case with latches as ordinarily constructed.

To accomplish the objects above mentioned, the present invention consists in certain novel 30 features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a door, showing the keeper-plate and perforated face-plate secured thereto. Fig. 2 is a similar view of a portion of a door jamb or casing with certain parts of my improved latch mechanism applied thereto. Fig. 3 is a perspective view of the pivoted latch and keeper in operative relation. Fig. 4 is a detail perspective view of the pivoted latch.

Similar numerals of reference indicate cor-45 responding parts in the several figures of the drawings.

Referring to the drawings, 1 indicates a pivoted latch which is adapted to be mounted in a mortise or recess 2 in the inner face of a door jamb or casing 3. The latch 1 is perforated at its rear end to receive a pin or

screw 4 passing through a fulcrum-plate 5 of any preferred form secured to the door jamb or casing and striding said mortise or recess. At its forward end said latch is provided with 55 a downwardly-extending catch-lip 6 adapted to engage a keeper on the door. The forward end of the latch is inclined and rounded off, as shown, and also provided with a perforation 7, the purpose of which will appear. In 60 close proximity to the forward end of said pivoted latch the latter is given two right-angle bends, as indicated, the object of which is to form a shoulder or stop 8, which is adapted to abut against a retaining plate or guard 9, 65 which is substantially L-shaped in cross-section and secured to the front corner of the door jamb or casing. It will be apparent that as the latch is drawn forward, the shoulder or stop 8 will come in contact with the retain- 70 ing-plate 9, which thereby takes the strain off the fulcrum-pin 4. The latch is also further provided upon its inner face with a thumbpiece 10, by means of which the latch may be raised from the inside.

11 designates a keeper-plate, which is secured to the outer face of the door and provided at one end with a right-angle bend 12 and an extension lip or catch 13, which is adapted to engage the outer end of the latch 80 when the door is closed. A face-plate 14 is riveted or otherwise secured to the keeperplate 11 adjacent to the bend 12 therein, and both the face-plate and the keeper-plate are provided with horizontally-alining perfora- 85 tions 15 for the reception of a screw passing into the edge of the door. The face-plate is further provided with an outward extension in line with and substantially of the same shape as the advance end or nose of the piv- 90 oted latch 1. This outward extension of the face-plate 14 is perforated in horizontal alinement with the perforation 7 in the latch, adapting a padlock to be engaged therewith for locking the door in closed position.

From the foregoing description it will be apparent that when a padlock is engaged with the alining perforations in the front end of the latch and the outward extension of the face-plate 14, the latch cannot be lifted, and 100 when the door is pressed outwardly by reason of strain brought to bear upon the inside

of the door, by reason of the shoulder or stop 8 on the latch coming in contact with the retaining-plate 9, all strain will be removed from the fulcrum-pin 4 of the latch, thus affording a very strong, durable, and reliable latch. By reason of the forward end of the latch projecting only slightly beyond the face of the door and the forward edge of the door jamb or casing, and by reason of the presence of the outward extension of the face-plate 14 in horizontal line with said latch, it will be next to impossible for the stock to operate or lift said latch by rubbing against the same.

The construction of latch herein described is also very useful for hay-doors, as it is capable of being readily and easily manipulated from the outside as well as the inside.

The various parts of the latch mechanism are so simple that they may easily be made from wrought-iron, although of course they may be cast, if preferred, or formed in any usual manner.

It will be apparent that 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 this invention.

Having thus described the invention, what is claimed as new, and desired to be secured

1. The herein-described latch for swinging doors comprising a metal latch proper arranged within a facial mortise in the inside surface of a door-jamb and pivoted at its rear end therein and provided at its forward swinging end with a projecting nose portion reaching beyond the plane of the outer face

of the door, in combination with a keeperplate secured directly to the swinging edge of the door, a catch-lip arranged in the plane 40 of the rear face of the door and adapted to be engaged by said latch, and a forward extension of said keeper-plate corresponding in shape to and arranged in alinement with the nose portion of the latch, said extension and 45 latch-nose being the only portions of the device which extend in front of the plane of the front face of the door, substantially as described.

2. The herein-described latch for swinging 50 doors pivoted at one end to the door-jamb and extending in a plane parallel to the inner surface thereof and provided at its opposite or swinging end with a projecting nose portion and formed intermediate its ends with a 55 right-angled bend forming a longitudinal stop or shoulder, in combination with a retainingplate L-shaped in cross-section and secured to the corner of the jamb or casing to which the latch is pivoted in such manner as to en- 60 gage the transverse bend in the latch, and an independent keeper secured to the door and formed with an extension corresponding in shape to and arranged in alinement with the nose portion of the latch, substantially as and 65 for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALLISON T. GREEN.

Witnesses:

F. R. FORREST, R. HENNINGER.