

No. 754,273.

PATENTED MAR. 8, 1904.

W. H. BACHE.
SHEET FOR ROOF COVERING.
APPLICATION FILED MAY 20, 1903.

NO MODEL.

Fig. 1.

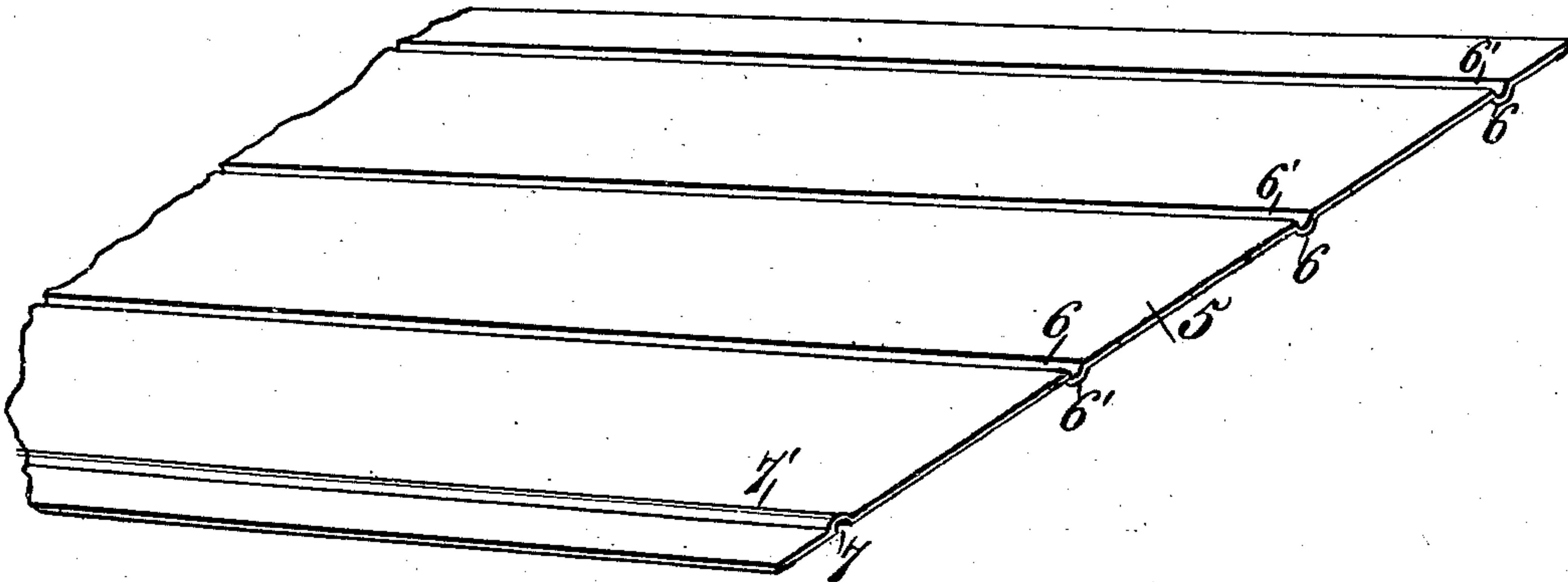


Fig. 2.

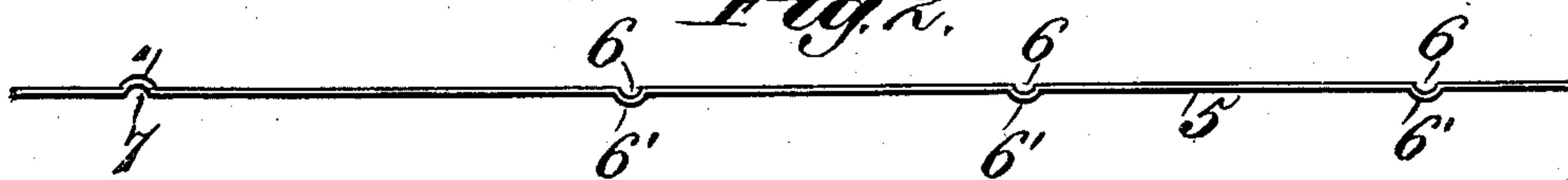


Fig. 3.

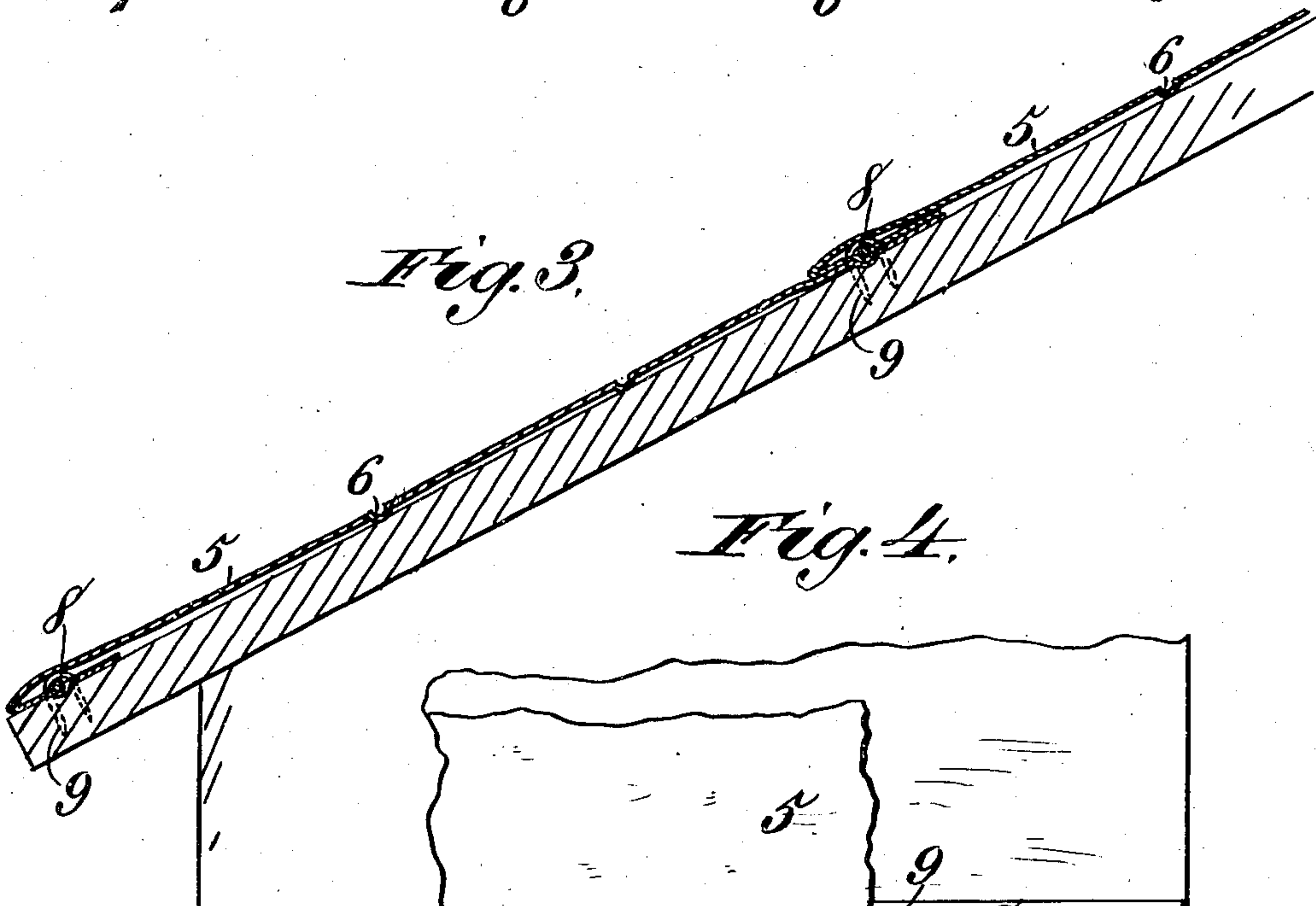
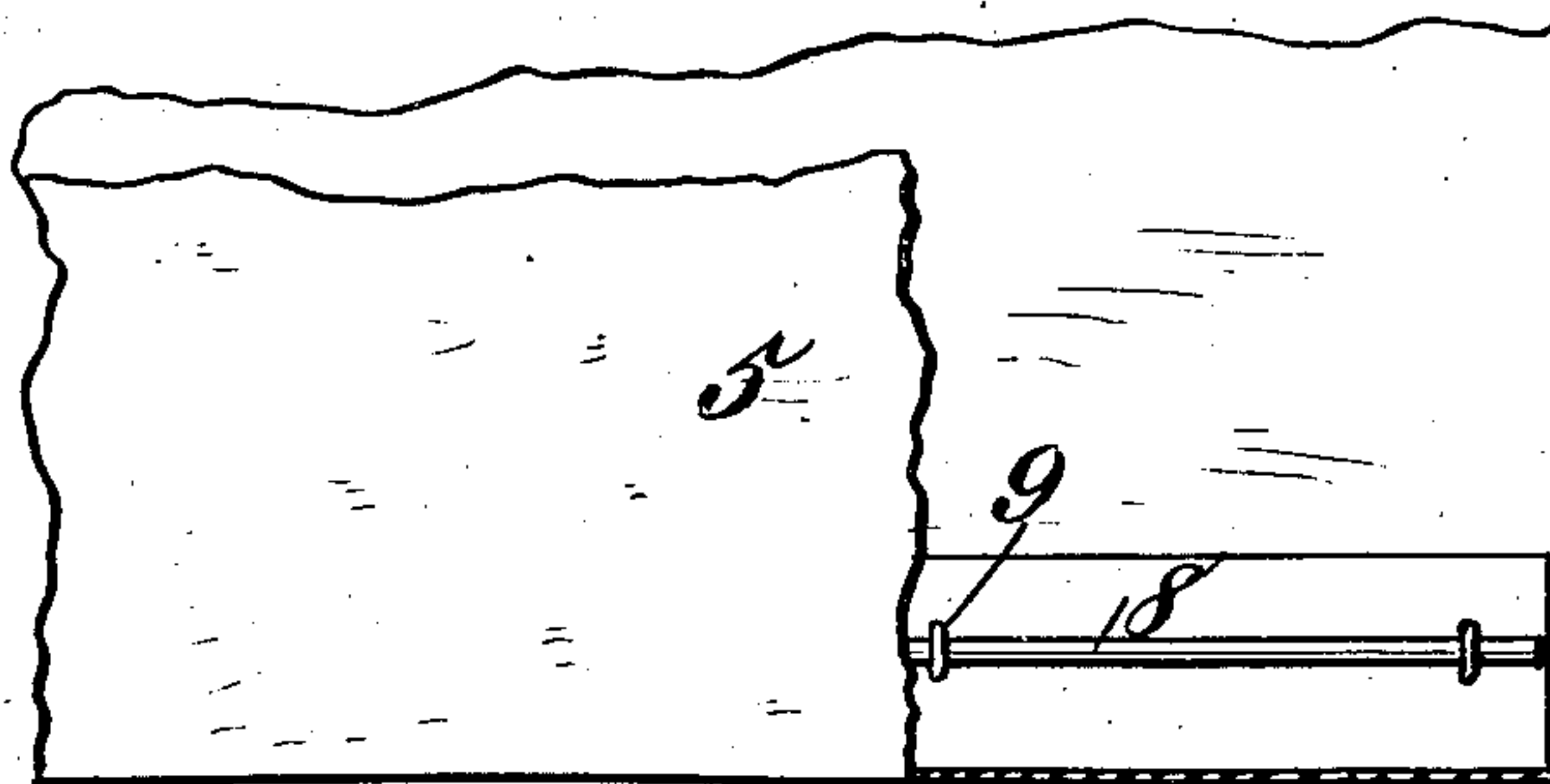


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM H. BACHE, OF BOUNDBROOK, NEW JERSEY.

SHEET FOR ROOF-COVERING.

SPECIFICATION forming part of Letters Patent No. 754,273, dated March 8, 1904.

Application filed May 20, 1903. Serial No. 158,038. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BACHE, a citizen of the United States, residing at Boundbrook, in the county of Somerset and State of New Jersey, have invented new and useful Improvements in Sheets for Roof-Covering, of which the following is a specification.

This invention relates to what I shall for convenience term a "sheet" for roof-covering and to a fastening means for holding the same in place. Said sheet may be used in the manner disclosed by Letters Patent No. 702,614, granted to me June 17, 1902, or it may be used as siding material—that is, as a substitute for the weather-boards usually utilized in forming the sides of a wooden building.

The improved article is light and flexible, and the fastening means constituting a part of the invention holds the covering securely in place against the woodwork of a roof or the studding of the side of a building, and said covering is of such a character that it can be accurately laid. Said covering may be used in other connections than those indicated, which I do not deem it necessary to specify.

The invention in one simple adaptation thereof is illustrated in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of the covering. Fig. 2 is an edge view of the same. Fig. 3 is a sectional elevation showing the manner of fastening the covering to a roof. Fig. 4 is a plan view of said covering fastened in place, a portion thereof being removed to more clearly illustrate the fastening means.

Like characters denote like parts throughout the several figures.

The roof-covering is generally made in sheets from some suitable fabric—such as cloth, felt, or the like—the sheets being denoted by 5 and ordinarily being elongated in order that they may continuously extend from one end of the roof or studding to the other end. The sheets 5 are creased longitudinally, the creases being separated from each other and being of any desirable number, four of them being illustrated. These creases are of such form that they present upon what might be considered the upper or outer face of the sheet three

parallel grooves 6 and upon the under face a groove 7. The formation of the three grooves in the upper faces of the sheets produces corresponding beads 6' upon the under faces thereof, the reverse being the case with the groove 7, the corresponding bead therefor being denoted by 7'. A groove 6 along the upper edge of a sheet is adapted to receive the bead 7' at the lower end of the next higher sheet, as will hereinafter appear.

In some cases it is necessary to have a sheet of less width or depth than that shown in the drawings, and in this event the wide sheet is cut longitudinally thereof into one or more smaller sheets. To facilitate this cutting is the office of the intermediate grooves 6, they acting as guides to receive a knife or like implement for severing the sheet into one or more sections. The said grooves of course run along straight lines, so that by their provision the use of a straight-edge for cutting a wide sheet is not necessary.

In laying the sheets upon a roof the following procedure is adopted: Along the upper face of the sheet shown in Fig. 2 in proximity to its lower edge is applied a film of cement. The cemented surface is then put against the roof along its lower edge. This brings the groove 7 up, so that it can receive a suitable flexible strip, say, of wire, as 8, which snugly fits the groove. It is essential that these wire strips should extend in parallelism with the upper and lower edges of the sheets, and by laying them in such grooves this result is positively assured. To permanently hold the sheets in place, I provide staples 9, which pass through the sheets and into the backing or foundation upon or against which the same are laid. These staples straddle the wire strips 8 and hold the same in place, and the strips in turn securely hold the sheets against the backing between the staples. After the first sheet is fastened by means of the wire strip and staples it is folded upon itself, and its body is placed against the foundation or backing. This brings the body of the sheet over the staples and strip to protect the same from the elements. The groove 7 assures the folding of the sheet in an absolutely straight manner, it acting as a guide

for this purpose, the result being that when the sheet is finally laid it cannot buckle or pucker. As previously indicated, the formation of the lower groove 7 on one side of the sheet produces a corresponding bead on the opposite side thereof, which bead when the sheet is to be applied to the roof is fitted against the latter, so that a sharp fold cannot be made in said sheet. After the first sheet is laid its width or depth may, if desired, be decreased by running a knife along either one of the two upper grooves 6, and the straight cutting of the sheet will be secured without the use of a straight-edge. After the first sheet has been laid and, if necessary, cut the bead 7' of the second sheet is laid into the upper groove 6, if there be more than one, or if there is only one it is placed in the single groove of the lower sheet. It will be understood, therefore, that the groove of the lower sheet receives a bead upon the next higher sheet, thus forming a positive interlock between the two. The insertion of the bead 7' of the higher sheet into the groove 6 of the lower sheet brings the groove 7 along the lower edge of the second sheet up, and into this groove a wire strip is placed exactly as in the other case and is fastened in position permanently by means of the staples. The second sheet is then folded upon itself exactly as is the case with the first one, and this procedure is followed until the roof is completely covered.

In practice the sheets are put upon the market in a roll, and the strips 8, being flexible, can be coiled into small compass and inserted into such rolls for transportation.

When the sheets are applied to the studding as a substitute for weather-boarding, the wire strips 8 are closely arranged, so as to prevent the ready penetration of the structure by objects of different kinds. As the strips 8 are flexible, they can be easily bent around curved or angular places in a roof. For example, the sheets can be readily laid against and securely fastened to a circular tower. The strips also may be handled with ease. They may be

placed upon a spool and in laying a roof can be easily unrolled from said spool to the desired length.

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

1. A covering of the class described consisting of a sheet of material folded on itself, fastenings for securing the sheet to a foundation, a strip fitting against the sheet between the parts of the fold and receiving said fastenings, and the sheet having a groove to receive said strip.

2. A covering of the class described consisting of a sheet of material folded on itself, staples passing through the same and covered by the body thereof, for fastening said sheet to a backing, and a flexible strip straddled by the staples, said strip holding the sheet to said backing, between the staples.

3. A flat sheet for roof-covering having corresponding beads and grooves on its opposite faces, the grooves facing in opposite directions.

4. A roof-covering consisting of a series of sheets, each sheet being folded on itself along one edge, the folds being covered by the bodies of the respective sheets, the folded-over portion of an upper sheet lying on the upper portion of a lower sheet, the latter having along said upper portion a groove, the fold of said upper sheet having a groove on its upper side and a corresponding bead on its lower side fitting in the groove along the upper portion of the lower sheet, a strip fitted in the groove in the folded portion of the upper sheet, the folded portion of the lower sheet also having a groove, a strip in the last-mentioned groove, and means for fastening the strips in place.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM H. BACHE.

Witnesses:

HEATH SUTHERLAND,
GEO. W. REA.