G. B. EVANS.

NAIL.

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1,109,328. Patented Sept. 1, 1914.

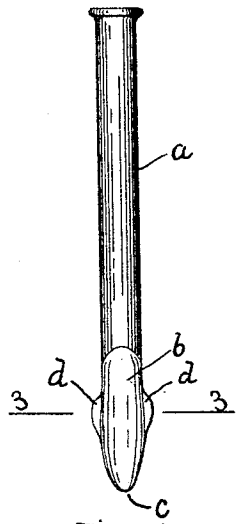


Fig. 1

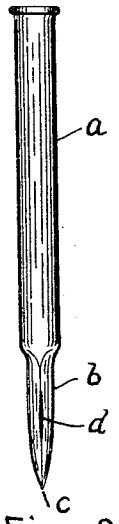


Fig. 2



Fig. 3

WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE B. EVANS, OF WINTHROP, MASSACHUSETTS.

NAIL.

1,109,328. Specification of Letters Patent. Patented Sept. 1, 1914.

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To all whom it may concern:

Be it known that I, GEORGE B. EVANS, of Winthrop, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Nails, of which the following is a specification.

This invention relates to nails and has particular reference to driven fastenings of this type which are frequently referred to as brads.

Nails or brads employed for driving into wood, such as securing weather strips in place, frequently cause the wood to split, and if they strike a knot below the surface they are liable to be deflected or twisted.

While my invention is especially adapted for use with wood and will be mainly hereinafter so described, I do not limit myself to such use since the nails embodying my invention may be used to advantage in the construction or repair of rawhide and fiberboard trunks or leather or other material.

Of the accompanying drawings; Figure 1 is a side elevation of a nail or brad constructed according to my invention. Fig. 2 is an elevation from the right or left of Fig. 1. Fig. 3 represents a section on line 3—3 of Fig. 1.

The body portion *a* which may be cylindrical or otherwise shaped in cross-section and which may have any suitably formed head or upper end, is reduced at one end to form the point portion *b* which is oval in cross-section as best shown in Fig. 3. Preferably the extreme lower end or tip *c* is formed with a somewhat blunt but thin edged point.

Projecting from opposite edges of the transversely oval shaped portion *b*, and about mid-way of the length of said portion *b*, are two thin sharp edged wings or ribs *d*. Preferably the lower ends of these wings or ribs merge into the edges of the point portion *b* at some little distance above the tip *c*. In any event the wings or ribs *d* terminate short of the point of junction between the portions *a* and *b* of the nail. In other words the wings or ribs project only from the opposite edges of the point portion and are not connected with, or do not reach up to, the sides of the body portion *a*.

The wings or ribs are of sufficient size to be readily seen by the user so that when the nail is to be driven, it may be turned so as to be cross-wise of the grain of the wood. The wings, being thin edged, act as knives and cut across the grain and prepare the way for the entrance of the body portion of the nail without liability of splitting the wood. If a knot in the wood is encountered, the wings or ribs readily cut through the same. The wings do not interfere with the driving operation but rather facilitate it for the reason above described.

By having the wings some little distance above the tip of the point portion they do not begin to act until after the nail has been well started into the wood and therefore they do not render the starting of the driving operation more difficult. As soon, however, as the wings reach the wood and begin to enter the same, they steady the point portion and reduce the liability of its twisting. If the wings were located further up the nail, adjacent to or merging into the body of the nail, they would not prevent the liability of twisting when first driving in the nail and as has been explained, the wings will cut through a knot in the wood without the point being deflected by said knot. In driving, the nail can be driven straight without deflecting. If, however, it should be desired to employ the nail in connection with such material as to render it desirable to have the nail clenched at its inner end, the employment of an anvil plate in the ordinary manner will of course result in the point portion being bent upwardly or clenched.

The nail is especially useful in connection with weather strips which are especially liable to be split and therefore require the making of holes with a brad-awl, because the wings or knives of the point portion are so relatively located and shaped that the nail or brad can be driven cross-wise of the grain without the preparation of holes, and still without liability of splitting the wood, or of deflecting, regardless of the material through which the nail is driven.

It is to be understood that, while my improved nails are especially useful in connection with weather strips or other wood articles, they may be used also as shoe nails.

I claim:—

A nail or brad having a body portion and

a flattened point portion which is oval in cross section, the opposite edges of the point portion having integral thin sharp-edged wings or ribs terminating short of the tip of the point portion and also terminating short of the point of junction of the body and point portions.

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

GEORGE B. EVANS.

Witnesses:
A. W. HARRISON,
A. F. RANDALL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."