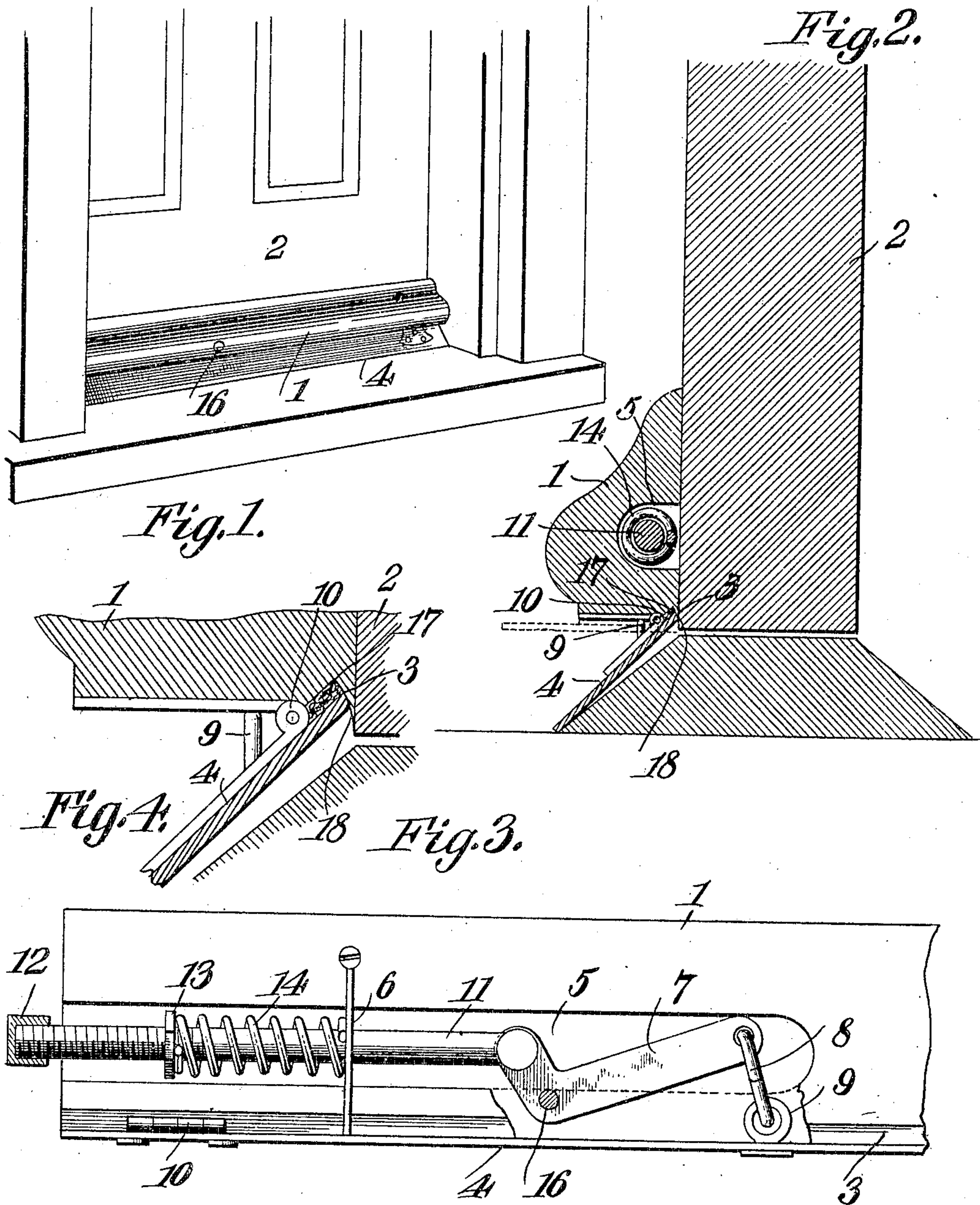


No. 844,656.

PATENTED FEB. 19, 1907.

F. J. BOEHLER.
WEATHER STRIP.
APPLICATION FILED JUNE 28, 1906.



WITNESSES:
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UNITED STATES PATENT OFFICE.

FRANK J. BOEHLER, OF REPUBLIC, OHIO.

WEATHER-STRIP.

No. 844,656.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed June 28, 1906. Serial No. 323,890.

To all whom it may concern:

Be it known that I, FRANK J. BOEHLER, a citizen of the United States, residing at Republic, in the county of Seneca and State of Ohio, have invented a new and useful Weather-Strip, of which the following is a specification.

This invention has relation to weather-strips; and it consists in the novel construction and arrangement of its parts, as hereinafter shown and described.

The object of the invention is to provide a weather-strip adapted to be applied to the lower edge of a hinged door, said strip being provided with a hinged plate or tongue which is spring-actuated and held in a horizontal position when the door is out of engagement with the door-jamb and which is forced into an inclined position along the outer side of the threshold when the door is in engagement with the door-jamb. Said tongue is hinged to a strip, the lower inner end of which is provided with a groove which is entered by the inner edge of the tongue when the door is closed, thus effectually closing the crack between the lower edge of the door and the top of the threshold and preventing the entrance of air. Said strip is provided with a channel in which is fulcrumed a lever. One end of said lever is connected by means of a link with an eye located upon the tongue in advance of the hinged points thereof. A longitudinally-movable rod is pivoted at its end to the other end of said lever. A spring engages said rod and has a tendency to maintain the outer end of the rod extended as far as possible beyond the end of the strip. The outer end of said rod is provided with a longitudinally-adjustable cap. When the door is closed, the said cap comes in contact with the door-jamb and moves the said rod longitudinally, which in turn through its connections forces down the outer edge of the tongue in the manner as above described.

In the accompanying drawings, Figure 1 is a perspective view of the bottom of a door with the weather-strip attached thereto. Fig. 2 is a transverse sectional view of the lower part of the door and the weather-strip. Fig. 3 is a rear view of a portion of the weather-strip. Fig. 4 is an enlarged transverse section of the strip.

The strip 1 is attached to the outside of the door 2 near the lower edge of the same. The lower inner edge of the strip 1 is grooved, as at 3. The plate or tongue 4 is hinged at

points intermediate of its longitudinal edges to the edge of said strip 1, the hinged points of the tongue 4 occurring just at the lower outer edge of the groove 3 of the strip 1. The inner face of the strip 1 is provided with a longitudinally-extending channel 5. The perforated plate 6 is located in the strip 1 and extends transversely across the channel 5, the perforation of the said plate 1 being in alinement with the longitudinal axis of the said channel. The lever 7 is fulcrumed in the channel 5 and is at all times housed within the same. The link 8 pivotally connects one end of the lever 7 with the eye 9, said eye in turn being attached to the tongue 4 in advance of the pivotal points 10 thereof.

The rod 11 is pivoted at its inner end to the other end of the lever. Said rod passes through the perforations of the plate 6 and terminates approximately at the end of the strip 1. The said end of the said rod is provided with the longitudinally-adjustable cap 12, which is adapted to engage the jamb of the door 2 when the said door is closed. The adjustable nut 13 is secured upon the rod 11, and the coil-spring 14 is interposed between said nut and the plate 6. The tension of the spring 14 is such as to have a tendency to project the free end of the rod 11 as far as possible beyond the end of the strip 1. By adjusting the position of the nut 13 the tension of the said spring 14 may be regulated. The screw 16, which forms the fulcrum for the lever 7, also serves as one of the attaching-screws, by means of which the strip 1 is fixed to the face of the door.

From the foregoing description it is obvious that when the door 2 is closed the cap 12 comes in contact with the side of the door-jamb, and the rod 11 is moved longitudinally against the tension of the spring 14. The lever 7 is rocked upon its fulcrum, and the end thereof to which the link 8 is attached is depressed. The said link engaging the eye 9, which is located upon the tongue 4 in advance of the hinge-points 10 thereof, positively depresses the outer edges of the said tongue, which passes down along the outer sides of the threshold. At the same time the inner edge of the tongue 4 passes up along the curved side 18 of the groove 3 and seats itself against the flat face of the strip of packing 17, attached to the opposite side of the said groove. Thus the space between the lower edge of the door 2 and the upper surface of the threshold is closed and air cannot pass through the same.

It is also obvious that when the door is opened and the cap 12 is carried away from the jamb the tension of spring 14 moves the rod 11 longitudinally in an outward direction, which in turn through its connections, as above described, moves the tongue 4 into a horizontal position. As the lower face of the tongue 4 when in horizontal position is flush with the lower edge of the door 2, the tongue will escape the upper surface of the threshold and will not interfere with the opening of the door.

It will be observed that when the inner edge of the tongue 4 is in elevated position in the groove 3 that the said edge of the tongue is in close proximity to the curved side 18 of the groove, and the possibility of air passing through at such place is removed. The inner edge of the said tongue 4 moves along the said curved side 18 of the groove 3 and bears laterally against the packing 17. As the said packing is of a yielding nature, it assures close contact of the lower edge of the tongue with the threshold.

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

1. A device of the character described comprising a strip, a tongue hinged to the strip, a lever fulcrumed to the strip, means operatively connecting one end of said lever with said tongue, a longitudinally-movable rod lo-

cated in the strip and connected at one end with said lever and projecting at its opposite end beyond the end of the strip, said projecting end of the rod being threaded a guide attached to the strip and receiving said rod, a cap engaging the thread of the projecting end of said strip, a nut engaging the thread of said strip and a coil-spring interposed between said nut and said guide.

2. A device of the character indicated comprising a strip having in its under side a groove, one side of which lies in a plane and the other side of which describes an arc struck from a center located at the edge of the first said side, a fibrous material located against the plane side of said groove, a tongue hinged at intermediate points at the edge of the plane side of said groove, the edge of said tongue moving in close contact with the arcuate side of the groove, a lever fulcrumed in the strip and being operatively connected with said tongue and a spring-actuated rod located in the strip and being connected with said lever at one end and projecting beyond the end of the strip at the other end.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANK J. BOEHLER.

Witnesses:

PHILIP KERN,
GEORGE LAMBRIGHT.