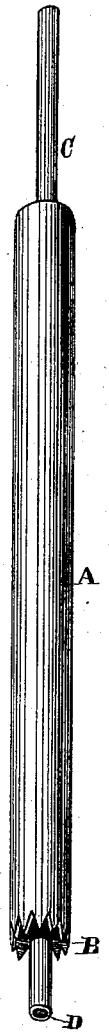
W. STACK.

Device for Driving Nails Under Water.

No. 207,315. Patented Aug. 20, 1878.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM STACK, OF OAKLAND, CALIFORNIA.

IMPROVEMENT IN DEVICES FOR DRIVING NAILS UNDER WATER.

Specification forming part of Letters Patent No. **207,315**, dated August 20, 1878; application filed July 12, 1878.

To all whom it may concern:

Be it known that I, WILLIAM STACK, of Oakland, county of Alameda, and State of California, have invented an Apparatus for Driving Nails or Spikes under Water; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing.

My invention relates to an apparatus for driving spikes or nails under water; and consists in the use of a tube having a serrated foot, which will engage with the piece of lumber into which the nail is to be driven, so as to hold the tube against the lumber, said tube also directing the movement of both the nail or spike and rod or driver which is inserted. This driver or rod has its foot hollowed out, so as to take the head of the nail or spike. By striking the rod or driver on the end which is out of water, the nail may be driven into position under water.

It is well known that it is extremely difficult to drive nails or spikes into timber which is under water, even if it is only submerged a few inches. In constructing piers, wharves, or sea-walls, and in work of like character, it frequently happens that a considerable portion of the work is delayed, which can only be accomplished at low water. If nails or spikes could be driven under water some of this delay could frequently be avoided. Again, it sometimes becomes necessary to remove articles which are submerged, and which cannot be taken hold of, but which, if proper supports or handles could be nailed on, could be grappled and raised. These difficulties I propose, in a measure, to obviate by the instrument herein described.

The figure is a perspective view of my invention.

A is a tube, which is preferably made of metal, and of suitable length for the purpose required. The foot B of this tube is serrated, as shown, so that the points will engage with the wood when the tube is pushed or driven against it. The rod or driver C has a recess or cavity, D, formed in its lower end, as shown, so as to rest on top of the nail or spike when the tube A is pushed against the timber in the desired position. The spike or nail is dropped on the upper end, and slides or is pushed down against the timber. The rod is then slid down on top of the nails, and by alternately drawing out and forcing the rod into the tube the rod will serve as a driver, or by hammering on the other end of the rod the nail is driven into the wood.

The tube answers both as a guide for the nail and rod. The tube can also answer as a guide for a screw device on the end of the rod, by which lag-screws may be put in place under water as well as nails.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

An apparatus for driving nails or screws beneath the water, consisting of the guiding-tube A, having the notched or serrated holding-foot B, in combination with the rod or driver C, the whole constructed to operate substantially as herein described.

In witness whereof I hereunto set my hand.

WILLIAM STACK.

Witnesses:

FRANK A. BROOKS,

R. K. EVANS.