May 8, 1928. 1,668,776

J. B. MANLEY

STAPLE NAIL

Filed Dec. 15, 1924

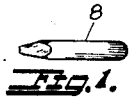


Fig. 1.

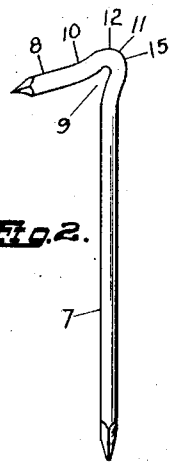


Fig. 2.

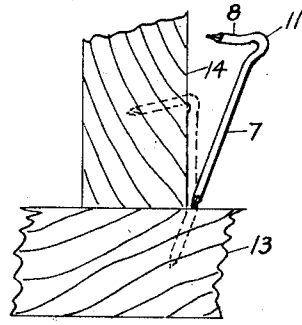


Fig. 3.

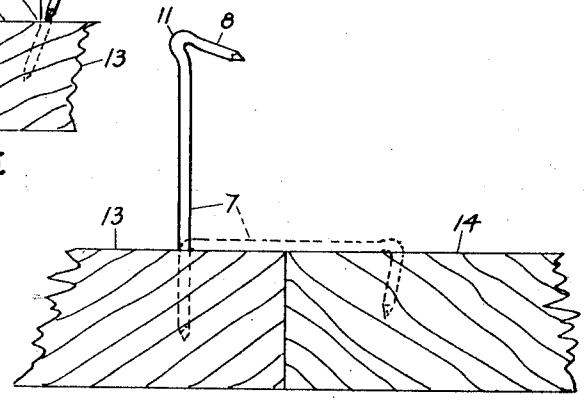


Fig. 4.

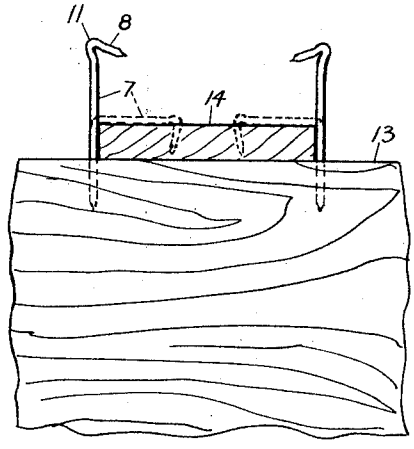


Fig. 5.

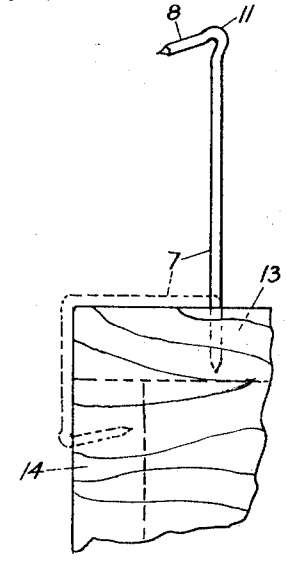


Fig. 6.

INVENTOR.
Jason B. Manley
BY M. C. Frank
ATTORNEY.

Patented May 8, 1928. 1,668,776

UNITED STATES PATENT OFFICE.

JASON B. MANLEY, OF OAKLAND, CALIFORNIA, ASSIGNOR TO WESLEY M. WOOTEN, OF SAN FRANCISCO, CALIFORNIA.

STAPLE NAIL.

Application filed December 15, 1924. Serial No. 755,956.

This invention relates broadly to nails, and more specifically to staple nails of a character that is first driven straight into wood or like material a desired distance, bent over and then the staple portion of the nail driven home in clinching relation.

Important objects of my invention include the provision of a simple, efficient and inexpensive instrument which when applied performs the function of a holding nail or staple or a combination of both; the provision of a staple nail having an angularly disposed staple portion with an acutely curved, outstanding, rigid and sturdy driving head; and the provision of a staple nail of such form and shape as to adapt it to numerous uses.

A further object of the invention in use, aims to protect the edges and corners of the material into which it is driven from breaking or splitting.

I attain the above objects by the novel construction of my staple nail, and other objects and advantages of the invention will appear in the subjoined description of the accompanying sheet of drawings, and in which is illustrated the preferred form of the invention and showing some of its numerous every day uses.

Referring to the sheet of drawings:

Figure 1 is a top view of the staple nail and Fig. 2 a face elevation of it.

Fig. 3 shows one application of the nail, that of toe-nailing and in which the edge is wholly preserved. The nail in full lines indicates its position just before driving and the dotted lines its final driven position.

Fig. 4 shows another useful application of the nail, that of drawing and rigidly holding two pieces of wood together in the same plane; the dotted lines indicating the final position of the nail.

Fig. 5 shows the invention as applied to the wooden slats of a crate, the slats are most rigidly secured and their edges protected against splitting; and

Fig. 6 shows still another meritorious application of the nail, that of providing a corner protector and binding tie as in the case of box shipments.

Throughout the figures of the drawing, my staple nail is shown in full lines in an upright position, and the dotted lines represent the respective positions the nail will assume when driven partially in, bent over and finally driven home. The nail for most efficient and general use will be made of the grade of wire used ordinarily in the manufacture of the common wire nail, but other materials may also be used if found advantageous for any particular need.

In the various figures the numeral 7 indicates the shank or body of my staple nail and is preferably straight before application as shown. The other end of the nail comprises a section 8 short in length compared to the shank portion 7, and is formed angularly thereto and preferably with an acute angle 9 of 75 degrees. This degree of angle I have found from experiment and use to be the ideal angle most suitable to all lengths and sizes of staple nails, but it is to be understood that I do not limit myself to this precise angle.

The said section 8 I term as the prong or staple leg of the invention, and in some cases I have found it desirable for reenforcement and ease in application to arcuate it a little as shown to advantage at 10, Fig. 2. Between the shank portion 7 and the staple leg 8 is an intermediate portion 11 bent outwardly and recurved to form an outstanding driving head for the nail. The said curvature it will be noted forms a sharp bend and aligns all three portions in a plane, resulting in a sturdy head that reenforces the joinder of the prong and shank portions. It is also to be observed, Fig. 2, that the center of the uppermost driving spot 12 of the head lies in the extension of the axis of the shank portion; this is necessary to assure the straight travel of the shank while the nail is being driven.

Both extremities of the nail are pointed as is the customary practice.

In use, the chosen staple nail for any of the applications shown in the drawings, or for any other of its numerous uses, is positioned on one member 13 of the desired union according to the judgment of the worker and driven in a desired holding distance, then the outstanding portion of the nail shank is bent over until the point of the prong portion touches the other member 14 and the driving is continued until the union is effected. It is to be further noted that

the center 15 of the driving spot for the prong portion lies also substantially in the extension of the axis of the said portion and for the same reason as given for the shank portion.

Having thus illustrated and described my invention, what I claim as new and desire Letters Patent thereon, is the following:—

A staple nail of wire comprising a body portion, a relatively short prong portion and a portion therebetween and curved outwardly to form a sharp bend and rigid driving head for the staple nail, all of the said portions being in the same plane and the prong portion forming an acute angle with the body portion, the said driving head having two definite driving spots, one lying in the extension of the axis of the body portion and the other in the extension of the axis of the prong portion.

In testimony whereof I affix my signature.

JASON B. MANLEY.