

*J. F. Holloway,
Capstan.*

N^o 24,558.

Patented June 28, 1859.

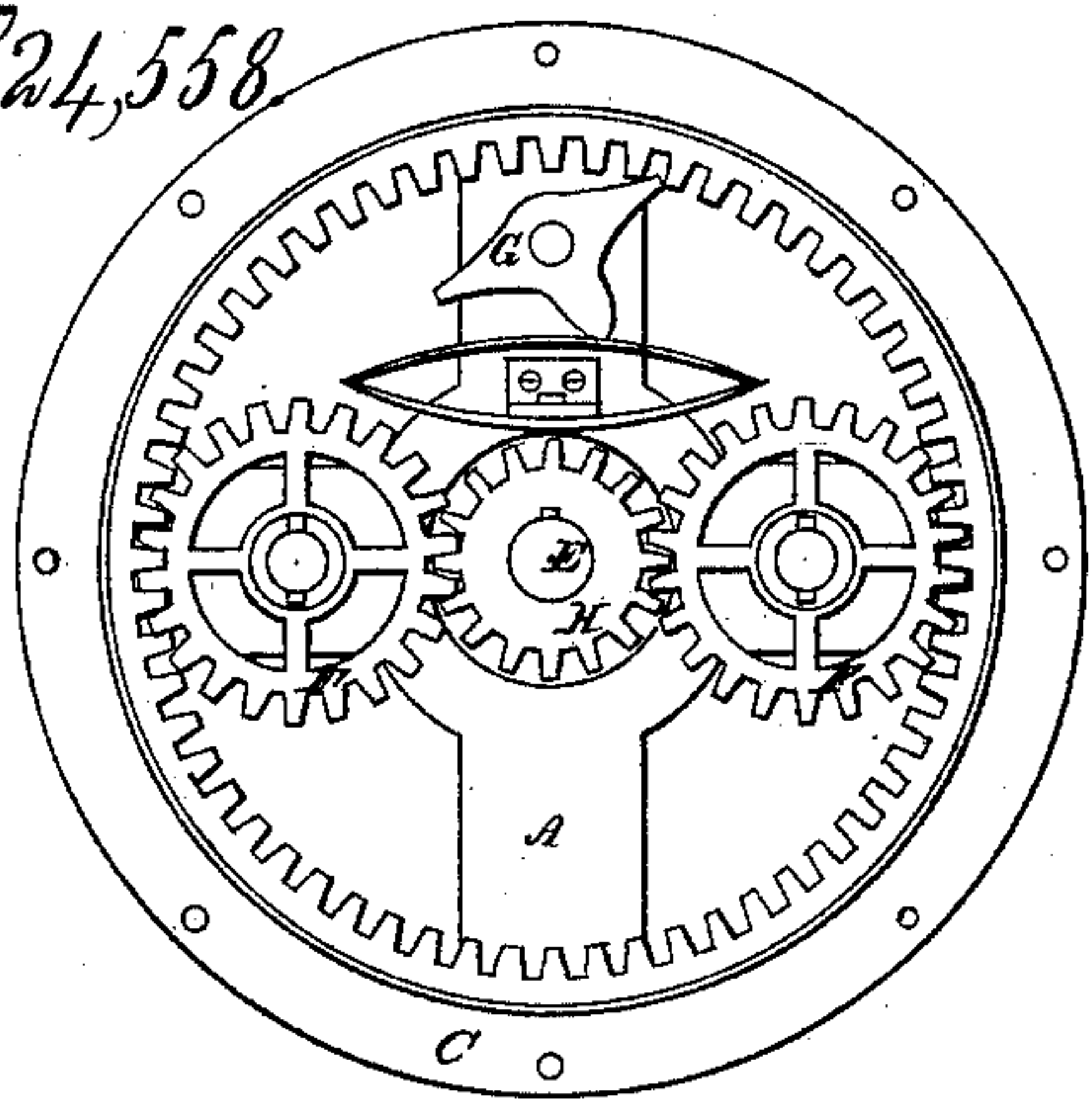


Fig. 3.

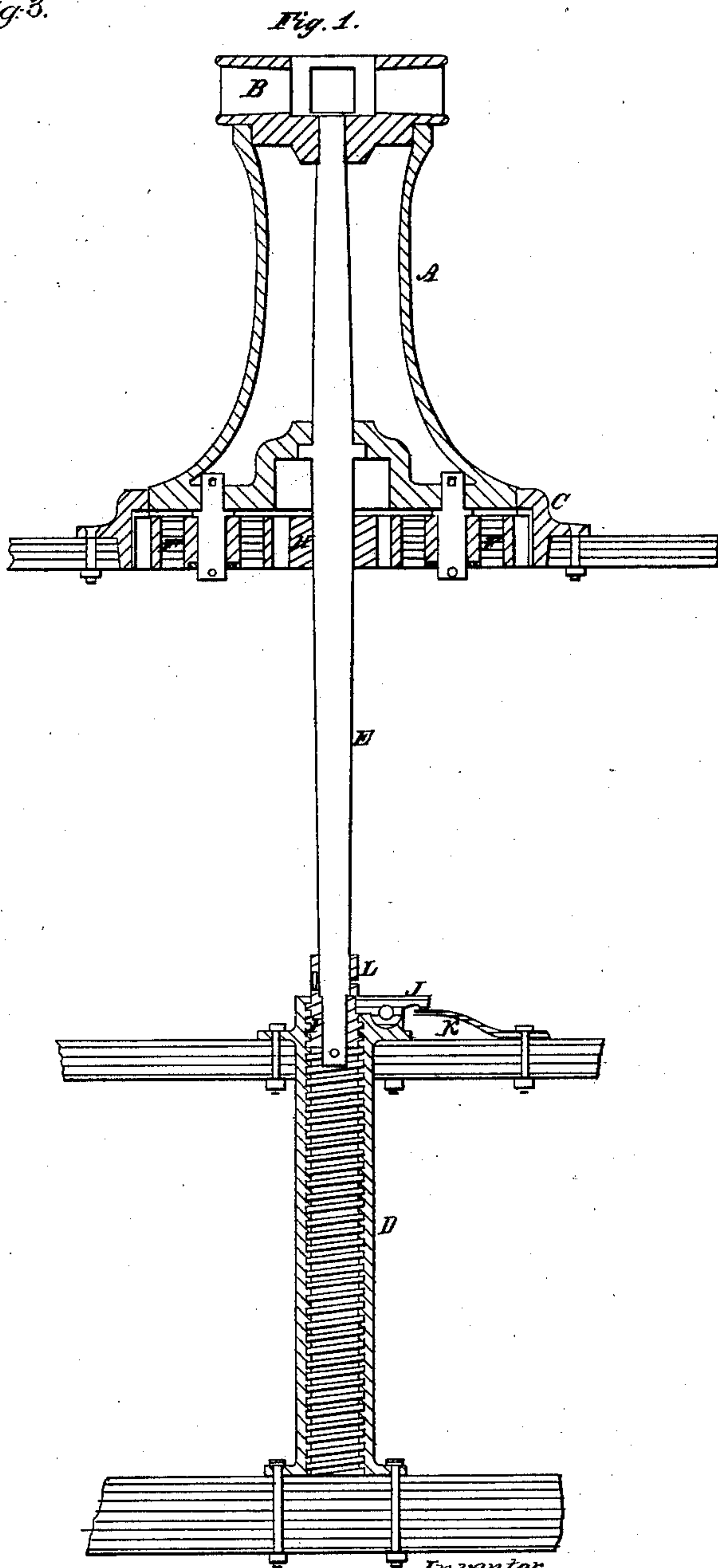


Fig. 1.

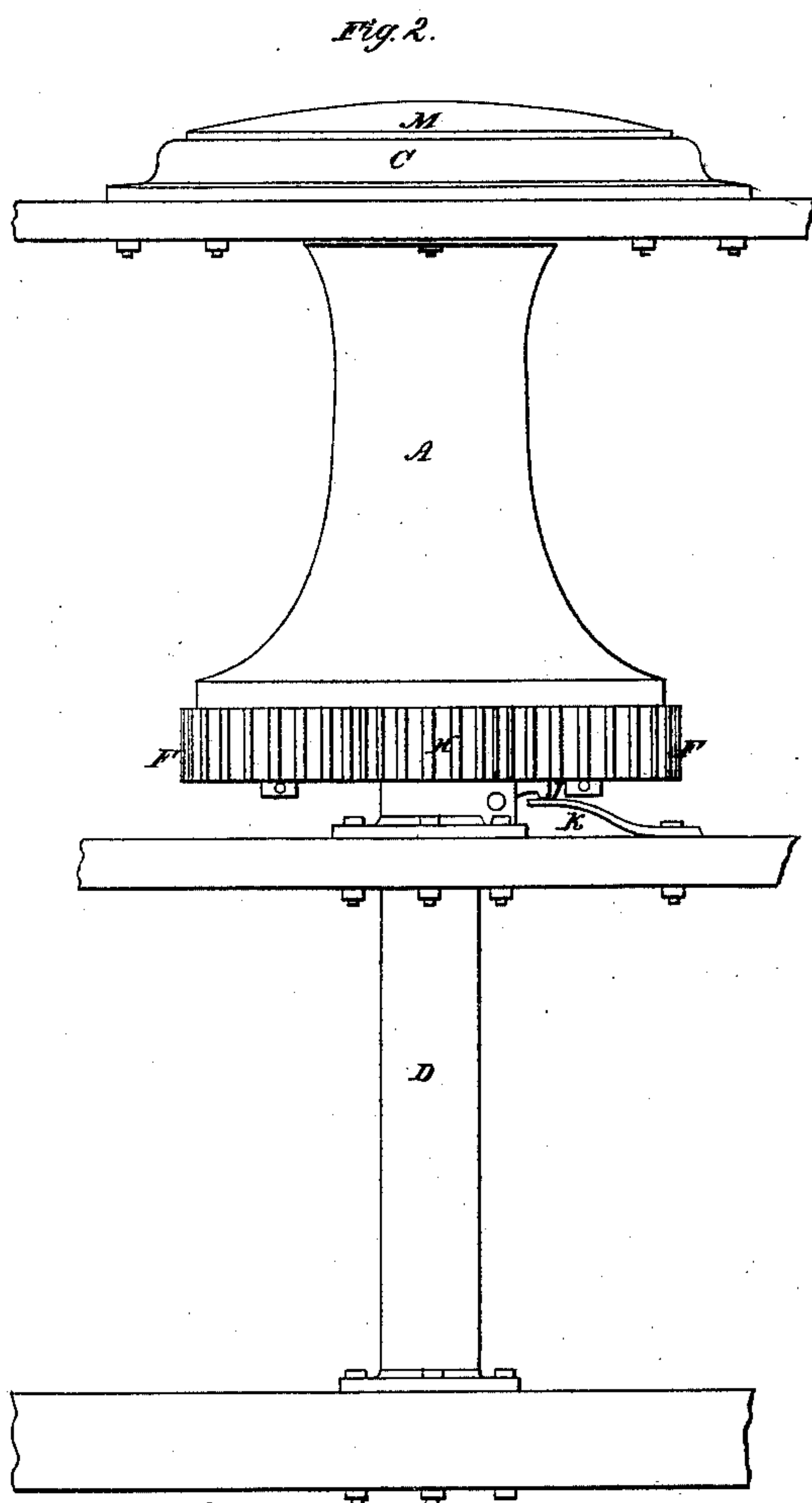


Fig. 2.

*Witnesses.
Geo. Enol Sellers,
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UNITED STATES PATENT OFFICE.

J. F. HOLLOWAY, OF SALINE MINES, ILLINOIS.

SHIP'S CAPSTAN.

Specification of Letters Patent No. 24,558, dated June 28, 1859.

To all whom it may concern:

Be it known that I, J. F. HOLLOWAY, of Saline Mines, Gallatin county, in the State of Illinois, have invented a new and Improved Capstan for Ships or Steamboats; and I do hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a sectional elevation, showing the capstan in position ready to work; Fig. 2 is an elevation, showing the capstan lowered below deck; Fig. 3 is a plan of the gearing.

The object to be obtained by what I claim in my improved capstan, is: so arranging it, that it can be readily lowered below deck and covered over with a plate, when it is not wanted, thus leaving the deck clear for the passage or storage of freight, it being well known, that the capstan in many boats is very much in the way, while freight is being taken on or discharged. Now to accomplish this result, I have made the following arrangement:

A is a capstan barrel of the ordinary external shape, B is the head of the capstan with holes to receive the capstan bars and made permanently fast to the spindle or shaft E, and revolves loosely on the top of A, when the capstan is in gear.

C is an annular ring or plate of metal, fastened to the deck of the vessel and has on its inner, upper edge a bearing against which the barrel A revolves. Below said bearing are teeth or cogs, also upon the inner surface, into which the pinions F revolve, which pinions are attached to the barrel A, and cause it to revolve also. The teeth in C serve the additional purpose of a ratchet, into which the pawl G falls, which pawl, being attached to A, holds it from turning backward. The pinion H is attached to the spindle E by a feather key, by means of which it is driven by said spindle and it being in gear with the pinions F, and through them with the annular ring C, the barrel A is made to revolve at a slower speed than E and consequently with an increased power.

The stand pipe D is permanently fastened to the keelson or cross timber of the boat and has upon its inner surface a double threaded screw cut its entire length, in which screw the bearing step I, having a corresponding screw cut upon its outer surface,

moves up and down, when the capstan is raised or lowered. When the capstan is in use, the spindle E revolves loosely in the bearing step I, which step is held in its place at the upper end of D by the catch J, which falls into a corresponding notch in I and is held in its place by the spring K. The coupling L is made to move up and down upon the shaft E, but is prevented from turning on said shaft by a feather key in said shaft or spindle.

When the capstan is to be lowered, the coupling L is moved down until it connects with the bearing step I; this step, being by that means made to revolve with the spindle E, moves down in the pipe D, and consequently lowers the capstan down. In order to raise the capstan up, the motion has only to be reversed. When the capstan is lowered down level with the deck, the ring C is covered with the manhole plate or hatch M, and the deck left free from obstruction. When the capstan is being raised or lowered, the pinion H should be raised up out of gear and will be held in that position by being partly turned around so as to keep the key out of the key seat.

It must be evident from the foregoing description, that the novelty of my invention consists in the arrangement, whereby the capstan can be readily lowered below deck for the purpose of leaving the deck clear, when it is required for other purposes, and it must also be evident to all ingenious mechanics, that the same result could be accomplished in various ways, as for instance: the spindle may be made hollow and an upright screw, standing below, may be made to operate within the hollow spindle, or the screws may be put to one side of the capstan, all of which plans would effect what I claim to have invented, viz., the raising and lowering of the capstan bodily for the purpose aforesaid.

Now I do not claim any novelty in the shape of the capstan, nor in the manner of gearing it, when in use, such arrangement of gearing having been used before. But

What I do claim as new and desire to secure by Letters Patent is:

A capstan, having a vertical movement as well as a rotary one, substantially in the manner and for the purpose specified.

J. F. HOLLOWAY.

Witnesses:

GEO. ENOL SELLERS,
F. H. SELLERS.