

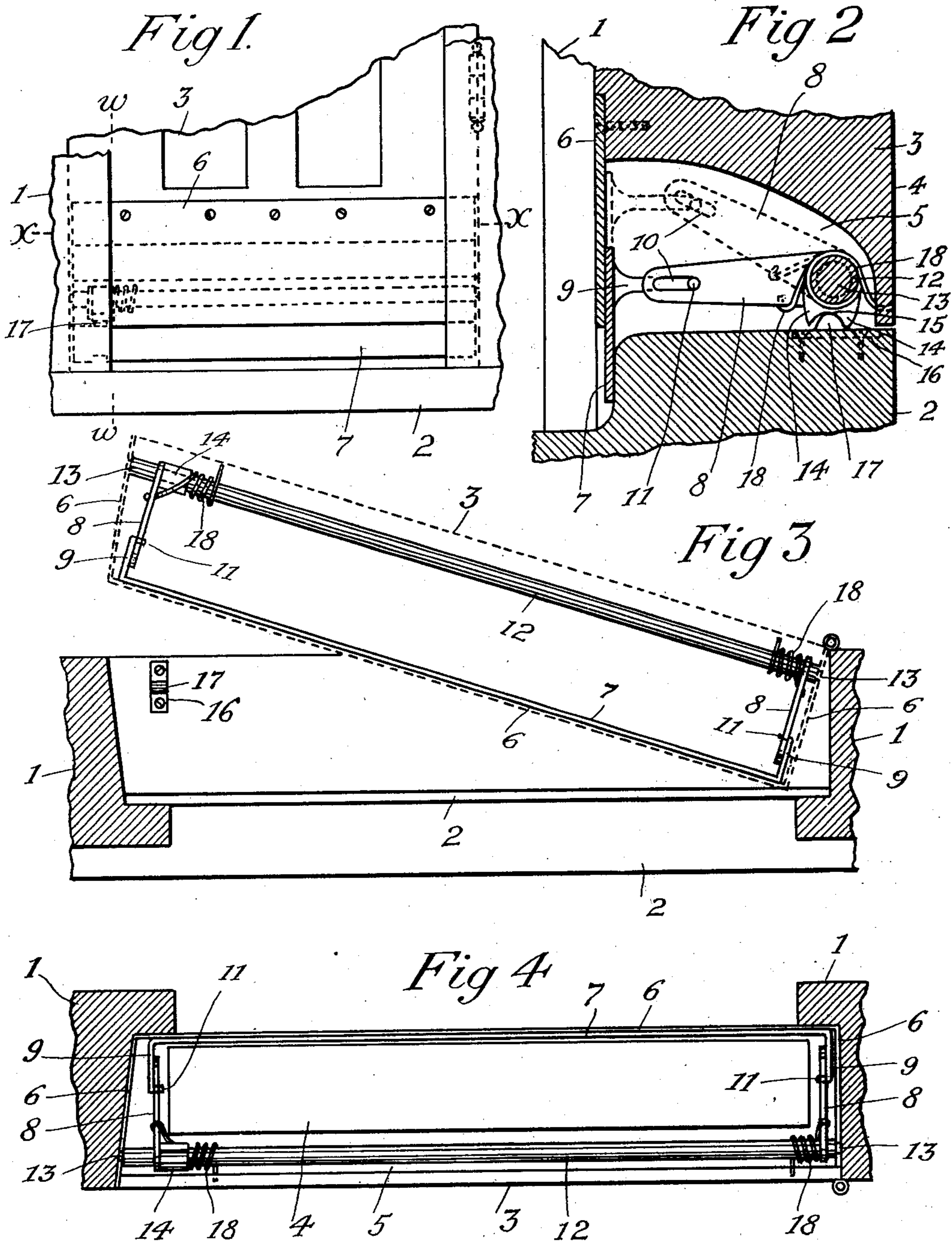
No. 745,396.

PATENTED DEC. 1, 1903.

A. SNORIN.
DOOR STRIP.

APPLICATION FILED JUNE 1, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

ANDREW SNORIN, OF OLIVIA, MINNESOTA.

DOOR-STRIP.

SPECIFICATION forming part of Letters Patent No. 745,396, dated December 1, 1903.

Application filed June 1, 1903. Serial No. 159,455. (No model.)

To all whom it may concern:

Be it known that I, ANDREW SNORIN, a citizen of the United States, residing at Olivia, county of Renville, and State of Minnesota, have invented certain new and useful Improvements in Door-Strips, of which the following is a specification.

My invention relates to door-strips or weather-strips adapted to be attached near the lower edges of doors and to shut down tightly against the threshold beneath when the door is closed.

The object of the invention is to provide improved means for thrusting and retracting the strip to cause it to properly perform its function.

In a general way the device may be said to consist of a spring-supported sliding strip in an opening in the lower edge of the door and a rocking rod and suitable connections for operating the strip as the door is opened or closed.

My improvements are illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the lower portion of a door-case, threshold, and door provided with the improvement. Fig. 2 is a vertical section of the same, enlarged, on the line *ww* of Fig. 1. Fig. 3 is a horizontal section on the line *xx* of Fig. 1; and Fig. 4 is an enlarged view from the underside, the threshold being removed.

In the views the relative width and thickness of the door-case and door and the size of the strip-operating devices are shown out of proportion in order that the latter devices may be illustrated on a larger scale than if all parts were shown in proper proportion.

In the drawings, 1 designates a door-case, 2 the sill or threshold, and 3 a door hinged to the frame in the usual way. The lower portion of the bottom rail 4 of the door is cut away to provide a suitable recess 5 for receiving the operative devices, and a metal or other band 6 is secured around its front and sides to properly inclose the devices.

The door-strip 7 is set in a recess adjacent to the front portion of the band 6, and it is supported and carried by arms 8, connected to inwardly-projecting ears 9 at both its ends, so that by the rocking of the arms the strip may be reciprocated in vertical direction in

the space between the outer surface of the bottom rail 4 and the inner surface of the band 6. The arms have elongated slots 10, in which pins or projections 11 extend from the ears 9 to enable the pivotal connection to shift as the arms are swung, and thus permit the strip to move in a vertical plane.

The arms 8 are rigidly secured to the ends of a rocking rod 12, that is revolubly supported in the lower portion of the recess 5. As shown, the reduced ends 13 of the rod are journaled in the sides of the band 6; but obviously the rod might be supported in bearing-boxes secured to the bottom rail intermediate the ends. At the end adjacent to the free edge of the door the rod is provided at its under side with cam projections 14, having a central notch 15, and on the threshold is secured, by means of a small plate 16, a short stud 17 in position to engage the cam as the door is being closed or opened. Such engagement of the cam with the stud while the door is being swung inward to close it serves to rock the rod and the arms 8, and thus to move the strip 7 downward to close the opening between the door and threshold. When the door is closed, the stud 17 is within the notch 15, and when the door is then moved to swing it open the frictional contact of the forward wall of the notch with the stud serves to partially rotate the rod in reverse direction to start the strip upward. Coil-springs 18 around the rod and having one end attached to the arm 8 and the other bearing against the rail tend to lift the strip and hold it in its upper or inoperative position, and they coöperate with the cam in turning the rod to lift the strip as the door is being opened.

In the use of the devices the closing of the door, as will be obvious, will cause the strip to descend to position to close the opening between the door and threshold, and the opening of the door will permit the springs to retract the strip and conceal it within the recess in the bottom rail.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with a door and threshold, of a door-strip, a rocking rod mounted in the bottom rail of the door, arms thereon supporting the strip, a spring for elevating the

strip, and means provided on the rod and threshold for rocking the rod to lower the strip, substantially as set forth.

2. The combination with a door and threshold, of a door-strip, a rocking rod mounted in the bottom rail of the door, arms thereon supporting the strip, a spring for elevating the strip, a cam on the rod, and a projection on the threshold for engaging it as the door is
10 being closed to rock the rod and lower the strip, substantially as set forth.

3. The combination with a door and threshold, of a door-strip, a rocking rod mounted in the bottom rail of the door, arms thereon sup-

porting the strip, a spring for elevating the strip, a notched cam on the rod, and a projection on the threshold adapted to engage the cam to partially turn the rod and then enter the cam-notch to hold it in place, for the purpose set forth. 15 20

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 26th day of May, 1903.

ANDREW SNORIN.

Witnesses:

H. J. LEE,

H. B. BACON.