(No Model.)

H. W. LIBBEY.

WOOD SCREW.

No. 422,307. Patented Feb. 25, 1890.

Fig. 1.

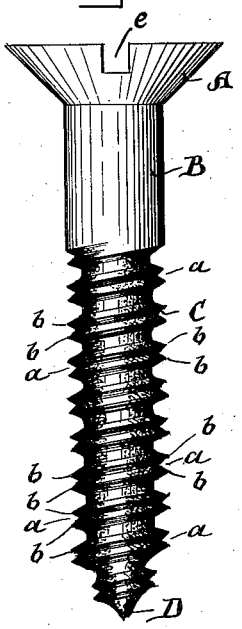


Fig. 2.

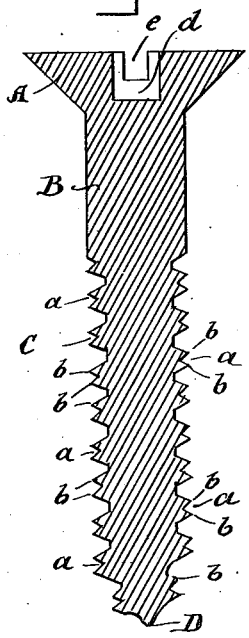


Fig. 5.

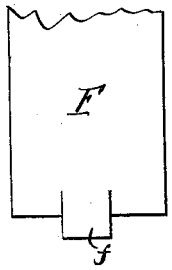


Fig. 6.

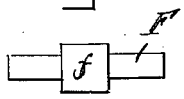


Fig. 3.

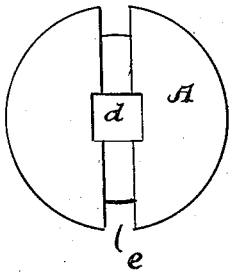
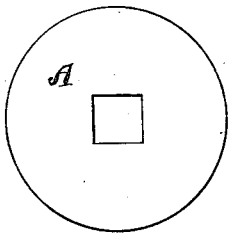


Fig. 4.



Witnesses.
J. George Pattzer
C. H. Swan

Inventor.
Hosea W. Libbey
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attorney.

UNITED STATES PATENT OFFICE.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

WOOD-SCREW.

SPECIFICATION forming part of Letters Patent No. 422,307, dated February 25, 1890.

Application filed June 26, 1889. Serial No. 315,617. (No model.)

To all whom it may concern:

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Wood-Screws, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to produce a wood-screw that can be inserted with less liability of splitting the material than screws now in use; and the invention consists in making the thread slightly thicker and dividing its periphery by a V-shaped groove, so as to present two cutting-edges on each thread; and the invention further consists in making the head with a square hole, as hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a side view of a wood-screw constructed according to my invention. Fig. 2 is a longitudinal section through the center of the same. Fig. 3 is a plan or top view of the head, showing the square hole and nick. Fig. 4 is a similar view of a head without the nick. Figs. 5 and 6 are respectively side view and view of the end of a screw-driver adapted to drive the screw with a square hole and nick.

A represents the head; B, the barrel or stem; C, the thread, and D the point. The thread is slightly thicker than the thread of an ordinary wood-screw, and its periphery is divided by a V-shaped groove *a*, thus forming two cutting-edges *b b*, or, as it were, a double thread, by reason of which the screw will much more readily enter the wood and consequently lessen the liability of splitting the same, while a better hold is obtained, because as there is at least one-third more lateral surface with which the wood is in contact the screw is easier forced home and has better drawing and holding capacity.

In the head I form a square hole or recess *d*, which may be in connection with the ordinary nick *e*, as shown in Fig. 3, or the head may be formed without the nick, as shown in Fig. 4. By means of this square hole or recess *d* the screw can be driven in or withdrawn from the wood by any square piece of metal being inserted in the same, and if the head is formed with a nick *e*, as in Fig. 3, a screw-driver F, with a square projection *f* on its lower end, may be employed, and the square end *f* will keep the screw-driver from slipping out of the nick and spoiling the edges thereof, as with screw-heads with only the ordinary nick; but if desired the ordinary nick alone may be employed.

What I claim as my invention is—

1. A wood-screw the thread of which is divided by a V-shaped groove, so as to produce two cutting-edges on the thread, substantially as shown and described.

2. A wood-screw consisting of the head A, stem B, and thread C, said thread being divided by a V-shaped groove *a*, and having two cutting-edges *b b*, substantially as shown and described.

3. A wood-screw with a flat-faced head having a square hole in its center, a stem under the head, and a double screw-thread formed by a V-shaped groove in the periphery of the thread, substantially as shown and described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 29th day of May, A. D. 1889.

HOSEA W. LIBBEY.

Witnesses:
CHAS. STEERE,
EDWIN PLANTA.