

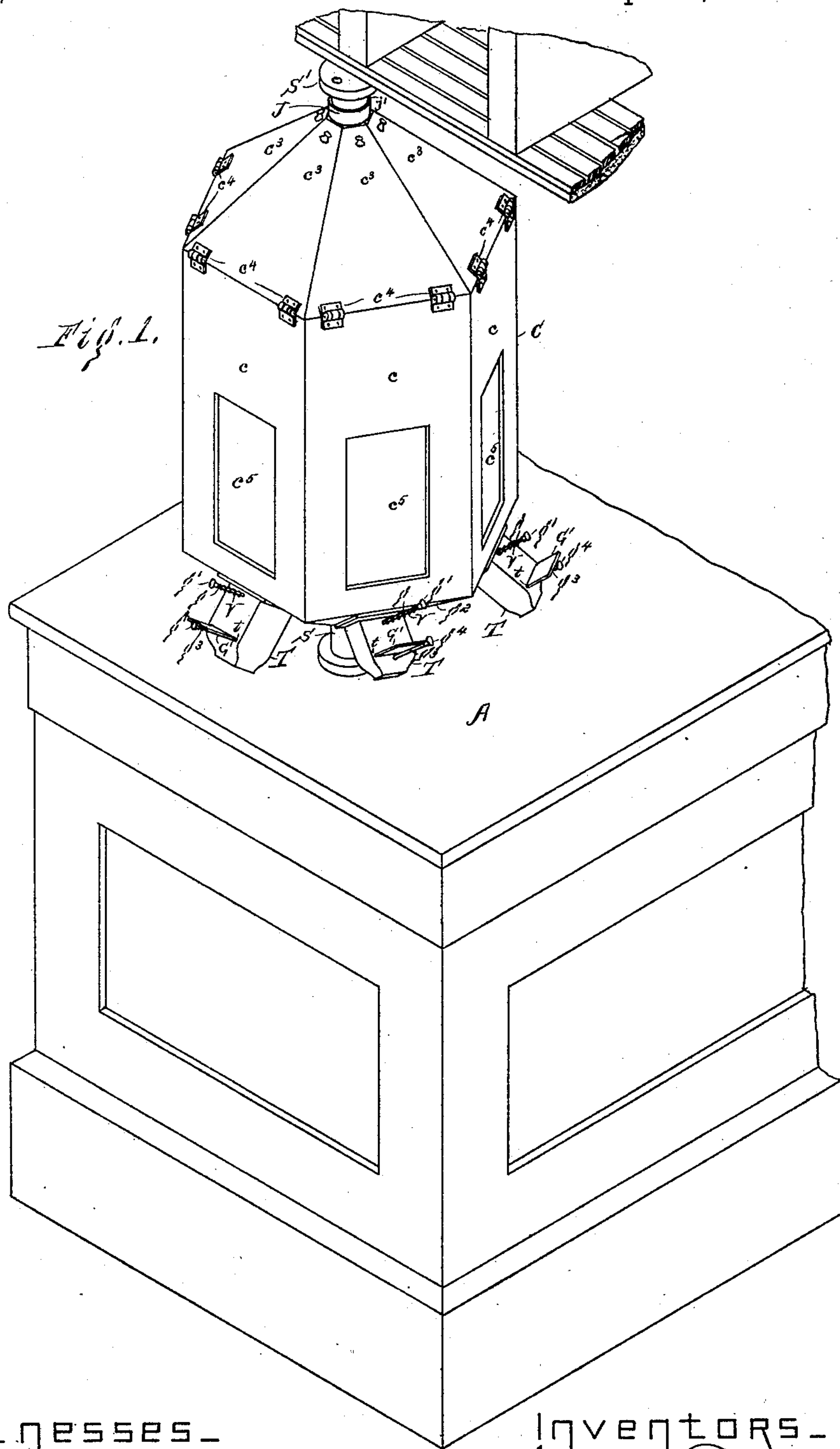
(No Model.)

2 Sheets—Sheet 1.

D. T. McKINNON.
MEASURING CANISTER.

No. 360,608.

Patented Apr. 5, 1887.



Witnesses—

Kirkley H. Lee.
Esther M. Day.

Inventors—

Donald T. McKinnon,
By Albert M. Moore,
His Attorney.

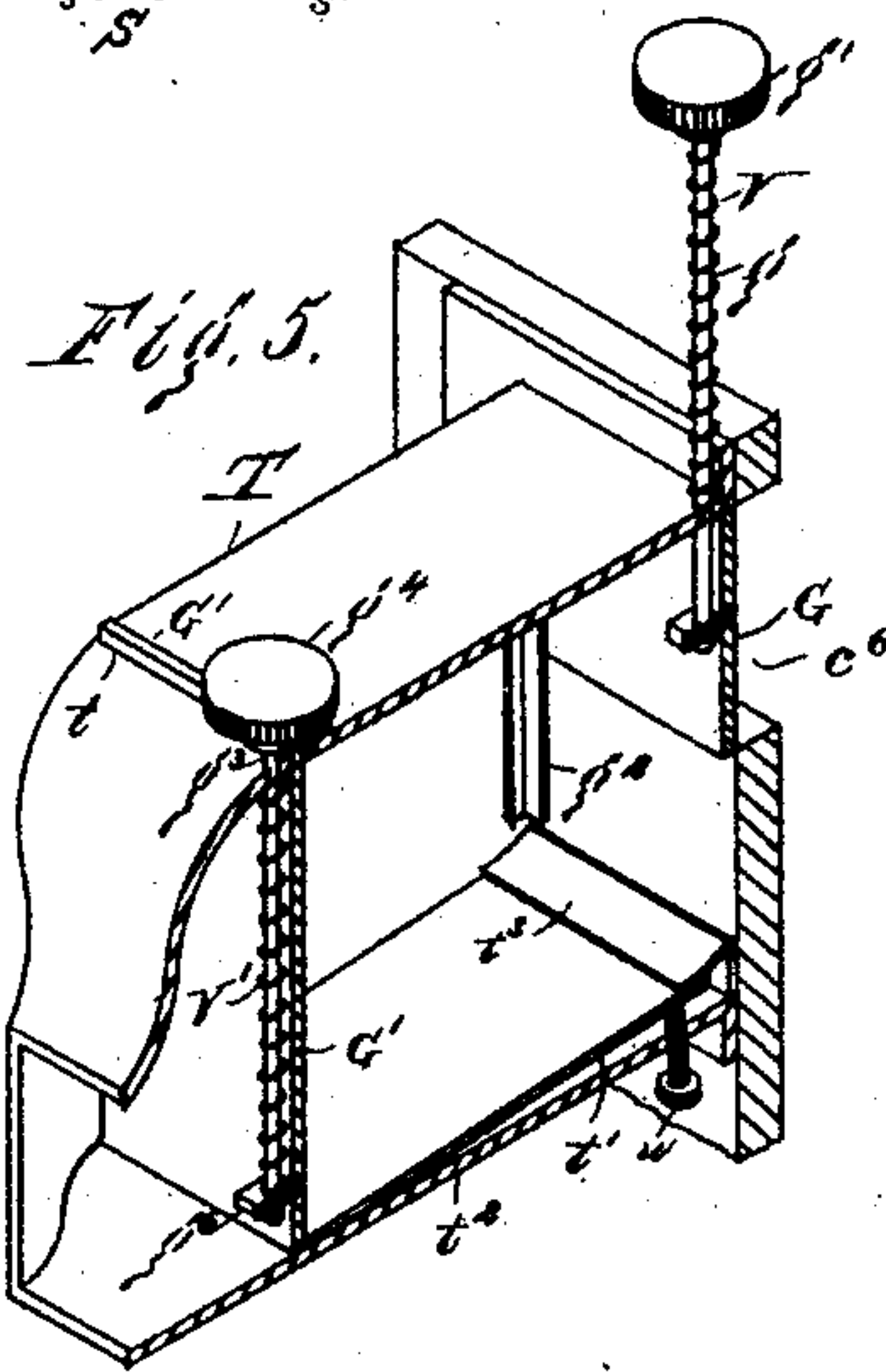
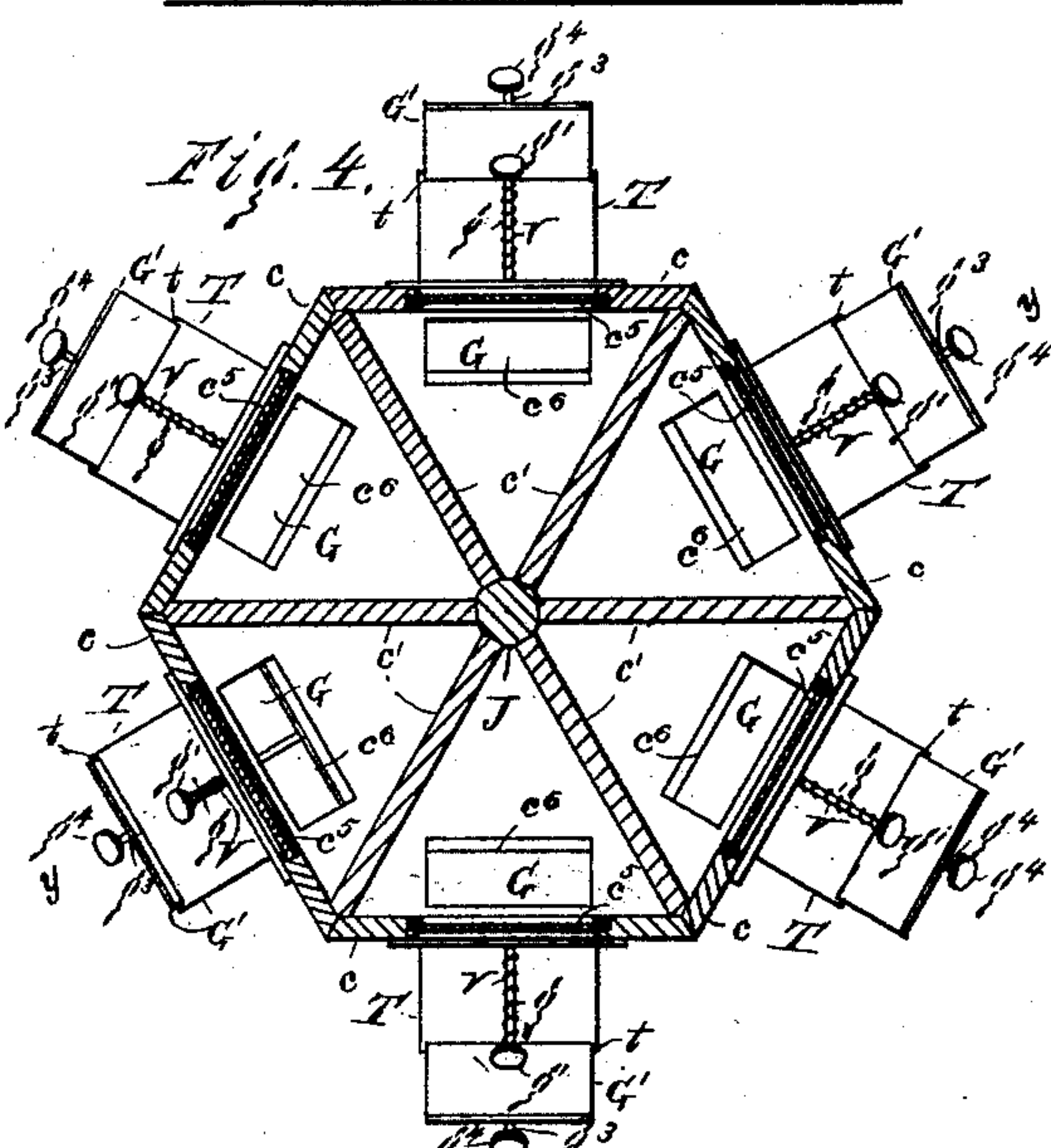
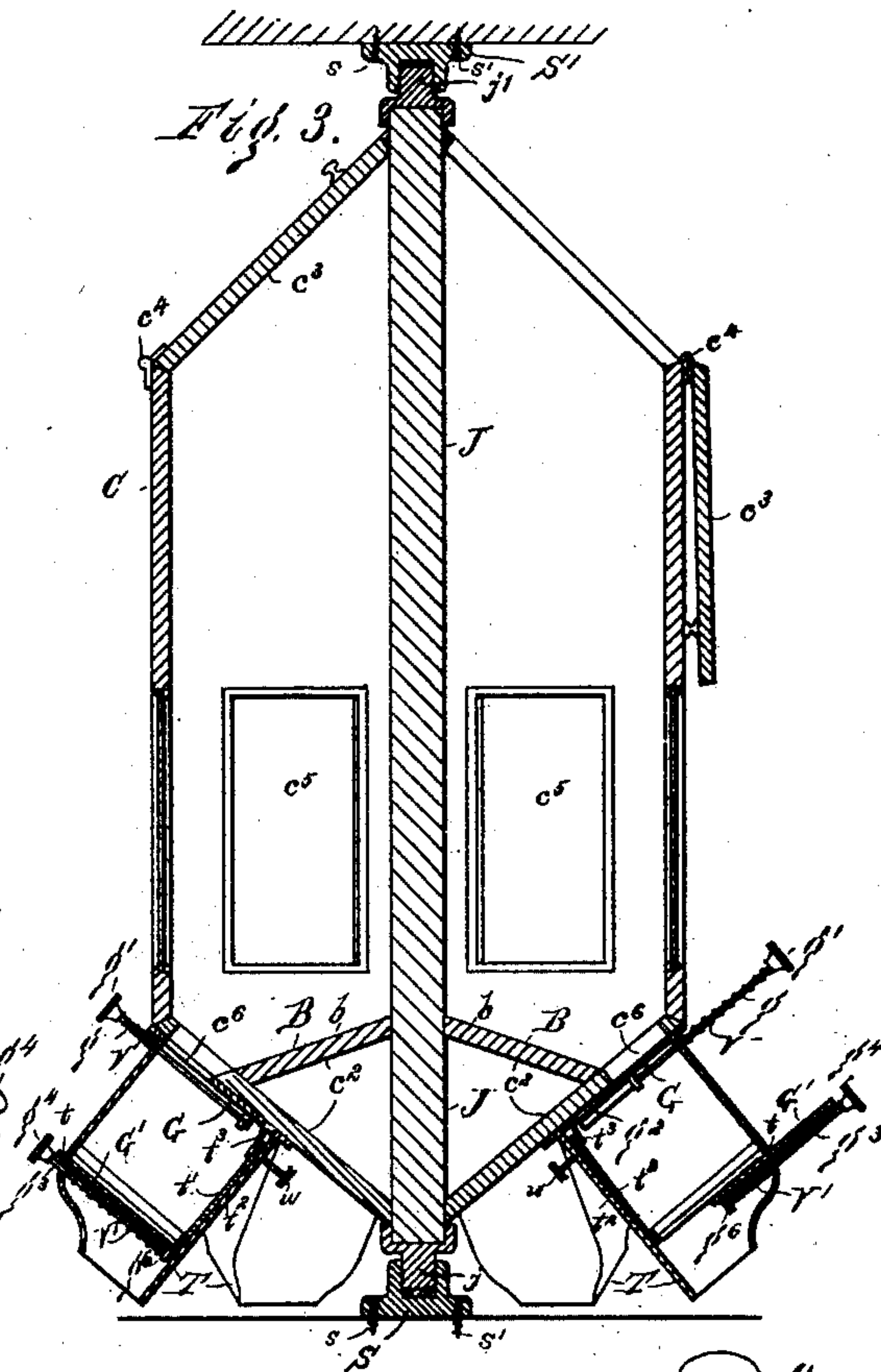
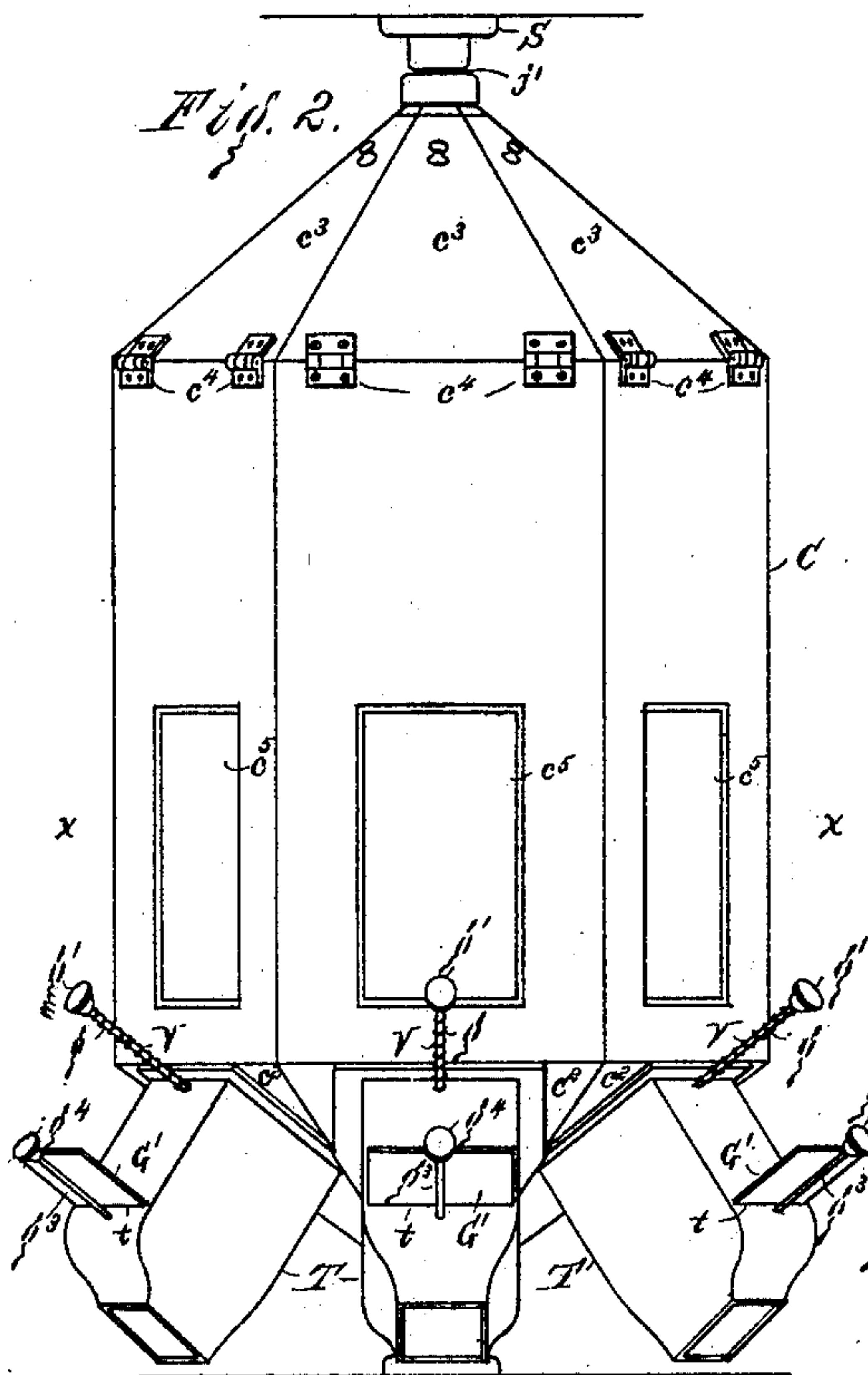
(No Model.)

2 Sheets—Sheet 2.

D. T. McKINNON.
MEASURING CANISTER.

No. 360,608.

Patented Apr. 5, 1887.



Witnesses—

Hirshley H. H. H.

Gertrude M. Day

INVENTOR—
Donald T. McKinnon,
By *Albert M. Moore,*
His Attorney.

UNITED STATES PATENT OFFICE.

DONALD T. McKINNON, OF LOWELL, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JOHN McKINNON, OF SAME PLACE.

MEASURING-CANISTER.

SPECIFICATION forming part of Letters Patent No. 360,608, dated April 5, 1887.

Application filed June 9, 1886. Serial No. 204,568. (No model.)

To all whom it may concern:

Be it known that I, DONALD T. McKINNON, a subject of Victoria, Queen of the United Kingdom of Great Britain and Ireland, residing at Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Combined Show-Case and Measuring Device, of which the following is a specification.

My invention relates to combined show-cases and measuring devices; and it consists in the combinations and devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an isometric view of part of a counter near its end, with my invention supported above the same and turning in a step secured to the top of said counter and in a bearing secured to the ceiling above said counter; Fig. 2, a side elevation of my invention and its bearings; Fig. 3, a vertical central section of my invention on the line $y y$ in Fig. 4, showing one door of the case open; Fig. 4, a horizontal section on the line $x x$ in Fig. 2; Fig. 5, an isometric view of a central vertical section of the spout and gates and a portion of the lower part of the case, showing also the false bottom of the spout and the means of adjusting the same to vary the capacity of the spout between its gates.

In Fig. 1, A is a counter of a store, upon which (or, if desired, upon the floor of the store) is secured a step, S, having a central vertical opening in the top thereof to receive the lower journal, j , of the case C. The journal j may be the lower cylindrical end of the vertical central post, J, of the case C, or a metallic journal secured to the lower end of said post. The upper end of said post is provided with a similar journal, j' , which turns in a bearing, S', precisely like the step S, inverted and secured to the ceiling of the room or store, the step and bearing being retained in place by screws $s s'$, in an obvious manner.

The case C consists of a box having any desired number of sides c , the case shown being hexagonal in cross-section, and partitions extending radially from the central post to the angles formed by adjacent sides, as shown at c' . The lower end of the case C is closed at c^2 , these parts forming in effect braces to sup-

port the bottom proper of the case, the bottom proper, B, consisting of pieces b , which incline downward and outward in each compartment of the case from the central post to the parts c^2 . The contents of the case are introduced through doors c^3 at the top of the case, hinged at their outer edges at c^4 , each compartment having a separate door, and said contents are visible through glass windows c^5 , with which each side of the case is provided, the windows enabling the contents to be known without the necessity of labeling the different compartments, and also showing when the contents of any compartment have been nearly exhausted.

The case C may be constructed of wood or other suitable material in a manner to suit the taste of the owner.

The contents of the case are drawn therefrom, as required, by spouts T, with one or more of which each compartment is provided, each compartment having an opening at its lower end (shown at c^6) about half as large as a cross-section of the upper end of the spout T, over which openings the upper ends of the spouts are secured by screws or nails passing through flanges, with which said upper ends of said spouts are provided, the spouts being preferably of sheet metal. It will be seen that the upper ends of the spouts T are partly closed—at least half closed—by the parts c^2 of the case C. In each spout there is a gate, G, consisting of a plate, which slides in ways g^2 , secured to the inside of said spout in such a manner as to drive said gate in contact with the part c^2 , to which the spout is secured. Each gate G is provided with a handle or shank, g , which reaches up through the top of the spout parallel with said gate and parallel with said part c^2 , and is provided above said spout with an enlarged head, g' , between which enlarged head and the top of said spout a spiral spring, V, surrounds said shank and is compressed. The expansive force of the spring V raises the gate G and normally closes the opening c^6 . The spout T is provided with another gate, G', parallel with the gate G, and guided by similar ways and by a slot, t , in the top of the spout T. The gate G' is also provided with a handle or shank, g^3 , having an enlarged head, g^4 , above the top of spout,

through an opening in which said shank g^2 extends, its lower end being secured to a bracket, g^6 , secured to the outer face of the gate G' at about right angles thereto. The gate G' is normally forced downward to close the lower end of the spout by a spring, V' , which surrounds the shank of said last-named gate between the top of the spout and the bracket g^6 . The spout below and outside of the gate G' is merely to direct the contents of the spout into a suitable receptacle used to carry away the portion of the contents of the case C sold to the customer.

The gates G G' are arranged at such a distance apart from each other, having regard to the sectional area of the spout between them, as to inclose a definite quantity of the materials contained in the case, according to the nature of such material—as, for example, a pint or a quart of beans, if the articles are sold by measure—or such a quantity as will weigh a given amount, if the articles are usually sold by weight—as a pound or half-pound of coffee—each compartment being intended to contain a separate material of a granular or finely-divided condition.

In order that the capacity of the spout between the gates may be varied to suit the varying weight of the same quantity of different lots of the material, the spout is provided with a false bottom, t' , secured at one end to the bottom t^2 of the spout T , within the same, its free end being adapted to be raised by an adjusting-screw, w , which turns in a threaded hole in the bottom of the spout and raises the free end of said false bottom by thrusting against the under side of the same. To prevent articles from getting between the bottom and false bottom of the spout, the free end of the false bottom is covered by a piece of spring sheet metal, t^3 , secured to the part c^2 of the case, and extending from side to side of said spout within the same.

It is evident that raising or lowering the false bottom within the spout diminishes or increases the capacity of that part of the spout included between the gates G G' .

The construction above described allows the case to be turned upon its vertical axis to bring any one of the spouts over the edge of the counter or toward the attendant.

I claim as my invention—

1. The combination of a measuring-spout, two independent gates placed within said spout and extending across the same, and a movable bottom adapted to be raised or lowered to vary the capacity of said spout be-

tween said gates, as and for the purpose specified.

2. The combination of a measuring-spout and two independent gates placed within said spout, a false bottom secured at one end within said spout, one or more screws turning in threaded holes in the bottom of said spout and thrusting against the under side of said false bottom, to adjust the height of the free end of said false bottom in said spout and to vary the capacity of said spout between said gates, as and for the purpose specified.

3. The combination of a spout partly closed at one end, two independent gates, a false bottom secured at one end within said spout and reaching nearly to the closed end of said spout, a spring secured to the closed end of said spout and pressing upon the free end of said false bottom from one side edge to the other thereof, and a screw turning in the bottom of said spout and thrusting against the under side of said false bottom, to vary the space between said false bottom and the bottom of said spout and to vary the capacity of said spout between said gates, as and for the purpose specified.

4. The combination of the case, one or more spouts having inclined bottoms and leading out of said case at the bottom thereof, each of said spouts having its end next said case closed for a portion of the distance from the bottom of said spout, suitable ways secured within said spout to the sides thereof, a gate sliding in said ways in contact with said partly-closed end, and provided with a shank extending through the top of said spout and having an enlarged head, a spiral spring surrounding said shank and compressed between said head and the top of said spout, and adapted to close the opening in the upper end of said spout by the raising of said gate, other ways secured within said spout, another gate sliding in said last-named ways and in a transverse slit in the top of said spout, another shank secured to said last-named gate near the lower edge thereof, and extending upward through an opening in the top of said spout, and provided with an enlarged head above said spout, and another spiral spring surrounding said last-named shank and compressed between the lower end of the same and the under side of the top of said spout, as and for the purpose specified.

DONALD T. McKINNON.

Witnesses:

ALBERT M. MOORE,
GERTRUDE M. DAY.