D. S. ARMSTRONG.

Material for Roofing and Building Purposes.

No. 206,850.

Patented Aug. 13, 1878.

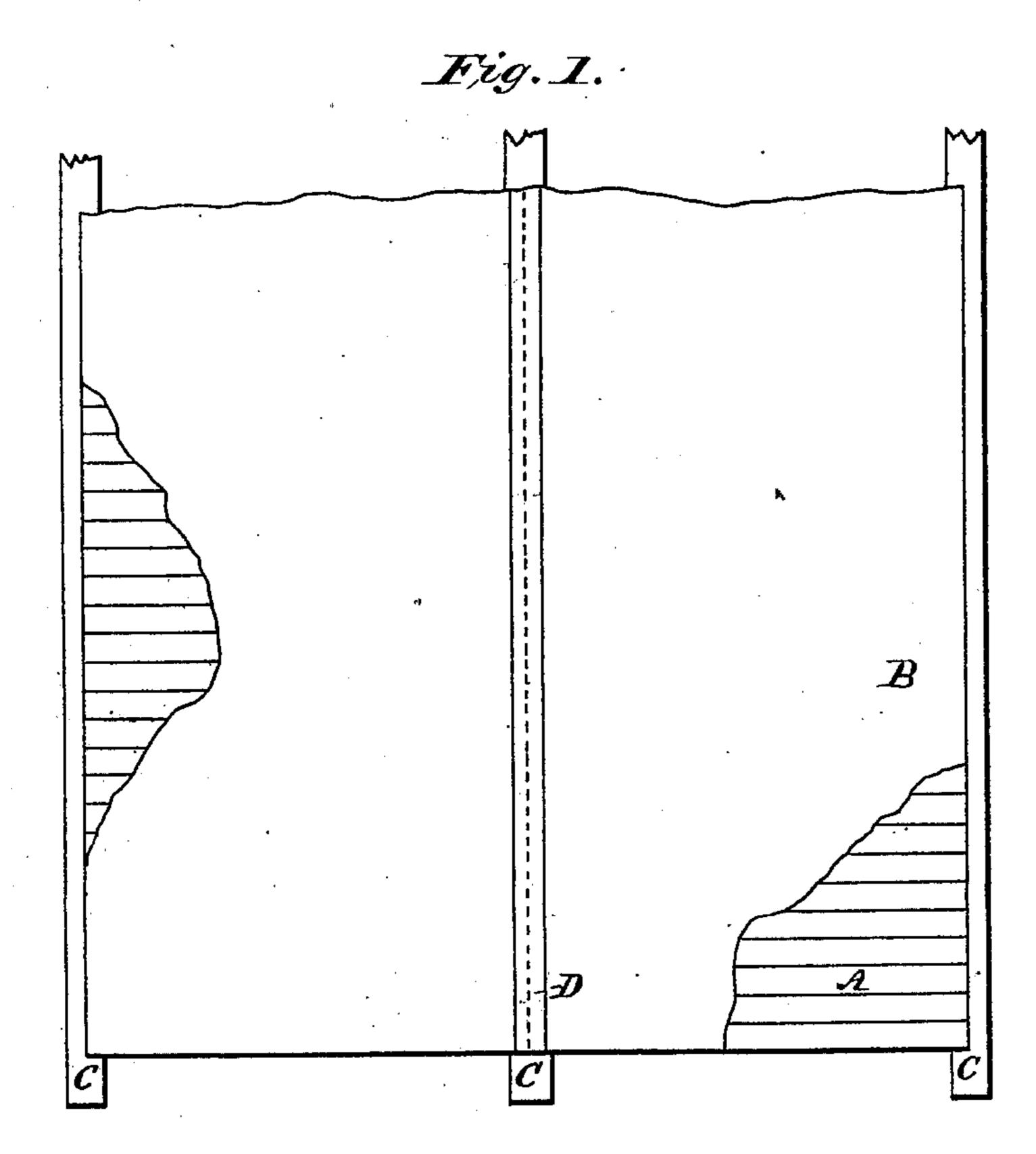


Fig. 2.

Fig. 3.

Witnesses.:

Inventor:

## UNITED STATES PATENT OFFICE.

DANIEL S. ARMSTRONG, OF HAMPDEN, MARYLAND.

IMPROVEMENT IN MATERIALS FOR ROOFING AND BUILDING PURPOSES.

Specification forming part of Letters Patent No. 206,850, dated August 13, 1878; application filed January 30, 1878.

To all whom it may concern:

Be it known that I, DANIEL S. ARMSTRONG, of Hampden, in the county of Baltimore and State of Maryland, have invented a new and useful Material for Roofing and Building Purposes, of which the following is a full, clear, and exact description, taken in connection with the accompanying drawings, in which similar letters of reference indicate like parts.

Figure 1 is a front view of my improved article as applied to a building. Fig. 2 is a cross-section, showing the paper on both sides of the laths. Fig. 3 is a cross-section, showing the paper as applied to one side of the laths.

My invention relates to a new article of manufacture for roofing, weather-boarding, and the interior lining and decoration of buildings; and it consists in the saturation and enameling of laths or thin strips of wood, or other suitable material of uniform thickness, with bitumen, placing them side by side, edge to edge, and covering one or both sides with felt paper, roofing-felt, canvas, or other suitable material.

Referring to the drawings, A are the laths; B, the felt paper or other suitable material; C, the studding of the sides of a building or the rafters of a roof, showing my improved material attached thereto. D indicates a strip of felt paper, sheet metal, or other suitable material, which I place over the meeting edges to prevent the ingress of water and make a tight joint; or I allow the edges of the felt paper to project over the ends and sides of the strips, so they will lap over the adjacent section, when it can be seamed down with bitumen or other suitable cement.

In the manufacture of my improved material I take the ordinary plastering-laths, or thin strips of wood of uniform thickness, or similar suitable material, and immerse and boil them in a solution of coal-tar, pitch, or any suitable bituminous substance or substances, having first freed the bitumen from all volatile matters, until they are thoroughly saturated, impregnated, and coated with the bitumen. On a suitable bench, table, or platform I place a layer, or cause to pass a sheet, of felt paper, roofing-felt, canvas, or other suitable material, previously saturated or not with

bitumen, on which I place the saturated strips of wood, fresh and hot from the caldron in which they have been saturated and boiled. I arrange these strips close together, side by side, edge to edge, at right angles to the length of the felt paper, and cause them to adhere to the same by rolling, or in any other suitable manner.

When I desire to cover both sides of the laths with felt paper or other suitable like material, I place a roll of felt paper or similar material in a convenient position, and as fast as the laths or slats are laid on the same, forming the under surface, and while the bitumen which adheres to the strips is still hot, I apply the upper layer or covering, and cause the whole to adhere by rolling or pressure of any kind.

I do not wish to limit myself to laying the slats of wood at right angles to the length of the felt paper, as it is obvious that they may be laid parallel therewith or diagonal thereto, care being taken to have the strips or laths laid so as to break joints without departing from the spirit of my invention; neither do I wish to limit myself to the covering of the slats on both sides with felt paper or other suitable material, as it is obvious that certain exigencies may require a cheaper or lighter material, with only one side of the laths or slats covered with the felt paper.

By impregnating the laths or strips of wood with bitumen in the manner described, I not only provide means for the ready adherence of the laths or strips of wood to the felt paper, but preserve the wood in such a manner as to make it lasting and prevent premature decay.

By preference, I use felt paper for covering the strips or laths, as it takes the paint more readily, and is susceptible of taking almost any kind of ornamentation or decoration.

For the roofs and sides of houses or buildings I apply to the outer surface of the felt paper one or more coats of linseed-oil, paint, or other like material, on which I cause to adhere, by a sand-blast in the usual manner, mica, sand, or other material. In some cases I may find it expedient to cover one side of the laths or slats with felt paper and the other side of the laths with a different material.

convenient size for handling—say, ten, (10,) fifteen, (15,) or twenty (20) feet long, and from one (1) to eight (8) feet wide.

I am aware that slats of wood of light or

different colors have been joined to canvas, &c., for floor-covering; but to such I lay no

claim.

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

1. The slats or laths A, of wood saturated

I manufacture my material in lengths of with bitumen, as described, in combination onvenient size for handling—say, ten, (10,) with the felt paper or other suitable material, fteen, (15,) or twenty (20) feet long, and from B, secured to one or both sides of said laths, substantially in the manner set forth, and for the purpose specified.

2. As a new article of manufacture, the material for roofs and the construction of

buildings, as set forth.

DANIEL S. ARMSTRONG.

Witnesses:

E. WILLIAM READ,

M. A. READ.