(No Model.)

A. MITCHELL.

SCREW.

No. 296,991. Patented Apr. 15, 1884.

Fig. 1.

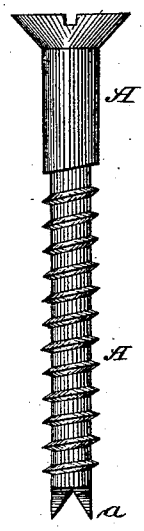
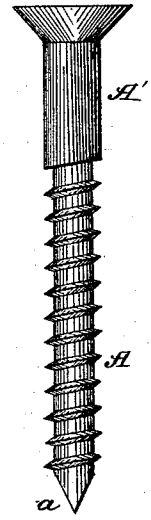


Fig. 2.



WITNESSES:

Fred. G. Dieterich

Jno. W. Stockett

Alexander Mitchell,

INVENTOR,

by Louis Bagger & Co.,

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALEXANDER MITCHELL, OF FREDERICTON, NEW BRUNSWICK, CANADA.

SCREW.

SPECIFICATION forming part of Letters Patent No. 296,991, dated April 15, 1884.

Application filed May 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER MITCHELL, of Fredericton, in the Province of New Brunswick and Dominion of Canada, have invented certain new and useful Improvements in Wood-Screws; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figures 1 and 2 are side views of my improved wood-screw, taken at right angles to each other.

Similar letters of reference indicate corresponding parts in all the figures.

My invention contemplates an improvement in wood-screws, which has for its object to enable the screw to be used in hard wood without boring. The so-called "gimlet-pointed" wood-screws, unless made of steel, (which adds considerably to the cost of the screws,) are apt to break or bend at the gimlet-point when used in black walnut, oak, and other hard woods, whereas my improved screw will enter even the hardest woods without injury to the point.

To this end my improvement consists in constructing the screw with a cylindrical stem or barrel, terminating in a chisel-edge of a width corresponding to the width of the barrel, said edge being cut away from circumference to center to form a conical recess, as shown.

In the drawings, I have shown a screw with ordinary threads, leaving the upper part, A', of the barrel solid, and, like the reduced lower part, A, cylindrical in shape. The reduced part of the barrel terminates in cutting-edges *a*, of wedge shape in cross-section, as shown in Fig. 2, and of even width at its cutting-edge and base—viz., of the same width as the threaded barrel A. In starting this screw in hard woods, by rocking it forward and back a little upon the wood the point of edge *a* will soon work its way into it up to its base, where the thread commences. There is no danger of bending the barrel, which is not tapering, as in gimlet-pointed screws, but stout and strong enough to stand the manipulation of the screw in starting it, as well as in screwing it home.

The chisel-point is cut away inward and upward from circumference to center to form an inverted-V-shaped recess, thus leaving two cutting-surfaces, as shown. This feature I deem to be important, and in it lies the gist of this invention.

Having thus described my invention, I do not claim a pointed screw, or a tapering and pointed screw; but I claim as my improvement and desire to secure by Letters Patent of the United States—

A wood-screw having a cylindrical threaded barrel, A, terminating in a chisel-edge or awl-point, *a*, of a width at its edge and base corresponding to the width of the cylindrical barrel cut away inward and upward from circumference to center, to form the inverted-V-shaped recess and outer cutting-edges, as shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ALEXANDER MITCHELL.

Witnesses:

ANDREW G. BLAIR,

GEORGE F. GREGORY.