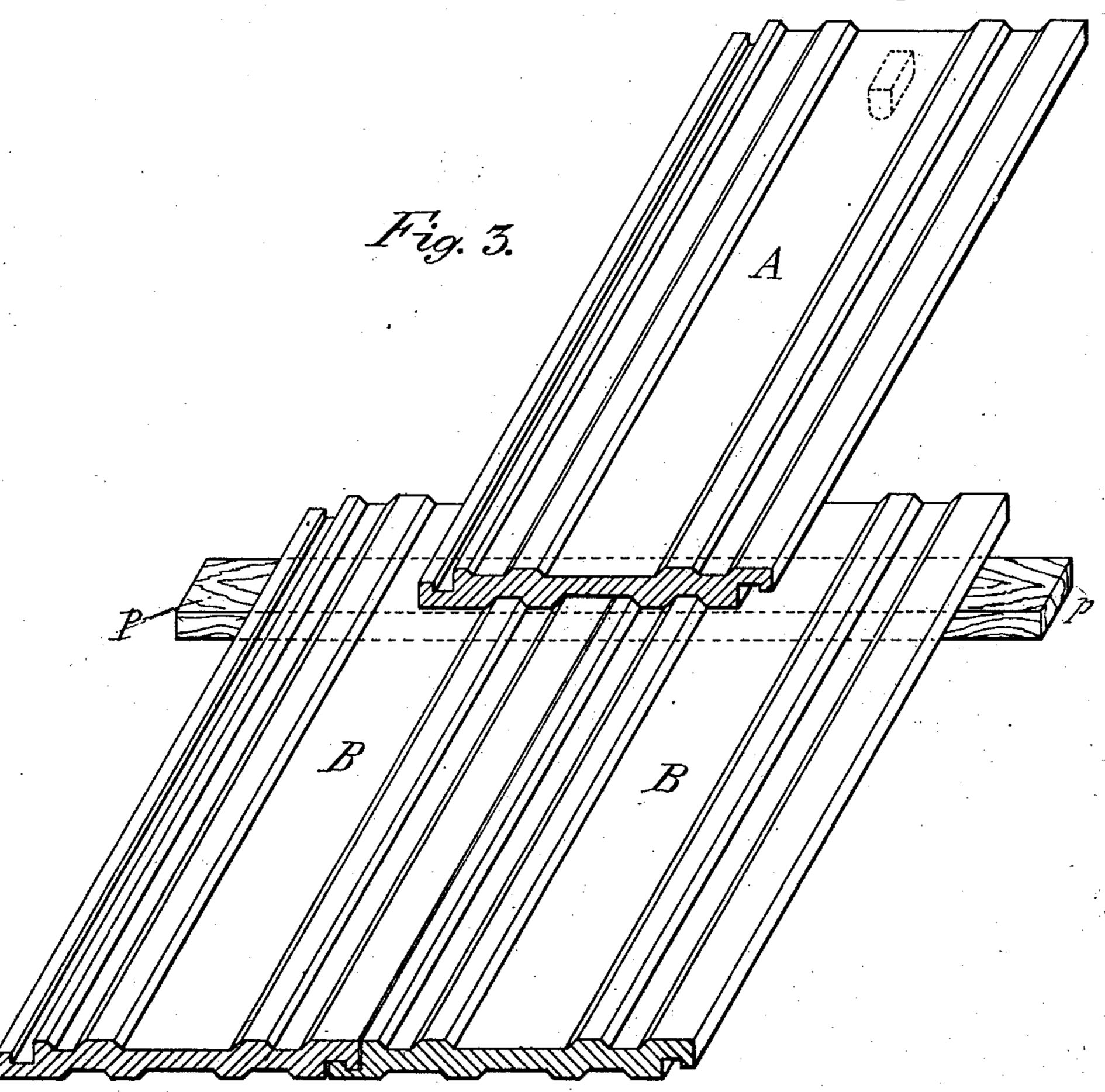
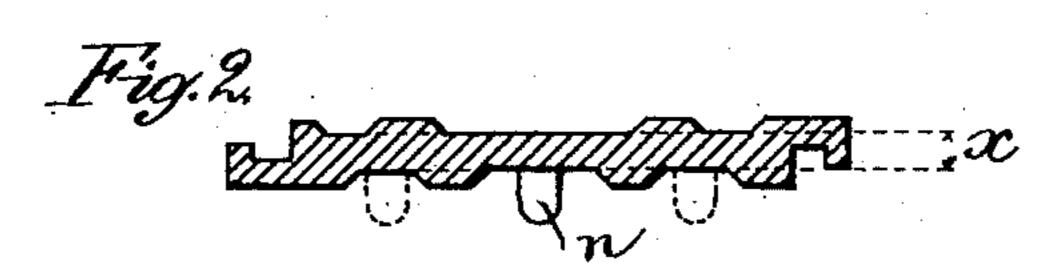
C. JÜNGST.

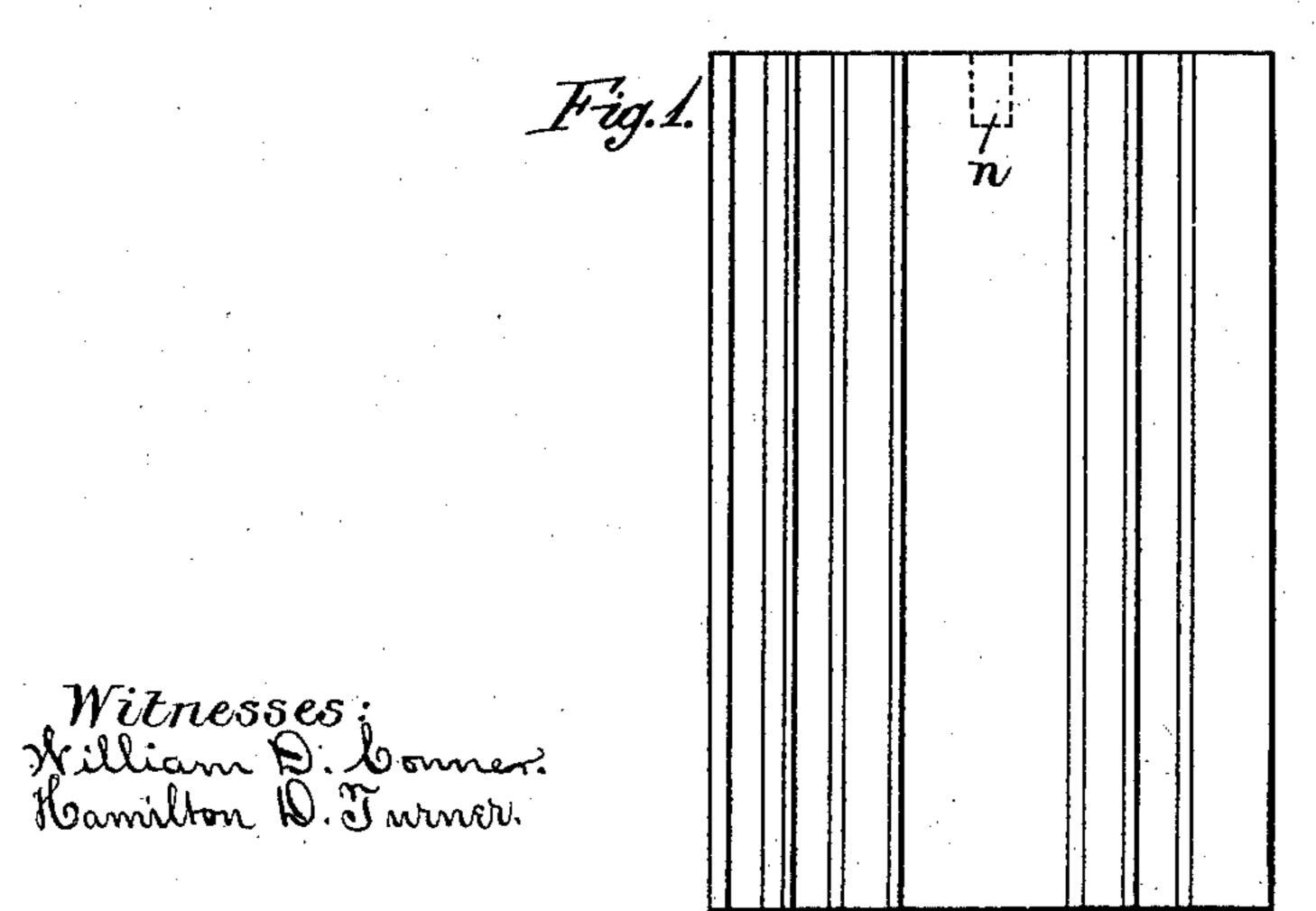
ROOFING TILE.

No. 367,758.

Patented Aug. 2, 1887.







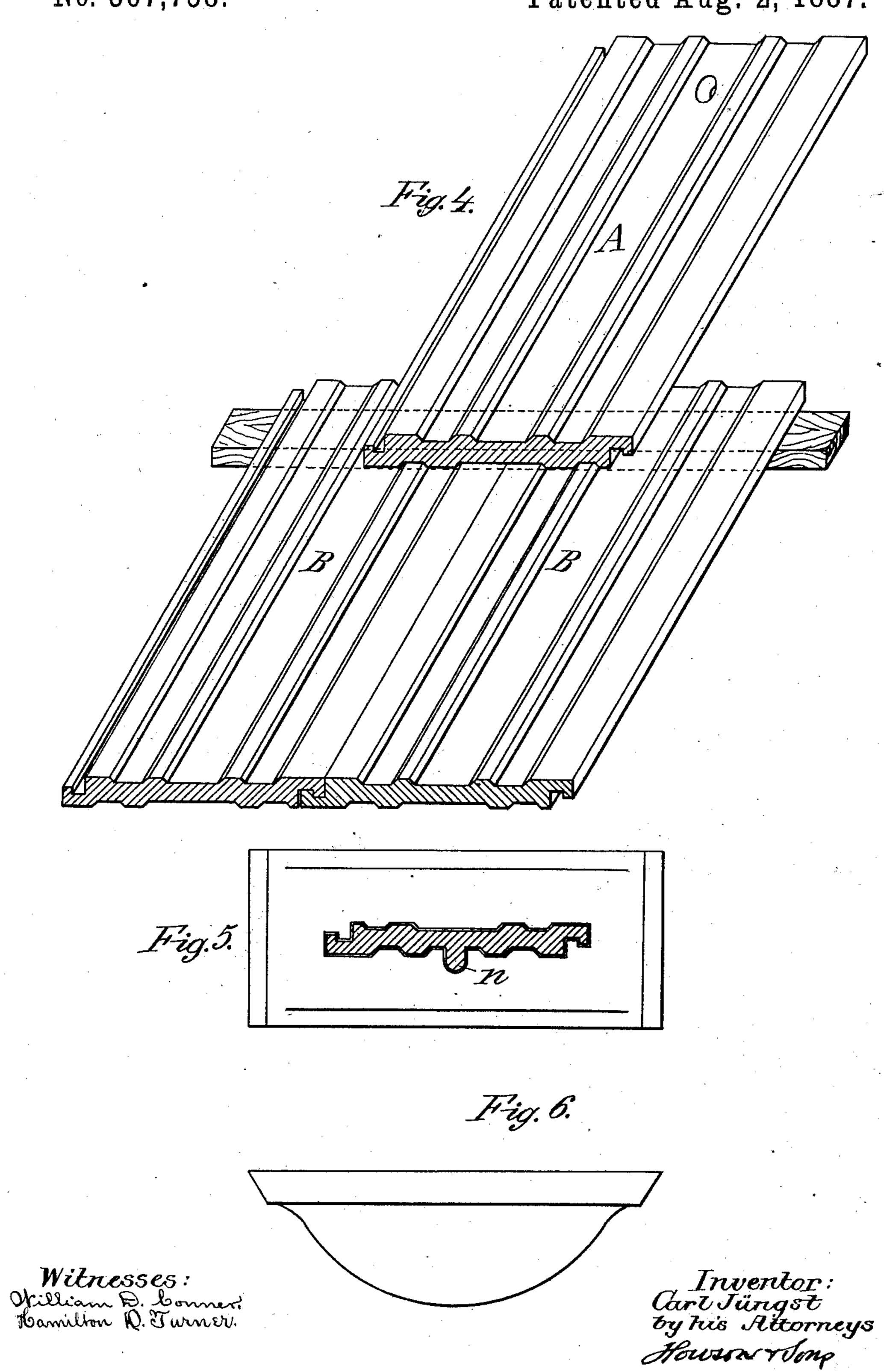
Inventor: Carl Jüngst by his Attorneys Howson Hone

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ROOFING TILE.

No. 367,758.

Patented Aug. 2, 1887.



## United States Patent Office.

CARL JÜNGST, OF FREIENWALDE, ON THE ODER, PRUSSIA, GERMANY, ASSIGNOR OF ONE-HALF TO FRANZ ULRICH BENCKENDORFF, OF SAME PLACE.

## ROOFING-TILE.

SPECIFICATION forming part of Letters Patent No. 367,758, dated August 2, 1887.

Application filed February 2, 1887. Serial No. 226,205. (No model.)

To all whom it may concern:

Be it known that I, CARL JÜNGST, a subject of the King of Prussia, residing at Freienwalde, on the Oder, in the Kingdom of Prussia, Germany, have invented new and useful Improvements in Roofing-Tiles, of which the following

is a specification.

My invention relates to the manufacture of ribbed or gooved roofing-tiles produced by to continuous tile-making machines in which the clay is pressed in a continuous column through a die having the required configuration, and is cut into lengths. The forms of such tiles at present in use, adapted for overlapping each 15 other, with ribs and grooves, are subject to several disadvantages both in respect of their manufacture and in the use thereof for roofing. The configuration or profile of such tiles has generally been such that the tiles cut from 20 the column of clay extended through the die of the machine received insufficient support on the table, and consequently got deformed; also, at the upper side of the top end a portion of the ribs or projections were cut away 25 or pressed out, or the tiles were at some parts disproportionately thin, preventing a close fit when placed in position for roofing. Furthermore, the tile frequently became cracked in burning at the weakened parts, thus impair-30 ing their durability, and, owing to the configuration of the tiles, the extent to which they could overlap was limited, as the top end of the tile would only fit properly together with the covering-tile when in a definite position. 35 Consequently a definite distance of the supporting-battens is required, which in many cases is inconvenient. By the improved manufacture of tiles, now to be described, these inconveniences and defects are obviated, and the 40 production of the tiles by means of suitable machines is easy and certain.

The improved form of tile is shown in plan and section at Figures 1 and 2 of the accompanying drawings. As shown at Fig. 2, the tile consists of two symmetrical halves, and is formed of a slab, x, of uniform thickness throughout. On the upper and under sides the tile has parallel ribs, which are also symmetrical on both halves. Figs. 5 and 6 show, in elevation and plan, the mouth-piece or die of the machine. The clay column extruded

from this has on its under side a continuous rib, n, Fig. 5, which is cut off by means of a wire in the known manner, leaving a short length for forming the stud for hanging the 55 tile on the support. (See dotted lines, Fig. 1.) Fig. 3 shows the arrangement of the tiles when fitted together in roofing.

The ribs on the under side of the tile A fit accurately into the grooves of the two con-60 tiguous lower tiles, so as to produce a perfect closure. As will be readily seen from Fig. 3, the builder is not limited to a definite distance apart of the battens p, as the tiles A and B can overlap each other to any desired extent, for 65 all the grooves extend throughout the length of each tile, and this is a characteristic feature of my invention.

As shown at Fig. 4, the holding-stude of the tiles are replaced by holes, enabling the tiles 70 to be fixed to the battens by nails. With this arrangement the tiles may be used with either side uppermost, thus affording an advantage that has hitherto not been attainable.

It will be evident that the tiles may also be 75 provided with two studs instead of only one, as shown in dotted lines in Fig. 2.

I claim as my invention-

1. A roofing-tile consisting of a slab of uniform thickness throughout with parallel ribs 80 and grooves, all the latter extending throughout the length of the tile and arranged symmetrically, substantially as described, whereby when in use the ribs of an upper tile fit the grooves of a lower tile with any extent of over-85 lap, substantially as set forth.

2. A roofing-tile consisting of a slab of uniform thickness having a hole for a securing-nail, and having parallel longitudinal ribs and grooves arranged symmetrically, the grooves consistent of the tile, substantially as described, whereby when in use an upper tile fits closely with its ribs in the grooves of the lower tile with any extent of overlap, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL JÜNGST.

Witnesses:

GUSTAV HÜLSMANN, B. ROI.