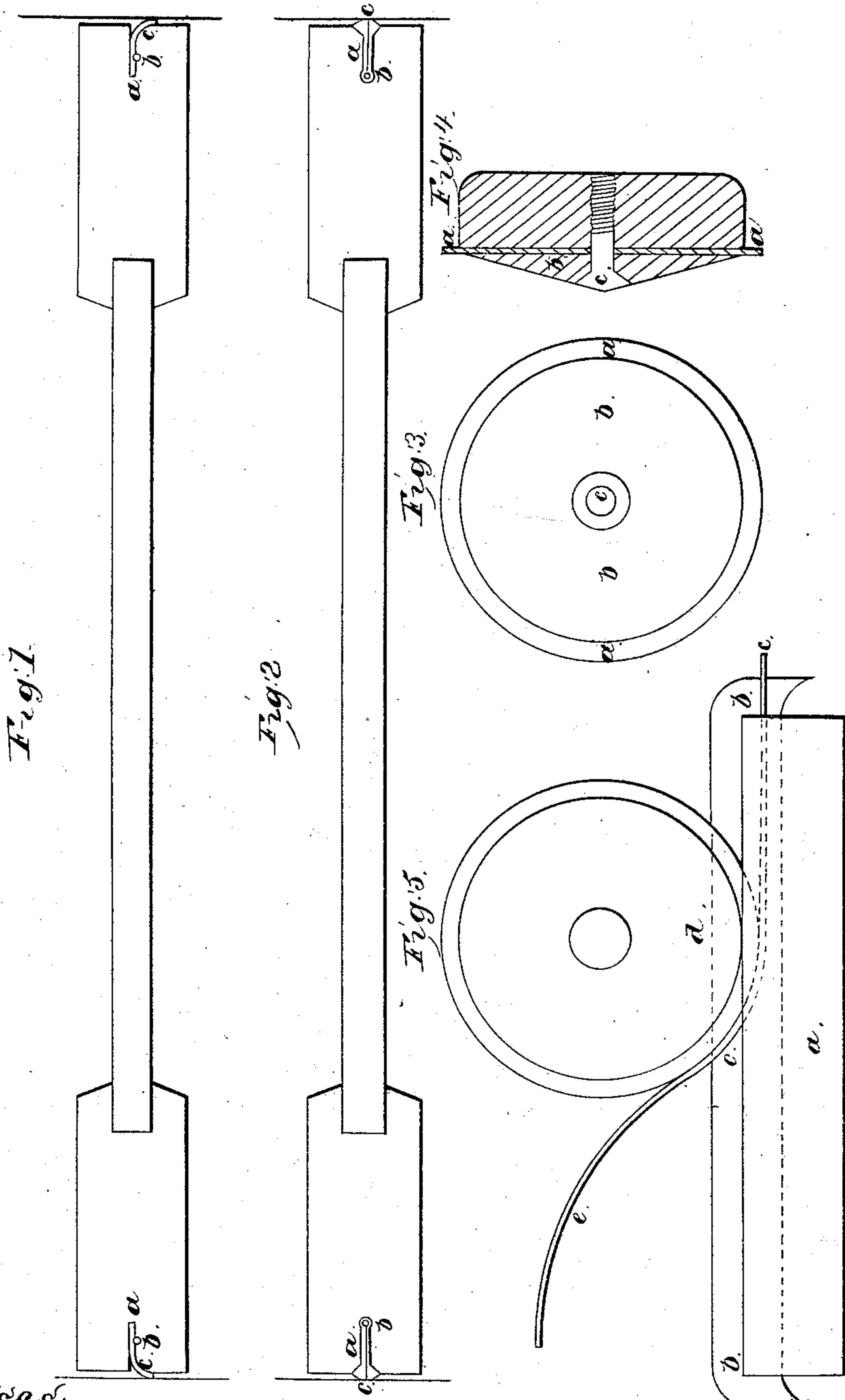


*H. Waterman,
Weather Strip.*

N^o 62,383.

Patented Feb. 26, 1867.



*Witnesses:
Theodore Snyder
Thomas W. Day.*

*Inventor:
Henry Waterman*

United States Patent Office.

HENRY WATERMAN, OF HUDSON, NEW YORK.

Letters Patent No. 62,383, dated February 26, 1867.

IMPROVED WEATHER STRIP.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HENRY WATERMAN, of the city of Hudson, county of Columbia, State of New York, have invented a new and improved mode of constructing what is called a Weather Strip, used for the purpose of making the joints of doors and windows air-tight; and I hereby declare that the following is a full, clear, and exact description of the construction of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents a transverse section of door or window with a strip of India rubber inserted in the edges, showing also how it is to be held in its position.

Figure 2 represents also a transverse section of door or window with a strip of cloth inserted in the edges, showing how it is to be held in its position.

Figure 3 represents a side view of the tool to be used in the construction.

Figure 4 represents an edge view of said tool.

Figure 5 represents the said tool in the act of forcing down the wire or its equivalent for the purpose of holding the strip of rubber or cloth in its place.

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction and operation.

In the use of vulcanized India rubber for the purpose of making the joints of doors and windows air-tight, various methods have been devised. One form is to place the strip of rubber in the edge of a strip of wood. ~~This is placed upon the casing moulding so that the projecting edge of the rubber presses against the door or window sash, and makes the joint air-tight.~~ Another form is to place the strip of rubber in a clamp of metal formed like the letter U over one edge about one-half of the strip of rubber, and is for the purpose of holding it in a groove sawed in the edge of the door or window sash, leaving a portion of the rubber projecting from the edge of the door or sash so as to press against the jamb or casing and make the joint air-tight.

My invention is especially designed to be more simple, easily made, and economical than any other form that has come to my knowledge, and is made as follows: In the edges of doors or window-sash I saw or plane a groove, *a*, fig. 1, about one-sixteenth of an inch in width, and about three-eighths of an inch in depth, into which insert a strip of India rubber, *e*, about three-quarters of an inch in width. Then with a peculiar tool, which I will hereafter describe, and is a part of my invention, I force a small wire, *b*, fig. 1, down by the side of the strip of rubber, or within the fold of a strip of cloth into the groove; in case of the rubber about half way down, (and of the cloth about to the bottom, or so far as will leave sufficient edge of cloth projecting,) which wire by indentation into the rubber and wood is to hold the rubber more firmly in its place than any other mode that has come to my knowledge. The afore-mentioned tool, as it is rolled along, not only forces the wire down to its place, but also draws the rubber evenly so as to entirely prevent wrinkles or puckers, and renders it perfectly straight and smooth. Thus the door or sash will have a strip of India rubber projecting about three-eighths of an inch from its outer edge, so that by the flexibility of the rubber it will press against the jamb of the door or window, and render the joint air-tight. In describing the instrument or tool by means of which I force down the wire into the groove so as to hold the strip or rubber into its place, I mention first a circular plate of thin steel, *a a*, fig. 3, and to be held between stock of wood or metal, which also answers for a guide as to depth. Fig. 5, represents this tool with the projecting edge of the steel plate being itself forced by the hand of the operator down by the side of the rubber into the groove, itself forcing the wire *c* down to the position shown by dotted lines.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement and mode of fastening a strip of India rubber or cloth in a groove in the edge of a door or window sash, by means of a wire forced down into the groove by the side of or within the folds of the rubber strip, so as to hold it firmly in its place, substantially in the manner and for the purpose hereinbefore set forth.

HENRY WATERMAN.

Witnesses:

JOHN V. WHITBECK,
JNO. C. DU BOIS.