

(No Model.)

R. STILWELL.

SCREW.

No. 383,834.

Patented May 29, 1888.

Fig. 1

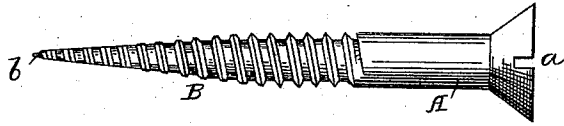


Fig. 2

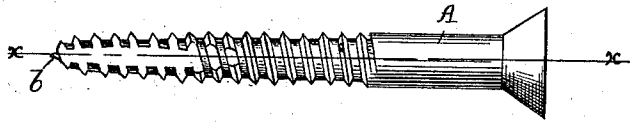


Fig. 3

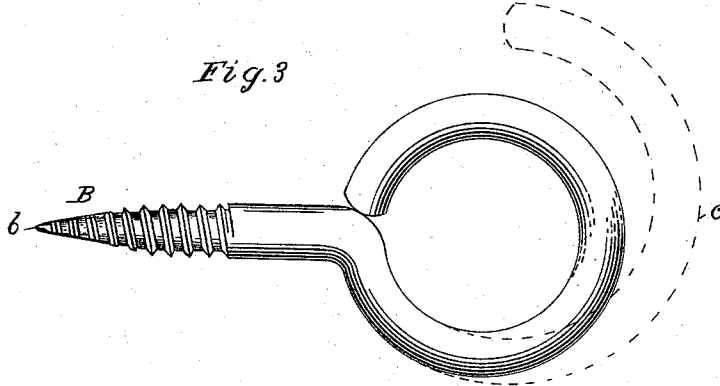


Fig. 4

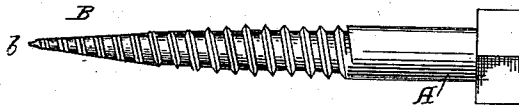


Fig. 5

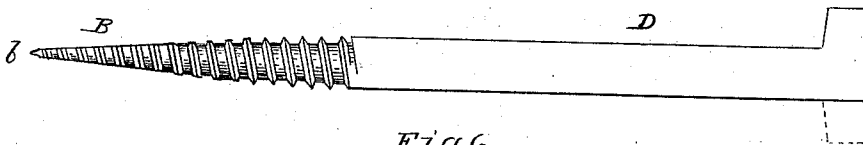
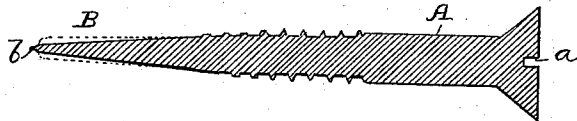


Fig. 6



Witnesses:

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# UNITED STATES PATENT OFFICE.

RICKASON STILWELL, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO BRADFORD WILLARD AND EMELINE C. STILWELL, OF SAME PLACE.

## SCREW.

SPECIFICATION forming part of Letters Patent No. 383,834, dated May 29, 1888.

Application filed March 1, 1887. Renewed November 18, 1887. Serial No. 255,562. (No model.)

*To all whom it may concern:*

Be it known that I, RICKASON STILWELL, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Screws, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is an elevation of my improved screw. Fig. 2 is an elevation looking in the direction of the arrow, Fig. 1. Fig. 3 shows the invention applied to a screw eye or hook. Fig. 4 shows the invention applied to a square-headed screw-bolt. Fig. 5 shows it applied to a railroad-tie bolt. Fig. 6 is a longitudinal section on line *x x*, Fig. 2.

It is a well-known habit among mechanics when using wood-screws to insert their points or hold their points against the material and then drive them into the wood by a blow with a hammer for quite a large part of the distance which it is intended they shall be ultimately inserted, afterward screwing them in the remaining distance by the use of a driver. It is obvious that this plan results in either cutting off or fracturing the fibers of the wood throughout nearly or quite the entire distance which the screws have thus been driven by a hammer, whereby their seating in the wood and consequent hold upon the wood is seriously injured and their usefulness interfered with to a corresponding extent.

It is the object of my invention to obviate that difficulty by means of a construction of a screw, so that with the exercise of a very little care such destruction or rupture of the fiber may be avoided.

To this end the invention consists of a screw having a part of its threaded end in the form of a wedge, with its sides at a quite acute angle to each other, whereby it is adapted to separate and crowd apart gradually the fibers of the wood when driven in by a blow, and yet permit the threads to obtain firm and satisfactory hold upon them, in such manner as to materially increase the resistance of the screw to such pulling strain as may be exerted upon it.

Referring to the drawings, A B is the screw, the head of which has formed in it an ordinary slot, *a*, to receive the screw-driver.

The part A of the body of the screw is cylindrical in form, and of practically uniform diameter throughout, the part B being wedge-shaped, as indicated in Fig. 1, tapering to a quite sharp point, *b*; but, as shown in Fig. 2, the part B has its sides nearly or quite parallel, being in this respect of the well-known form and proportion in which the ordinary wood-screws are made, having, of course, the usual gimlet-point.

The length of the part B, which has a continuous thread, may be about as shown in the drawings, or may be varied according to the judgment of the maker, and in order to facilitate the screw getting a firm grip in the wood I provide the edges of the wedging part with lips, grooves, or serrations, of any usual or approved form, arranged spirally to correspond with the pitch of the continuous thread.

In Fig. 3 I have shown my invention applied to an ordinary screw-eye, (shown in full lines,) or the ring or eye part C may be left open, as indicated in dotted lines at *c*, to form a hook.

The invention is very important as applied to a device of this sort, because the wedging form insures that it can be driven part way into the wood with a comparatively light blow, and with consequently little danger of bending the eye or hook-shaped end out of proper form; or they may be pressed in the wood with the hand.

In Fig. 4 the invention is shown applied to a square-headed bolt of otherwise common form and construction. In Fig. 5 it is shown applied to a railroad-tie bolt, D, having a lip or spur of suitable form or shape, adapted to overlap and engage with the flange or base of the rail when properly turned down in contact therewith.

While I have shown many of the forms of screw and bolt to which my invention is applicable, I do not wish to be limited thereby, because it is adapted for use with many other forms which will naturally suggest themselves to any skilled mechanic who is familiar with the art to which this invention pertains.

Having thus fully described my invention, what I claim is—

1. The herein-described screw having the wedge-shaped part B, provided at one end

with a continuous thread, and at the other end with spiral serrations upon the edges of the wedging part, substantially as set forth.

2. A wood-screw having one end of the part  
5 B wedge-shaped, and provided upon its edges with spiral serrations, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

RICKASON STILWELL.

Witnesses:

GEO. H. BEETS,  
BRADFORD WILLARD.