

D. BEAN.  
 PILE-SAWS.

No. 180,523.

Patented Aug. 1, 1876.

Fig. 2.

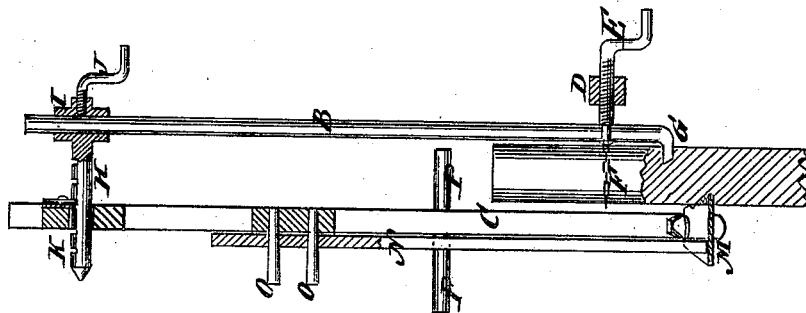
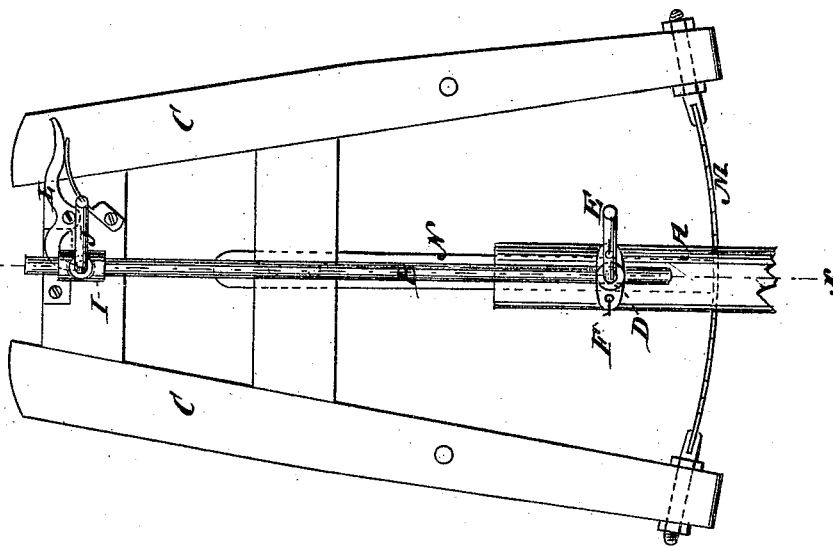


Fig. 1.



WITNESSES:

*E. Wolff.*  
*John Goethals*

INVENTOR:

*David Bean*

BY

*Wm. L. ...*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

DAVID BEAN, OF LE SUEUR, MINNESOTA.

## IMPROVEMENT IN PILE-SAWS.

Specification forming part of Letters Patent No. **180,523**, dated August 1, 1876; application filed April 10, 1876.

*To all whom it may concern:*

Be it known that I, DAVID BEAN, of the city and county of Le Sueur and State of Minnesota, have invented a new and Improved Pile-Saw, of which the following is a specification:

My invention consists of a standard for supporting the saw-frame, with a clamping device for attaching it to the upper end of the pile to be sawed off under water, and having a vertically-adjustable arm, on which the frame swings, and on which arm the frame is adjustable to feed the saw up to the pile as the work progresses, and measure its depth in the water, all as hereinafter described.

Figure 1 is a side elevation of my improved pile-saw; and Fig. 2 is a sectional elevation, taken on line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the pile to be sawed off. B is the standard for supporting the saw-frame C. D is a nut; E, a clamp-screw, and F a chair for clamping the standard to the pile. G is a stud on the lower end of the standard for pressing into the pile to assist in keeping the standard upright. H is the arm on which the saw-frame vibrates, said arms being fitted by

a sliding head, I, on the standard to shift up and down to set the saw to the required height, and having a binding-screw, J, to secure it. The arm also has notches K for the spring-dog L, which keeps the frame in position. M is the saw, and N is a gage, detachably connected to the frame by pins O, and resting on the saw at the lower end to measure the depth of the saw in the water; also to steady it until entered in the pile, after which it is taken off. P represents handles for working the saw. The frame is shifted along the arm H from notch to notch as the saw works into the pile.

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

1. The standard B, having clamps D E F, and G, and vertically-adjustable pivot-arm H, in combination with the saw-frame and saw, substantially as specified.

2. The arm H, having notches K, in combination with saw-frame, having spring-dog L, substantially as specified.

DAVID BEAN.

Witnesses:

LIVINGSTON QUACKENBUSH,  
HEMAN W. STONE.