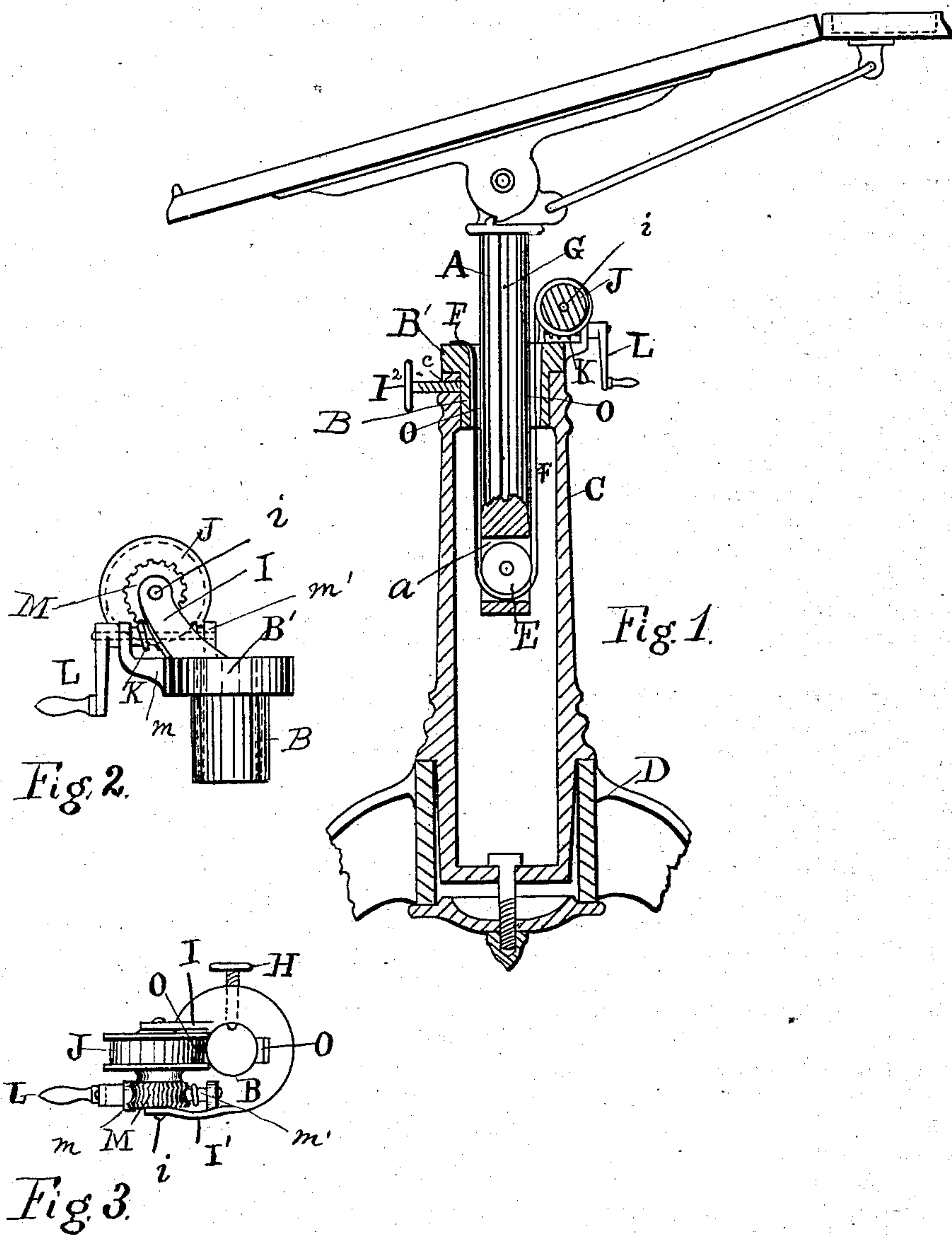


(No Model.)

E. S. COBB.
DRAWING STAND.

No. 315,246.

Patented Apr. 7, 1885.



Witnesses,
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UNITED STATES PATENT OFFICE.

EDWARD S. COBB, OF TERRE HAUTE, INDIANA.

DRAWING-STAND.

SPECIFICATION forming part of Letters Patent No. 315,246, dated April 7, 1885.

Application filed January 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWARD S. COBB, of Terre Haute, in the county of Vigo and in the State of Indiana, have invented certain new and useful Improvements in Drawing-Stands; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to stands or tables intended chiefly for the use of draftsmen, and will be more fully set forth hereinafter.

In the drawings, Figure 1 is a side elevation of my improved device, partly in section, with the legs broken off; and Figs. 2 and 3 are details.

A represents the vertically-movable and rotary standard which supports the drawing-table proper, which latter forms no part of my present invention.

B is a movable collar having a circular flange, B', the said collar being adapted to fit within the upper part of the hollow cylinder or standard C, and the flange B' to rest upon the top of said cylinder.

D represents the upper part of the supporting-legs of the cylinder C.

E is a sheave or pulley located within a slot, *a*, in the lower part of the standard A, and under this sheave and through this slot there passes the steel tape F, one end of which is secured to the collar B, while the other end is secured to and adapted to be wound around the barrel of a reel, J, to be hereinafter referred to. The standard A is provided with a V-shaped vertical groove, G, and a set-screw, H, passes through a threaded hole in the flange B, and has a conical point adapted to enter said groove, whereby whenever the standard A and the table supported thereon is moved by the rotary action of the former the collar shall always move or rotate exactly with it, and thereby prevent the tape F from becoming twisted or out of proper line, and this screw H also serves when tightened to make the standard A and collar B rigid with each other. Rising from the upper surface of the flange B are the brackets I and I', in which are journaled the ends of the shaft *i*, and this shaft supports the reel J, already named, the barrel of which receives the tape F, and which barrel has rigid therewith the worm-wheel M, revolving, consequently, on the same shaft *i*,

and the whole actuated by the worm-shaft K and its crank L, the said shaft being supported in bearings *m m'*, rising from the flange B.

It has been already explained how the standard A and collar B are made to rotate together by reason of the groove G in the former and the screw H passing through the flange of the latter into the said groove; but when these parts have been sufficiently revolved to bring the table proper into the desired position it is necessary that further rotation should be prevented, and this is accomplished as follows: The cylinder C is provided near its upper edge with a threaded hole, *c*, through which passes the set-screw I², and whenever the collar and standard have been turned to the desired position this screw I² is tightened against the collar, and thus all parts are held rigid. The standard A fits snugly within the central bore of the collar B, and in order that the tape F may not bind or in any way interfere small grooves or vertical slots O O are cut along the inner surface of the collar B opposite each other, as shown, and hence the tape always has room to move freely alongside the standard A, down to, under, and up from the sheave or pulley E.

The operation of my device will be apparent from the foregoing description of its construction. When it is desired to lower the table proper, the crank L is turned in one direction and the weight of the table and standard A forces the latter downward (as far as the length of tape unreeled will permit) into the hollow standard or cylinder C, while a turn of the crank in the opposite direction instantly serves, by shortening the tape, to raise the standard A and with it the table, the standard A always remaining stationary until the worm is revolved.

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

1. In a drawing-stand, the combination, with a supporting-base having a cylindrical or hollow standard, of a movable collar fitting within and upon the hollow standard, a table-top, and another standard slotted at its lower end and having a sheave mounted in said slot supporting the table-top and vertically movable within and rotating with the collar; a reel lo-

cated on the collar, and a tape passing through the lower slotted part of the movable standard under the sheave secured in said slot, one end of said tape being attached directly to said collar and the other end to the reel, substantially as set forth.

2. In a drawing-stand, the combination, with a table-top and a supporting-base having a cylindrical hollow standard, of a movable collar fitting within and upon the hollow standard, a reel located on the collar and a tape, and a vertical movable and rotating standard slotted at its lower end and having a sheave mounted in said slot, supported within the collar by the tape passing through the slotted lower end of the movable standard and secured to the collar at one end and at its other end to the reel mounted on said collar, the said movable standard being provided with a vertical slot or groove and the said collar with a set-screw passing therethrough and into said groove, whereby while the said movable standard may be raised or lowered independently of the collar it can only be rotated in connection therewith, substantially as set forth.

3. In a drawing-stand, the combination, with a table-top and a supporting-base having a cylindrical hollow standard, of a movable collar fitting within and upon the hollow standard, a movable standard slotted at its lower end and having a sheave mounted therein vertically movable within the collar and rotating therewith, a reel mounted on said collar and provided with a worm-wheel rigid with its barrel, and a worm-shaft and crank, and a tape secured at one end to the collar, thence passing down alongside of the movable standard and under the sheave secured in a slot in the lower part of said standard, and up alongside the opposite side of said standard to the barrel of the reel, substantially as set forth.

4. In a drawing-stand, the combination of a table-top and a supporting-base having a cylindrical or hollow standard, C, collar B, standard A, slotted at its lower end and having a sheave mounted therein, reel J, and tape F, secured to the collar and reel and passing through the slot in the base of the standard A, and thereby supporting the latter, substantially as set forth.

5. In a drawing-stand, the combination, with a table-top, of a supporting-base having a cylindrical or hollow standard, C, standard A, having sheave E, collar B, having vertical inner grooves, O O, reel J, and tape F, substantially as set forth.

6. In a drawing-stand, the combination, with a table-top, of a supporting-base having a cylindrical or hollow standard, C, standard A, having sheave E secured within a slot in its lower part, and vertical exterior groove, G, collar B, having flange B', provided with a horizontal perforation, screw H, adapted to pass through said perforation in the flange B', reel J, mounted on the flange B', and tape F, one end of which is secured to the collar B and the other end to the reel J, substantially as set forth.

7. In a drawing-stand, the combination, with a table-top, of a supporting-base having a cylindrical or hollow standard, C, having a threaded hole, c, near its upper edge, standard A, having sheave E secured within a slot in its lower part, and vertical exterior groove, G, collar B, having flange B', provided with a horizontal perforation, screw H, reel J, mounted on the flange B', tape F, secured to the collar and the reel, and set-screw I², substantially as set forth.

8. In a drawing-stand, the combination, with a table-top, of a supporting-base having a cylindrical or hollow standard, C, vertically-movable standard A, having sheave E in its slotted lower end, collar B, having flange B', brackets I I', shaft i, reel J, and worm-wheel M rigid therewith, worm-shaft K, and crank L, supported on bearings rising from the flange of the collar B, and the tape F, secured to the collar and the reel, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

EDWARD S. COBB.

Witnesses:

STANLEY S. STOUT,
H. G. UNDERWOOD.