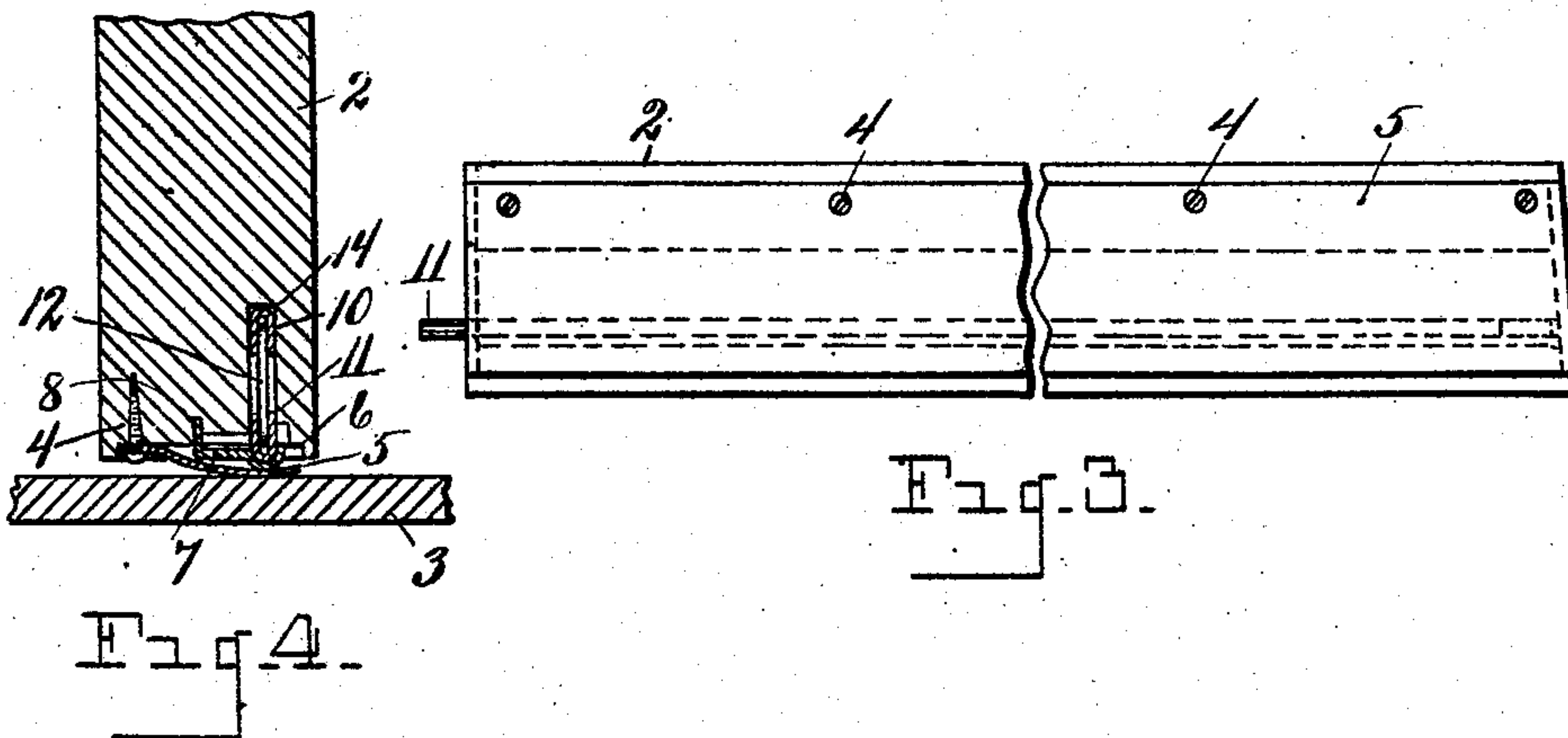
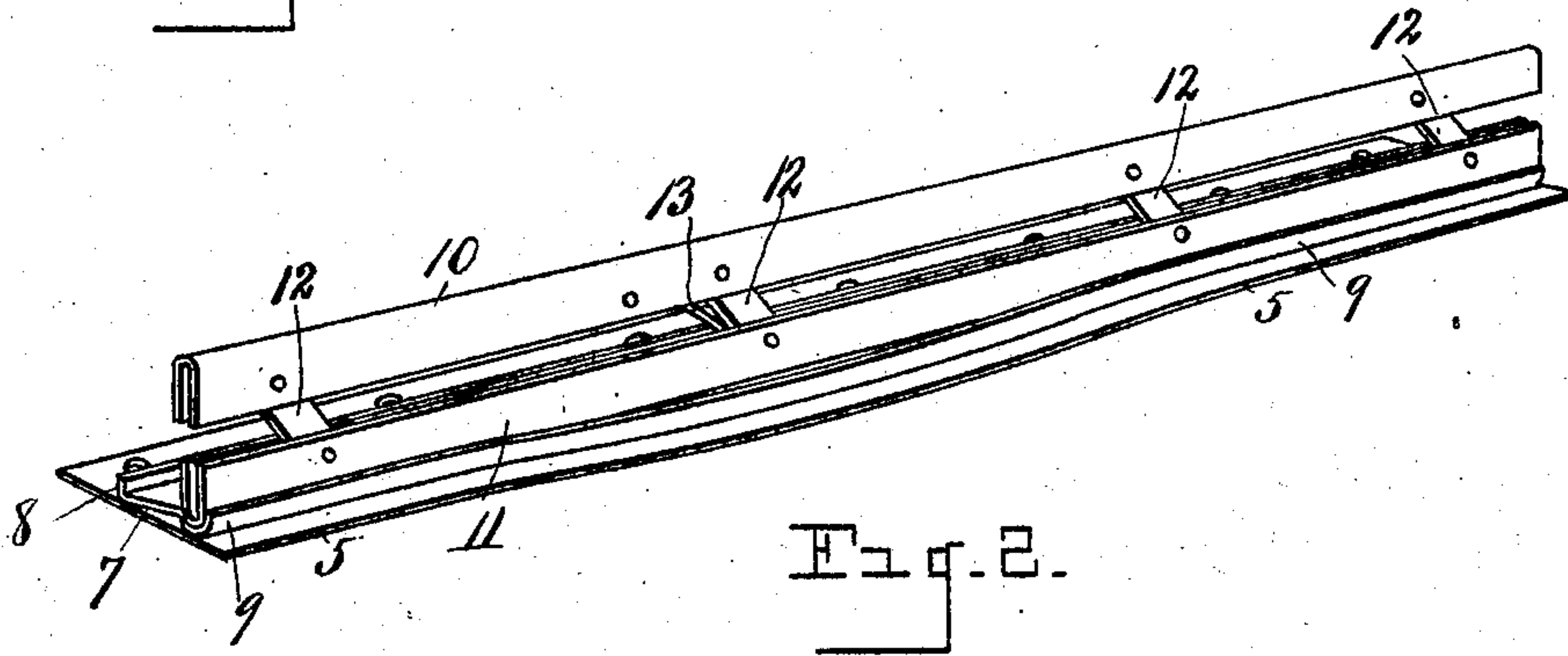
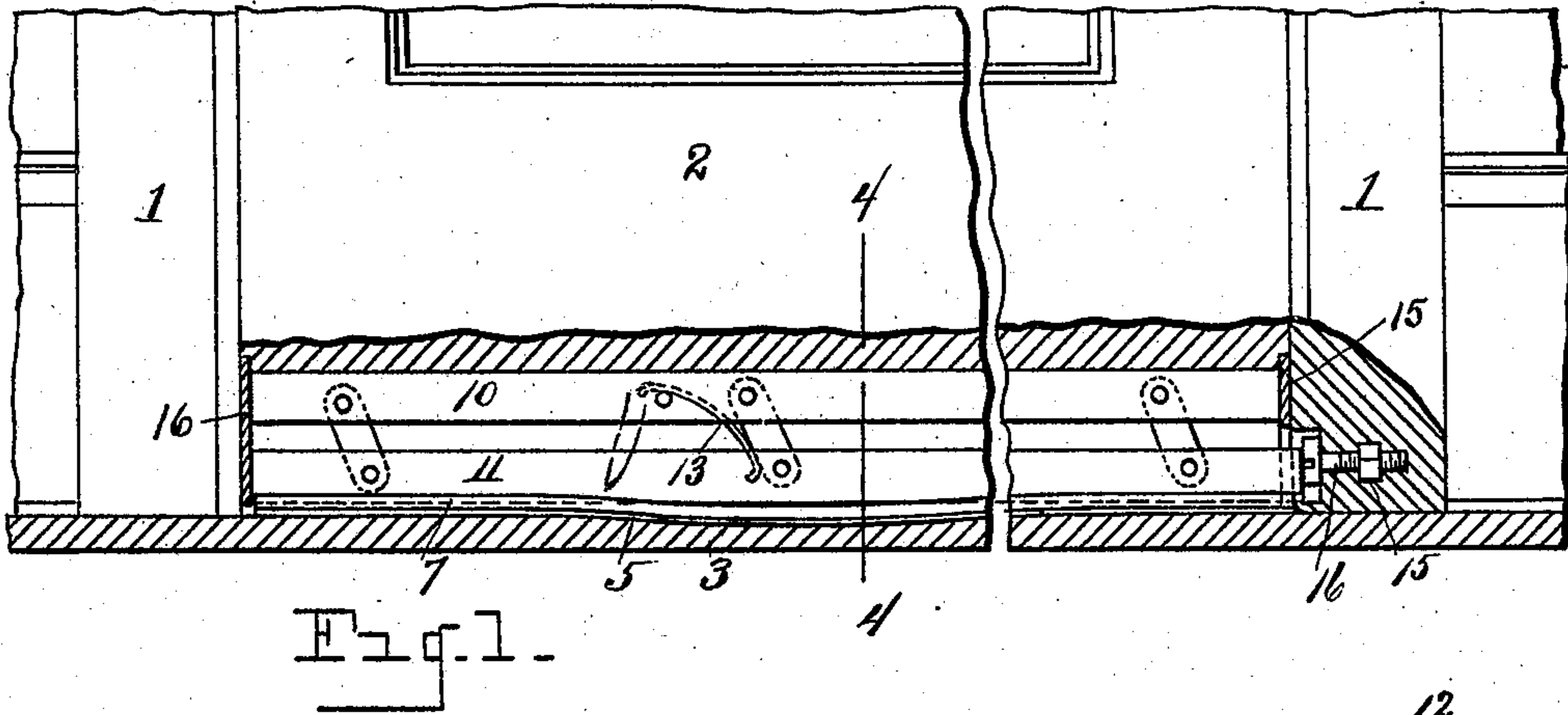


No. 858,434.

PATENTED JULY 2, 1907.

F. WUELFING.
WEATHER STRIP.
APPLICATION FILED JAN. 19, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

FREDERICK WUELFING, OF PONTIAC, MICHIGAN.

WEATHER-STRIP.

No. 858,434.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed January 19, 1907. Serial No. 353,018.

To all whom it may concern:

Be it known that I, FREDERICK WUELFING, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented a new and useful Weather-Strip, of which the following is a specification.

My invention relates to devices for closing the openings between the lower edges of doors and door sills, particularly after the sills become worn, and also for closing like openings between doors and continuous floors between adjoining rooms; and the objects of my improvements are,—to provide means of this character which may be adjusted as the floor or sill become worn; to provide a construction of this kind that can be easily attached to the bottom of any door; and to provide a construction of this kind which shall automatically rise out of the way as soon as the door begins to open, and which shall descend to close the opening just as the door closes.

My invention consists in a flat resilient strip of metal adapted to be pressed down to close the opening between the bottom of a door and the floor or sill below it in combination with means to depress this strip of metal just as the door closes.

It further consists of adjustable means to control the depth to which this strip of metal is depressed.

It further consists of a longitudinal member which may be altered to change the contour of this metal strip when depressed, so as to cause it to fit the irregularities of the floor or sill.

In the accompanying drawings, Figure 1 is a view of the lower edge of a door with a portion of the side broken away to show my improved weather strip and the actuating mechanism therefor. Fig. 2 is a view of the strip and mechanism. Fig. 3 is a bottom view of the door and weather strip. Fig. 4 is a cross section on the line 4—4 of Fig. 1.

Similar reference characters refer to like parts throughout the several views.

In the drawings, 1 is a door casing, 2 is the door and 3 the sill or floor. Secured to the bottom of the door by means of screws 4 is a strip 5 made of thin spring brass, steel, or other desirable material, which is adapted to normally lie in a groove 6 in the bottom of the door. This strip 5 bears against the flexible portion 7 which has a lip 8 adapted to fit into a groove in the door and be thus prevented from moving laterally. The opposite edge is bent to form a trough 9. Two narrow pieces of sheet metal are bent U shaped in cross section and thus form the upper portion 10 and the lower portion 11 of the actuator. These pieces are connected by means of links 12 and are normally held against each other by means of the spring 13 which tends to hold the lower member 11 toward the right, (Fig. 1) and as

the upper member is fixed in a groove 14 in the door, the spring 13 tends to hold this member 11 up away from the floor. The right end of the lower member 11 is adapted to project beyond the inner edge of the door as shown in Fig. 1.

Secured in the door-casing is a nut 15 into which the screw 16 engages, which screw may be screwed in or out as desired. When the door is opened, the spring 13 will move the member 11 out at the rear edge of the door thus lifting it and permits the resilience of the flat strip 5 to cause it to rise. When the door is closing, the end of the member 11 will engage the head of the screw 16, move the member to the left in Fig. 1, and depress it, thus causing the part 7 and the strip 5 to be depressed against the floor or sill 3. The distance that this strip 5 is depressed will depend upon the distance the member 11 is moved by the screw 16, and therefore upon the position of the head of this screw. So if the floor or sill underneath the door wears away, it is only necessary to turn the screw 16 outward and thus cause it and the member 11 to contact earlier in the closing of the door.

In case the floor wears unevenly, as is usually the case, the member 7 may be bent as shown in Figs. 1 and 2, which will cause the strip 5 to be forced down unevenly. This member 7 should be made of a low carbon steel which will be quite stiff and which may be bent as the occasion demands. In this construction, the weather strip is lowered just as the door is being closed and it rises just as the door opens. If therefore the floor is worn just below the door, (when closed) this construction will close the opening between the floor and door. Where a non-adjusting weather strip is employed, it will contact with the floor beyond the portion underneath the door (when closed) and wear away because of such contact, and will not close the opening where the floor has become worn. The parts numbered 5, 7, 10, and 11, the links 12 may all be made of comparatively light sheet metal and the whole construction is therefore very inexpensive. Small plates 15 and 16 may be employed at the ends of this apparatus to close the ends of the grooves.

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

1. A weather strip for doors, formed from a strip of resilient sheet metal and adapted to be secured to the lower edge of a door, a grooved member having a longitudinal tongue adapted to fit in a slot in the lower edge of the door, a stationary member, a movable actuating member, and links connecting the stationary and movable actuating member, the actuator being adapted, when moved longitudinally to depress the resilient strip.

2. In a device of the class described, the combination with a door having a slot in its lower edge, of an actuating member mounted in the slot in the door, links to sup-

port the same in such a manner that the actuating member may move laterally downward and longitudinally, a second member mounted at the lower edge of the door independently of the actuating member, said second member
5 being formed of sheet metal and adapted to be bent to conform to the floor beneath the door when closed.

3. In a device of the class described, the combination with a door having a slot in its lower edge, of links mounted in said slot, an actuating member supported by
10 said links and whose length is substantially the width of

the door, and a sheet metal strip having a portion thereof grooved to receive the actuating member, said strip being adapted to be bent to conform to the irregularities of the floor.

In testimony whereof I have signed this specification in 15 the presence of two subscribing witnesses.

FREDERICK WUELFING.

Witnesses:

EDWARD N. PAGELSEN,

ELIZABETH M. BROWN.