

J. E. LEDTERMAN.
WEATHER STRIP.
APPLICATION FILED MAR. 1, 1909.

944,042.

Patented Dec. 21, 1909.

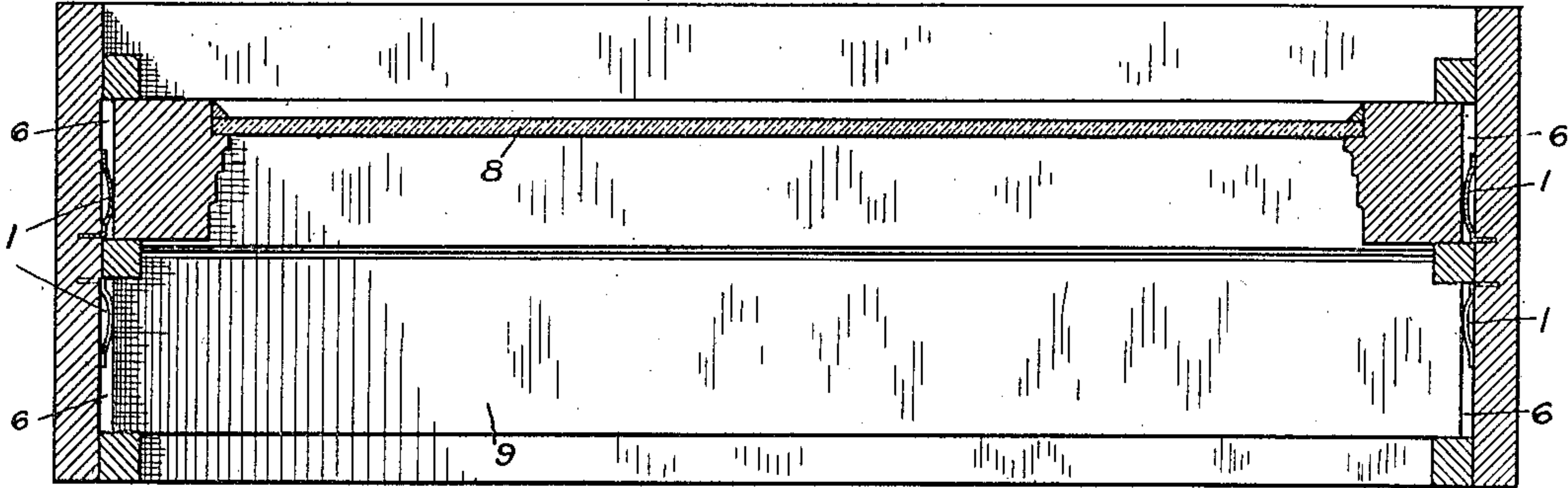


Fig. 2.

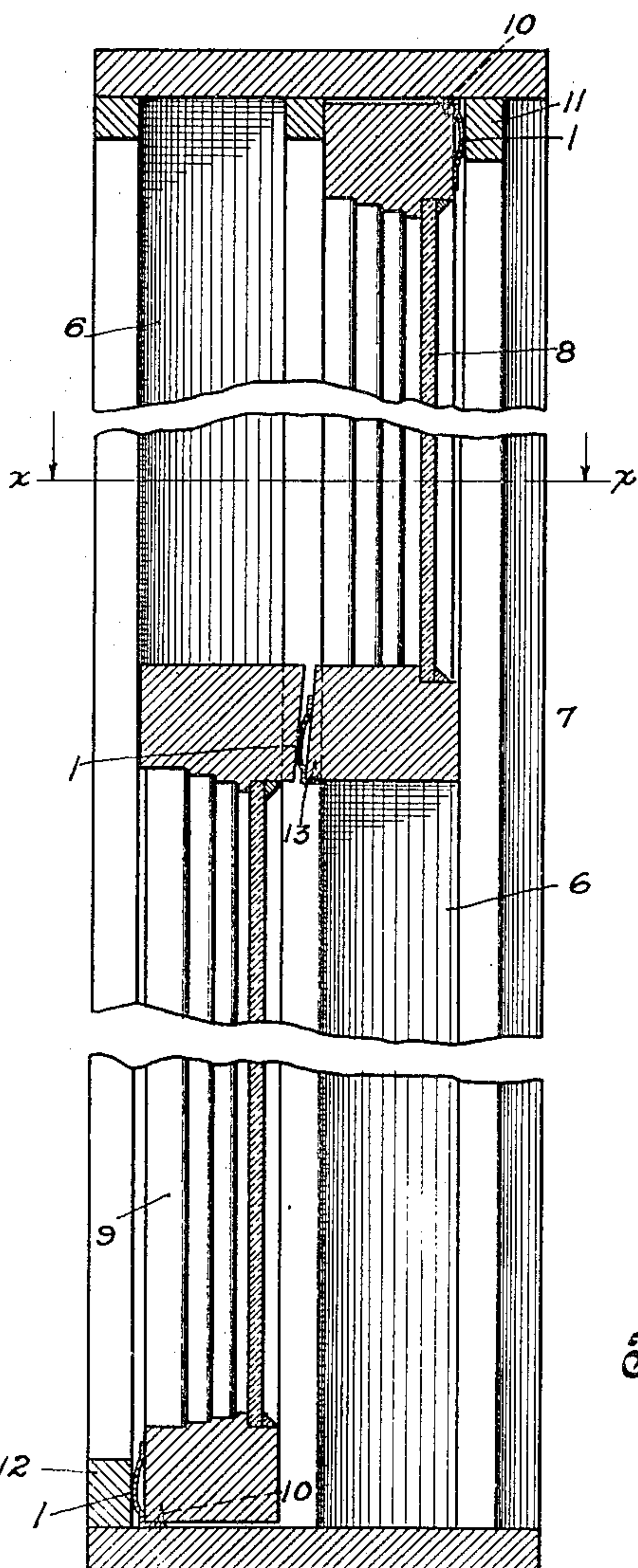


Fig. 1.

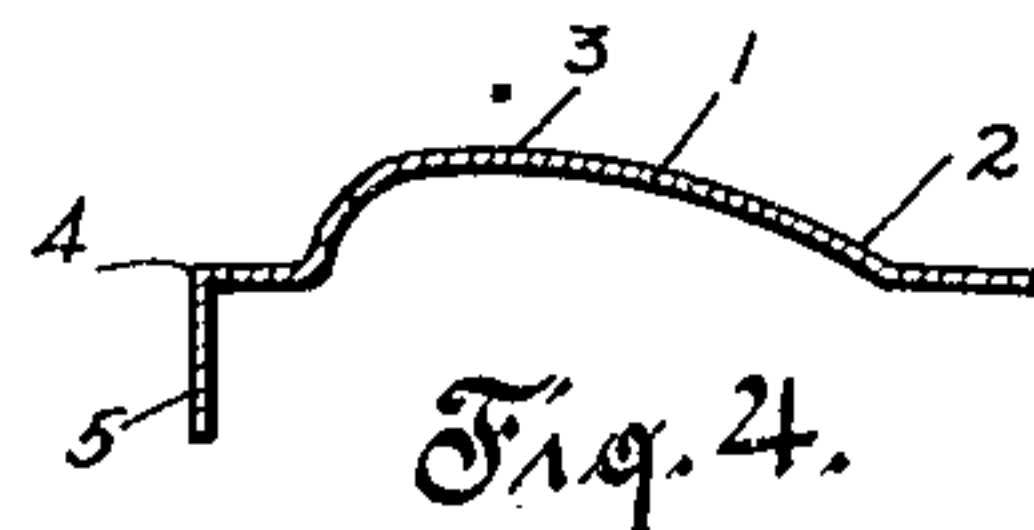


Fig. 4.

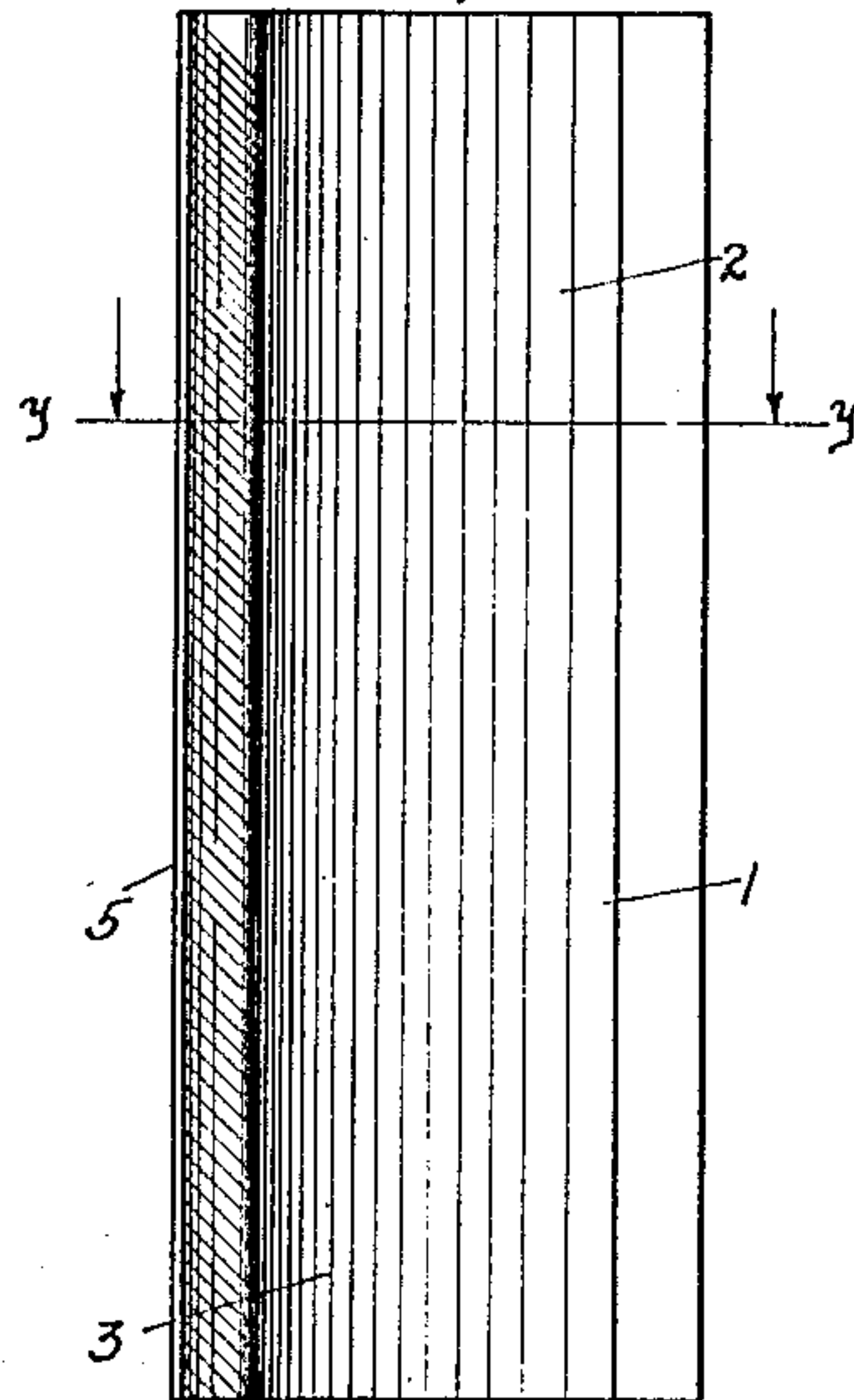


Fig. 3.

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UNITED STATES PATENT OFFICE.

JOHN E. LEDTERMAN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO HARRY McCORKLE, OF CHICAGO, ILLINOIS.

WEATHER-STRIP.

944,042.

Specification of Letters Patent.

Patented Dec. 21, 1909.

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To all whom it may concern:

Be it known that I, JOHN E. LEDTERMAN, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification.

My invention relates to improvements in weather strips and the object of my invention is to provide a strip of the character mentioned especially adapted for use in connection with windows.

A further object is to provide a weather strip formed entirely of metal adapted to effectually close the crevices or openings about a window sash, or door or the like and one which will be durable and simple of construction, hence of low cost to manufacture.

Other objects will appear hereinafter.

With these objects in view my invention consists in a weather strip characterized as above mentioned and in certain improvements and details of construction which will be hereinafter fully described and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a vertical longitudinal section of a window provided with the preferred form of my weather strip, Fig. 2 is a transverse section thereof taken on the line $x x$ of Fig. 1, Fig. 3 is a rear elevation of a portion of my strip detached, and Fig. 4 is a transverse section thereof taken on the line $y y$ of Fig. 3.

Referring now to the drawings my invention is comprised in a metallic weather strip 1 preferably formed of copper although any other suitable material may be used, the same being substantially L-shaped in cross section. The wider portion 2 of the strip 1 is formed intermediate its edges with a longitudinally extending ridge 3 preferably of a cross sectional shape substantially semi-ovoidal, the highest portion of said ridge being adjacent the inner edge 4 of the portion 2, said ridge being of such shape for reasons which will be stated in the following. However, I do not wish to limit myself to such specific shape of the ridge formed in the portion 2 as the same may be

of any other suitable form without departing from the spirit of my invention.

In applying the strip the narrower portion 5 thereof is secured to the window sash or window frame or in the event of using the same in connection with a door, to the door casing or the door itself as the case may be, in any suitable manner, the portion 2 thereof being free permitting of the ridge 3 thereof forcibly engaging the surface adjacent thereto. By forming said contacting ridge 3 of the strip of a shape as described, the tendency will be, when the former is depressed by the adjacent surface in engagement therewith, such depression thereof necessarily causing the widening of the strip portion 2, to force the metal toward the outer edge of the latter or to cause said strip portion to widen in that direction, and not toward the attached edge portion thereof, it being evident that under the latter conditions, as would be the case for instance if the ridge were of a true elliptical form or the like, the attached edge of the strip would be apt to be forced loose and in some instances finally become entirely detached. Hence the reason for the construction as described. It will be observed that the edges of the wider portion 2 of the strip are flat bearing surfaces, the outer one serving to stiffen the strip and to facilitate outward expansion of the semi-ovoidal section and the inner one serving to stiffen portions 5 and furnish a convenient surface for fastening or driving the strip.

In the accompanying drawings I have shown my weather strip applied to an ordinary window. In such application, strips 1 are provided in the bottom of each of the sash grooves or channels 6 of the sash frame 7 the same being coextensive with the lengths or heights of the window sashes 8 and 9 carried therein. The portions 5 of said strips in such event are rigidly secured in said grooves 7 by being clamped in longitudinally extending slits provided therein for the reception thereof, such being the means employed for securing the strips in position. By such provision the ridge-portion 3 of the strips 1 will be held in forced engagement with the lateral edges of the window sash, as clearly shown in Fig. 2, with an obvious result. The upper outer edge of the

outer sash 8 and the inner lower edge of the inner sash 9 are each provided with similar strips 1 preferably secured thereto by tacks 10 driven through the portions 5 thereof into the top edge of the former and the bottom edge of the latter, such strips being adapted to forcibly contact the inner surfaces of the upper outer and the lower inner sash stops 11 and 12 respectively, as clearly shown in Fig. 1. However, if desired, I may secure said strips to the stops 11 and 12 instead of to the sashes as stated, in which event they would serve in the same capacity. Further, a strip 1 is provided to close the space between the contiguous surfaces of the adjacent end portions of the sashes 8 and 9, said strip being preferably secured to the upper sash 8 by means of tacks 13 passing through the portion 5 of the strip and entering the bottom edge of said sash. However, it is evident that, if desired, the strip may be applied to the upper edge of the lower sash instead of to the upper sash as described, the same in either event being adapted to serve in the same capacity.

Though I have shown what I deem to be the preferred form of my device, I do not wish to be limited thereto, as there might be various changes made in the details of construction without departing from the spirit of my invention comprehended within the appended claims. And although I have shown my strip as applied to a window it is understood that I do not wish to limit my-

self to such particular application but may use the same in any other connection to which it is applicable.

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

1. A weather strip comprising an angular strip of metal substantially L-shaped in cross section, the wider of the angularly disposed portions of said strip being provided at its outer free edge with a flat bearing surface, and intermediate of its edges with a longitudinally extending ridge semi-ovoidal in cross section, the highest portion of said ridge being adjacent the inner edge, substantially as described.

2. A weather strip comprising an angular strip of metal substantially L-shaped in cross section, the wider of the angularly disposed portions of said strip being provided at its edges with flat bearing surfaces, and intermediate of its edges with a longitudinally extending ridge semi-ovoidal in cross section, the highest portion of said ridge being adjacent the inner edge, substantially as described.

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

JOHN E. LEDTERMAN.

Witnesses:

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HELEN F. LILLIS.