No. 720,811. PATENTED FEB. 17, 1903.

J. INGRAM.

ROOF.

APPLICATION FILED NOV. 6 1902.

NO MODEL.

Fig. 1.

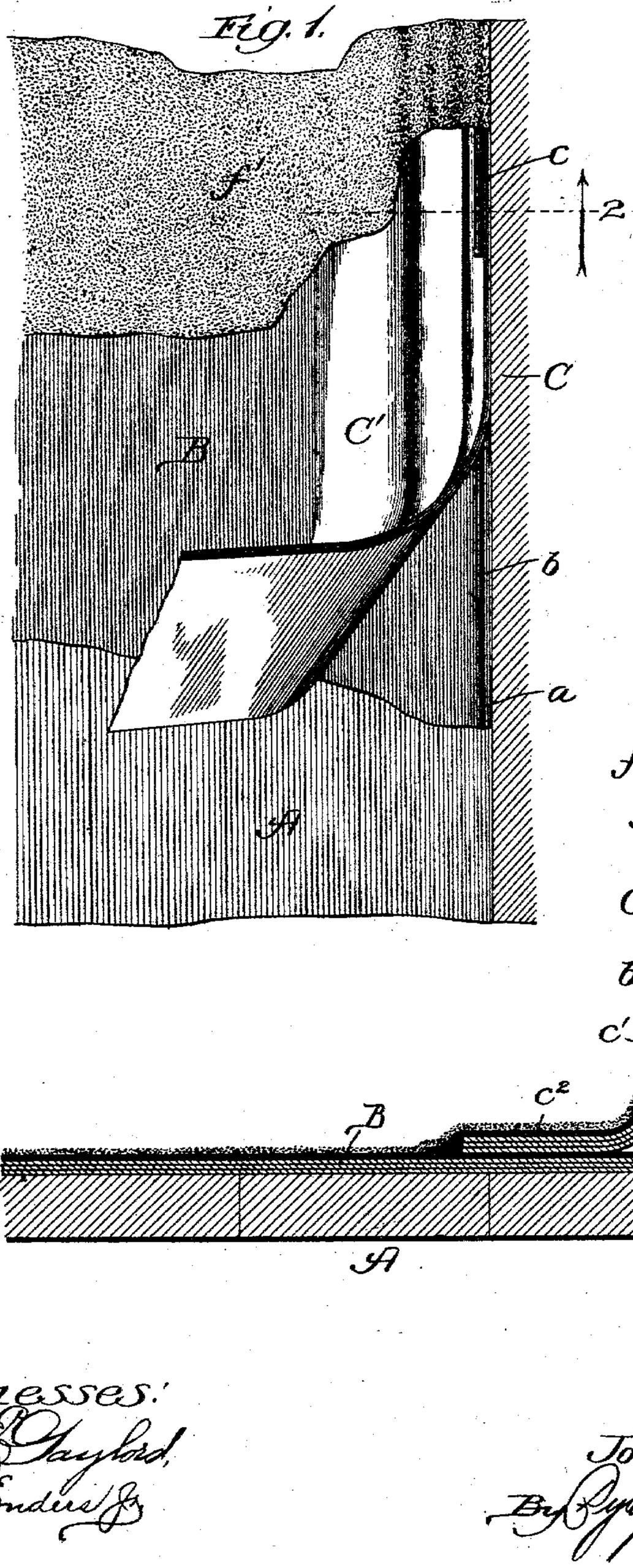
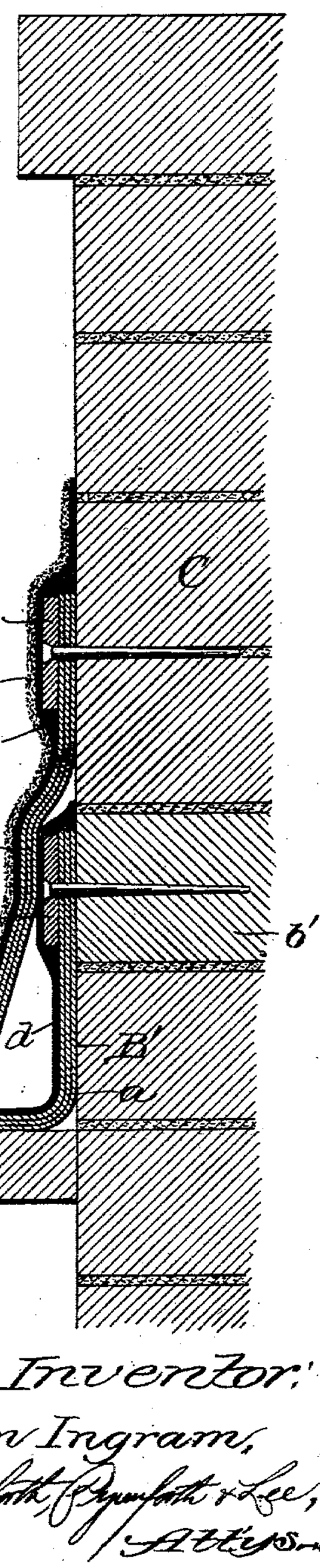


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN INGRAM, OF CHICAGO, ILLINOIS.

ROOF.

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Application filed November 6, 1902. Serial No. 130,219. (No model.)

To all whom it may concern:

Be it known that I, JOHN INGRAM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Roofs, of which the following is a specification.

My invention relates particularly to so-called "gravel" roofs, and my primary object is to provide improved and cheapened means for joining the roof to the fire and protection walls of the building, which project above the roof. In the common construction of roofs of this character suitable roofing-paper is employed to cover the roof and the edges of the sheets are turned up at the margins of the roof and joined to the fire-walls and other protection-walls, thereby affording what may be termed "flashings." This constitutes the weak portion of the roof, as this portion of the roof, if unprotected, will always wear out before the main portion of the roof does. Some effort has been made to overcome this difficulty; but, so far as I am aware, no construction cheap enough for general use has heretofore been devised.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a broken plan view of a roof with the projecting portion of the protection or fire wall in section, and Fig. 2 an enlarged vertical section taken as indicated at the corresponding line of Fig. 1.

In the preferred construction, A represents a board roof; B, the roofing paper or felt applied thereto and having an edge turned upwardly and joined to the adjacent wall to afford a flashing B′; C, a wall of the building which projects above the roof and to which is secured the flashing B′, and C′ a counter-flashing connected with said wall and protecting the bend *a* of the paper B.

The paper B consists of any desired number of layers of tarred sheets of roofing-paper, or it may be of prepared roofing-paper used alone or in connection with other paper. By preference there is first applied to the roof one dry thickness of felt, then four thicknesses of heavy saturated wool felt, then a heavy coating of composition of tar and pitch, then a "cap-sheet" of heavy saturated wool felt, then a coating of composition of tar and pitch, and finally a layer of clean screened dry lake-gravel free from sand. The flashing B′ is secured by a lath or strip *b* and nails driven into the wooden two-by-four member *b*′, between two adjacent courses of bricks, as shown. The counter-flashing C′ is composed of roofing-paper, preferably of three-ply prepared roofing-paper, as shown. It is secured at its upper margin by a lath *c* and nails, as shown. The portion *c*′ of the counter-flashing is inclined, and the lower margin c^2 laps upon the roof. The lath *b* and the paper B are "mopped" with pitch, producing a comparatively hard layer *d*, to which the counter-flashing C′ adheres. The counter-flashing C′ and the roof receive a similar coating *f*, over which is spread a layer of gravel *f*′. This completes the roof and affords a watertight joint at the wall.

It is noteworthy that this construction provides a cheap and effective protection for the bend *a* in the roofing-paper, so that the life of the roof is greatly increased. The expense incident to the use of this protection is so slight as to render the use highly economical.

What I regard as new, and desire to secure by Letters Patent, is—

1. In a building, the combination of a roof, a wall projecting above the same, roofing-paper applied to said roof and having a margin turned upwardly and joined to said wall, a counter-flashing of roofing-paper joined at its upper portion to said wall and bearing at its lower portion on the paper on said roof, and a finishing layer of roofing material covering the roof and reflected over said counter-flashing, for the purpose set forth.

2. In a building, the combination of a roof, a wall projecting above the same, roofing-paper applied to said roof and having a margin turned upwardly, a strip securing said margin to said wall, a coating of pitch applied to said upturned margin, said lath, and to the adjacent portion of the roof, a counter-flashing having its lower portion adhering to said coating on the roof and its upper margin contacting with the wall above said strip, a second strip securing the upper margin of said counter-flashing to said wall, a coating of pitch upon said counter-flashing, and a layer of gravel applied to said last-named coating, for the purpose set forth.

JOHN INGRAM.

In presence of—
ALBERT D. BACCI,
A. C. KITTLESON.