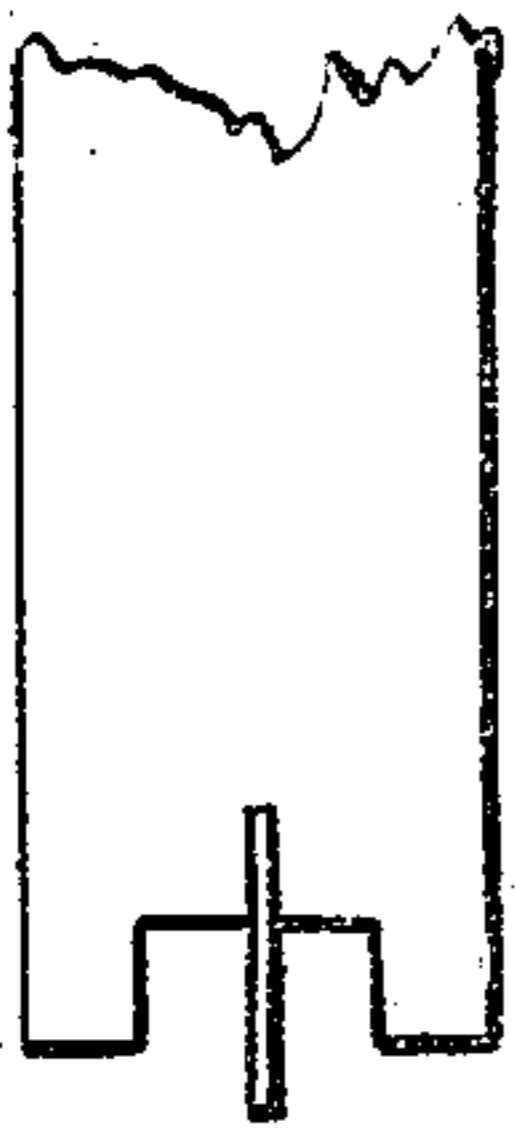


*E. P. & E. S. Torrey.*

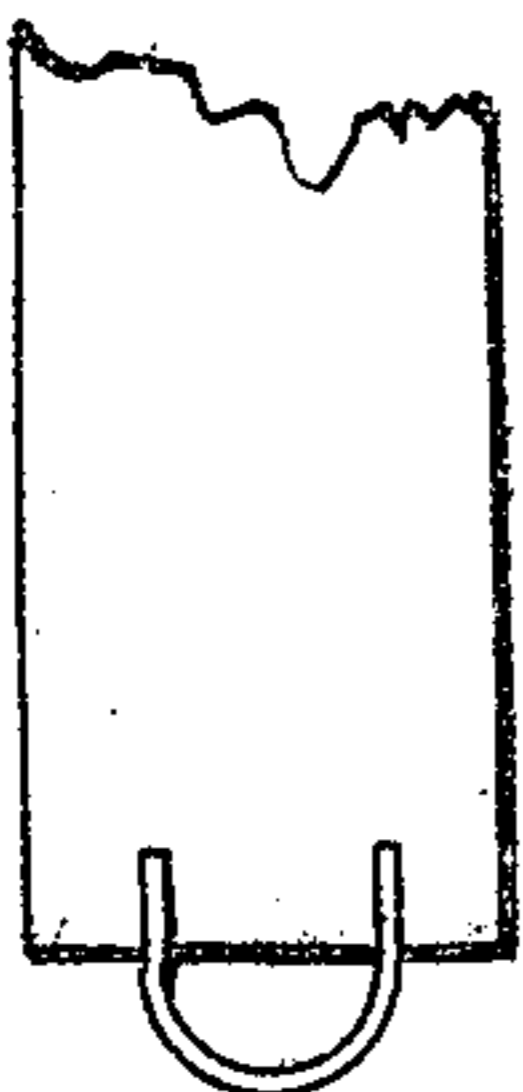
*Weather Strips,*

*No. 64383,*

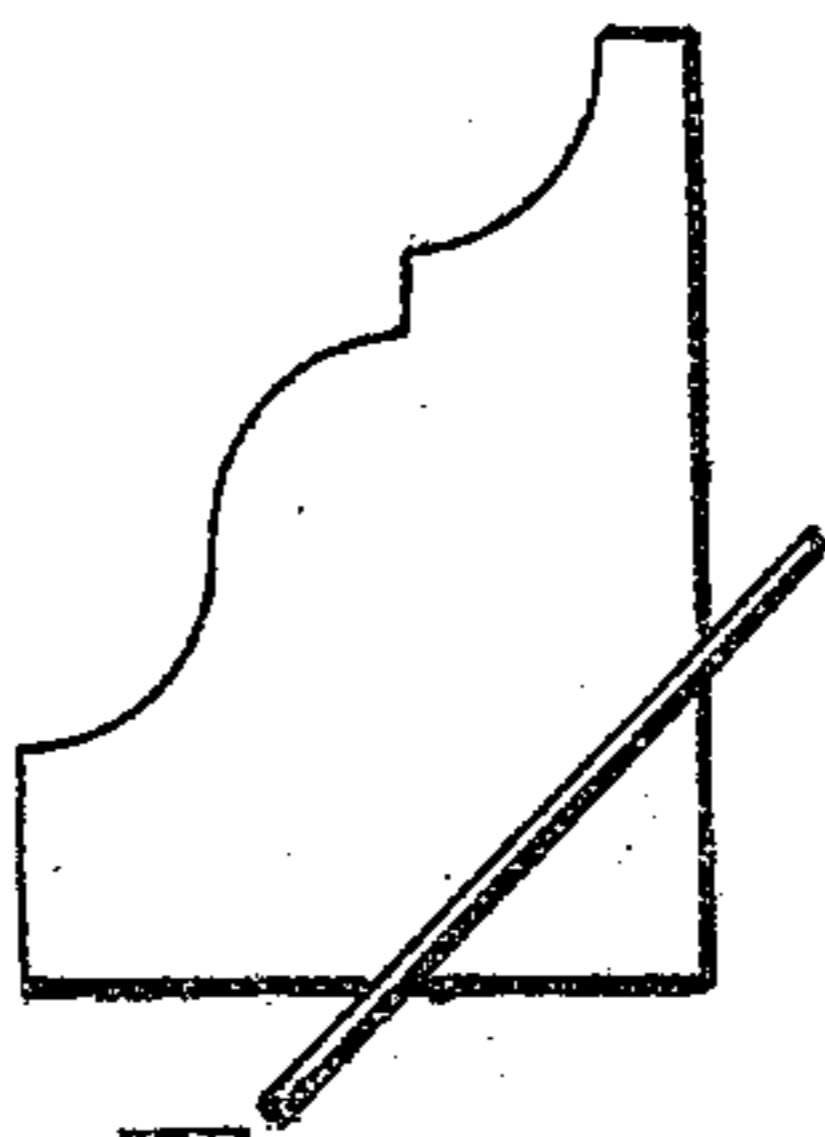
*Patented Apr. 30, 1867.*



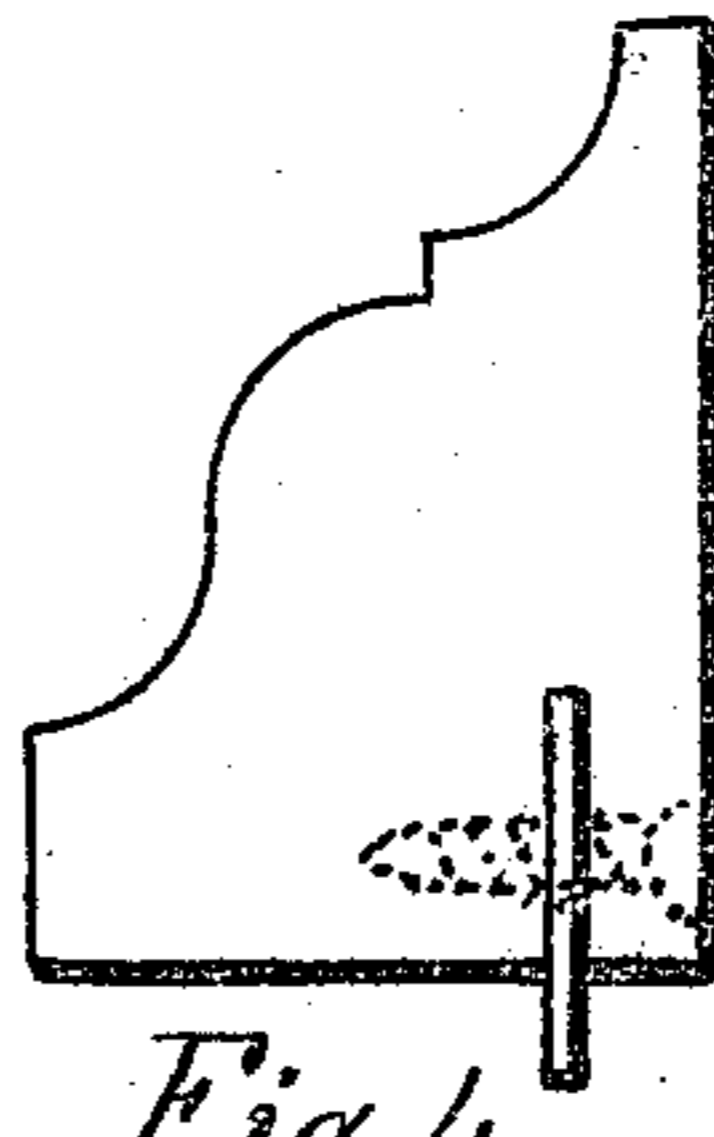
*Fig. 1*



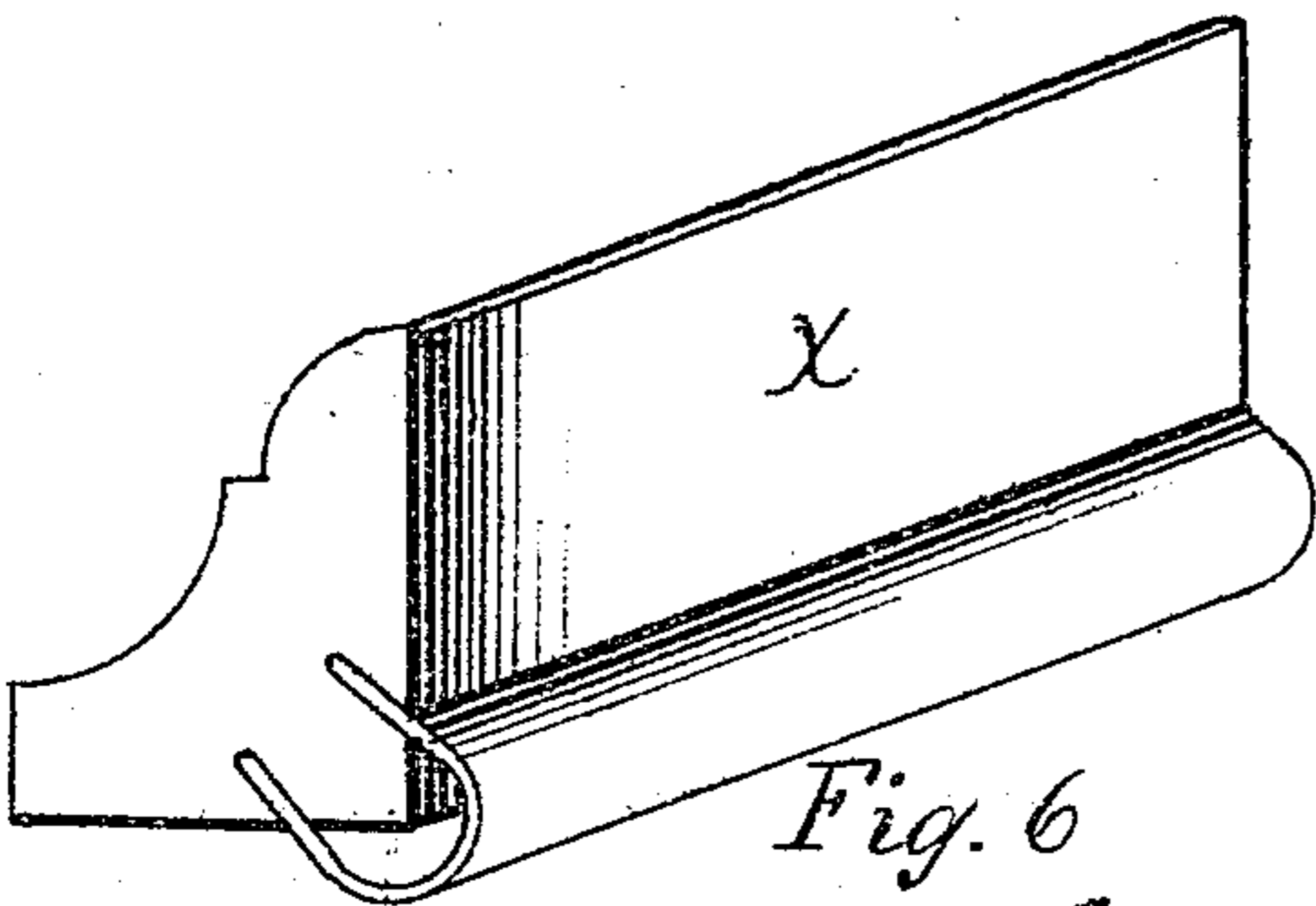
*Fig. 2*



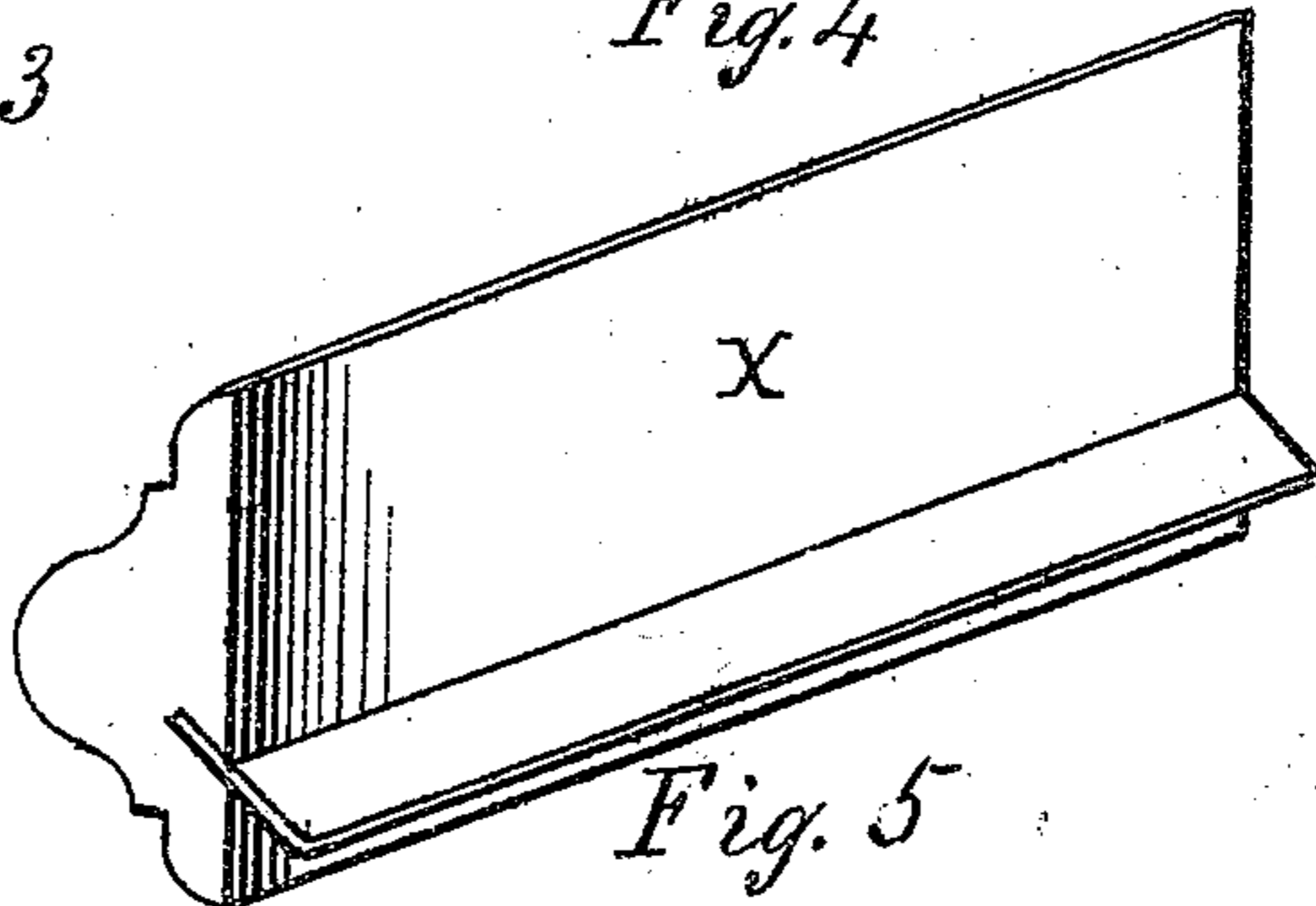
*Fig. 3*



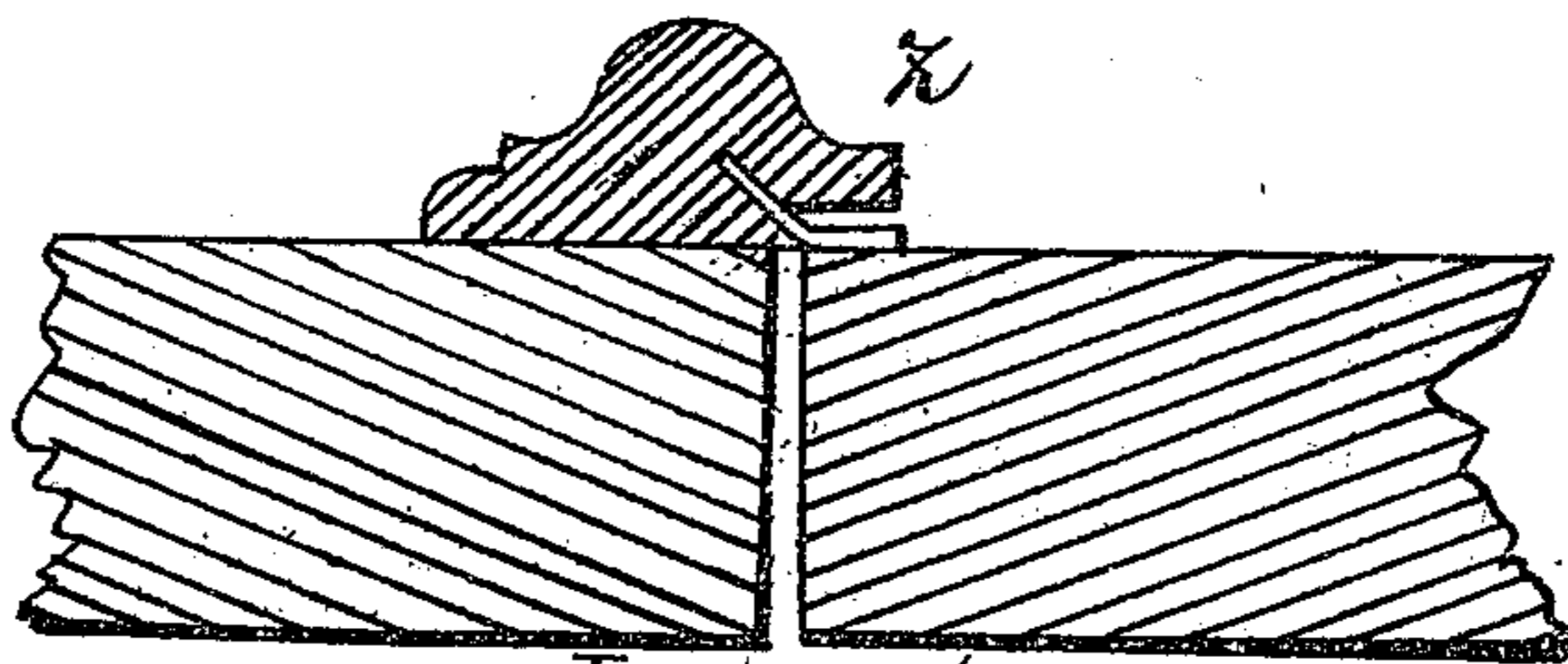
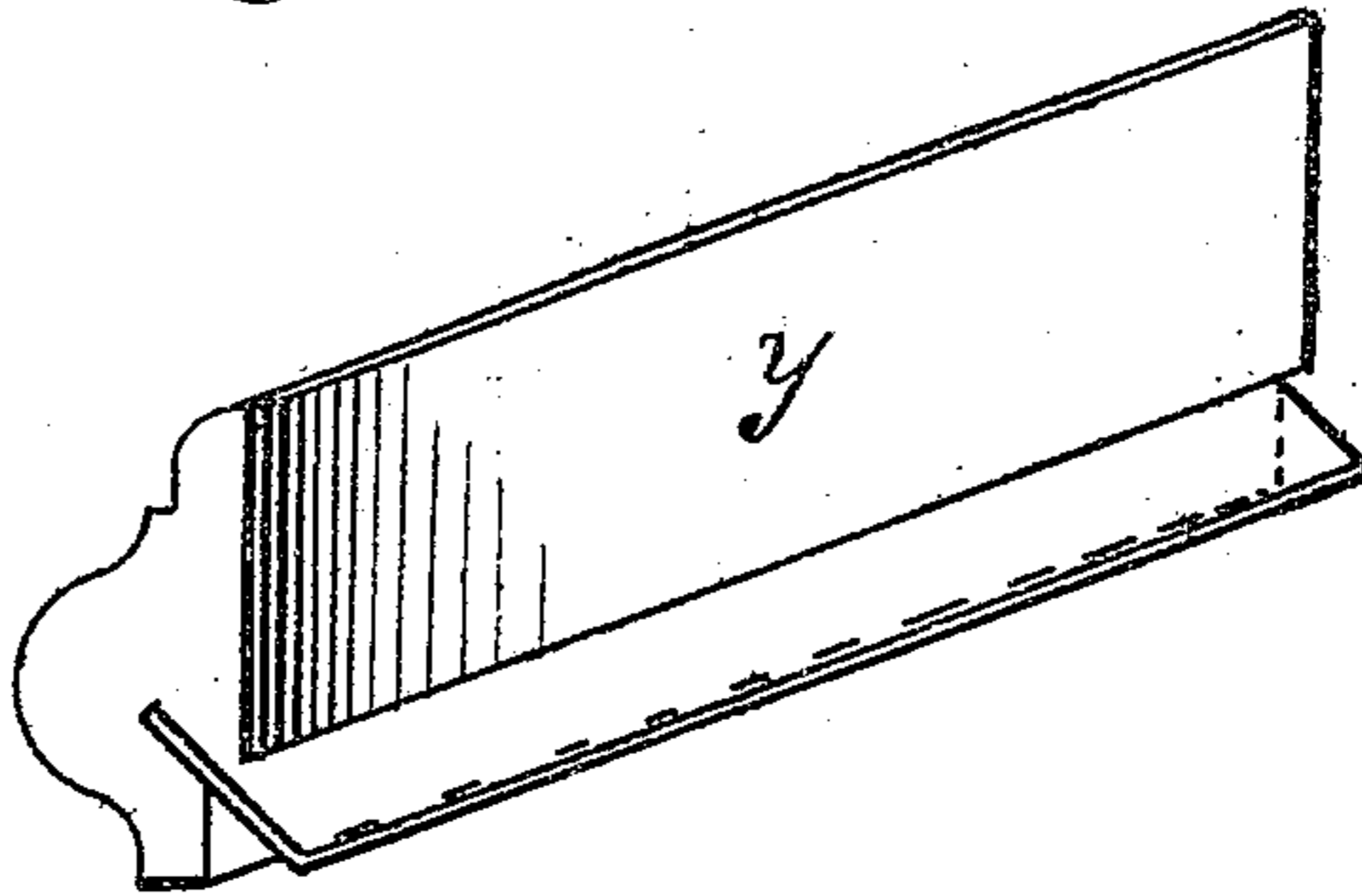
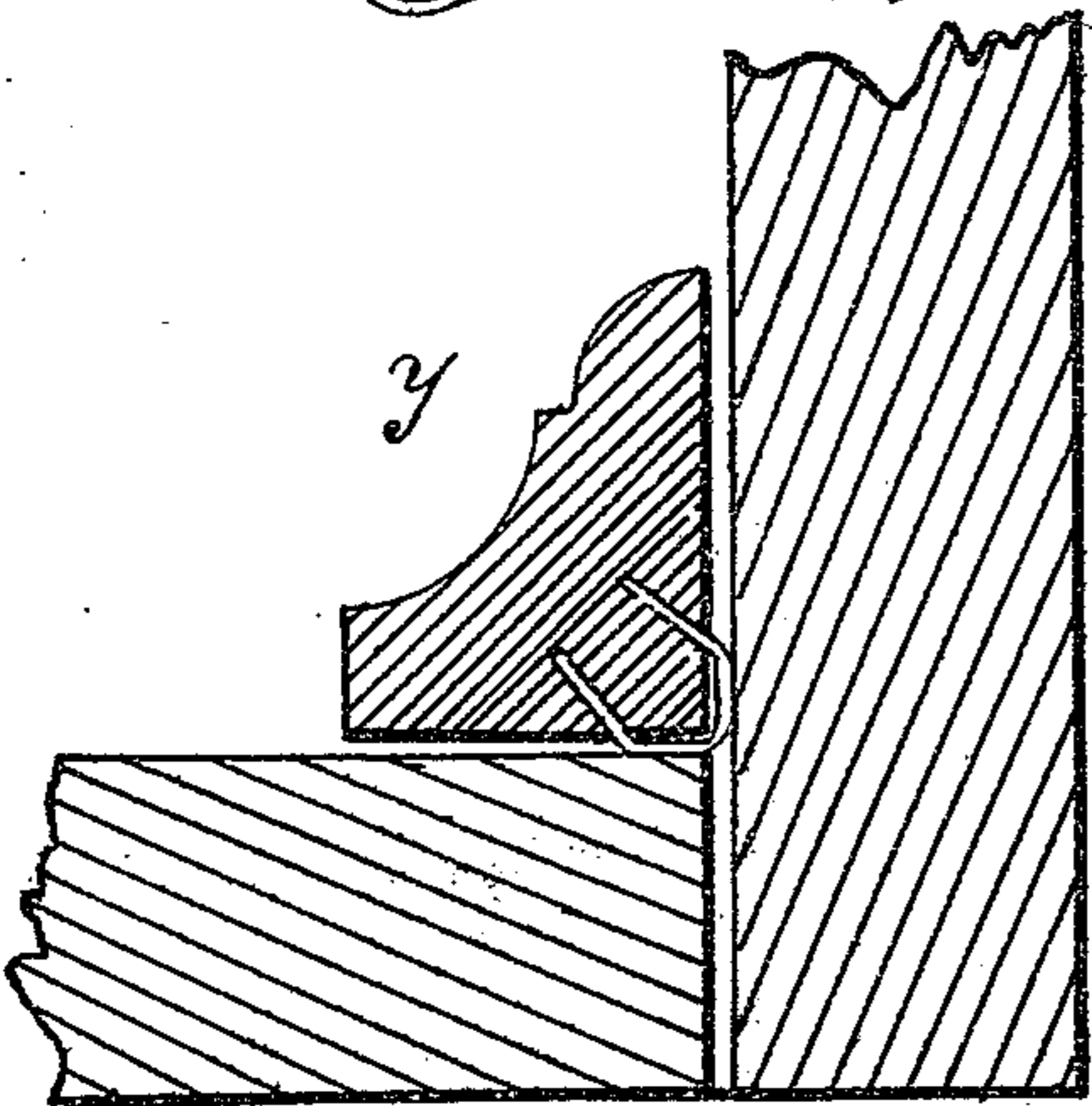
*Fig. 4*



*Fig. 6*



*Fig. 5*



*Witnesses.*

*Wm. L. Chapman*

*A. H. Hook*

*Inventor.*

*E. P. Torrey*  
*E. S. Torrey*

*Per J. J. Greenwood Atty*

# UNITED STATES PATENT OFFICE.

EDWARD P. AND E. S. TORREY, OF NEW YORK, N. Y.

## IMPROVEMENT IN WEATHER-STRIPS.

Specification forming part of Letters Patent No. 64,383, dated April 30, 1867.

Be it known that we, E. P. TORREY and E. S. TORREY, of the city, county, and State of New York, have invented certain new and useful Improvements and Modifications in the Construction of Weather-Strips for Doors, Windows, &c., by which said strips are rendered more efficient than those heretofore constructed; and we do hereby declare and ascertain our said invention, referring to the accompanying drawing illustrating the said specification.

In accordance with the statute we herein point out the difference between our devices and the things heretofore made by giving figures of the former devices that most closely approximate our present invention, without, however, admitting a right in any other party to the devices thus shown, simply using the same to clearly show the limit we intend to put upon our present claims.

In the drawing, Figure 1 shows a thin piece of India rubber, *a*, inserted into a channel in the bottom of a door, &c., *b*. It is not an independent weather-strip, but the door itself must be channeled to receive it. Fig. 2 is a similar, but somewhat broader, strip of rubber, the two longitudinal edges of which are inserted into saw-kerfs or channels cut in the door or window, forming a sort of elastic cushion along the joint to be protected, as is clearly seen in the figure. Fig. 3 is an independent weather-strip, formed of two thin and peculiarly-formed strips of wood, with a strip of India rubber between them, which projects beyond the surface of the wooden strips at both edges. The complexity and fragility of this renders it too costly and inefficient for practical use. A weather-strip such as is shown in Fig. 4 has also been made, but it is not adapted to the situations our devices are intended to occupy, or so perfectly perform their offices.

Our devices differ from the above-named in several important particulars, which we hereinafter point out, and which render them practical, cheap, and efficient to a much greater degree than anything we have heretofore seen, producing a merchantable article, adapted to all existing contingencies, to many of which the former articles are wholly inapplicable.

In practice we have found it necessary to make our independent weather-strips in two

forms to suit the several surfaces to which we apply them, the one being where the joint to be covered is in pieces that are in one plane, or nearly so, such as folding doors or windows. The other is used where the surfaces of the pieces forming the joint are at different angles. The first of these is shown at Fig. 5, in which *x* is a piece of weather-strip made to cover a joint in a perfectly-level surface. *y* is a similar piece made to cover a joint where the edges of the pieces may be somewhat warped, and is preferable in most practical cases. *z* is the weather-strip attached. The weather-strip *x* is formed of a strip of wooden molding, having its outer surface stuck with any style of molding desired. Its under surface, or that to come in contact with the surface it is to be attached to, is straight and flat. Into this surface we cut a saw-kerf or channel, and insert a thin strip of India rubber or other material, *a*, which we affix with cement without the use of pins or nails. This channel, as will be seen, is cut at an angle to insure the proper laying down of the rubber upon the surface of the strip in the right direction, a matter of importance in practice; and it will be noted that there is a projection of the wood on the one side sufficient to properly secure it to the piece on one side of the joint, while the rubber, covered by the projecting edge of the molding, laps over onto the other side of said joint. In practice doors and windows are liable to warp somewhat, so that the surfaces where the joints come are not precisely on the same level. To obviate the difficulty of employing a strip constructed on the plan above named we form a strip, as seen at *y*, in which the straight surface, or that which comes in contact with the fixture, is rabbeted, that portion of the surface over which the rubber strip projects being sunk below the other. In this the India rubber, or other proper material, is let into a kerf cut into the weather-strip at its inner angle.

It will be seen that, in either case, the flexible strip is covered by the wooden molding, and pressed between it and the surface, so as to insure a perfectly-tight joint, which is not so sure where the edge of the strip is alone depended upon for the purpose.

Fig. 6 shows a molding or weather-strip of wood suited to joints in angles. *x* is the

weather-strip detached; *y*, the same affixed. In this the protecting flexible strip is made to protect two surfaces, for which purpose the two flat surfaces of the molding, which are at an angle to each other, have each a channel cut into it, into which the two edges of the flexible strip are fastened, as described above; and the said strip is thus made to double around the corner of the wooden molding, and protect both surfaces at said angle.

By the foregoing description it will be seen that we do not herein claim simply a molding of wood with a strip of rubber projecting from the surface thereof; nor do we claim inserting the flexible material by its two edges *per se*; but

What we do claim as our improvement, and

for which we desire to secure Letters Patent, is—

1. A weather-strip formed of a single piece of molding, as herein described and shown in Fig. 5, with a strip of India rubber or other suitable material affixed therein, as specified, for covering joints on level surfaces, substantially as above specified.

2. We also claim the weather-strip, shown in Fig. 6, for guarding joints in angles, constructed as and for the purposes herein set forth.

EDWD. P. TORREY.  
E. S. TORREY.

Witnesses:

J. J. GREENOUGH,  
STEPHEN G. CLARKE.