No. 844,056. PATENTED FEB. 12, 1907.

S. TAYLOR.

METALLIC COVERING FOR ROOFS, WALLS, AND BUILDINGS.

APPLICATION FILED JAN. 27, 1906.

Fig. 1.

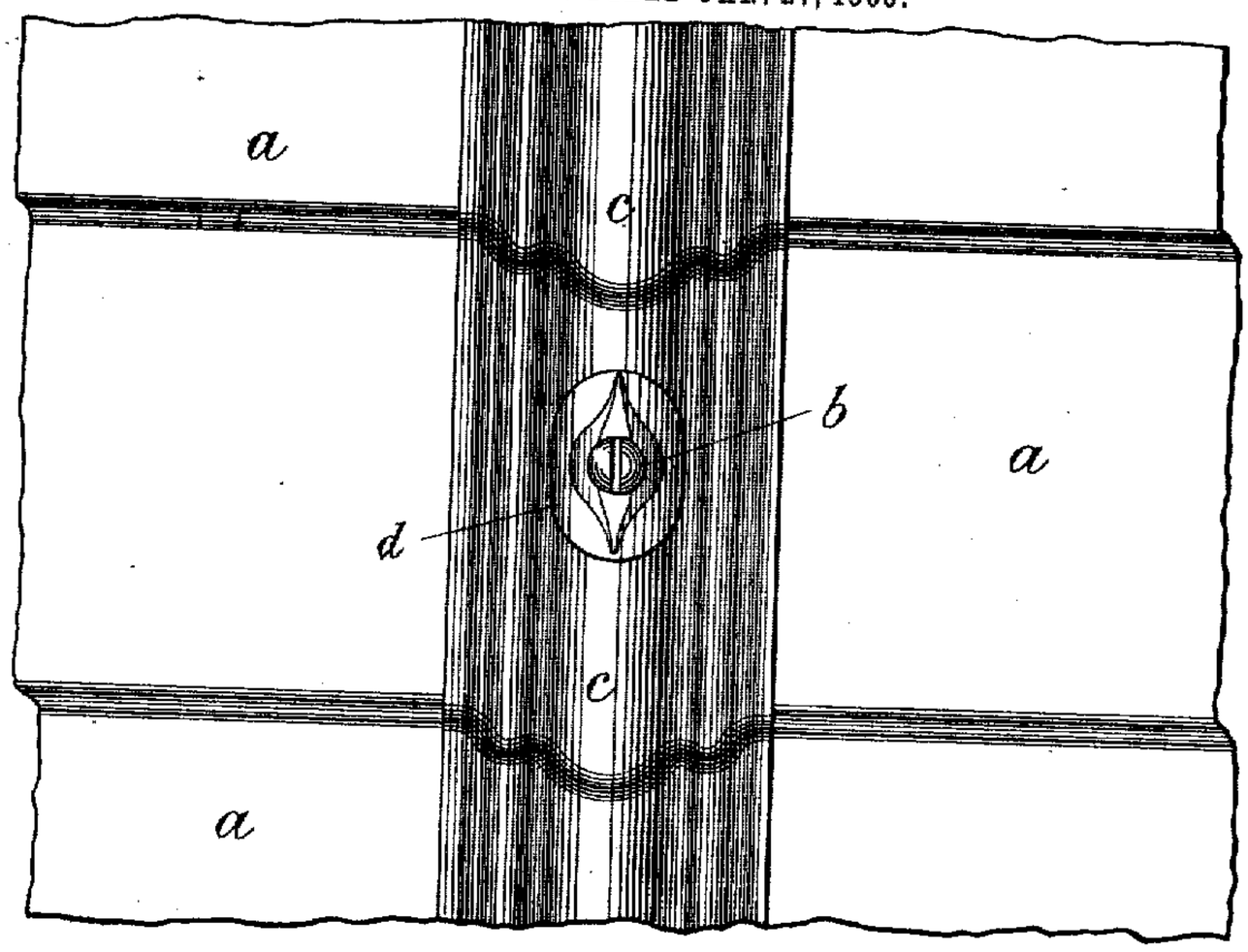


Fig. 2.

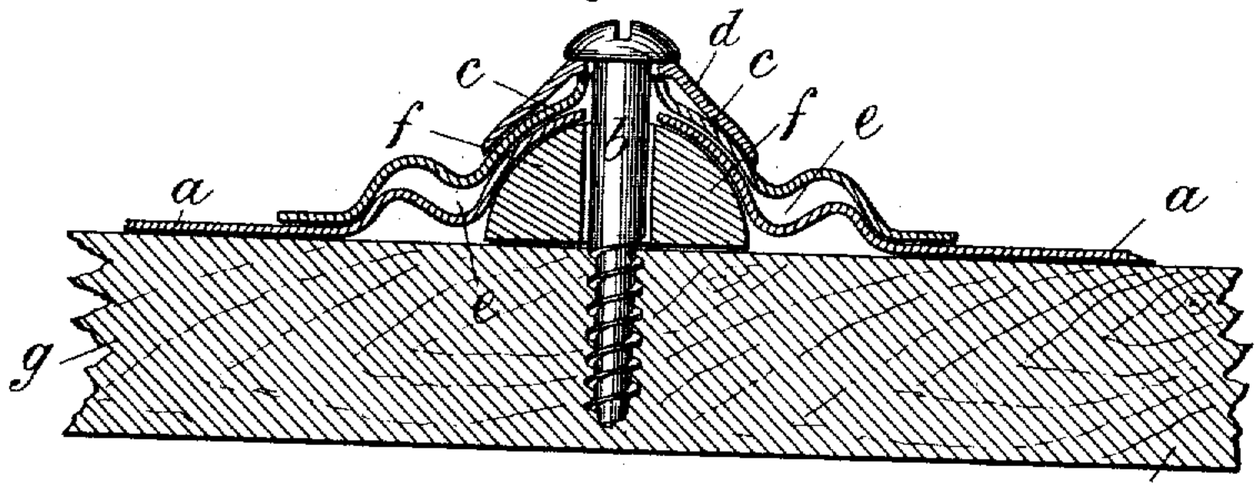


Fig. 3.

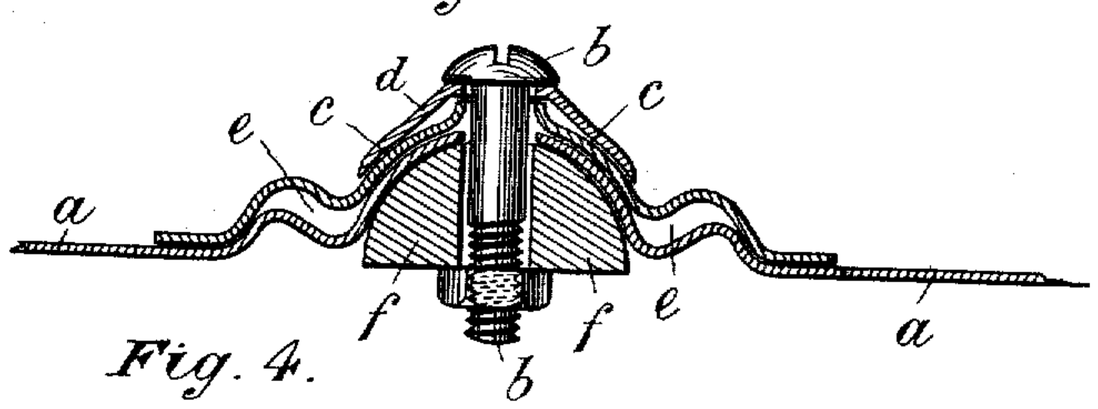


Fig. 4.

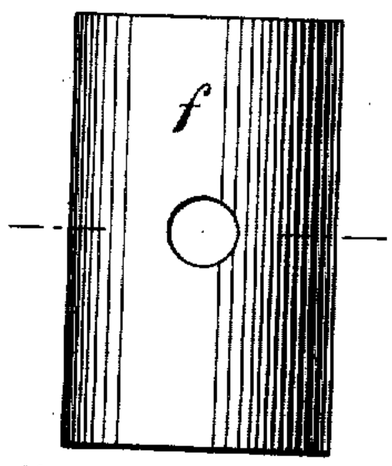
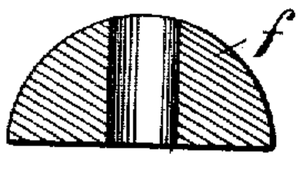


Fig. 5.



Witnesses;—

Richard Skerrett

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UNITED STATES PATENT OFFICE.

SAMUEL TAYLOR, OF BIRMINGHAM, ENGLAND.

METALLIC COVERING FOR ROOFS, WALLS, AND BUILDINGS.

No. 844,056. Specification of Letters Patent. Patented Feb. 12, 1907.

Application filed January 27, 1906. Serial No. 298,221.

To all whom it may concern:

Be it known that I, SAMUEL TAYLOR, a subject of the King of Great Britain, residing at Nos. 145, 146, and 147 Lionel street, Birmingham, England, have invented certain new and useful Improvements in Metallic Coverings for Roofs, Walls, and Buildings, of which the following is a specification.

The said invention relates to that type of metal-covered roofs, walls, and buildings in which the opposed edges of stepped or plain metallic sheets are separated a short distance apart and are connected by guttered strips or caps which are secured to the sheets or to the sheets and roof work or framing of the building by screw pins of bolts.

According to the said invention I so fashion the longitudinal edges of the sheets and guttered strips or caps that channels are formed between them for carrying away water of condensation or other water, so as thereby to more effectually prevent water gaining access to the under side of the roofing-sheets than with the arrangement of parts heretofore used.

For supporting and fixing the metallic sheets and connecting strips or caps to the roof work or framing (or fixing their edges together where no rafters are situated under the joints) semicylindrical or saddle-like blocks of wood or of other hard material are used at the joints, the fixing screws or bolts passing through holes in the said blocks, the edges of the caps fitting closely or saddlewise on the semicylindrical blocks.

Figure 1 of the accompanying drawing represents in plan a portion of a metal-covered roof containing the improvements constituting my invention, and Fig. 2 is a cross-section of the same. Fig. 3 represents in section the method of connecting the unsupported edges of the metallic sheets between the purlins or framing. Fig. 4 represents in plan, and Fig. 5 in cross-section, one of the semicylindrical or saddle-like blocks employed in supporting and joining the sheets and caps together.

The same letters of reference indicate the same parts in the several figures of the drawing.

a a are the metallic stepped (or plain) metal sheets the adjacent edges of which are separated a short distance apart to permit of the passage between them of the fixing-screws *b b*. *c* is the guttered fixing cap or strip engaging with or fitting over the adjacent open or separated edges of the sheets *a a*. It will be seen by an examination of Fig. 2 that the sheets and caps are so fashioned as to form between them longitudinal channels *e e* for carrying away water which may have found its way between the bearing parts of the said sheets and caps and preventing the same by capillary attraction or otherwise from gaining access to the under sides of the said sheets.

f is one of the solid semicylindrical or saddle-like blocks, preferably of hard wood, between which and the strips or caps *c* the edges of the sheets *a* are gripped where they are to be connected by the screw-pins *b* (or bolts) to the woodwork or roof-framing. The flat bottoms of the semicylindrical blocks *f* rest on the roof work or framing *g*, and the central beading fits closely or saddlewise the semicylindrical blocks *f*, a hole in each block being made for the passage of the fixing-screw *b* (or bolt) into the roof work or framing. The heads of the screws or bolts *b* seat themselves on washers *d*. By the use of the semicylindrical blocks *f* the metallic sheets and fixing-caps are very securely fixed to the roof work or framing, and the extreme edges of the sheets are maintained in their position and prevented from being forced downward in the fixing of the sheets with the screws or bolts.

Where the edges of the metallic sheets *a* and caps *c* are secured together between the purlins or rafters, the semicylindrical blocks *f* are secured in place within the joint part of the sheets and caps by fixing-bolts and nuts *b*, as is illustrated in Fig. 3. A further advantage attending the use of the solid semicylindrical blocks *f* is that rattling of the contacting parts of the sheets and caps can be very efficiently prevented.

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

1. In metal roofs or metal-covered roofs, walls and buildings the presented edges of the metallic sheets of which are separated a short distance apart and have each a small convex corrugation passing by a concave channel or corrugation into a larger convex quadrant-like corrugation at the edge of the sheet, the quadrant-like corrugation of one sheet forming with the presented quadrant-shaped corrugation of the adjacent sheet a semicircular or nearly semicircular convex corrugation the corrugations of the said

sheets being covered by a similarly-corrugated covering-strip or cap which covers the opening between the sheets making the small convex and concave corrugations of the caps or strips of such a height that water-conduits are formed between the corrugations of the sheets and the corrugations of the caps or covering-strips which carry away water of condensation or other water and prevent water gaining, by capillary attraction or otherwise, access to the under sides of the sheets.

2. Metallic roofing comprising the combination with a pair of metallic sheets the presented edges of which are separated a short distance apart and have each a small convex corrugation passing by a concave channel or corrugation into a larger convex quadrant-like corrugation at the edge of the sheet, the quadrant-like corrugation of one sheet forming with the presented quadrant-shaped corrugation of the adjacent sheet a semicircular or nearly semicircular convex corrugation, of similarly-corrugated covering-strips or caps which cover the openings between the sheets the small convex and concave corrugations of which caps or strips have such a height that water-conduits are formed between the corrugations of the sheets and the corrugations of the caps or covering-strips, a series of washers, short detached blocks and fixing-screws substantially as set forth.

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

SAMUEL TAYLOR.

Witnesses:
RICHARD SKERRETT,
ARTHUR JOHN POWELL.