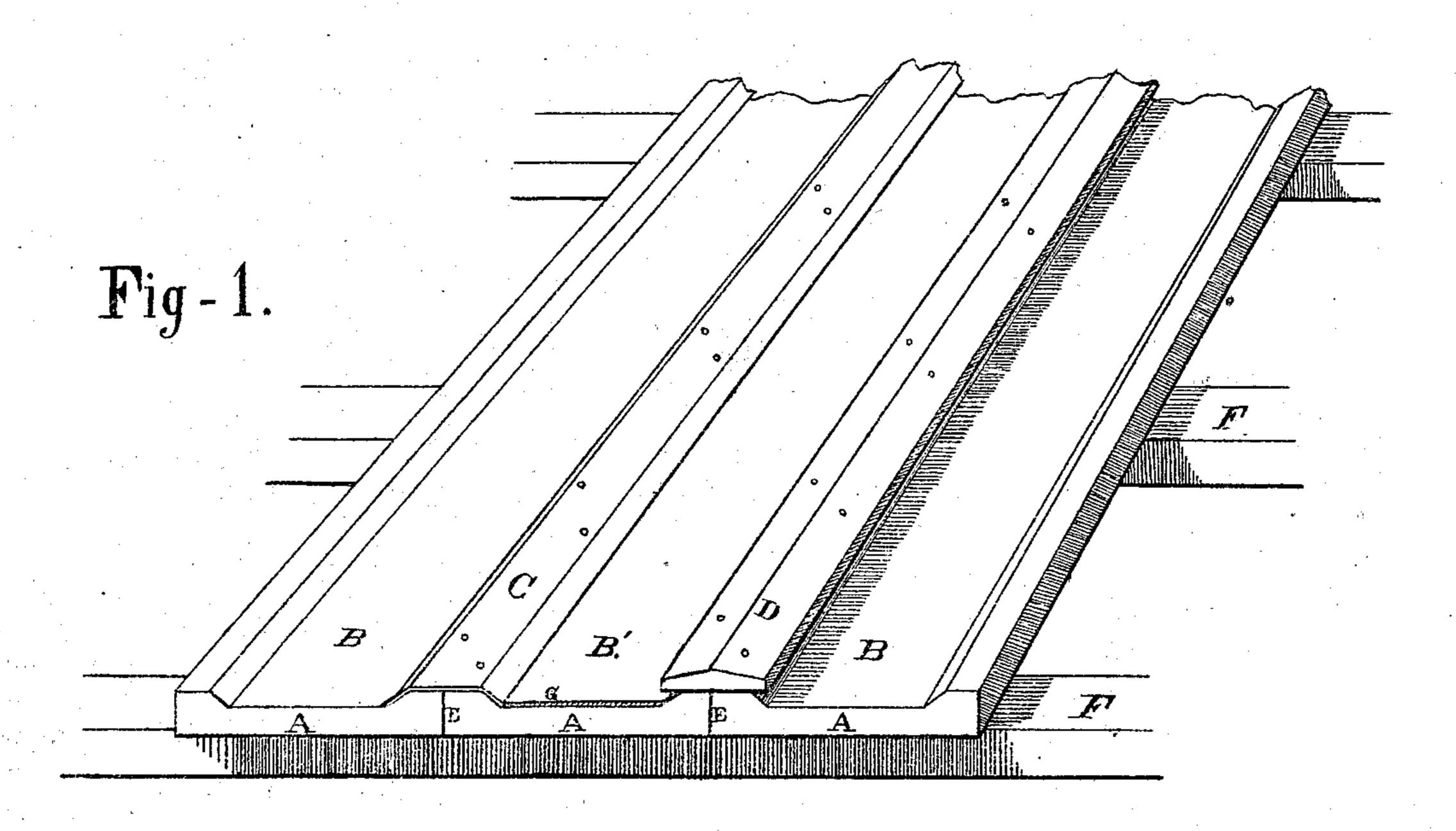
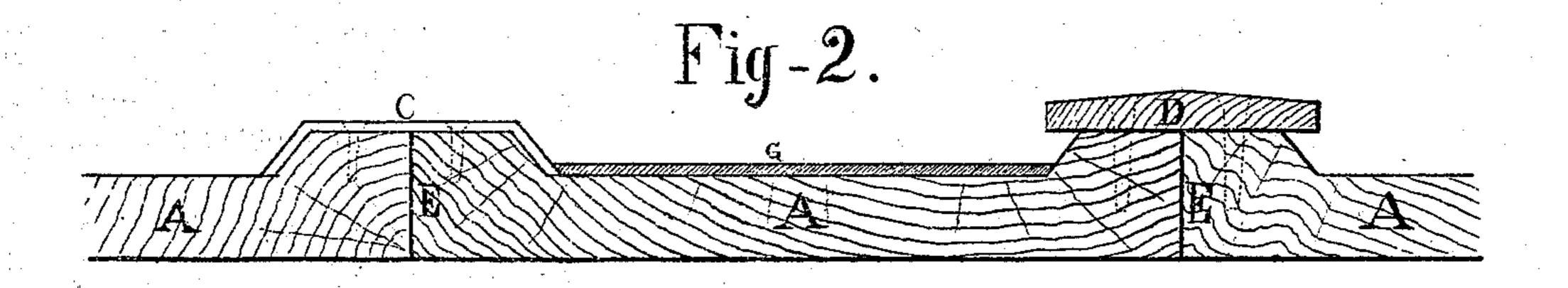
J. LONG.

Fire and Water-Proof Roofs.

No. 143,581.

Patented Oct. 14, 1873.





WITNESSES.
Orlander Cook

Inventor. Poseph Long

UNITED STATES PATENT OFFICE.

JOSEPH LONG, OF MECHANICSBURG, PENNSYLVANIA.

IMPROVEMENT IN FIRE AND WATER PROOF ROOFS.

Specification forming part of Letters Patent No. 143,581, dated October 14, 1873; application filed August 27, 1873.

To all whom it may concern:

Be it known that I, Joseph Long, of Mechanicsburg, Cumberland county, Pennsylvania, have invented certain Improvements in Fire and Water Proof Roofs, of which the following is a specification:

Figure 1 is a perspective view of the invention. Fig. 2 is a sectional view of the invention.

A A A are boards of a good quality of white pine, cypress, or other soft wood, six inches in width, and one inch in thickness. BB'B are grooves or rabbets sunk in these boards onefourth of an inch in depth and four and onehalf inches in width, thus allowing an elevated margin or edge on each side of each board of three-fourths of an inch in width. These boards thus grooved or rabbeted are fastened to the ordinary laths or boards F F on a building, to which shingles, slate, tin, and other roofing materials are usually attached, joining the elevated edges or margins E E closely. Over these joints of the elevated margins of the boards are fastened with screws or nails beveled wooden caps D of the same kind of wood of which the roof is composed, three-eighths of an inch in thickness, and two inches in

width, or a zinc cap, C. This completes a good water-proof roof. To make it fire-proof, the whole surface is covered with a cement composed of equal portions of common paint and gum-shellac, which is then sanded in the usual way of sanding paint. This cement covering B' G thus prepared becomes very hard and solid, and is perfectly fire and water-proof.

What I claim as my invention, and desire to

secure by Letters Patent, is—

A fire and water proof roof composed of the boards A A A with the rabbets or grooves B B' B sunk in the one side thereof, forming thereby the elevated edges or margins E E, which are closely joined and the joints covered with wooden caps D or zinc caps C, the boards thus joined being fastened to the laths F F of the building, and the whole roof thus prepared covered with a cement composed of equal portions of common paint and gum-shellac sanded and applied as shown at B' G, the whole combined, constructed, and used in the manner and for the purposes herein set forth.

JOSEPH LONG.

Witnesses:

F. E. BELTZHOOVER, HARRY HOOK.