No. 840,103. PATENTED JAN. 1, 1907.

R. W. BIRD.

METHOD OF LAYING ROOFING.

APPLICATION FILED FEB. 24, 1906.

Fig. 1

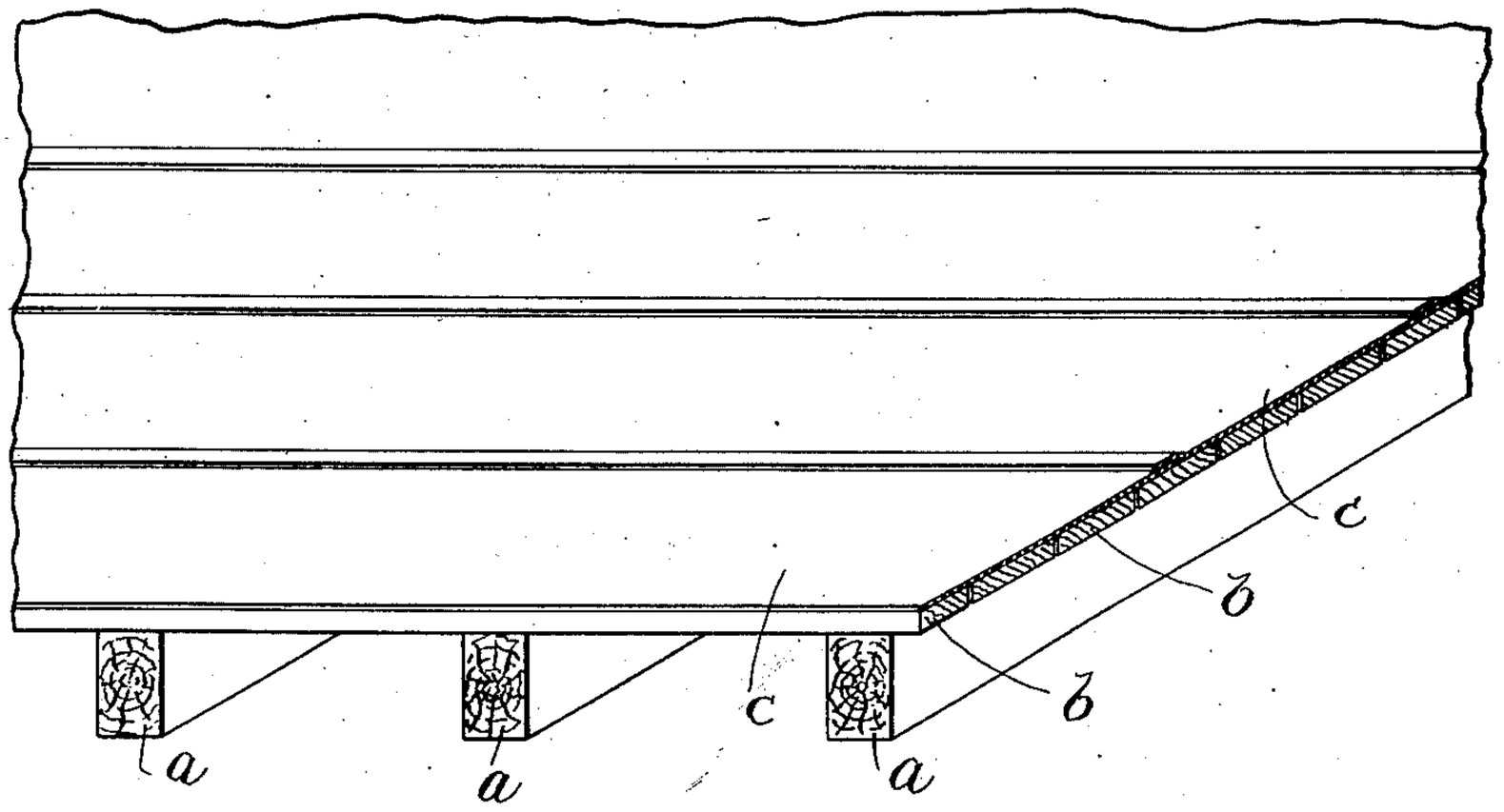
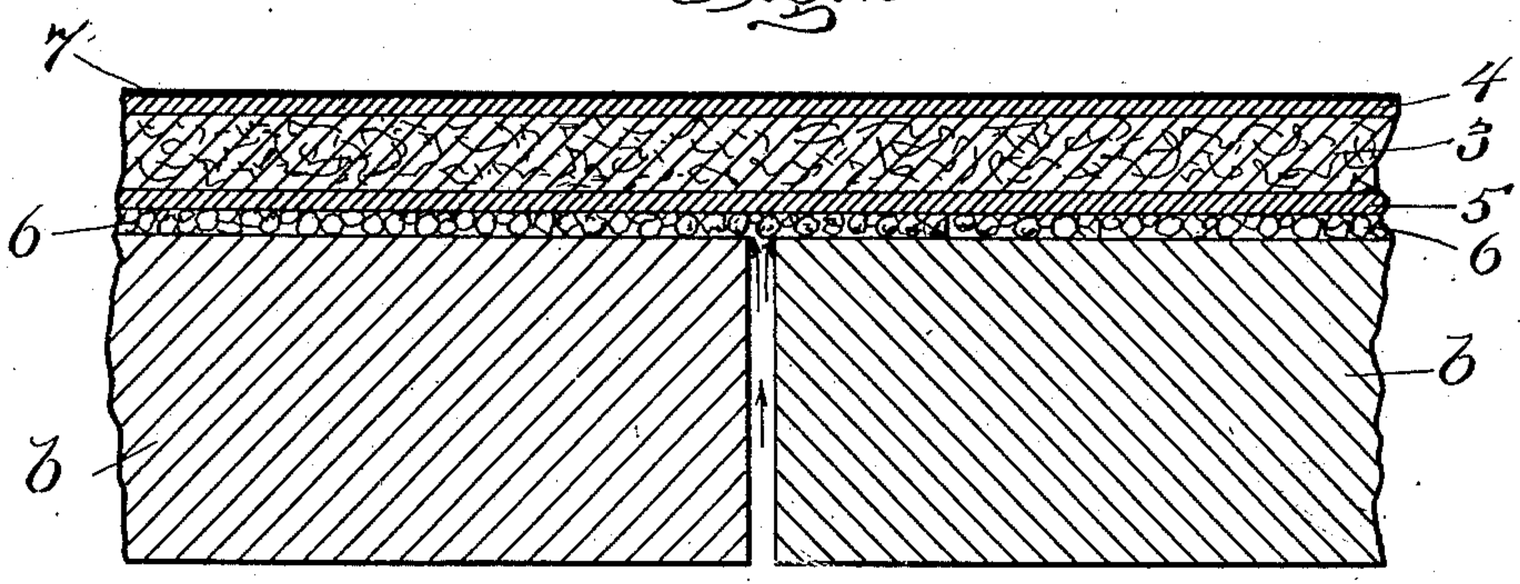


Fig. 2



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UNITED STATES PATENT OFFICE.

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METHOD OF LAYING ROOFING.

No. 840,103. Specification of Letters Patent Patented Jan. 1, 1907.

Application filed February 24, 1906. Serial No. 302,726.

To all whom it may concern:

Be it known that I, REGINALD W. BIRD, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Methods of Laying Roofing, of which the following is a specification.

This invention has relation to roofing.

Roofing materials have heretofore been constructed of a sheet of felt or equivalent material saturated or impregnated with a waterproofing substance and coated on one face with a layer of fine sand, flint, or equivalent material and on the other face with a layer of waterproofing compound. In laying such roofing it has been customary to place the sheet upon the supporting-boards of the roof with the coating of waterproofing compound next to the boards and with the layer of flint, sand, or gravel exposed to the atmosphere. In roofing a building it is customary to use boards, which are laid side by side upon the supporting-beams, and as much of the lumber is used in a comparatively green state and before it has been sufficiently dried there is present in the board a quantity of sap or resinous substance, according to the kind of wood of which the boards are formed. In laying the roofing material upon such boards with the smooth surface of the sheet in contact with the boards the sheet adheres to the surface of the board and prevents the escape of moisture, and therefore prevents the board from drying, and as a consequence the boards soon rot and the roof quickly deteriorates. Where the roof is formed of resinous woods a still more serious result ensues, particularly in warm climates, for the heating of the sun causes the resinous sap to collect on the surface of the boards. Since the waterproofing compound used for impregnating the roofing sheets are composed of asphalt or similar materials, for which a resinous sap containing pitch and turpentine is a solvent, the latter eat into the sheet and destroy it. I have found this to be true from my own experience, for I have seen roofs (under the conditions described) in which large portions of the sheet were eaten away like sores. I have found that these evils may be overcome or prevented by laying the roofing-strips with the flint-coated surface of the sheets next to the wooden boards. When the sheets are laid in this way, an air-space is left between the sheet and the board for the escape of moisture and for the ventilation of the space. The coating of flint or sand holds the body of the sheet out of contact with the board and prevents the resinous sap from injuring the sheet. I have demonstrated that by placing the sheet as described I am able to prevent the rapid rotting of the boards which support the sheet and also prevent the deterioration of the sheets and save them from the attacks of the resinous saps in the boards.

Referring to the drawings, Figure 1 represents in perspective view a portion of roof laid in accordance with my invention. Fig. 2 represents a magnified section through one of the boards and the roofing material thereon.

Referring to said drawings, *a a* indicate the beams of a roof, upon which are laid boards *b b*. These boards are preferably laid with small cracks or spaces between them, although this is not necessary, as the shrinkage of the board is sufficient to form these spaces.

c c represent strips of sheets of insulating compound. These sheets are preferably formed with a body portion 3, of wool, felt, or equivalent material, which is saturated or impregnated with waterproofing compound, having as its base asphalting or an analogous substance. The faces of the sheet are coated with layers 4 5 of the waterproofing compound. The layer 5 is coated with a layer of granular material—such as sand, flint, gravel, or the like—whereas the layer 4 is preferably lightly coated with talc 7 or similar material to prevent the convolutions from sticking together when the strips are rolled together. In Fig. 2 it will be seen that by arranging the roofing-strip *c* with the coating 6, of flint or sand, next to the boards *b* there is left a space to which air may have access to carry off the moisture of the drying boards for the other purposes hereinbefore set forth.

What I claim is—

The herein-described method of laying

roofing which consists in preparing a foundation of boards, taking strips or sheets of roofing material consisting of a fibrous body impregnated with waterproofing compound, and having on one face a layer of non-absorbent granular material and on the other face waterproofing compound, and laying said strips upon said foundation of boards with the granular material next to and in contact with said boards.

In testimony whereof I have affixed my signature in presence of two witnesses.

REGINALD W. BIRD.

Witnesses:
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