

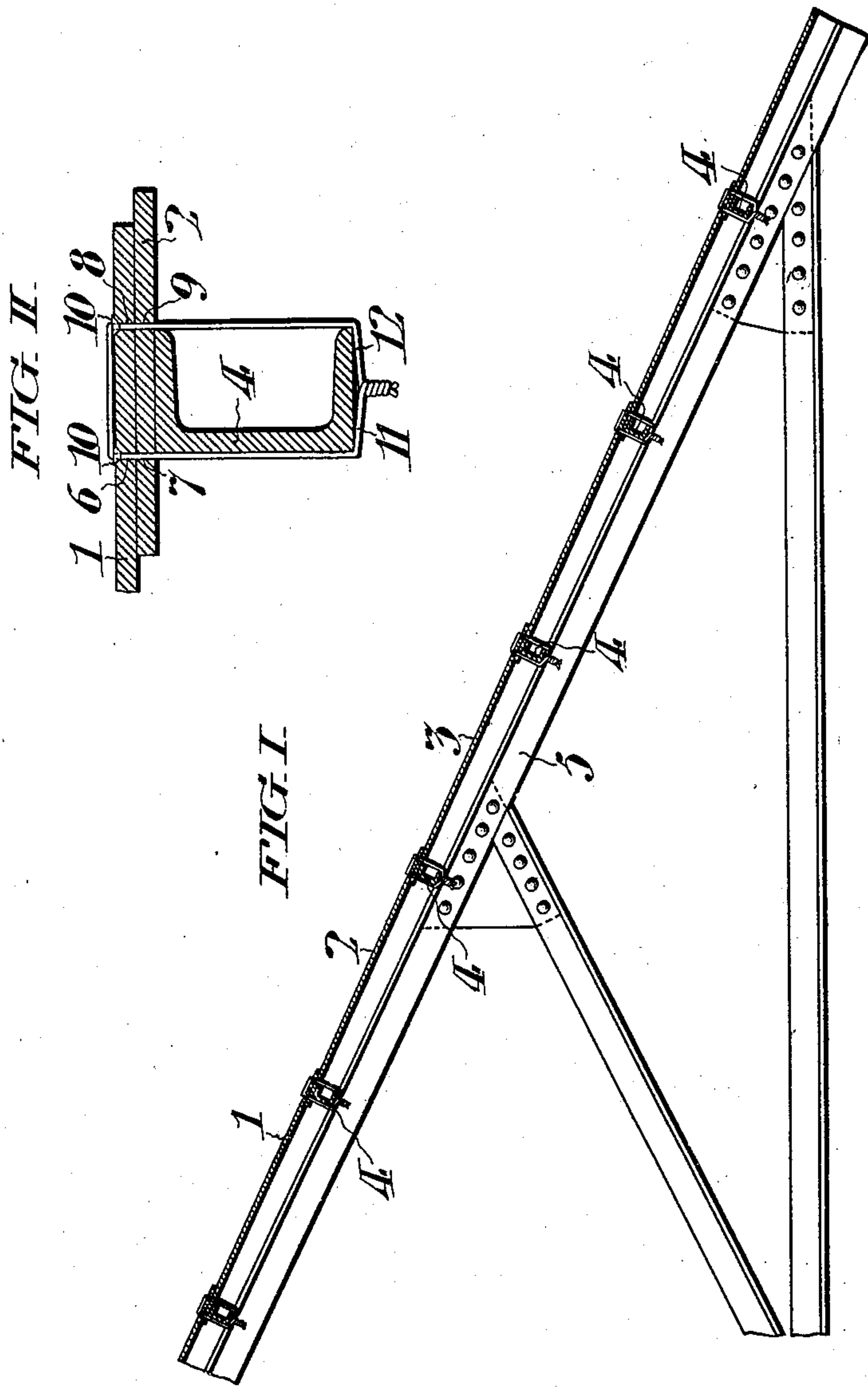
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C. E. WADE.

MEANS FOR ATTACHING ASBESTOS SHEATHING TO STRUCTURAL  
FRAMEWORK.

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Witnesses

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# UNITED STATES PATENT OFFICE.

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## MEANS FOR ATTACHING ASBESTOS SHEATHING TO STRUCTURAL FRAMEWORK.

No. 889,831.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed February 4, 1907. Serial No. 355,661.

*To all whom it may concern:*

Be it known that I, CHARLES E. WADE, of North Wales, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Means for Attaching Asbestos Sheathing to Structural Framework, whereof the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improved means of attachment of asbestos sheathing to the framework of sheds and buildings. This sheathing is usually made in sheets of considerable area as distinguished from slates and shingles, and having sufficient length to span across the space between adjacent rafters and purlins of a roof truss. The sheets are overlapped slightly where they rest upon the purlins and are secured to their supports by means of wire loops having their ends twisted together tightly to draw said sheets closely together and firmly against their supports, thereby making a tight economical form of construction.

In the accompanying drawings Figure I, is a sectional elevation of a portion of a roof embodying my invention. Fig. II, is a detail cross section.

By referring to Fig. I, it will be noted that the sheets of asbestos sheathing 1, 2, and 3, etc., are overlapped, and the joints or overlapping portions rest upon purlins 4. These purlins are shown as channel bars, but they may also be made of angle or T bars, as will be readily understood, and they may run horizontally, attached to uprights or to roof trusses 5. Furthermore, the framework may be of wood, instead of metal, if desired. The sheets of lumber may be flat or corrugated.

By referring to Fig. II, it will be noted that the sheets 1, 2, are overlapped. The overlapping parts coincide with and rest upon the channel bars. The sheets are provided with registering holes 6, 7, 8, and 9, and the holes 6, and 8, in the outer sheet are fitted with beveled washers 10, which may be of lead or other sheet metal. Through the washers and holes in the sheets are passed the ends 11, and 12, of a wire, which may be of aluminum or copper. The wire twice pierces both of the overlapped sheets. The wire ends are passed down by the sides of the channel bar 4, and brought together under the bar and tightly twisted, whereby the sheets 1, 2, are

firmly secured to each other and to the bar. These wires are placed at intervals along the bars according to the requirements of the space to be covered.

By the arrangement described a very simple and expeditious method is provided for securing the sheathing sheets to the framework of the building, and notwithstanding its simplicity experience has shown that it is strong and durable, and furthermore that it does not affect the waterproof character of the covering of the building. By overlapping the sheets sufficiently to have each of the wires twice pierce both of said sheets, said wires perform the double function of securely fastening the sheets to each other and to their support. A stronger construction is produced than has heretofore been the case, since there is a double thickness of the sheets to resist the strain placed thereon by the wires when they are twisted together, besides forming a tighter joint between the adjacent sheets.

The beveled washers countersunk in the outer surface of the sheathing, prevent the access of rain or moisture at the points where the wires pierce the sheathing, and time only tends to embed them more deeply into it, for no destructive or corroding action can take place between asbestos and metal. Furthermore, by having the metal washers beveled to fit the corresponding cavities in the sheathing, they may be drawn with a wedging action tightly into place by the wires without danger of breaking through said sheathing, which is yielding and allows the wedges to become embedded therein. By this construction it is necessary to overlap the sheets only slightly in order to allow wire loops to pass through both thicknesses of sheathing and around the supporting purlins, and the necessity of covering the holes made by the securing means with an additional sheet of sheathing is thus obviated, thereby effecting a great saving of material. In this respect there is a marked contrast between the utility and behavior of the sheathing which I have invented and structures wherein slates, wooden shingles or clapboards are secured by metallic fasteners such as nails, to an underlying frame. In such construction it is always necessary to overlap the shingles or slates sufficiently to cover the holes made by the securing means.

Obviously if at any point the structure



shows a tendency to admit any water between the overlapping joints it can be overcome by twisting and thus tightening the wires at that point.

7 I claim:—

1. In a structure, the combination of a supporting framework; sheets of overlapped asbestos sheathing of considerable area overlying the same, the overlapping portions  
10 coinciding in position with the elements of the framework; and wires passing through the overlapping portions and secured to the framework whereby the same element serves to secure said portions to each other and also  
15 to the framework.

2. In a structure, the combination of a supporting framework; sheets of overlapped asbestos sheathing of considerable area overlying the same; beveled metal washers  
20 seated in corresponding recesses in the outer of said sheets; and wires passing through said washers and sheets and around the elements of said framework for securing said sheets thereto by twisting together, whereby

tightening of the wires forces the beveled  
25 washers the more deeply into said recesses thus forming tight joints obviating the necessity of an overlying sheet.

3. In a structure, the combination of a supporting framework; sheets of overlapped  
30 asbestos sheathing of considerable area overlying the same; a wire loop, twice piercing said overlapping portions and also surrounding an element of the framework and secured by twisting its ends at the inside of the  
35 framework; and means surrounding said wire whereby a tight joint is formed around said wire and the necessity of an overlying sheet is obviated.

In testimony whereof, I have hereunto  
40 signed my name, at Pittsburg in the State of Pennsylvania this 26th day of January, 1907.

CHARLES E. WADE.

Witnesses:

O. H. ELLYSON,  
THOMAS WATSON.