G. C. ARMSTRONG.
Wood-Screw.

No. 205,990. Patented July 16, 1878.

Fig 1.

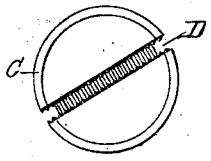
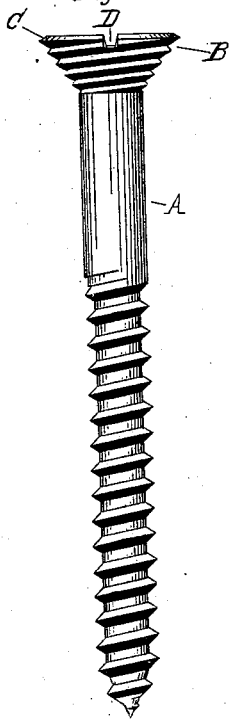


Fig 2.



Witnesses.
Chas. M. Higgins.
Patrick Martin

Inventor.
George C. Armstrong
per
A. H. Wales & Co.
his Attys.

UNITED STATES PATENT OFFICE.

GEORGE C. ARMSTRONG, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN WOOD-SCREWS.

Specification forming part of Letters Patent No. **205,990**, dated July 16, 1878; application filed April 13, 1878.

To all whom it may concern:

Be it known that I, GEORGE C. ARMSTRONG, of Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Wood-Screws, of which the following is a specification:

The object of my invention is to provide an improved wood-screw that will hold more firmly, require less countersinking than ordinary screws, and prevent the screw-driver slipping from the slot.

My invention may be stated to consist in an improved screw having the under side of its head screw-threaded, its upper edge beveled, and its slot corrugated, as hereinafter set forth.

In the annexed drawing, Figure 1 is a plan view of my improved screw, and Fig. 2 is an elevation thereof.

A represents the body of the screw, which is threaded in the usual manner. B is the conical or countersunk head, which, according to my invention, is threaded on its under or conical side, as shown, the thread being preferably finer, but of the same pitch as that on the body of the screw. The extreme upper edge of the head is beveled, as shown at C. D represents the slot of the head, which is cut centrally and transversely, as usual; but the vertical sides thereof are made slightly beveling, as represented, and these sides are corrugated with fine dentations or corrugations, as shown.

In the use of ordinary screws, as is well known, it is necessary to countersink the hole in the wood for the head to lie in, and in cases where the screw is to be screwed below the surface, or where it is to be put in at an angle, the countersink-drill, being conical, forms a hole much larger than is necessary and injures the appearance of the work, preventing fine finish in the subsequent painting.

In my improved screw little or no countersinking will be necessary, except in the hardest kinds of wood, and then only to a trifling extent, as the threads on the head enable extra countersinking to be dispensed with.

When screwing the head of ordinary screws into hard wood, if the countersink has not been drilled deep enough, the screw must be removed and the drill used again, as the head must be forced to its seat by the threads on the body of the screw, and when the head reaches the surface of the wood there is a tendency for the head to break off. This is very annoying, as the screw must be removed and another substituted, which in fine work is very troublesome.

This tendency of the head to break is almost entirely obviated in my improved screw, for the head is not pulled into its seat bodily, but advances into the wood by the action of its own screw-thread. This feature is particularly valuable where hard wood is to be fastened upon soft wood, for the hold of the threads in the soft wood is often not strong enough to draw the head of the screw into the countersink in the hard wood, but the threads in the soft wood often break and loose their hold.

In my improved screw the threaded head obviates this difficulty, and enables the two kinds of wood to be held firmly together.

In removing screws that have been screwed below the surface, the edge of the screw-head sometimes catches in the wood and breaks the head or tears or cuts the sides of the countersink.

In my improved screw the upper edge of the head is beveled, as shown at C, and this enables the head to thus relieve itself without tearing the wood.

The corrugated slot of the head prevents the screw-driver from slipping and denting the wood and from injuring the screw-head. This feature is more adapted for the fine finishing round-headed screws, the heads of which are usually formed of ornamental plated caps, which are easily torn or injured by the slipping of the screw-driver from the slot.

The thread B on the head of the screw may be either single or double, and of a pitch corresponding to the body-threads A, or a little finer, as may be found most suitable in screws of different kinds and sizes.

I am aware that screws have been made the

head-slots of which have been corrugated on their bottom side, but not on their vertical sides, as in my invention.

What I claim as my invention is—

1. As a new article of manufacture, a wood-screw having its head provided on the under side with a screw-thread of a pitch concordant with the thread on the body of the screw, substantially as and for the purpose herein set forth.

2. A screw the head-slot of which is dented or corrugated upon its vertical sides, substantially as and for the purpose set forth.

GEORGE C. ARMSTRONG.

Witnesses:
CHAS. M. HIGGINS,
EDWARD H. WALES.