

F. D. SCHNEIDER.  
FASTENING DEVICE.  
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980,567.

Patented Jan. 3, 1911.

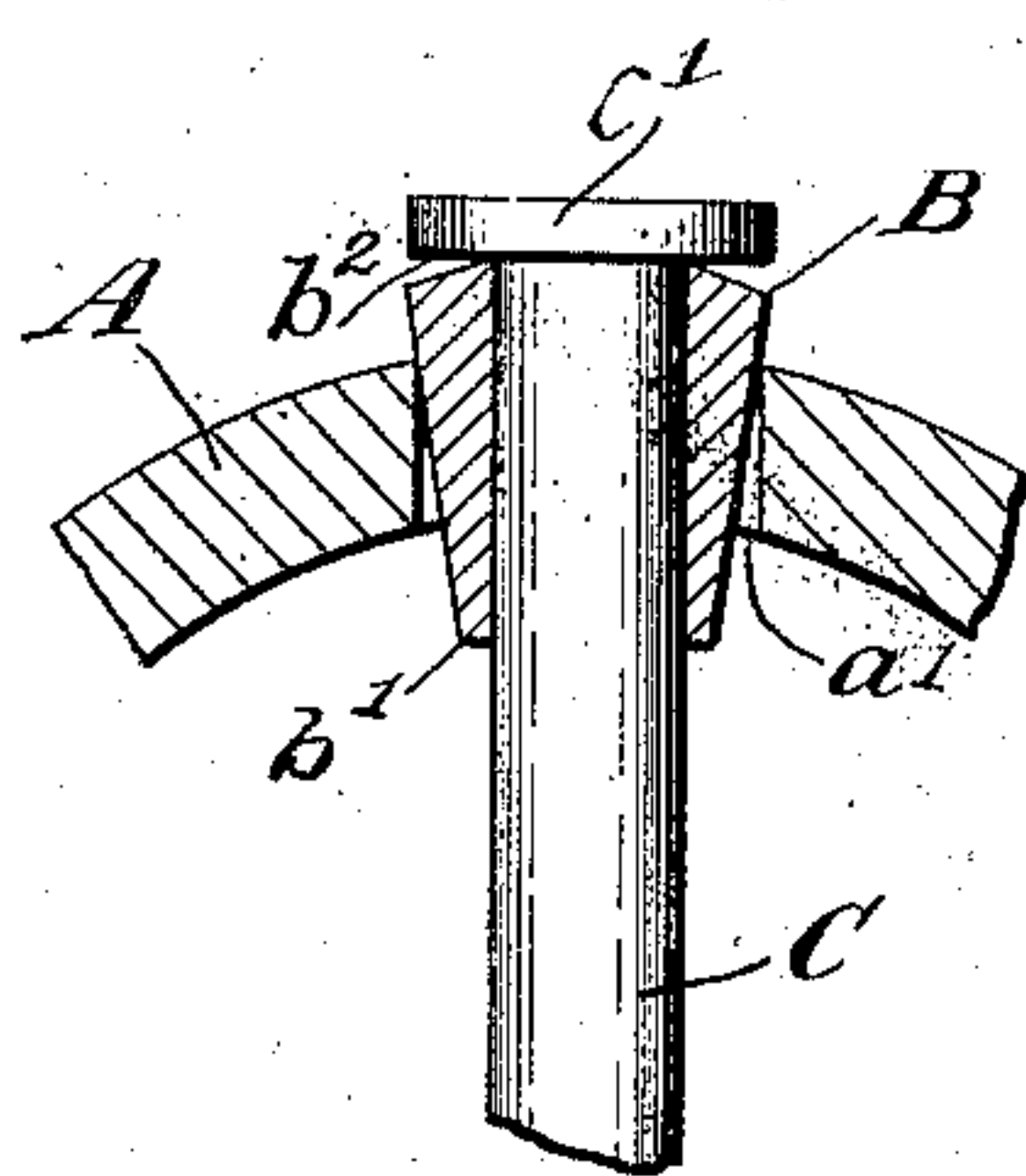
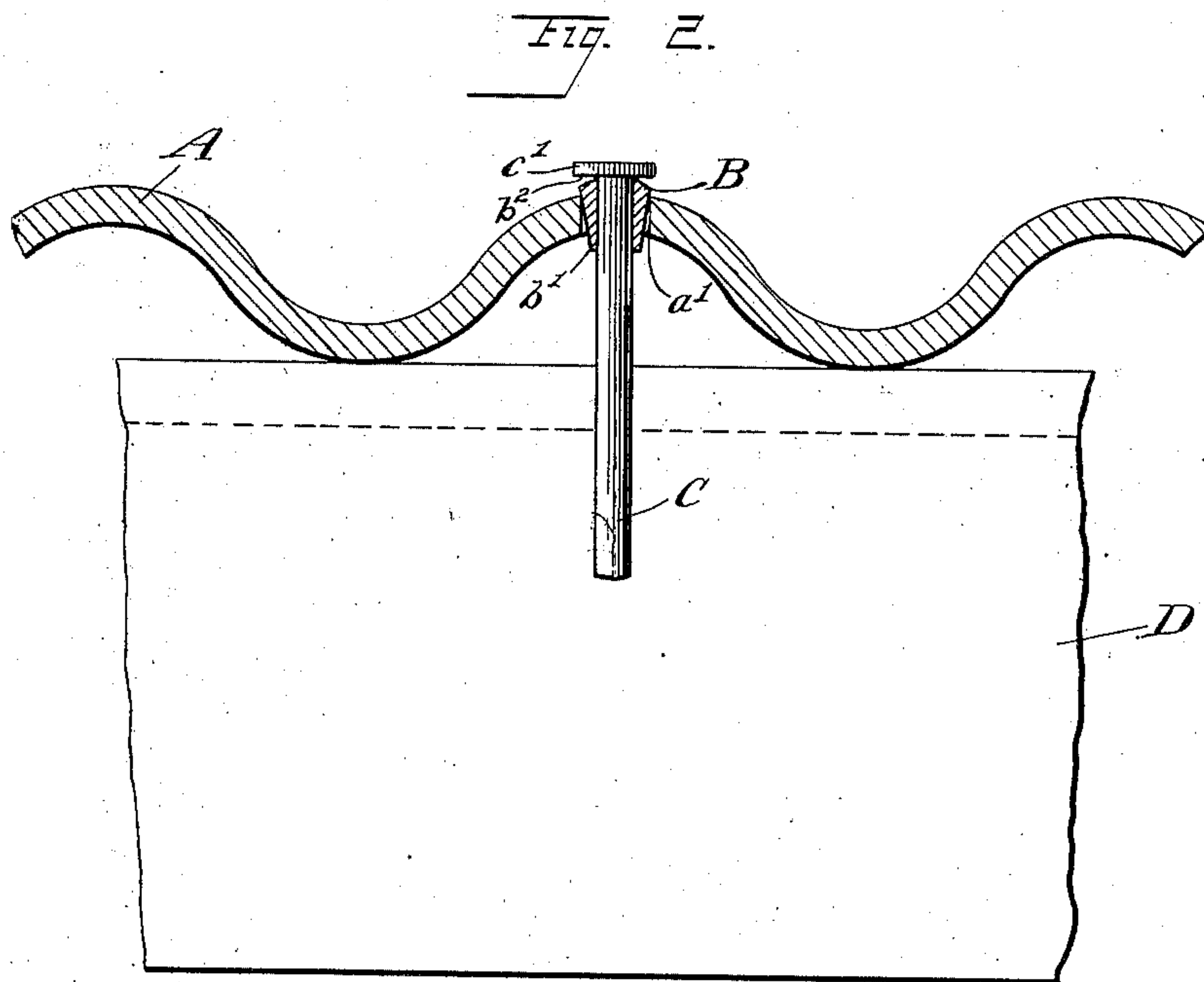


Fig. 1

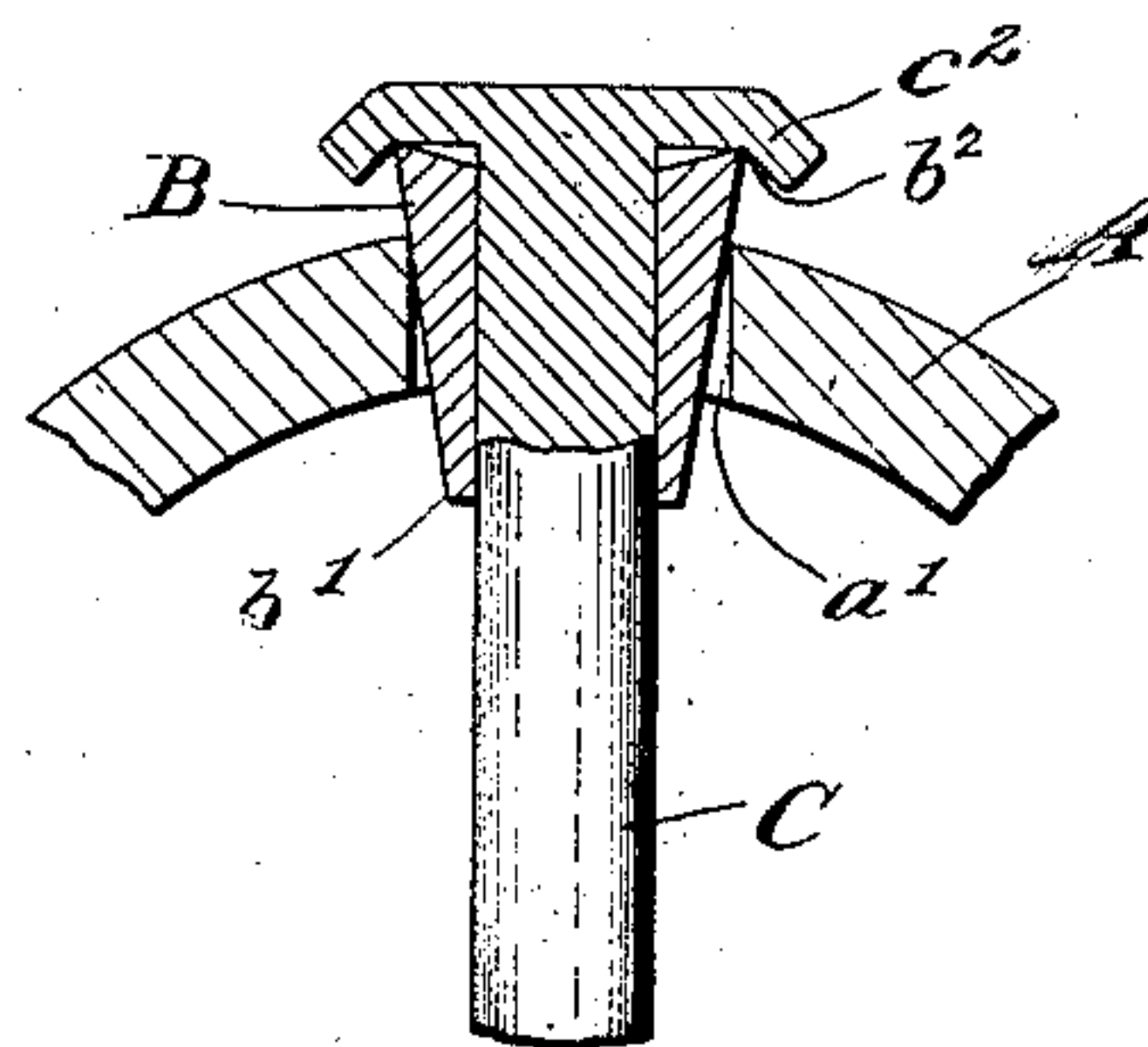


Fig. 3

Witnesses

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# UNITED STATES PATENT OFFICE.

FREDERICK D. SCHNEIDER, OF BEDFORD, OHIO.

## FASTENING DEVICE.

980,567.

Specification of Letters Patent.

Patented Jan. 3, 1911.

Application filed November 4, 1909. Serial No. 526,211.

*To all whom it may concern:*

Be it known that I, FREDERICK D. SCHNEIDER, a citizen of the United States, resident of Bedford, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Fastening Devices, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates to a fastening device, and more particularly to one adapted especially for use in the fastening of members directly exposed to inclement weather, implying moisture. Heretofore devices adapted to serve the same general purposes have been rather inefficient in the way of an absolute prevention of leakage at the connections.

Accordingly, the object of my invention is the provision of a device which, while fulfilling all the ordinary demands for simplicity and effectiveness, will nevertheless positively preclude the possibility of any save a water-tight fit, at all times.

The said invention consists of means hereinafter fully described and particularly set forth in the claims.

The annexed drawing and the following description set forth in detail certain means embodying my invention, the disclosed means, however, constituting but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing:—Figure 1 is an enlarged vertical cross-section of the simplest and preferred form of my device. Fig. 2 is a vertical cross-section, actual size, showing a specific application. Fig. 3 is an enlarged vertical cross-section of a modification.

Like letters and figures designate like parts throughout the several views

My invention consists of a clench member and washer in combination. Its function is a conjunctive use with any member it may be desired to fasten, and which is in the drawing, by way of example, shown to be a cross section of a single arch of corrugated roofing. With more particular reference thereto, the roof A is provided with an opening  $a'$  through which it is to be fastened to the underlying purlins D. This is

now generally accomplished by twisting the ends of two adjacent nails in the same corrugation around each other on the under side of the purlin.

To best effect the particular purpose of my invention, I provide a downwardly tapered washer B, the smaller end  $b'$  being necessarily of such a size that it may be readily inserted into the opening  $a'$ , whereas the larger end is in turn of a size incapable of passing therethrough. The upper side of the washer is more abruptly sloped or cut away, so as to present a thin rim  $b^2$  contiguous to the opening therein. A nail C having a head  $c'$  extends through both washer and opening in the customary manner, and is adapted, while being secured to the purlin in any approved manner, to draw the washer into the opening, thus tightly wedging it therein. As will now be apparent, there is afforded in consequence a very sharp surface of contact for the head of the nail. In practice, a jamming of the metal is caused at this upper rim so formed, and hence affords absolutely no likelihood of a loose or exposed joint between the nail and washer. In the modification shown in Fig. 3, the upper side of the washer is concave, to form a similar rim, save that in this case it is outwardly disposed, that is non-contiguous to the opening. It is best to associate with this modified form of washer a nail or other equivalent member having a capped head  $c^2$ , as shown. This should be of such a size that it will completely cover the upper or larger end of the washer, and in this way, due to the jamming of the head on the rim, will likewise exclude whatever rain or lesser moisture might otherwise be disposed to settle between the nail head and washer, to thereafter run down along the nail and through the roof.

It should be especially noted that the loose relation of the two parts of my fastening device permits its practical efficiency to be independent of the angle which the nail assumes in the opening.

Having fully described my invention, what I claim therefore and desire to secure by Letters Patent is:

1. As a new article of manufacture, a fastening device comprising the combination with a tapered washer having its upper face sloping away from its opening to form a

sharp rim; of a member, provided with a head, projecting through the opening in the washer and adapted to engage said rim.

2. As a new article of manufacture, a fastening device comprising the combination  
5 with a downwardly tapered washer having its upper face sloping downwardly from, to form a sharp rim contiguous to, its open-

ing; of a nail projecting through the opening and adapted to engage said rim. 10

Signed by me, this 3rd day of November, 1909.

FREDERICK D. SCHNEIDER.

Attested by—

CURT B. MUELLER,

CLERK G. GEUDER.