

O. F. FAGERSTROM.  
Door-Securers.

No. 152,835.

Patented July 7, 1874.

Fig: 1.

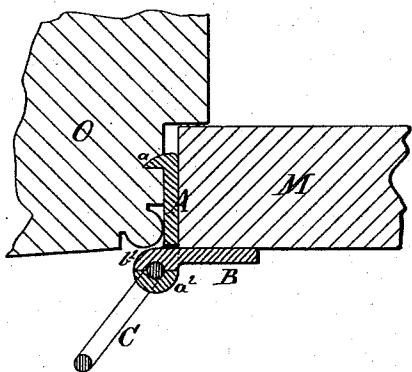


Fig: 2.

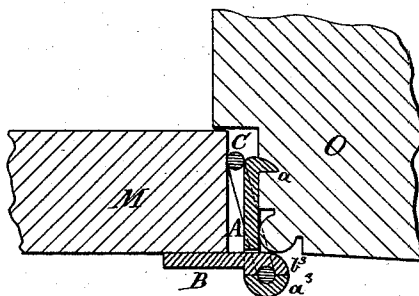


Fig: 3.

Fig: 4.

Fig: 5.

Fig: 6.

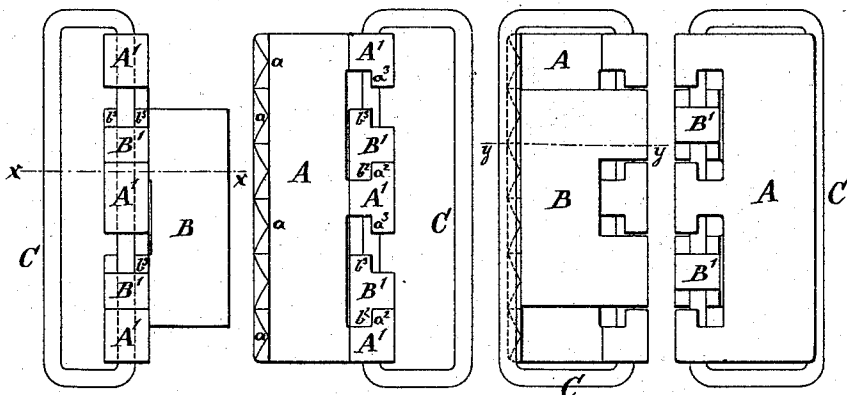
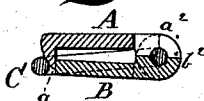


Fig: 7.



Witnesses;

Inventor;

*Arnold Hermann*

*Wm C. Dey*

*O. F. Fagerstrom*

by his attorney  
*J. D. Stetson*  
New York City

# UNITED STATES PATENT OFFICE.

OSCAR F. FAGERSTROM, OF NEW YORK, N. Y.

## IMPROVEMENT IN DOOR-SECURERS.

Specification forming part of Letters Patent No. **152,835**, dated July 7, 1874; application filed April 11, 1874.

*To all whom it may concern:*

Be it known that I, OSCAR F. FAGERSTROM, of New York city, in the State of New York, have invented certain Improvements in Door-Fasteners, of which the following is a specification:

It is a folding device adapted to be carried in the pocket, provided with a sharp edge, preferably toothed, which engages in the door-casing, and with a hinged part so connected thereto that it may, by a simple endwise movement, be made to turn easily on the center of motion as a hinge, or may be made to lock firmly therewith, and form an inflexible angle. The third hinged or movable piece serves the double functions of covering the teeth, and thus causing them to induce no injury in the pocket, and of thickening the device when required, so as to better fill the joint indoors which have become shrunken.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of this specification.

Figure 1 is a horizontal section, showing the edge of a door and the adjacent casing with my device in position for locking. This shows its application to a right-handed door. Fig. 2 is a corresponding section, showing its application to a left-handed door. In this figure the joint between the door and the casing is represented wider than in the other, giving an opportunity to show one of the uses of what I term the loop. It practically increases the thickness of the portion which applies in the space between the door and the casing. It will be understood that the loop will serve in the same manner when applied in a right-handed door, as in Fig. 1, provided the joint there is wide, so as to require it. The remaining figures represent the device alone, out of connection to the door. Figs. 3 and 4 show it in its locked condition, the condition in which it holds a door firmly fastened when properly applied thereon. Fig. 3 is a view in the plane of the portion which fits into the joint of the door. The other principal folding part stands out at right angles thereto. Fig. 4 is a view of the same in the plane of the other principal part. The part

which enters the door is here in full view, with its teeth toward the eye. Figs. 5 and 6 represent the device in its closed position, adapted for the pocket. Fig. 5 shows one face of the closed door-fastener, and Fig. 6 the other face. Fig. 7 is a section on the line *yy* in Fig. 5.

Similar letters of reference indicate like parts in all the figures.

The door is indicated by M, and the casing by O. The three parts of my door-fastener are indicated, respectively, by A, B, and C. Further marks will be used when necessary to indicate the portions of the respective parts. The part A is the largest, and may be termed the principal part. It is adapted to enter the joint between the door and the casing, and extend sufficiently deep therein to take a firm hold of the wood by means of its teeth *a*. The other edge is formed with stout bosses *A*<sup>1</sup>, which are shouldered, as indicated by *a*<sup>2</sup> *a*<sup>3</sup>, to engage, respectively, with corresponding shoulders on the other principal part, according as the device is applied on right-handed or left-handed doors. B is the other principal part, and may be in any convenient form. I have represented it as rectangular, and having less length or height than the part A; but this is not essential. The bosses *B*<sup>1</sup>, which are on one edge, are formed with shoulders, marked, respectively, *b*<sup>2</sup> *b*<sup>3</sup>. The bosses *B*<sup>1</sup> on the part B match between the bosses *A*<sup>1</sup> on the part A, and allow it to turn freely, except when the part B is so placed as to cause the shoulders to engage. The part B may be changed in position endwise, so as to allow it to be turned freely, or to engage and be locked stiffly at a right angle with the part A, as desired. The stout wire C, which constitutes the axis of motion, is prolonged around in the form of a nearly rectangular loop, the length of which is a little greater than that of the part A, and its width just sufficient to match against the exterior beveled faces of the teeth *a* when the device is closed. The width of the part B should be just sufficient to come within the lines of the teeth *a* when the device is closed, so that thus conditioned it assumes a very compact form for the pocket.

In applying the device it is unfolded, and, the parts C and B being turned out of the way,

the part A is placed in the proper position on the door-frame. On closing the door the teeth are forced home. If on trial it is found that the joint of the door is too open to effect this, the loop C is turned around into the position shown in Fig. 2. If not, it is allowed to remain idly outside, as shown in Fig. 1. After the door is fully closed, the part B is turned around into the position shown in these figures, and is moved endwise to cause the shoulders to engage.

It is obviously preferable that the gravity of the part B shall tend to hold the shoulders engaged, as otherwise a prolonged shaking or agitation of the confined door might release it. To this end I provide the device with the two sets of shoulders, the shoulders  $b^2$  on the part B engaging with the shoulders  $a^2$  on the part A when the device is applied to a right-handed door, and the shoulders  $b^3$  engaging with the shoulders  $a^3$  when applied to a left-handed door. I attach much importance to these duplicate sets of shoulders or equivalent means for engaging the parts firmly when the device is applied either side up, as is required

in using the same device on the two arrangements of the doors.

The teeth  $a$  may be variously formed, or they may be a continuous edge, adapted to engage with the door.

I claim as my invention—

1. The door-fastener described, having two parts, A B, hinged together, with locking faces or shoulders  $a^2 b^2$  and  $a^3 b^3$ , adapted to lock and unlock by an end motion, as herein specified.

2. In combination with the hinged parts A B, adapted to lock and unlock, as specified, the loop C, performing the double function of guarding the teeth  $a$  when in the closed condition, and of increasing the thickness of the part A when required in use, as herein specified.

In testimony whereof I have hereunto set my hand this 10th day of April, 1874, in the presence of two subscribing witnesses.

OSCAR F. FAGERSTROM.

Witnesses:

WILLIAM C. DEY,  
ARNOLD HÖRMANN.