

No. 894,310.

W. C. BOWSER.
SHOW CASE.

PATENTED JULY 28, 1908.

APPLICATION FILED APR. 14, 1908.

2 SHEETS—SHEET 1.

Fig. 1.

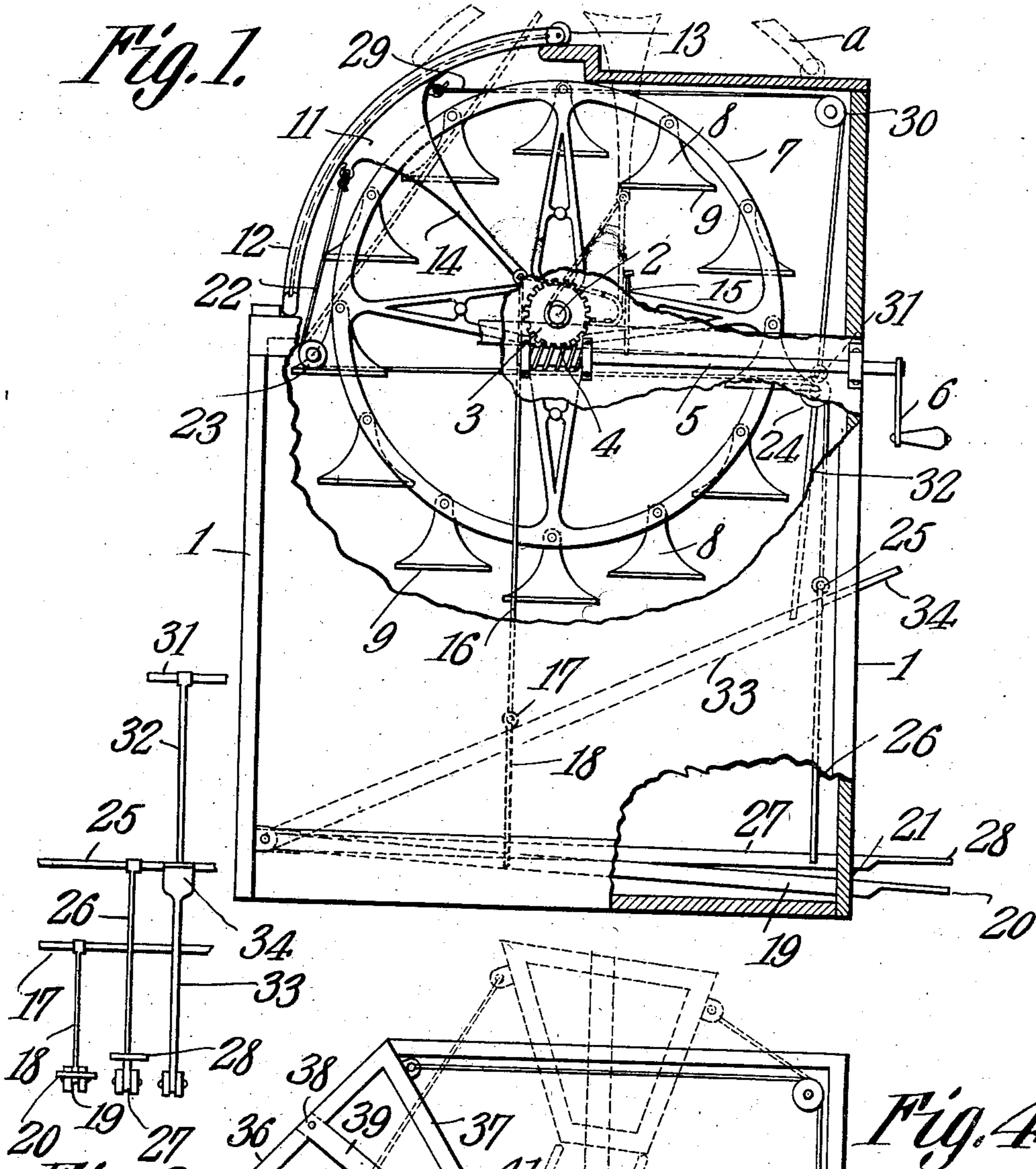


Fig. 3.

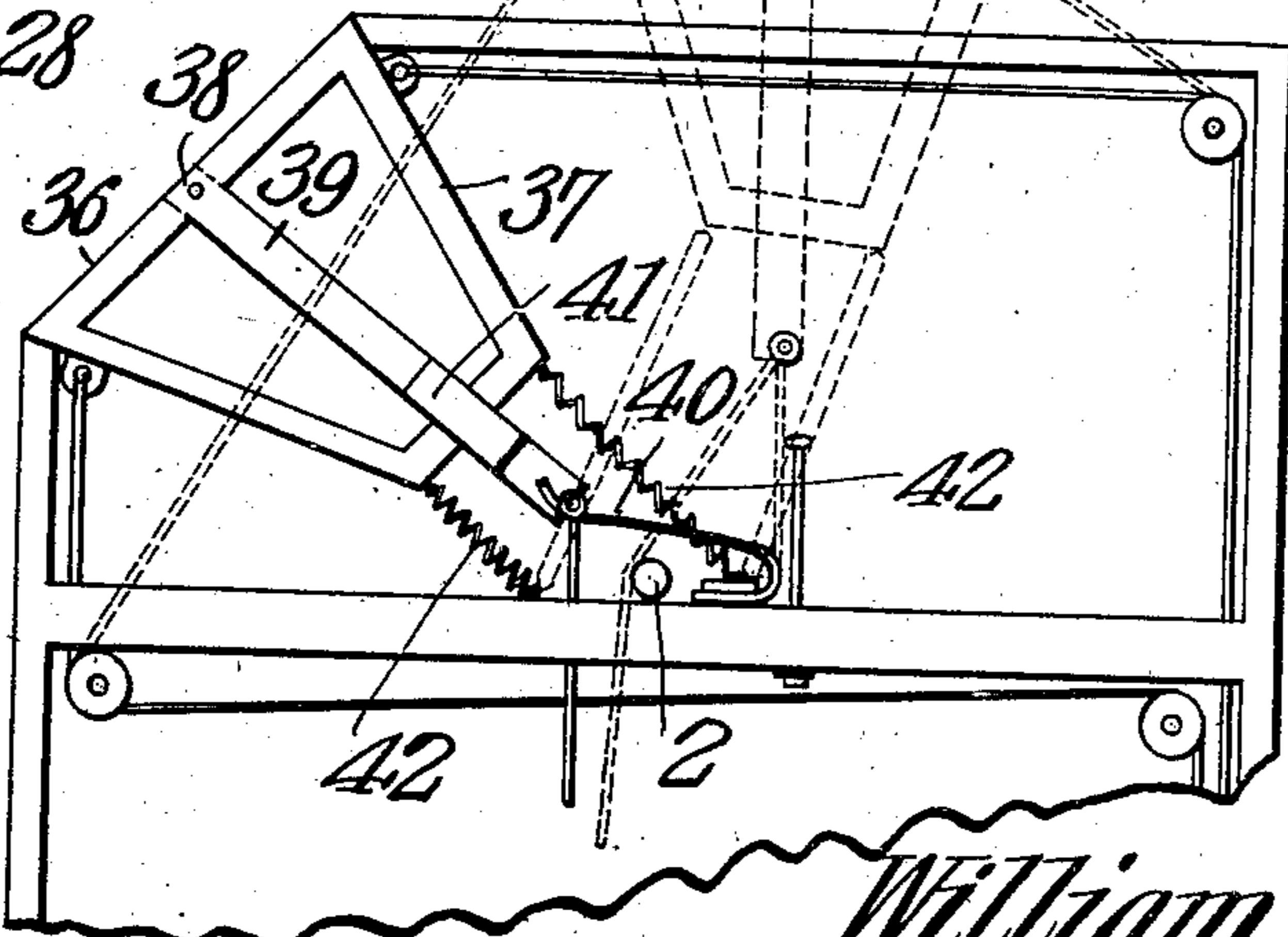


Fig. 4.

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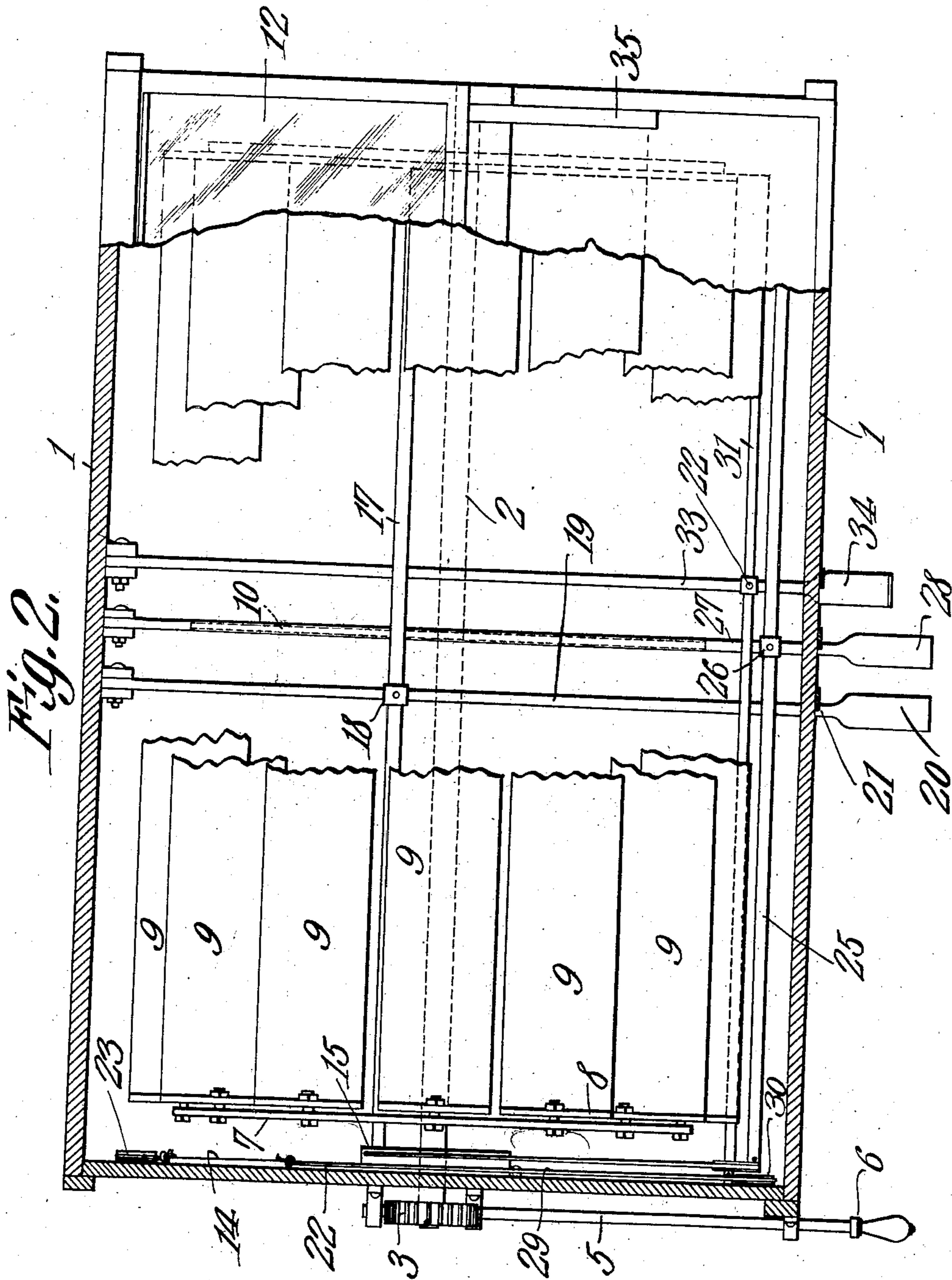
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM C. BOWSER, OF LOCK HAVEN, PENNSYLVANIA.

SHOW-CASE.

No. 894,310.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed April 14, 1908. Serial No. 426,989.

To all whom it may concern:

Be it known that I, WILLIAM C. BOWSER, a citizen of the United States, residing at Lock Haven, in the county of Clinton and State of Pennsylvania, have invented a new and useful Show-Case, of which the following is a specification.

This invention relates to show cases and its object is to provide a device of this character having a plurality of movably supported shelves any one of which is designed to be brought into position so that the contents thereof will be clearly visible to a prospective purchaser.

Another object is to provide novel means whereby the shelves can be operated by a person located in rear of the case.

Another object is to provide a case having a closure mounted in a novel manner and designed to be quickly opened or closed by means of pedal operated mechanism located in rear of the case.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a view partly in end elevation and partly in section of a show case embodying the present improvements, one of the positions of the closure being indicated by dotted lines. Fig. 2 is a view partly in plan and partly in section of the show case, the middle portions of the shelves being removed. Fig. 3 is a front elevation of the pedals employed for actuating the closure, said view also showing the connections between the pedals and their respective cross rods. Fig. 4 is a section through the upper portion of a show case having a modified form of closure.

Referring to the figures by characters of reference, 1 designates a case of any desired proportions and extending longitudinally through the case and bearing within the end walls thereof is a shaft 2 one projecting end of which has a worm wheel 3 keyed or otherwise secured thereon and engaged by a worm 4 on shaft 5 which is mounted on the end of the case and extends rearwardly therefrom, there being a crank 6 or other suitable device upon the rear end of the shaft 5 whereby it can be readily turned manually. The shaft 2 has two or more wheels 7 secured to it at

points between the ends of the case and suspended between every two wheels is a series of hangers 8 supporting shelves 9 which are maintained normally by gravity in horizontal positions. These shelves are designed to hold any suitable merchandise and by turning the shaft 5 motion will be transmitted through the worms to the shaft 2 so that the wheels 7 will be revolved and any one or more of the trays brought into position below the closure of the case. In Fig. 2 two end wheels 7 have been shown and an intermediate wheel 10 has been indicated by dotted lines. It will thus be apparent that with this construction two sets of shelves are employed, one set being located between the middle wheel 10 and each end wheel. For the purpose of better illustrating the invention, however, the middle wheel and the inner end portions of the shelves have been removed and said wheel merely indicated by dotted lines, as stated.

The upper portion of the front of the case and the front portion of the top thereof are cut away so as to form the inlet opening 11 of the device. This opening is normally covered by a panel 12 which, as shown in Fig. 1, is preferably curved from top to bottom so that a rounded or convex exterior will be presented at the inlet portion of the case, the panel 12 being preferably concentric with the wheels 7. The lower edge of the panel normally rests upon the front wall of the case while the rear edge thereof is provided with one or more anti-friction rollers 13 designed to rest upon the top of the case. Arms 14 are secured rigidly to the end portions of the panel and extend into the case, the inner ends of said arms being pivotally mounted upon the ends of spring strips 15 upon the inner faces of the end portions of the case. These springs when in their normal positions, hold the arms 14 elevated as shown by dotted lines at *a* in Fig. 1, but when the springs are in lowered position and under stress they will so hold the arms 14 as to permit the panel 12 to rest at its lower and upper edges upon the front and top of the case respectively. In order that the springs 15 may be held in lowered positions chains, cords, or other flexible devices 16 are fastened to them and extend downward and are secured to the ends of a cross rod 17. This rod has an arm 18 rigidly secured to it and connected to a lever 19 which extends through a slot in the rear wall of the case near the bottom thereof and ter-

minates in a pedal 20. Any suitable means such as a notched strip 21 may be provided for securing the pedal 20 in its lowermost position.

5 Secured to each arm 11 and extending downward therefrom is a chain, cord, or other flexible device 22 extending under pulleys 23 arranged upon the ends of the case and then extending rearwardly and over pulleys 24. Said connections then extend
10 downward and are fastened to the ends of a cross rod 25 connected adjacent its center by means of an arm 26 with a lever 27 one end of which extends through the rear wall of the
15 case and has a pedal 28 thereon. Cords or other flexible devices 29 extend rearwardly from the arms 11 and over pulleys 30 located under the top of the case adjacent the rear wall thereof. These connections then ex-
20 tend downward and are fastened to the ends of a cross rod 31 having an arm 32 rigidly secured to it and pivoted or otherwise connected to a lever 33 one end of which extends through the rear wall of the case, and has a
25 pedal 34 thereon. In view of the fact that the connections 22 and 29 are attached to the same arms and to separate levers it will be apparent that when one of the levers 27 and 33 is raised the other one of said levers will be
30 lowered and vice-versa.

When it is desired to open the case after a desired shelf has been brought into position under the closure 12, the operator releases lever 19 from the strip 21 so as to permit
35 springs 15 to assume their normal or raised positions as indicated at *a*, thus tilting the closure. The operator then pushes downward on the raised pedal 34 which will cause the rod 31 to pull on the connections 29 and
40 thus swing the closure upwardly and onto the top of the case. While this movement of the closure is taking place and the pedal 34 moving downward lever 27 and pedal 28 are moving upwardly, this upward movement
45 being produced by the connections 22 which are fastened to the arms 11. It is of course to be understood that in order to obtain this opening of the closure it is necessary to slot the top of the case as indicated at 35 so that
50 the arms 11 and the connections 29 may pass therethrough. Obviously, however, this can be eliminated by arranging the arms 11 and the connections upon the outer faces of the ends of the case. This construction is so ob-
55 vious that it is not deemed necessary to make a detail showing thereof. When it is desired to close the case the operator pushes downward on the pedal 28 whereupon pedal 34 will be raised and the closure will be swung
60 downwardly. The operator then pulls downward on the pedal 20 and thus returns the springs 15 to their initial positions and therefore the closure 12 will be caused to firmly bind upon the front wall and the top of the
65 case as shown by full lines in Fig. 1.

Instead of mounting the closure in the manner shown in Fig. 1 the same can be made of a flat panel 36 having angular frames 37 depending from the ends thereof the end portions of the panel being provided with
70 trunnions 38 bearing within guide strips 39 which are in turn connected, pivotally, to the springs 40 corresponding to the springs 15. Guide straps 41 are arranged on the strips 39 and the inner portions of the frames 37 are
75 designed to work between the strips 39 and the strap 41. Parallel coiled springs 42 are connected to the inner corners of each frame 37 and also to the end of the case at points equi-distant from and at opposite sides of
80 the shaft 2. When the closure is raised into open position by means of the mechanism heretofore described the springs 42 will operate to hold it out of contact with the top of the case and there will therefore be no dan-
85 ger of the closure scratching the case while moving thereover. In Fig. 4 this modified form of closure has been shown by dotted lines in raised position.

It will be seen that a show case embodying
90 the present improvements is advantageous because any article contained therein can be quickly brought into position where it can be seen by a prospective purchaser. Moreover, the front of the case can be quickly
95 opened or closed without requiring the operator to lean over the case or to leave his position behind it.

What is claimed is:

1. The combination with a show case hav-
100 ing an opening; of a swinging closure for said opening, means for tilting the closure, and depressible manually operated means extending beyond one wall of the case for shifting the tilted closure into or out of position
105 across the opening.

2. The combination with a show case hav-
ing an opening; of a closure mounted to swing upon the case and onto the top thereof, means for automatically tilting the closure,
110 and depressible manually operated means for shifting the tilted closure into or out of position across the opening.

3. The combination with a case having an inlet opening; of a closure, arms extending
115 therefrom, a resilient connection between each arm and the case, said connection holding the closure normally raised, and means for placing the connections under stress to lower the closure.
120

4. The combination with a case having an inlet opening; of a closure, arms extending
therefrom, a resilient connection between each arm and the case, said connection hold-
125 ing the closure normally raised, means for placing the connections under stress to lower the closure, and separate manually operated means for opening and closing the closure while raised.

5. The combination with a case having an
130

inlet opening; of a closure, elastic means connecting the closure with the case and normally holding the closure in a partly raised position, means for placing the connections
 5 under stress to hold the closure in lowered position, and separate manually operated means for opening and closing the closure respectively when partly raised.

6. The combination with a case having an
 10 inlet opening; of a closure therefor, arms extending from the closure, spring bearings for the arms and secured to the case, said bearings holding the closure normally in a partly raised position, and manually operated
 15 means for placing the bearings under stress to hold the closure shut.

7. The combination with a case having the upper portion of its front wall and the front portion of its top cut away to form an opening;
 20 of a panel constituting a closure for the opening, arms extending from the panel, spring bearings for the arms and secured within the case, said bearings normally holding the arms elevated, and manually operated

means for placing the bearings under stress 25 to bind the panel upon the top and front wall of the case to close the opening.

8. The combination with a case having the upper portion of its front wall and the front portion of its top cut away to form an open- 30 ing; of a panel constituting a closure for the opening, arm extending from the panel, spring bearings for the arms and secured within the case, said bearings normally holding the arms elevated, manually operated means for plac- 35 ing the bearings under stress to bind the panel upon the top and front wall of the case to close the opening, and separate manually operated means for swinging the panel into open and closed positions respectively while 40 partly elevated.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM C. BOWSER.

Witnesses:

WILLIAM D. McCLINTICK,
 BESSIE McCLOSKEY.