

(No Model.)

J. B. ADLER.
NAIL.

No. 493,144.

Patented Mar. 7, 1893.

FIG. 1.

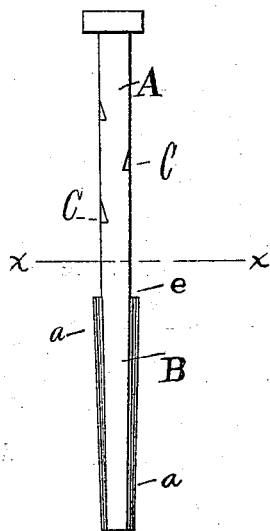


FIG. 3.

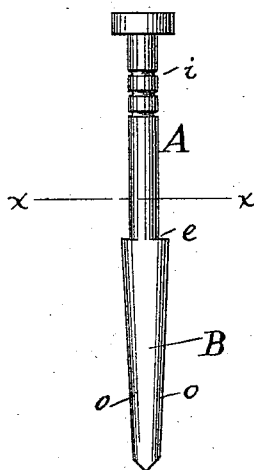


FIG. 2.



FIG. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH B. ADLER, OF NEW YORK, N. Y.

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Application filed June 11, 1892. Serial No. 436,342. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH B. ADLER, a citizen of the United States, residing in the city of New York, in the county and State of New York, have invented a certain new and useful Improvement in Nails, of which the following is a specification.

My invention relates to improvements in nails especially for use in hard woods.

The object of my invention is to provide a nail which can be easily driven, and when driven in will not only be more secure, but also more difficult to extract than the ordinary nail; also to provide a nail which by reason of its form the liability of mistake in driving with, instead of across the grain is obviated.

In the drawings Figure 1 is a side elevation of my improved nail. Fig. 3 is a similar view of a modification of the same. Figs. 2 and 4 are transverse sections of Figs. 1 and 3 at line *x x*.

In the drawings similar letters of reference designate corresponding parts in all figures.

A designates a nail made of any suitable material having the lower portion B of its shank laterally extended in the form of a wedge toward the point of the nail. The sides of this portion B of the nail so extended are beveled as shown by *a* thus forming a cutting edge for the nail when driven.

C designates incuts in the shank of the nail above the wedge shaped portion B.

With a nail constructed in this manner the liability of mistake in driving the nail with, instead of across the grain of the wood is obviated by reason of the form of the wedge shaped cutting edge of the lower portion B; in addition it will be seen that while in driving the nail the wedge shaped lower portion cuts through the wood yet by reason of the fact that the lower portion of the nail is provided with a wedge shape cutting edge a path is prepared for the upper part of the shank of the nail to enter, thus preventing the splitting of the wood and making it easier to insert the nail.

The shoulders *e* of the wedge shape point and the incuts C on the shank above the portion B render it more difficult to extract the nail when driven because of the fiber of the wood swelling and filling around the shoulders *e* and in the incuts C, especially in view of the fact that a nail almost invariably turns when driven in.

Instead of beveling the edges of the portion B of the shank, the extended wedge shaped portion may be made oval as shown at *o* in Fig. 3, and instead of incuts the shank may be provided with a series of grooves *i* extending around the same beneath the head of the nail.

Railroad or other spikes made according to the principle of my invention will be found more desirable than those in present use for the reason that by my construction the spike is given a more secure hold and is less liable to become loosened after being driven, especially in hard wood.

What I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a nail having the lower portion of its shank enlarged laterally, forming a section having upper flat lateral shoulders, *e*, from which shoulders said enlargement tapers downwardly to a common point each side of the enlarged portion being wedge shaped in cross section, substantially as described.

2. As a new article of manufacture the herein described nail having the lower portion B of its shank extended laterally in wedge shape and provided with tapering cutting edges *a* shoulders *e* and a series of incuts C in the shank between the head of the nail and the shoulders *e* of the wedge shaped portion, substantially as shown and described.

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Witnesses:

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