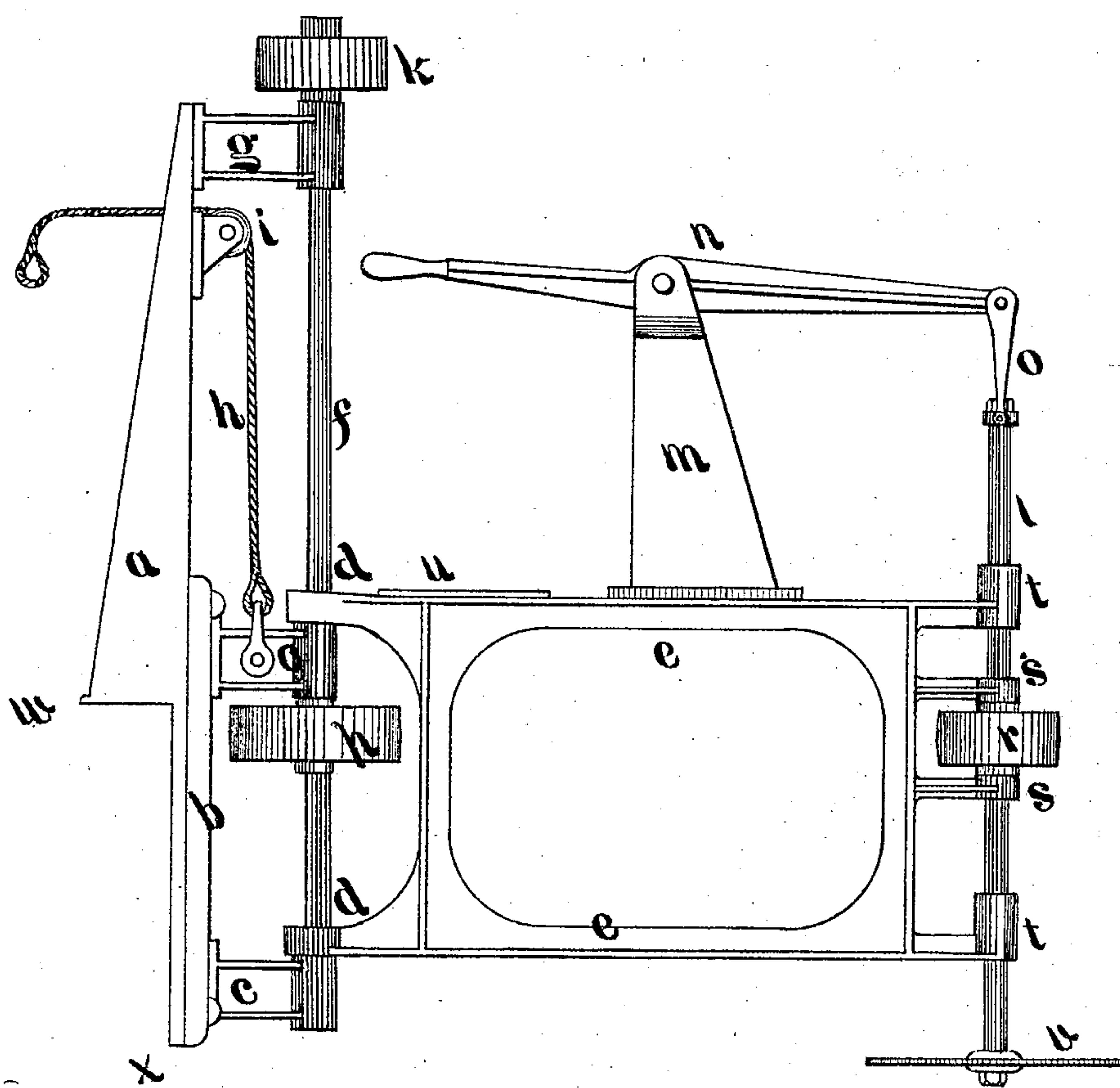


T. SHAW.  
 Pile-Sawing Apparatus.

No. 152,426.

Patented June 23, 1874.



Witnesses,  
 W. F. Bray  
 Wm. S. Larned

Inventor,  
T. Shaw

# UNITED STATES PATENT OFFICE.

THOMAS SHAW, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN PILE-SAWING APPARATUS.

Specification forming part of Letters Patent No. **152,426**, dated June 23, 1874; application filed November 20, 1873.

*To all whom it may concern:*

Be it known that I, THOMAS SHAW, of the city and county of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Machines for Sawing Piles under Water; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention consists in the employment of a lever in combination with the saw-arbor, for the purpose of getting a rapid adjustment of saw to the proper height where the operation is upon rough water or affected by tides.

In order to enable others to use and practice my invention, I will proceed to describe its construction and operation.

On reference to the accompanying drawings, which form part of the specification, the sketch represents a side view of an ordinary sawing-frame, *e*, attached to the side of an ordinary flat-boat. The sawing-frame is provided on its outer end with the usual saw-arbor *l*, working in bearings *t t* and *s s*, and has secured on its lower end a circular saw, *v*. The top of frame *e* is provided with a fulcrum-post, *m*, to which lever *n* is pivoted.

The said lever *n* is secured by a collar-yoke, *o*, to the top of the saw-arbor. The other end of lever is weighted to balance the weight of the saw-arbor, and is provided with a convenient handle to enable the operator, who stands on the platform *u*, to raise or depress the lever, according to the motion of the waves, in order to adjust the saw to the proper height before allowing it to cut.

The operator is aided in the adjustment by an attendant, who, sighting from shore to the top of lever *n*, will give direction and proper notice of adjustment, after which the saw will follow the direction of the cut, and the arbor will move vertically in its bearings, according to the motion of the waves.

The brackets *a*, *b*, and *c* connect the frame to the sides of the boat, and the pulleys *k*, *p*, and *r* convey motion to the saw through ordinary belts.

What I claim, and desire to secure by Letters Patent, is—

The combination of lever *n* with saw-arbor *l* and frame *e*, for the purpose set forth.

THOS. SHAW.

Witnesses:

W. F. BREY,

WM. GARWOOD.