No. 792,966. PATENTED JUNE 20, 1905.

C. COLEMAN & A. N. GREGORY.

DOOR FASTENER.

APPLICATION FILED SEPT. 3, 1904.

Fig 1

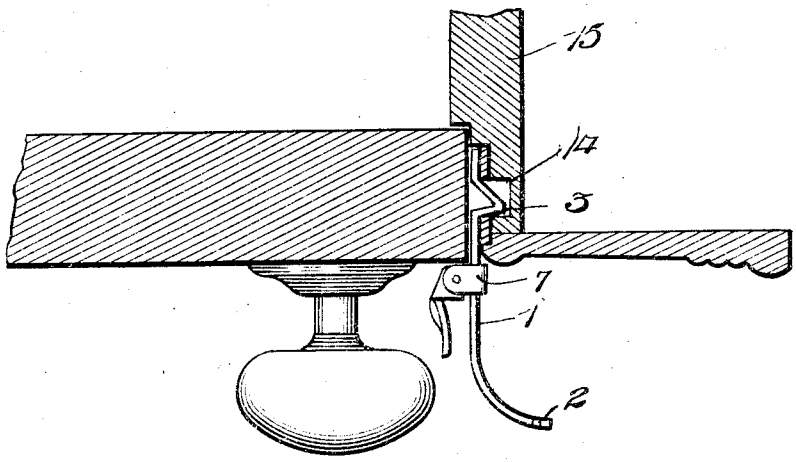



Fig 2.

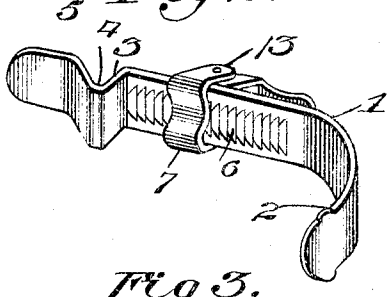
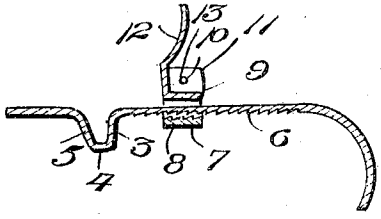



Fig 3.




Witnesses

Phil E. Barnes.

H. Allen

Inventors

Charles Coleman

Alton N Gregory.

By Victor J. Evans

Attorney

No. 792,966. Patented June 20, 1905.

# UNITED STATES PATENT OFFICE.

CHARLES COLEMAN AND ALTON N. GREGORY, OF INDEX, WASHINGTON.

## DOOR-FASTENER.

SPECIFICATION forming part of Letters Patent No. 792,966, dated June 20, 1905.

Application filed September 3, 1904. Serial No. 223,294.

*To all whom it may concern:*

Be it known that we, CHARLES COLEMAN and ALTON N. GREGORY, citizens of the United States, residing at Index, in the county of Snohomish and State of Washington, have invented new and useful Improvements in Door-Fasteners, of which the following is a specification.

The invention relates to an improved door-securer; and it consists, essentially, in an arm arranged to engage the keeper-socket of a door-casing and a sliding stop or catch movable on said arm and provided with means for locking it against movement.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a view illustrating the application of our improved door-securer, the portions of the door and casing shown being in section. Fig. 2 is a perspective view of the door-securer. Fig. 3 is a central longitudinal section of the same.

Referring to the drawings, our improved door-securer comprises an arm 1, preferably of sheet metal, laterally curved at its forward end and provided near said end with ears 2, projecting from the upper and lower edges. Near the rear end the arm is bent into an approximately right-angled direction, as at 3, then rearwardly in a plane parallel with the plane of the arm, as at 4, then from said portion 4 toward the normal plane of the arm, as at 5, then projected rearwardly in a plane with the main length of the arm, the portion 5 being at an incline to the main plane of the arm. This structure provides a recess in one face of the arm, which recess has a forward wall projecting at right angles to the body of the arm and a rear wall at an incline to said body. On the rear face the arm is provided intermediate its upper and lower edges with a series of serrations or teeth 6.

The movable catch arranged for coöperation with the arm comprises a strap member 7 of a size to loosely engage the arm, the terminals of member 7 projecting at right angles to its base portion, as clearly shown in the drawings. On the inner surface the base member is provided with a series of teeth 8, arranged for operative engagement with teeth 6.

The locking-cam comprises a body portion having a rear wall 9 and side walls 10, the lower edges of which side walls are rounded, as at 11, for a purpose hereinafter mentioned. The cam is preferably provided with a handle portion 12, projecting forward and normally lying in a plane above the plane of the arm 1. The cam when secured in place is positioned between the terminals of strap member 7, being pivotally secured thereto by a transversely-arranged pin 13, connection being so arranged that when the cam-surfaces 11 are forced in contact with the front surface of arm 1 the teeth 8 on the strap member will be brought into engagement with the teeth 6 on the arm, locking the catch and arm together. In this position of the parts it will be noted that the rear wall 9 of the locking-cam projects at a right angle to the body of the arm to form the stop to limit the movement of the door, as hereinafter mentioned.

It is understood, of course, that the strap member 7 is of such dimension as to embrace the arm 1, but be prevented from being entirely disconnected from the arm by the projecting ears 2.

In operation the securer is positioned by inserting the laterally-projecting portion into the keeper-recess 14 of the door-casing 15 and the door swung into closed position, the latch of the door entering the recess in the arm and holding the same against lateral displacement, while the right-angled portion 3 of the arm projection bears against the forward wall of the keeper-recess and prevents forward movement of the arm. The movable catch is now adjusted lengthwise the arm to contact with the door and the locking-cam turned down into locking position, causing teeth 8 of the strap to engage teeth 6 on the arm. In this position it will be noted that the rear wall 9 projects across the face of the door and prevents movement of the same toward the catch. The rear wall 9 of the locking-cam serves another important function in that after disengaging teeth 6 and 8 by turning the locking-cam on its pivot, so that the rear wall 9 rests

parallel with the body of the arm, the movable catch is pressed laterally to bring said rear wall 9 into engagement with the plane or smooth surface of the arm 1. This movement insures a complete separation of the teeth 6 and 8, and as the surfaces of arm 1 and wall 9 are smooth the catch may be readily moved to any desired position, as will be evident.

By providing the recess in the arm with an end wall 4 of some length, rather than meeting walls 3 and 5 to form the base of the recess, we are enabled to guard against sticking of the latch when in place in the recess, which sticking would have a tendency to withdraw the latch and arm from the keeper on opening the door. This we avoid by forming the recess with a base-wall of some length.

It will be seen that the recess provides an offset or stop extending laterally of the bar near its rear end and that the forwardly-curved end of the bar provides a support along which the catch may be moved until brought into engagement with the ears 2, in which position the catch will be entirely out of the way of the opening door.

Having thus described the invention, what is claimed as new is—

A door-securer comprising a bar provided with an offset near its rear end and provided on one face with a series of teeth, and a catch comprising a strap embracing the bar and consisting of a base disposed on the toothed side of the bar and formed with coacting teeth and right-angled portions extending above and below the bar to the opposite side thereof, and a locking-cam pivoted to said right-angled portions of the strap and lying on the opposite side of the bar from said toothed base and having a rear wall disposed at right angles to its cam-face to form a stop when the catch is in locked position, and a guide for the movement of the catch when unlocked.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES COLEMAN.
ALTON N. GREGORY.

Witnesses:
F. E. BRIGHTMAN,
A. J. FREMONT.