

J.B. Holmes,

Canstn.

Nº 16,774.

Patented Mar. 3, 1857.

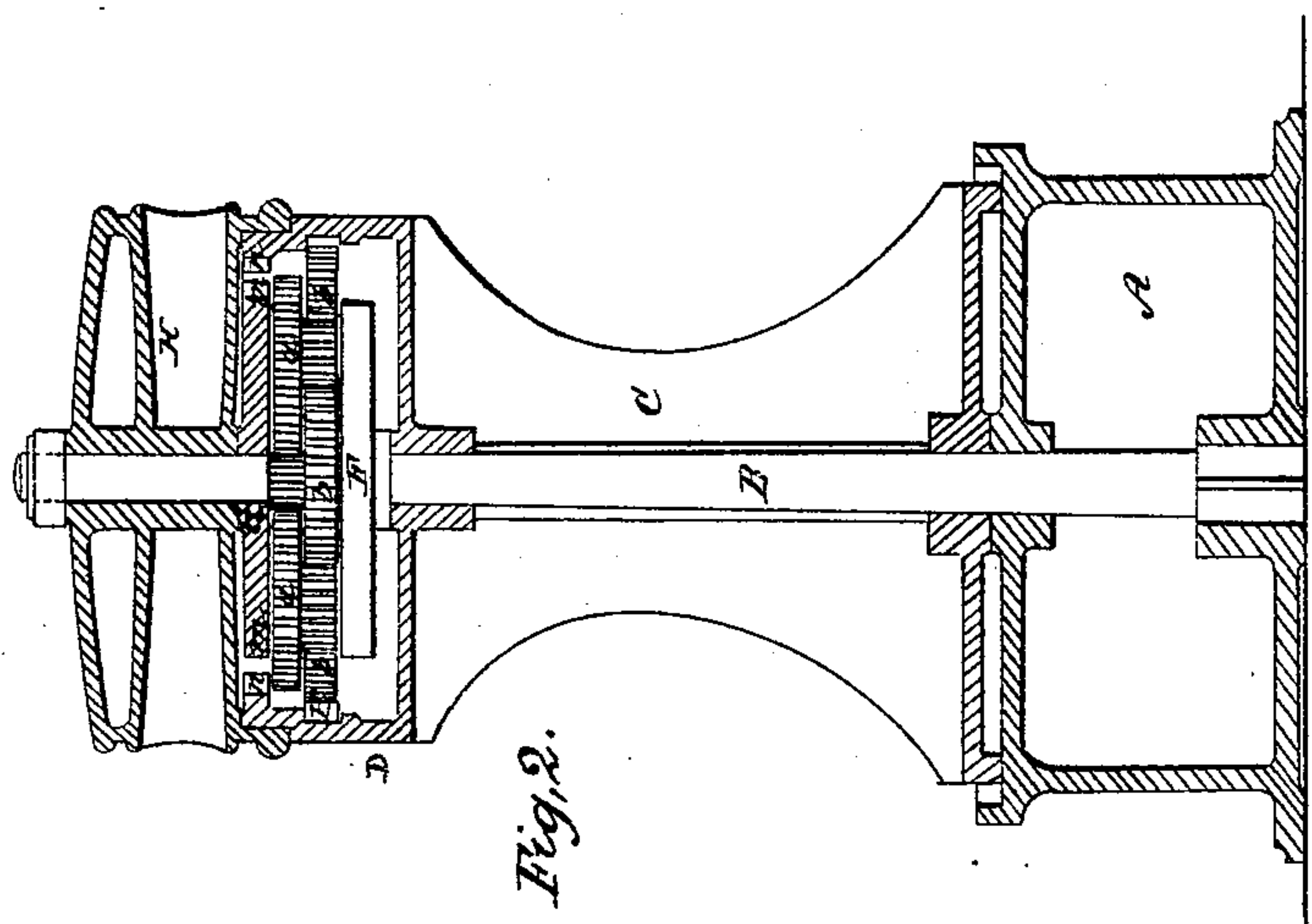


Fig. 2.

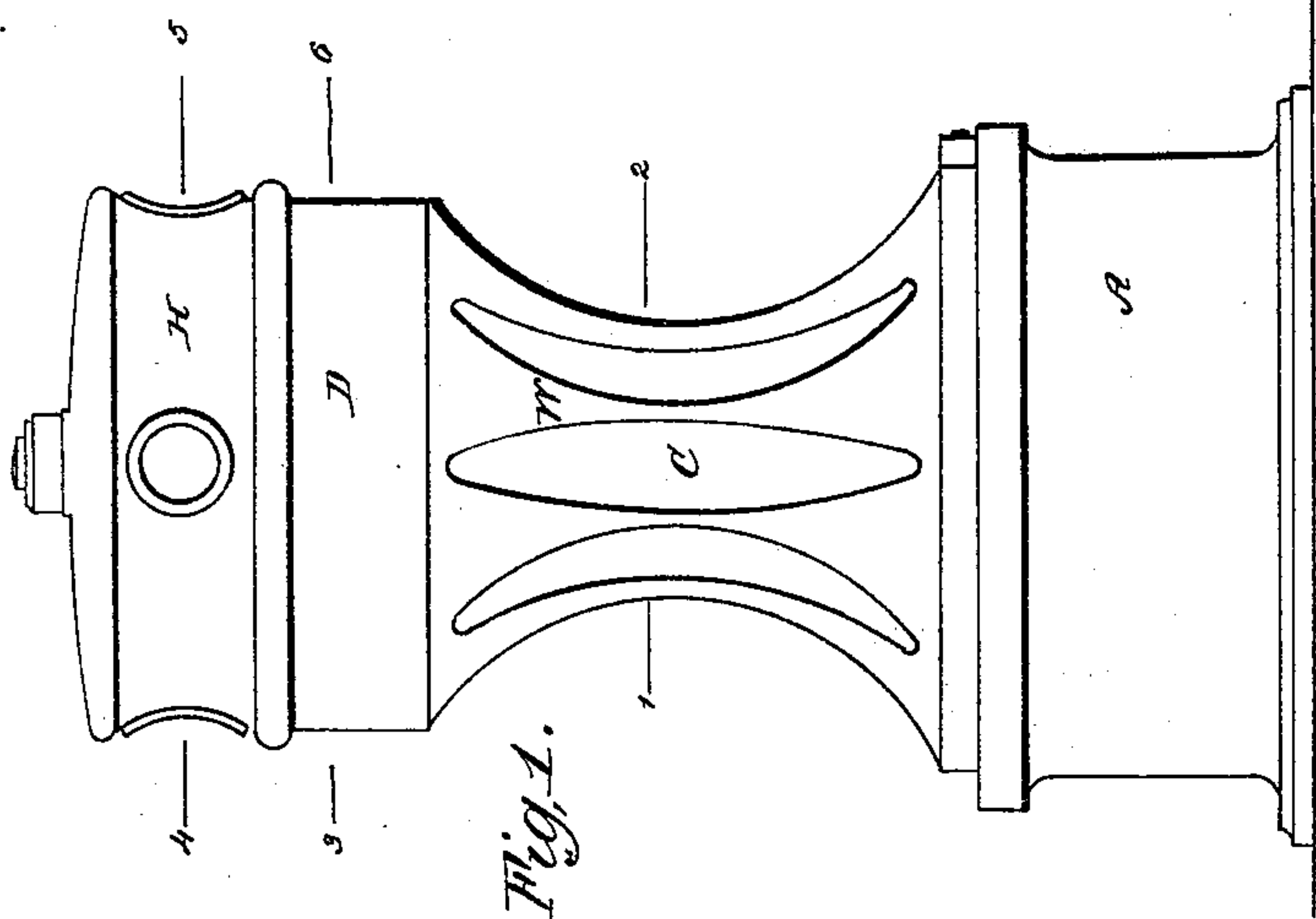
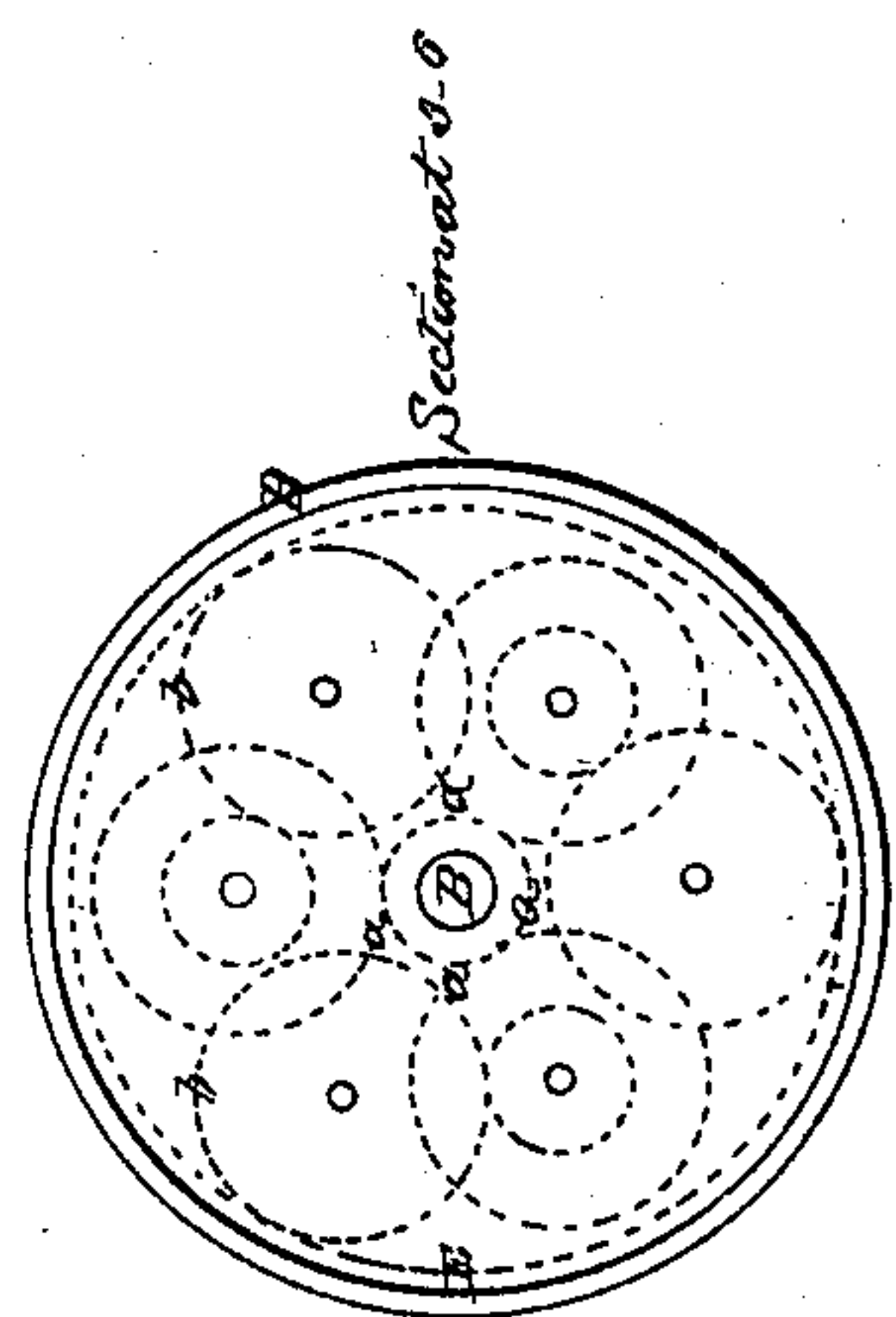


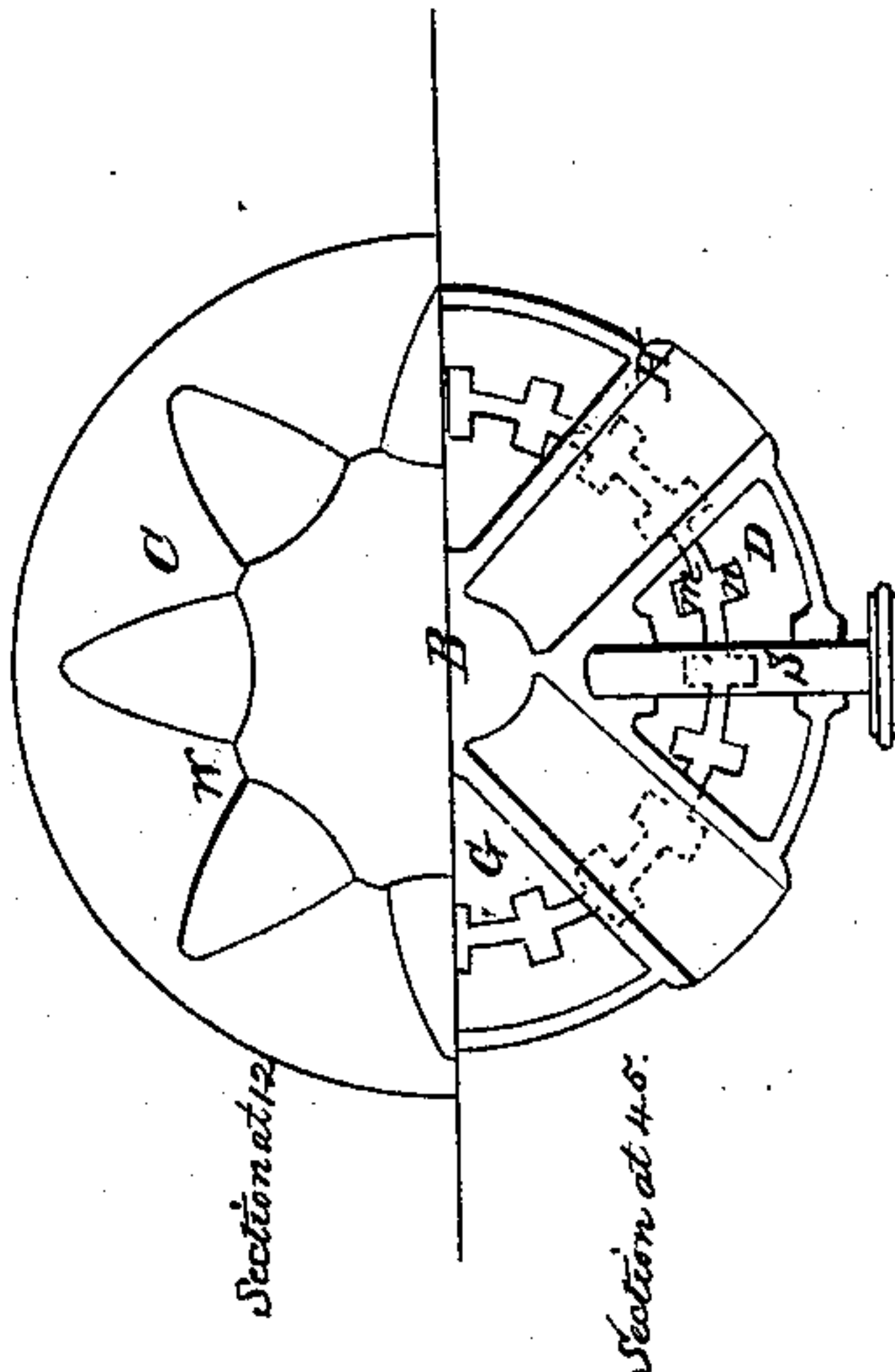
Fig. 1.

Fig. 4.



Section at 2-2.

Fig. 3.



Section at 1-1.

Section at 4-5.

UNITED STATES PATENT OFFICE.

JOHN B. HOLMES, OF NEW YORK, N. Y., ASSIGNOR TO JOHN R. PRATT, OF NEW YORK, N. Y.

SHIP'S CAPSTAN.

Specification of Letters Patent No. 16,774, dated March 3, 1857.

To all whom it may concern:

Be it known that I, JOHN B. HOLMES, of New York, in the county and State of New York, have invented a new and Improved Chain Capstan; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure I represents an outside view and Fig. II a section of the capstan. Fig. III is a horizontal section at the center of the barrel and capstan head, and Fig. IV is a section of the cap-piece showing the arrangement of the gearing.

In the winding of the chain upon the barrel several contrivances have been attempted to prevent the chain from riding or of one part of the chain passing over the other. This difficulty is prevented by the peculiar construction of the whelps on the barrel.

To the bottom of the capstan A, which is firmly attached to the deck, the stationary shaft B is fastened, around which the barrel C turns, resting upon the bottom A, and provided with a cap piece D firmly attached, with an internal tooth wheel E. The upper rim or flanch of the cappiece is made with notches or recesses (*n*) for the projection on the sliding clutch S to fit into.

F is a plate keyed fast upon the stationary shaft B to carry the centers of the gear wheels, and pinions.

G is a plate turning freely upon the shaft B and to which a pinion O is firmly attached. The circumference of this plate is made with notches or recesses (*m*) for the projection of the sliding clutch S to fit into.

H is the capstan head, turning freely upon the shaft B, and into which the capstan bars are inserted to turn the same.

S is a sliding clutch fitted to the capstan head H in proper bearings, capable of sliding, and provided with a projection fitting either into the recesses (*n*) of the cappiece D, or into the recesses (*m*) of the plate G.

When this sliding clutch S is moved so that its projection comes into one of the notches or recesses (*n*) of the cappiece D the capstan head H will be connected with this cappiece D, and consequently with the barrel C, and any motion communicated to the capstan head H will be directly communicated to the barrel C immaterial which way the capstan head may be turned. When the sliding clutch S is moved inward, so that the projection comes into one of the recesses (*m*) in the plate G the capstan head will be connected with this plate G and any motion given to the capstan head will be communicated through the pinion O, fast on the plate G, to the wheels *a a a* and *b b b*, and to the internal tooth wheel E, fast on cappiece D, and consequently the barrel C will be turned around, either way the capstan head may be moved.

The whelps W on the barrel C are made smallest in the middle leaving the space between them consequently the widest in the middle, so that the chain will be perfectly free to slide easily toward the middle of the barrel as fast as wound upon the same. The whelps W being made high to catch the uneven part of the chain enables the same to be held by one or two turns around the barrel and enables me to use a very short barrel and to dispense with all feeding strips or other contrivances to keep the chain always in the smallest part of the barrel and to prevent the chain from riding or from one part of the same passing over the other.

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

The vertical recesses C and whelps extending the whole length of the barrel of the capstan and allowing of two or more turns of the cable around the capstan as herein set forth.

JOHN B. HOLMES.

Witnesses:

HENRY E. RUCKER,
E. RINDGE.