

T. N. REED.

TOP.

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931,487.

Patented Aug. 17, 1909.

Fig. 1.

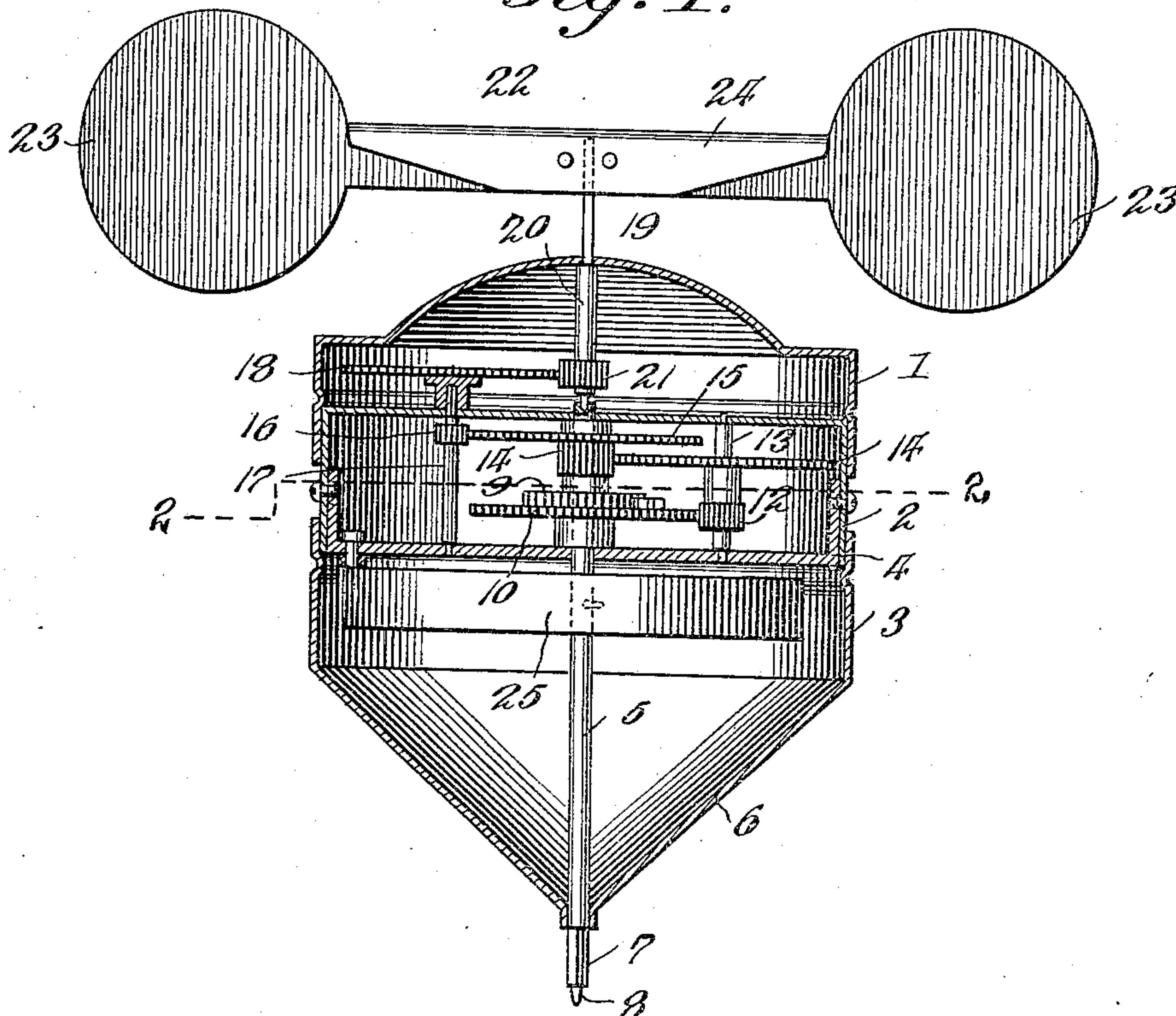
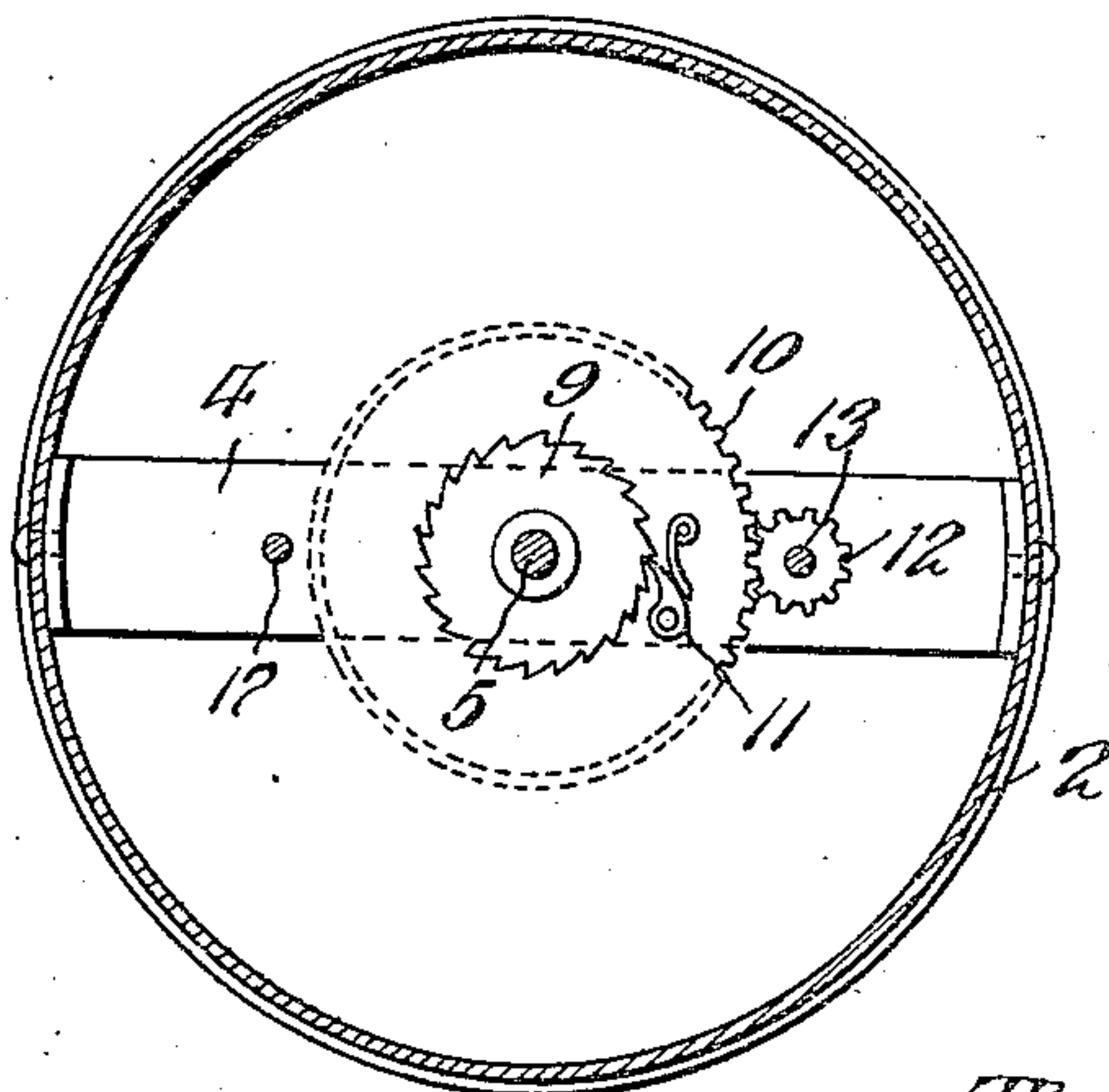


Fig. 2.



Witnesses

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# UNITED STATES PATENT OFFICE.

THOMAS N. REED, OF ITASCA, TEXAS.

TOP.

No. 931,487.

Specification of Letters Patent.

Patented Aug. 17, 1909.

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*To all whom it may concern:*

Be it known that I, THOMAS N. REED, a citizen of the United States, residing at Itasca, in the county of Hill and State of Texas, have invented new and useful Improvements in Tops, of which the following is a specification.

This invention relates to tops, and the object of the invention is to provide a top comprising a hollow structure provided with a spring motor, the top being provided with a depending spindle attached to the motor adapted to revolve the top in one direction, and the top being also provided with a projecting shaft or spindle having laterally extending arms or fan blades which are adapted to rotate in an opposite direction when the top is spun.

With these and other objects in view the invention resides in the novel construction and arrangement of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a central longitudinal sectional view of a top constructed in accordance with the present invention. Fig. 2 is a horizontal sectional view upon the line 2—2 of Fig. 1.

The improved top is preferably constructed in three separate parts, being a top section 1, intermediate section 2 and lower section 3. The sections 1, 2 and 3 are each preferably cylindrical in cross section, and the section or chamber 2 is adapted to contain the spring motor mechanism by which the top is rotated. This section 2 comprises an upper portion or box and a lower portion or floor. The floor 4 may comprise a centrally arranged longitudinally extending strip as clearly illustrated in Fig. 2 of the drawings. This strip 4 has its ends provided with upturned portions or flanges having suitable threaded openings adapted to aline with similar openings in the side walls of the compartment 2, and these openings are adapted for the reception of screws or similar threaded elements by which the floor is secured to the chamber or compartment 2. The chamber 2 is provided with a centrally arranged spindle 5, having its upper end extending slightly above the top wall of the compartment and provided with a suitable recess or bearing, the purpose of which will hereinafter be described. The lower portion of the spindle projects through a central aperture arranged in the floor 4 for

a suitable distance below the cone-shaped base 6 of the bottom section 3. The portion of the spindle immediately below the cone-shaped portion of the base section 3 is squared as indicated by the numeral 7, and the extremity below the squared portion 7 is pointed or cone-shaped as indicated by the numeral 8 so as to provide a bearing point for the top when spun.

Securely mounted upon the portion of the spindle 5 positioned within the compartment 2 is a ratchet wheel 9 and loosely mounted upon this spindle directly below the wheel 9 is a larger toothed wheel 10 which is loosely mounted upon the spindle 5 and has its hub bearing against the floor 4. This wheel 10 is provided with a suitable spring pressed pawl 11 adapted to engage the teeth of the wheel 9. The wheel 10 is adapted to mesh with a cog 12 secured upon a spindle 13, and this shaft also carries a larger toothed wheel 14 which in turn meshes with a cog 14 having a larger toothed wheel 15 and loosely mounted upon the spindle 5 above the wheel 9. This larger wheel 15 meshes with a cog 16 carried by a spindle 17. The upper portion of this spindle 17 is squared and projects above the top wall of the intermediate section or chamber 2 of the top. The squared projecting portion of the spindle 17 is adapted for engagement with a squared opening provided in a hub of a toothed wheel 18. The top section 1 of the device is provided with a dome, and this dome has a central perforation adapted for the reception of a reduced portion 19 provided upon a shaft 20. This shaft 20 carries a cog 21 adapted to mesh with the wheel 18, and has its lower extremity provided with a reduced portion adapted to be engaged within the bearing provided by the top portion of the spindle 5. The reduced extension 19 of the shaft 20 may be squared so as to be removably connected with a suitable squared opening provided upon a longitudinal member 22. This member 22 has its ends enlarged and preferably rounded as indicated by the numerals 23. The member 22 may be constructed in two separate parts from a plate of flattened material, and these parts jointed together by a plate 24. This plate 24 is adapted to be bent upon itself so as to engage both sides of the arms and a short space may be left between the ends of the arms to provide for the reception of the squared portion 19 of the shaft 20.



Secured to the floor 4 of the central compartment is a coiled spring 25, the inner end of which being secured to the spindle 5 as indicated by the dotted lines of the drawings in Fig. 1.

The operation of the device is as follows: The squared portion 7 of the spindle 5 is adapted for the reception of a suitable wrench by which the spindle may be rotated so as to wind the spring 25. One hand of the operator is adapted to grasp the fan member 22 during this process of winding, and the pawl 11 will slip along the notches or teeth of the wheel 9 so that the remainder of the mechanism will not be affected during the process of winding and the spring retained in wound condition until the fan 22 is released. When the fan member 22 is released the body of the top will revolve in one direction and the fan in an opposite direction. The friction caused by the connection of the train of gears operating the fan, as well as the resistance of the air to the enlarged portions 23 of the fan will cause this member to revolve at a slower rate than the spindle 5 and the body of the top.

By constructing the top of a plurality of members or compartments, it will be noted that the device may be readily separated so as to provide an access to any of the compartments comprising the device whereby the mechanism within the compartments may be readily repaired when required. It will be further seen that by constructing the top as described the same may be easily separated and the parts or compartments formed into small compass for folding for transportation etc.

Having thus fully described the invention what is claimed as new is:

1. A top having a hollow body comprising a plurality of compartments separated from each other, a spindle for the top, a spring upon the spindle, a plurality of toothed wheels within one of the compartments and adapted to be operated by the spring, a fan member provided with a spindle and carried by the upper section of the top, a toothed wheel upon said fan spindle, and a second toothed wheel connected with the train of gears operated by the spring and adapted to mesh with the gear upon the spindle of the fan.

2. In a top of the class described formed in sections, a central hollow section comprising a pair of detachable members and provided with a train of gears, a depending spindle for the gears, a spring connected with said spindle and with the lower member of the central section, a hollow cone-shaped lower section connected with the central section, a dome-shaped upper section connected with the central section, a fan spindle mounted within a bearing in the upper section and being provided with a toothed wheel, a fan member carried by the last named spindle, and a removable toothed wheel connected with the train of gears within the central chamber and meshing with the toothed wheel within the upper section.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS N. REED.

Witnesses:

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