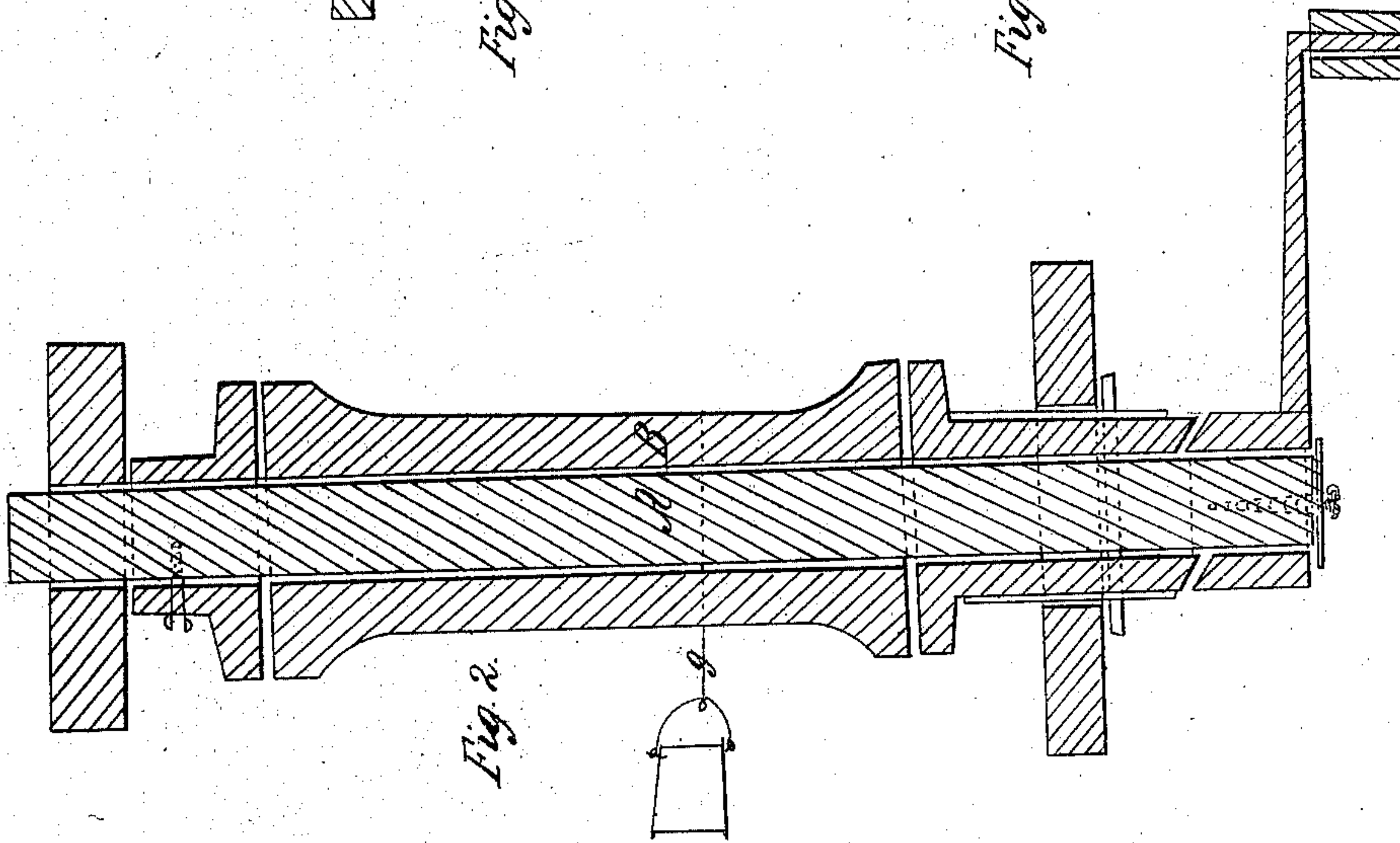
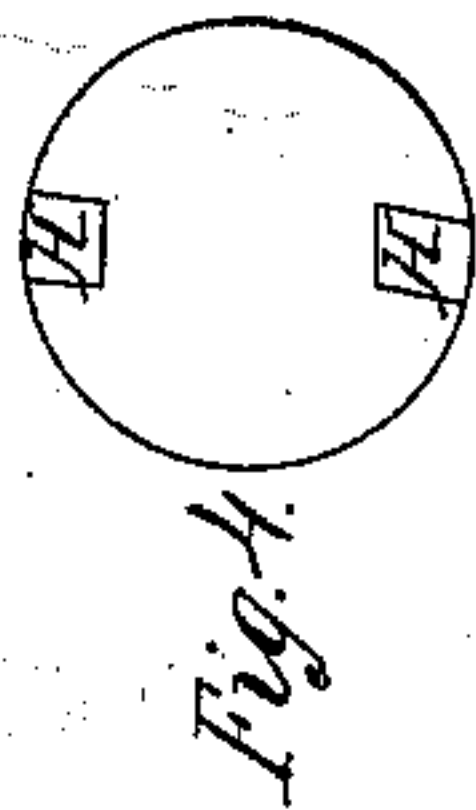
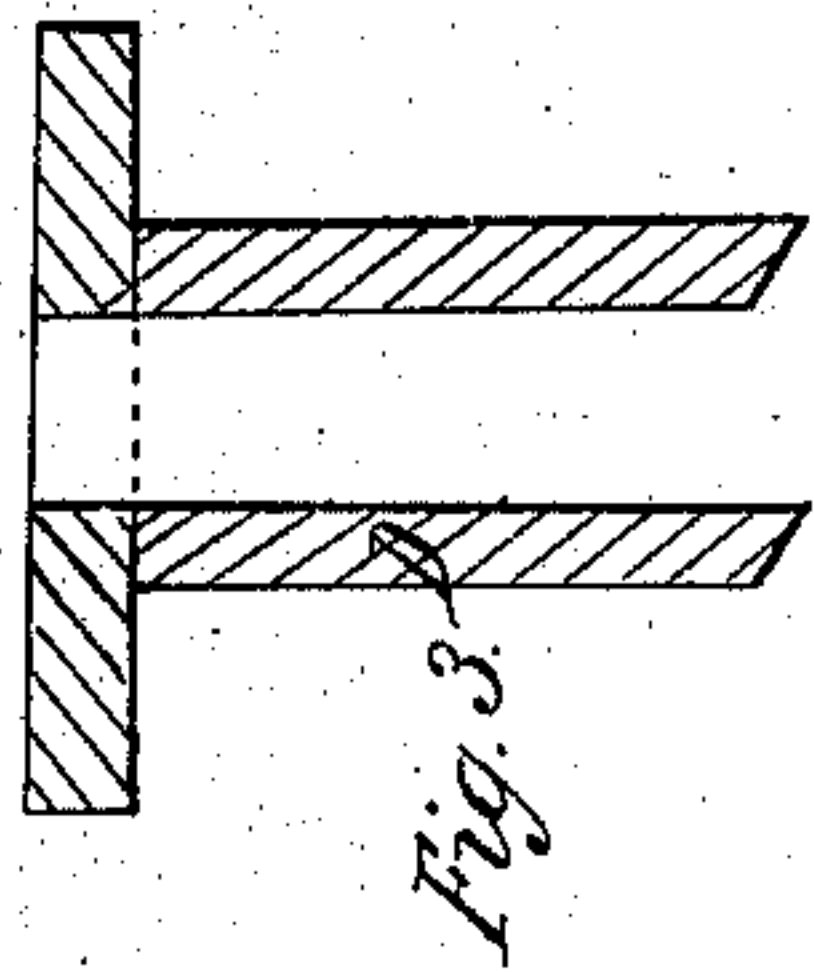
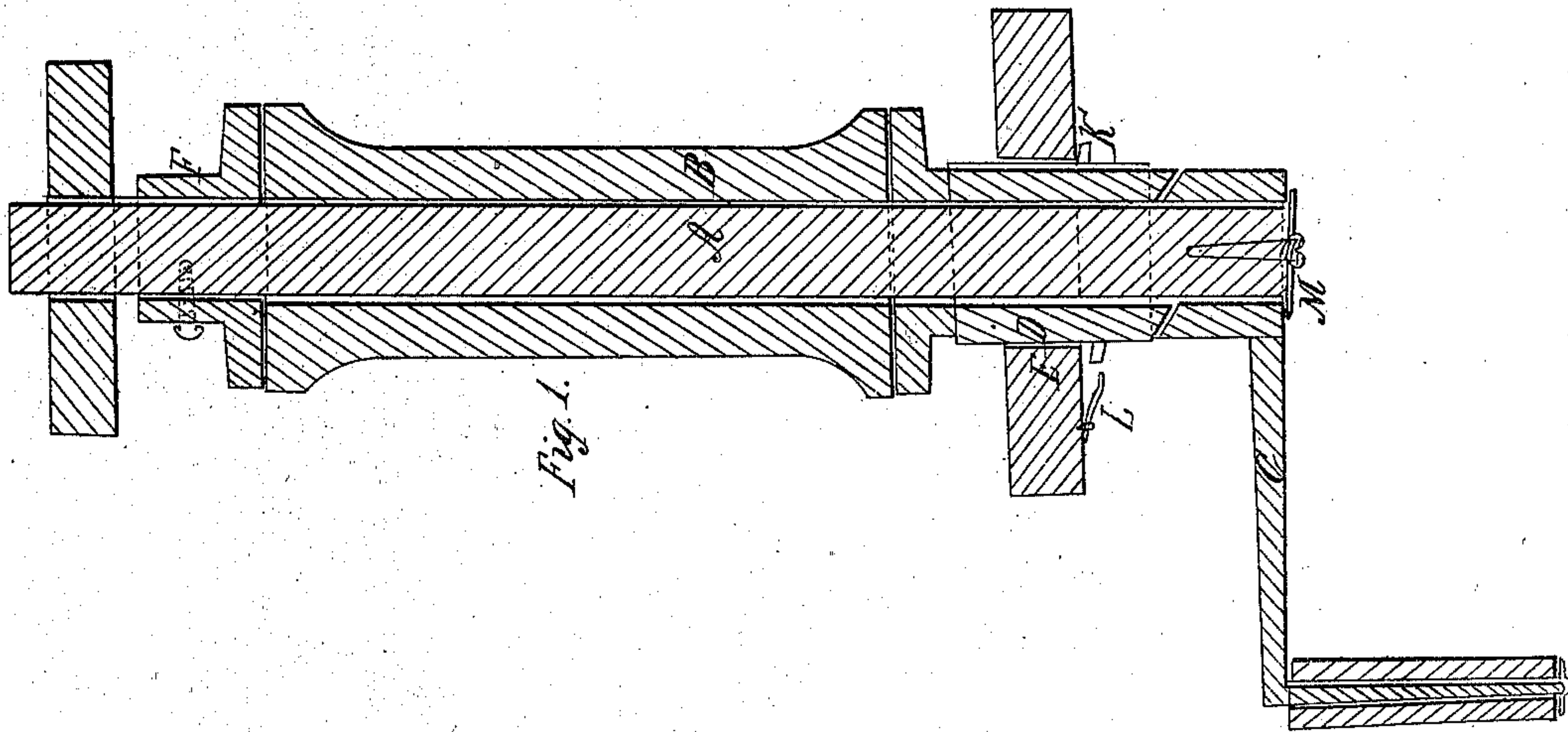


S. M. Washburn
Windlass Water Elevator

N^o 35405.

Patented May 27, 1862.



UNITED STATES PATENT OFFICE.

SAMUEL M. WASHBURN, OF POUGHKEEPSIE, NEW YORK.

IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. 35,405, dated May 27, 1862.

To all whom it may concern:

Be it known that I, SAMUEL M. WASHBURN, of Poughkeepsie, of the county of Dutchess, in the State of New York, have invented a new and useful Improvement in Water-Elevators for Hoisting and Letting Down Buckets in Wells; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and letters of reference marked thereon.

In Figure 1, A, the shaft, placed horizontally, passes centrally through the crank-socket C, ratchet-wheel band K, brake-wheel D, drum B, and brake-wheel F, and rests in the boxes or bearings G G. B, the drum, revolves around the shaft A and unwinds the chain I. C is the crank-wheel, with two bevel-notches cut opposite each other in the inner edge. D is the brake-wheel, with two arms or shafts placed in grooves in shaft A, under ratchet-wheel band K, with the ends extending to the bevel-notches of crank-socket C. F, the brake-wheel, is fastened to shaft A by screw N. G G are boxes or bearings of shaft A and ratchet-wheel band K. M is the disk or washer fastened to the end of shaft A, covering the outer end of crank-socket C. L is the pawl, fastened to G and resting on ratchet-wheel K.

Fig. 2 shows the elevator with drum B not held by brake-wheels D and F. I is the cord or chain with bucket attached.

Fig. 3 shows the brake-wheel with shafts or arms.

Fig. 4 shows the end of ratchet-wheel band and shaft cut off to show the grooves H H.

Operation: Turn the crank-socket C to the right, which wedges the bevel-notches against the bevel ends of the arms of brake-wheel D and moves brake-wheel D longitudinally on the shaft A until it presses against the end of drum B, carrying it against the brake-wheel F; thus pressed and firmly held by the brakes D and F the drum is carried around with the shaft A and winds up the chain I. To unwind the chain, reverse the motion or turn crank-socket C to the left while the pawl falls into the notches of the ratchet-wheel K, preventing shaft A from revolving. The bevels in crank-socket C are thereby removed from the bevel ends of the arms of brake-wheel D and loosen drum B sufficient to revolve on shaft A, thus unwinding the cord slowly or fast, at will, by the operation of the brakes on drum B.

What I claim is—

The combination and arrangement of crank-socket C with brake-wheel D, for the purposes substantially as specified.

SAMUEL M. WASHBURN.

Witnesses:

JOHN ALBERTSON,
J. G. P. HOLDEN.