N. G. THOM.

Wood Screw.

No. 23,409. Patented March 29, 1859.

Fig: 1.

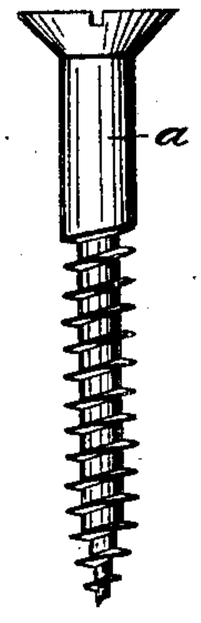


Fig: 2.

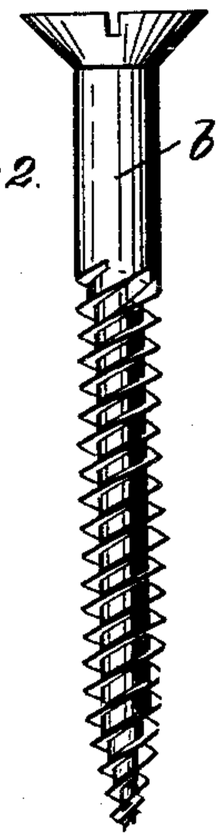
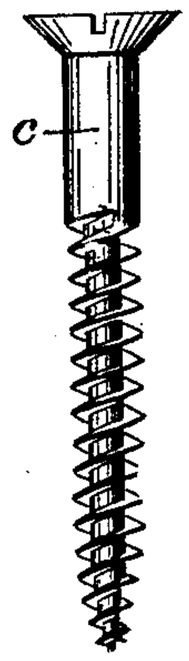


Fig: 3.



Witnesses:

J. B. Paddock.
F. St. Sixon.

UNITED STATES PATENT OFFICE.

N. G. THOM, OF CINCINNATI, OHIO.

IMPROVED MANUFACTURE OF WOOD-SCREWS.

Specification forming part of Letters Patent No. **23,409**, dated March 29, 1859.

To all whom it may concern:

Be it known that I, N. G. THOM, of the city of Cincinnati, county of Hamilton, and State of Ohio, have invented a new and Improved Wood-Screw; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

The ordinary wood-screw now in use is constructed with what is termed a "single thread," as shown in the drawings at Figure I[a], and the labor of turning it into wood is tedious and protracted, and from the slight angle which the thread makes to the axis of the screw and the power of the screw-driver consequent upon such angle great care is required, particularly in soft wood, (into which most of the screws used are driven,) to prevent the screw being torn out, which is often done by a single turn after the screw is driven into the head, or, if not torn out, the grain of the wood sufficiently broken to prevent the screw having a firm hold. This is particularly the case when used to fasten iron or other unyielding substance to wood. The labor of turning in the ordinary single-thread screw being tedious, especially when the screw is long, it is often driven partly in with the hammer to facilitate the operation, thereby breaking the grain of the wood and rendering the screw less liable to hold; but in my improved wood-screw these objections are entirely obviated and other advantages gained.

To enable others skilled in the art to make and use my improved wood-screw, I hereby proceed to describe its construction and advantages.

The nature of my invention consists in constructing a wood-screw with two or more threads, (shown in the drawings at Fig. II as a triple and Fig. III as a double thread screw,) which threads terminate around a central tapering point, which point may end with or continue beyond the termination of said threads.

The construction of my improved screw, as above described, allows it to be turned into the wood with one-half or one-third the number of turns, respectively, as a single-thread screw, thereby saving from one-half to two-thirds the time required to turn in the ordinary single-thread screw, Fig. I, of the same length and pitch; secondly, the threads being at a greater angle with the axis of the screw there is little or no liability to tear out the wood, yet sufficient power can be exerted on the screw to draw sufficiently tight for all ordinary purposes; thirdly, the threads being at a greater angle with the axis, as will be readily perceived by reference to the drawings, the screw obtains a better hold upon the fibers of the wood, rendering it much more firm and consequently less liable to tear out, and, fourthly, the lips of the threads at their termination around the point being nearly or exactly opposite, or at nearly equal distances from each other, there is no liability to crowd the screw aside, as must necessarily be the case with the single-thread screw with the thread terminating on one side of the center, as in Fig. I[a].

I do not confine myself to any particular form of construction as to size, shape, &c., as these may be varied indefinitely, and the same construction is applicable to coach or lag screws or any other screw in which wood or other yielding substance constitute the material into which the screw is driven.

I am aware that a tapering screw-point has been long used upon augers, gimlets, &c., and I therefore do not claim that feature as any part of my present invention; but

What I do claim as my invention, and desire to secure by Letters Patent as a new manufacture, is—

The within-described wood-screw, the characteristic feature of which consists in its having two or more parallel threads that terminate at or near the point of a tapering core, substantially as described.

N. G. THOM.

Witnesses:
T. B. PADDACK,
W. K. NIXON.