

(No Model.)

C. E. RICE.

DOOR STRIP.

No. 254,694.

Patented Mar. 7, 1882.

Fig. 1.

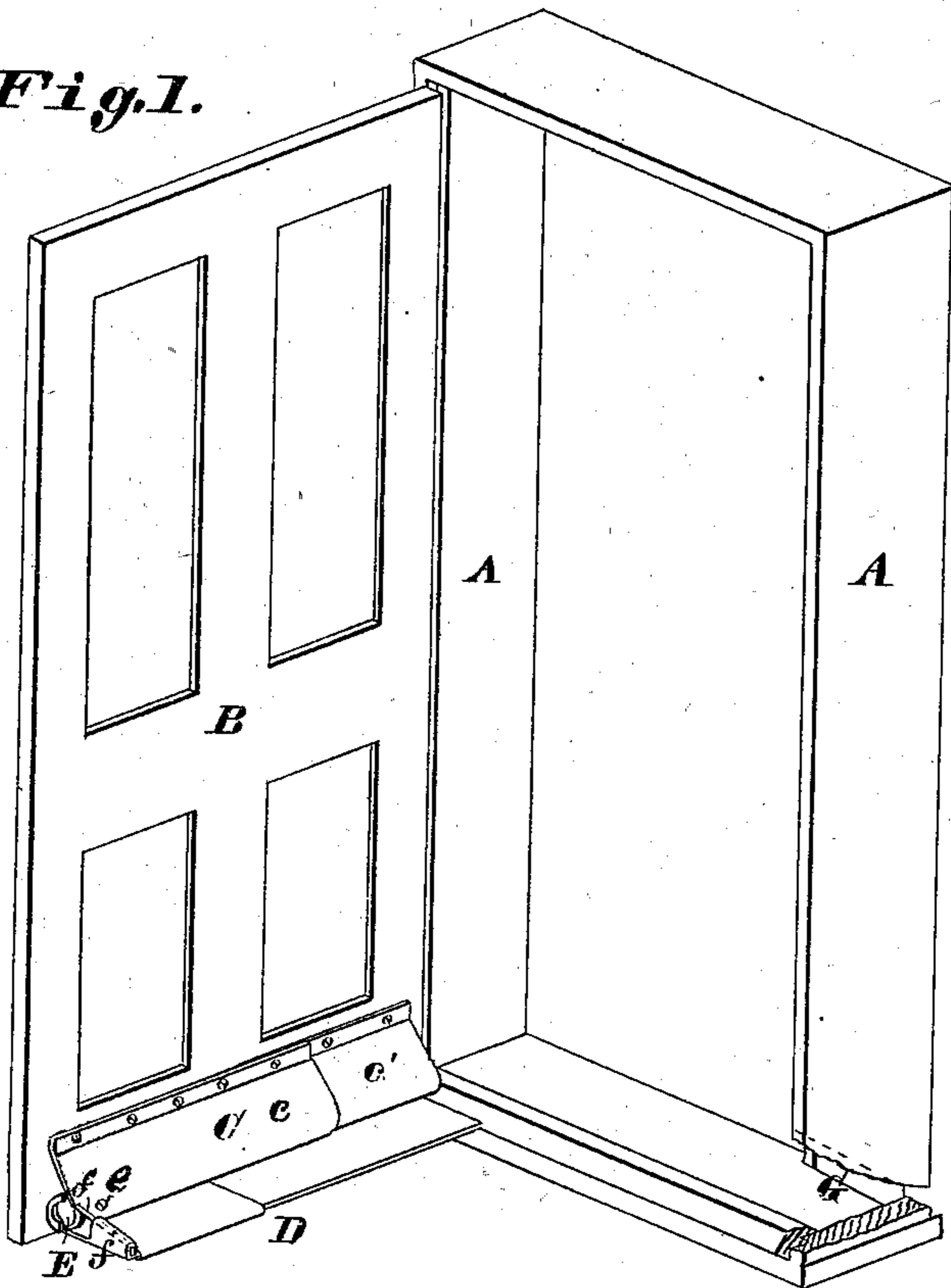


Fig. 2.

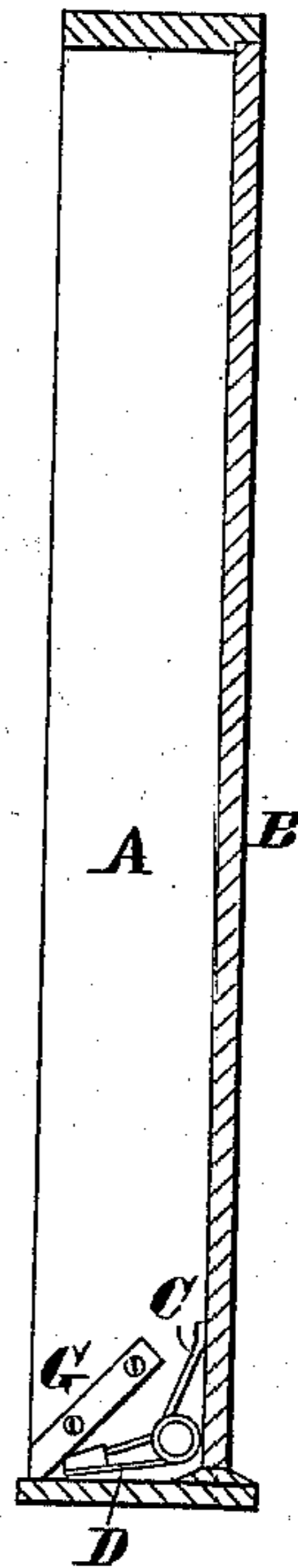


Fig. 4

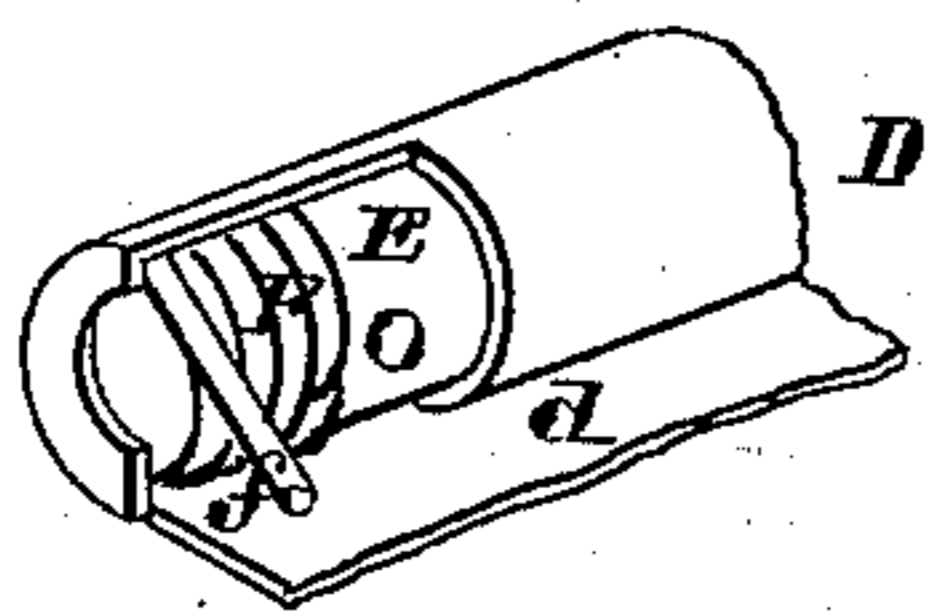
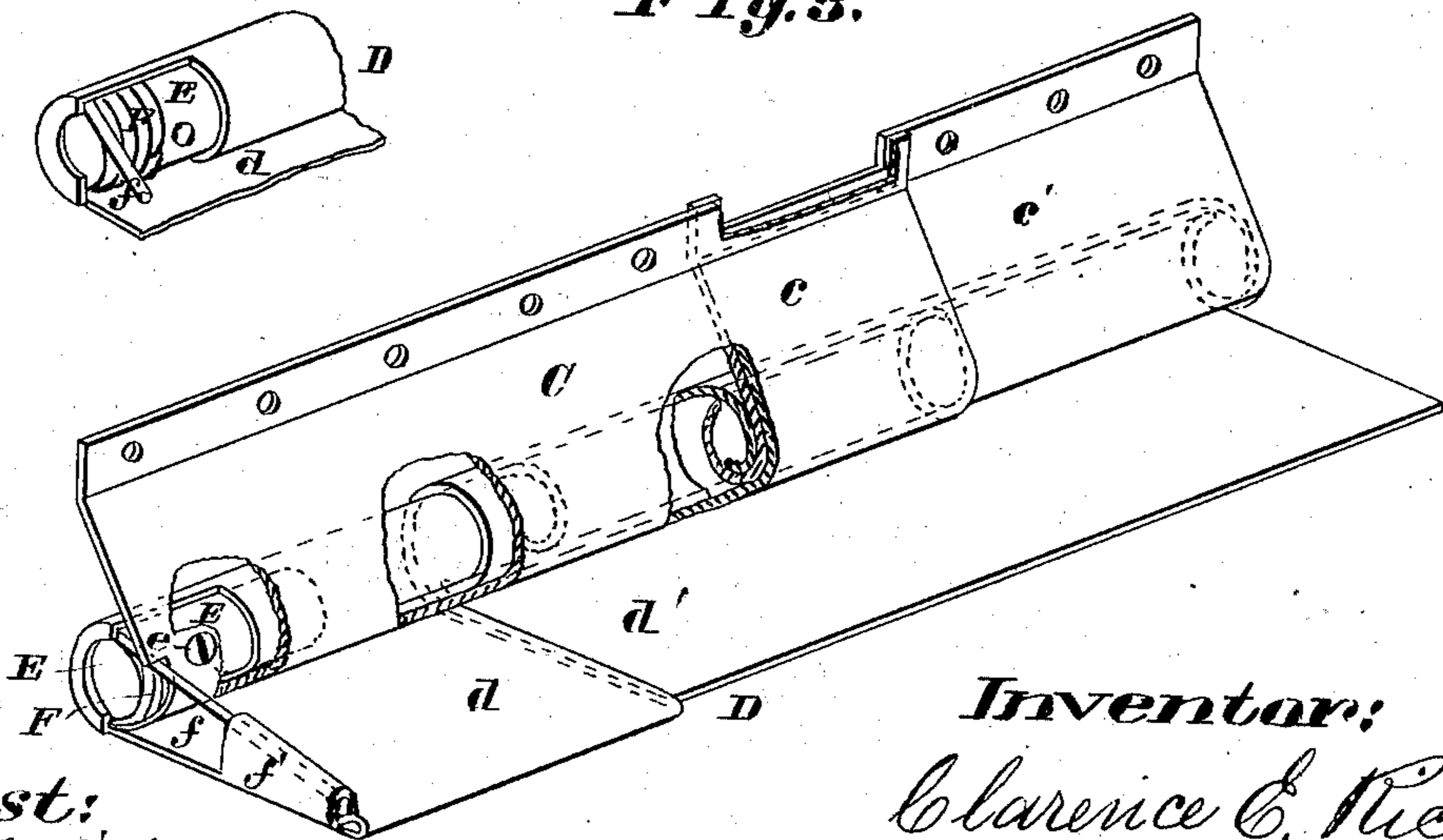


Fig. 3.



Attest:

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UNITED STATES PATENT OFFICE.

CLARENCE E. RICE, OF SEDGWICK, KANSAS.

DOOR-STRIP.

SPECIFICATION forming part of Letters Patent No. 254,694, dated March 7, 1882.

Application filed May 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE E. RICE, of Sedgwick, in the county of Harvey and State of Kansas, have invented a certain new and useful Improvement in Door-Strips, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a strip to be secured to the bottom of a door, and relates to that class of such strips which are extensible in length, to be applicable to doors of different widths.

My invention consists, first, in the manner of securing the spring to the strip, which spring raises the free edge of the sill-strip as the door is opened, to prevent it from dragging; and my invention consists, secondly, in the combination of parts, as hereinafter fully described.

In the drawings, Figure 1 is a perspective view showing my improvement secured to a door and the door secured to its frame, the lower right-hand corner of which (the door-frame) is broken away to show the cam for forcing the sill-strip down tight upon the threshold of the door, when the door is closed, against the influence of the spring, to prevent the entrance of water or wind in cold weather. Fig. 2 is a vertical section of same. Fig. 3 is an enlarged detail perspective view of the strip, parts being in section to show its construction. Fig. 4 is a detail perspective view of the end of the sill-strip to which the spring is attached, showing the manner of attaching the spring.

A is the door-frame, and B the door hinged thereto, both of which are of common construction. To the bottom of the door is secured the strip, which consists of two members, C and D, the member C being secured directly to the door, and the member D being hinged, as shown, to the member C. Each member consists of two pieces, *c c'* and *d d'*. They are made extensible, as shown, for the purpose before stated; but this feature is old, and I do not claim it as my invention. The lower edge of the member C is bent into the form of a tube or cylinder for receiving the similarly-shaped portion of the sill strip or member D, thus making a hinged connection between them. However, the form of these strips, as well as their extensible character, is old, (with the ex-

ception of the lip on the member D, which will hereinafter be described,) and needs no further description here.

E is a short plug, preferably made of wood, which is inclosed within the tubular portion of the member D at its outer end. The plug is of smaller diameter than the inside of the tube, so that the member D may reciprocate, while the plug remains fixed. The plug is securely fastened to the member C by a screw, *e*.

F is a spiral spring which surrounds the plug E, to which one of its ends is secured, the other end of the spring terminating in an arm, *f*, which is secured to the free edge of the sill member D by a lip, *f'*, turned up to inclose it, as shown. The tendency of the spring is to raise the free edge of the member D, and thus it will be seen that when the door is opened the sill member will not be allowed to drag upon the floor.

To have a close connection between the sill-strip D and the threshold of the door, when the door is closed to exclude rain, &c., I secure an inclined cam, G, to the lower right-hand corner of the door-frame B. Thus as the door is closed the free edge of the sill-strip will come in contact with the cam and be forced down, making a close connection between it and the threshold. The cam and spring should both be at the same edge of the door and frame, so if the spring were changed to the hinged edge of the door the cam should also be changed to the corresponding side of the frame.

I do not claim that the cam or the automatic sill-strip are broadly new.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In combination with a door-strip consisting of members C D, extensible in length, as described, and cam G, the spring F, having an arm, *f*, whose end is inclosed by a lip, *f'*, of the member D, the spiral part of said spring surrounding the plug E, to which its other end is secured, and which is itself inclosed by the tubular-formed edge of the member D, and held securely from turning by a screw, *e*, attaching it to the member C, all substantially as described.

2. The plug E and spring F, having arm *f*, the former connected to the member C of the

door-strip, and the latter surrounding and secured to the former and operating to raise the free edge of the member D, as and for the purpose set forth.

- 5 3. The combination of the member C, having the plug E, with the member D, hinged to the member C, spring S, supported on the plug E,

and having its ends bearing respectively on the two strips, and a cam, G.

CLARENCE E. RICE.

Witnesses:

WM. FINN,
L. L. LADD.