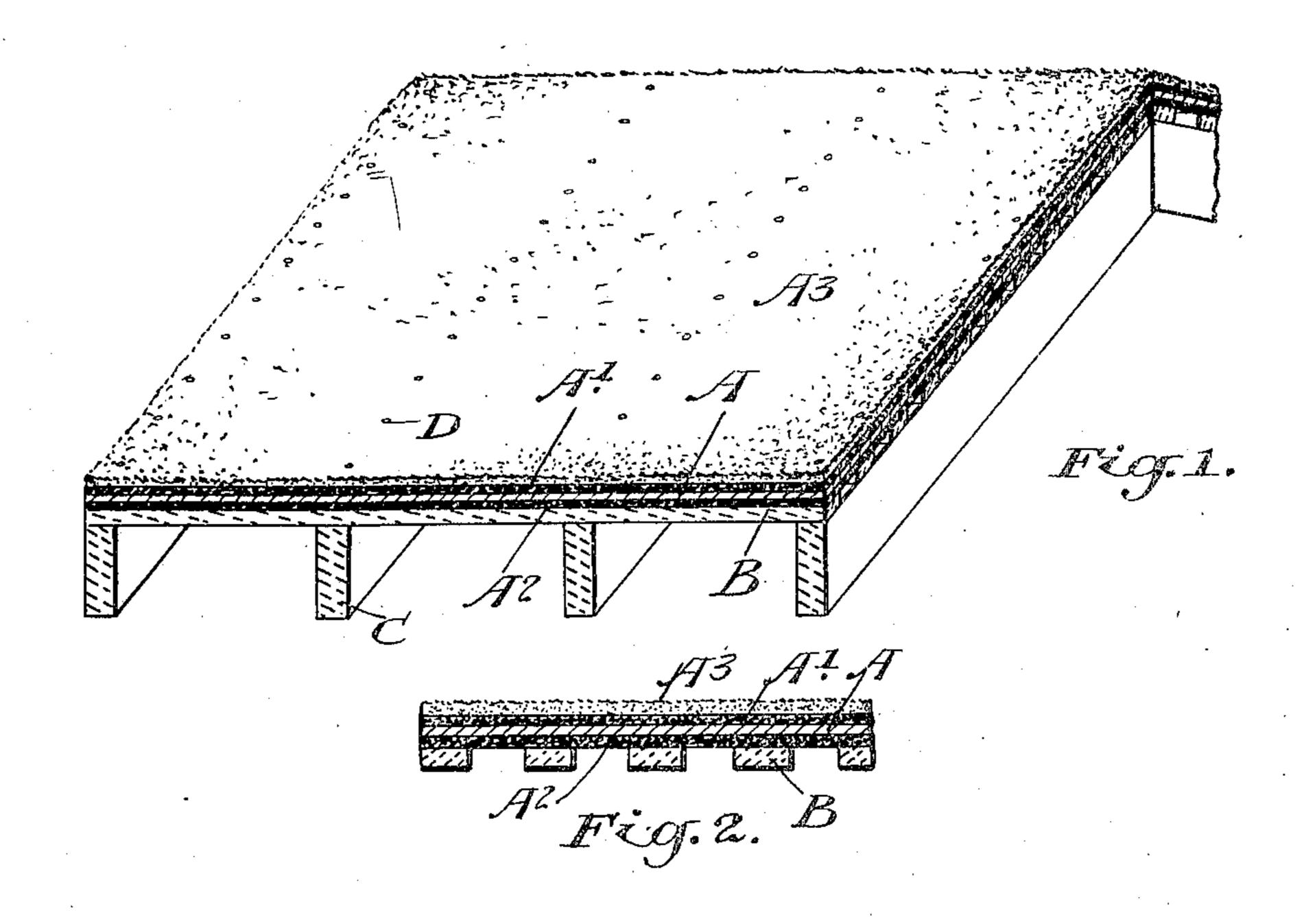
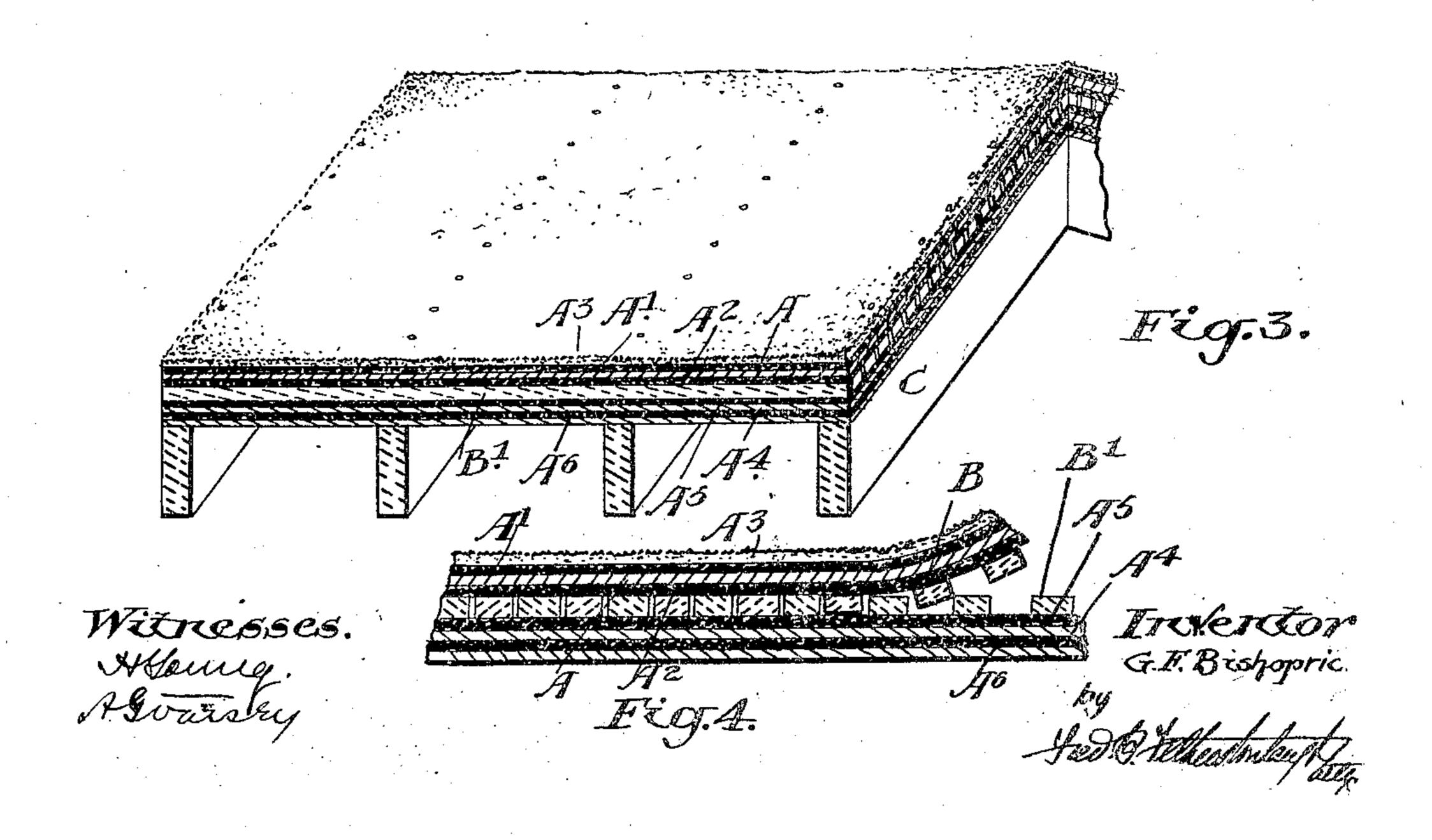
No. 875,041.

PATENTED DEC. 31, 1907.

## G. F. BISHOPRIC. COMPOSITE ROOFING. APPLICATION FILED MAR. 21, 1907.





## UNITED STATES PATENT OFFICE.

GEORGE FREDERICK BISHOPRIC, OF TORONTO, ONTARIO, CANADA.

## COMPOSITE ROOFING.

No. 875,041.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed March 21, 1907. Serial No. 363,716.

To all whom it may concern:

BISHOPRIC, of the city of Toronto, in the county of York, in the Province of Ontario, 5 Canada, have invented certain new and useful Improvements in Composite Roofing, of which the following is the specification.

My invention relates to improvements in composite roofing, and the object of the invention is to devise a cheap, durable composite roofing, which may be placed directly on the rafters or joists without the necessity of sheathing the rafters with boards.

A further object is to enable the roofing to be firmly nailed in position and capable of resisting wind pressure. To effect these objects I have constructed my roofing of an interlayer or backing of suitable material and outer and inner coatings for the same of adaptive material, such as tar or asphalt mastic an outermost coating of sand or like granular material, and an innermost reinforcement of wooden strips held by adhesion to the adhesive coating and designed to form a foundation whereby the roofing may be securely held in position, the parts being otherwise arranged in detail as hereinafter more particularly explained.

Figure 1, is a perspective view of a portion of a roofing showing the application of my improved invention and the roofing exaggerated as to thickness. Fig. 2, is a still more exaggerated longitudinal section through the roofing. Fig. 3, is a similar view to Fig. 1, showing a modified formation of the roofing. Fig. 4, is a longitudinal section of the modified form shown in Fig. 3, on a larger scale.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the backing or foundation layer of my composite roofing, which is preferably formed of paper.

A' is an outer coating of tar, asphalt mastic or other suitable adhesive material and A<sup>2</sup> is an inner coating of the same material.

A<sup>3</sup> is an outer coating of sand, or other granular or like material, which is superimposed upon the tar, asphalt mastic, or other adhesive surface while hot, and therefore, closely adheres to the same.

B are the series of strips located to the inside of the coating A<sup>2</sup> and adhering thereto and forming a ground layer for the roofing.

C are the joists or rafters of a roof and D are the nails, which are passed through the 55 strips B and thereby securely hold the roofing in position without any liability of it being stripped off by the wind. The strips B are located at distances apart slightly greater than the width of the strip.

In Figs. 3 and 4, I show the outer roofing superimposed upon a base having the foundation strip or inner layer A<sup>4</sup>, the adhesive coatings A<sup>5</sup> and A<sup>6</sup> on each side of it and superimposed reinforcing strips B'. These 65 strips are designed to fit as will be readily understood, from these latter figures between the strips B and are necessarily alternately ar ranged as indicated, a slight distance being left between the strips B and B' in order to 70 allow for any crookedness or defect in the strip.

When the roofing is formed at the top section and lower section as described it is of great strength and suitable for decks and for 75 uses for which the form in Figs. 1 and 2 would not be suitable.

What I claim as my invention is:

1. A composite roofing comprising an inner foundation layer, coatings of adhesive ma- 80 terial on the upper and lower sides of the same, a superimposed coating of sand or the like on the upper adhesive coating and a bottom reinforcement secured to the lower coating, consisting of strips located at de- 85 sired intervals apart as and for the purpose

2. A composite roofing comprising a foundation layer comprising an inner foundation layer, coating of adhesive material on the 90 upper and lower sides of the same, a superimposed coating of sand on the upper adhesive coating, a bottom reinforcement secured to the lower coating consisting of strips located at desired intervals apart and a base 95 formed of a layer of suitable material having an upper and lower adhesive coating and superimposed strips adhering to the upper coating and interlocking with the strips forming the reinforcement in the composite roofing above as and for the purpose specified.

GEORGE FREDERICK BISHOPRIC.

Witnesses:

B. BOYD, A. CRIGHTON.