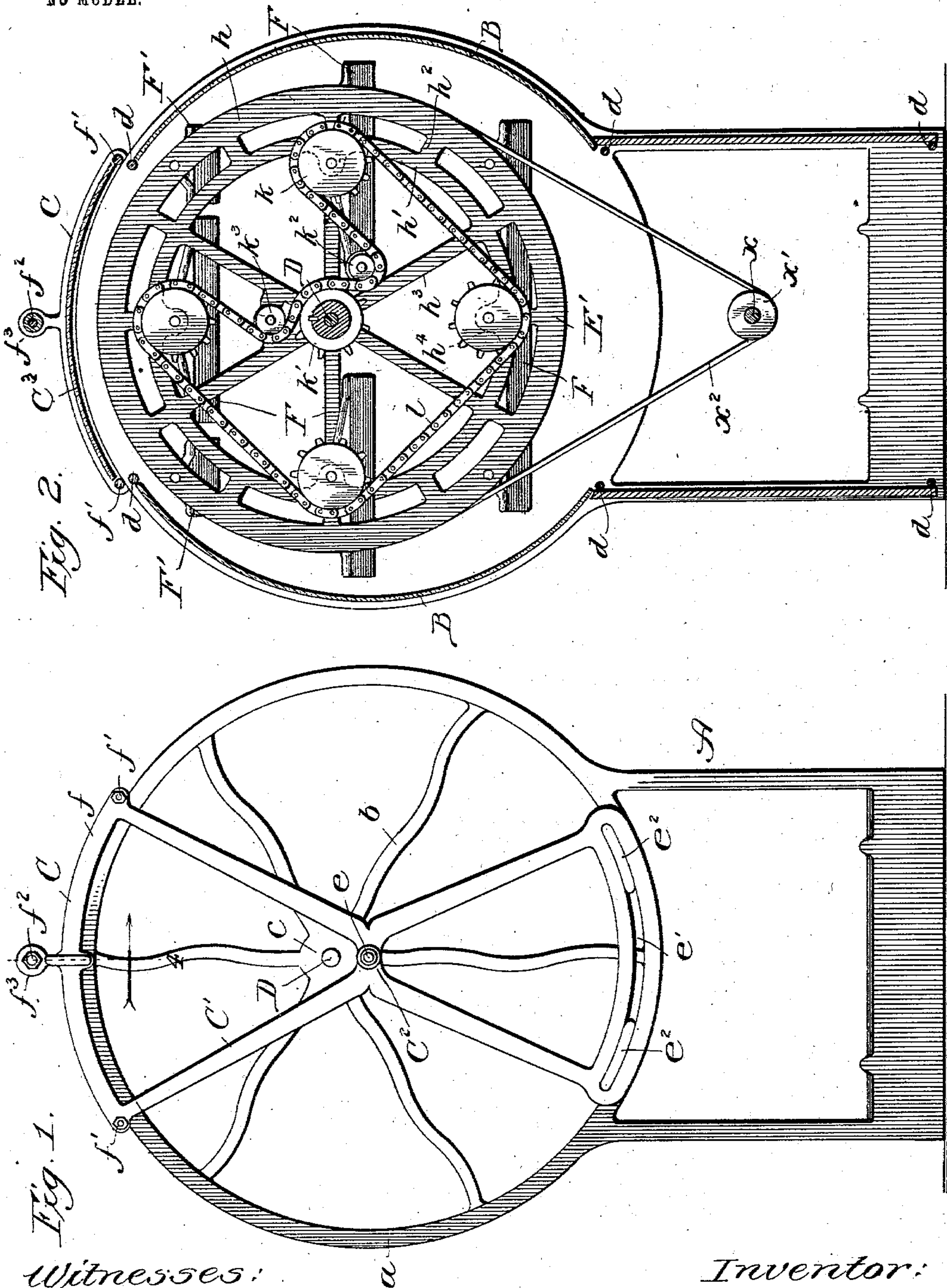


A. BEVER.
CABINET SHOW CASE.

APPLICATION FILED JULY 17, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



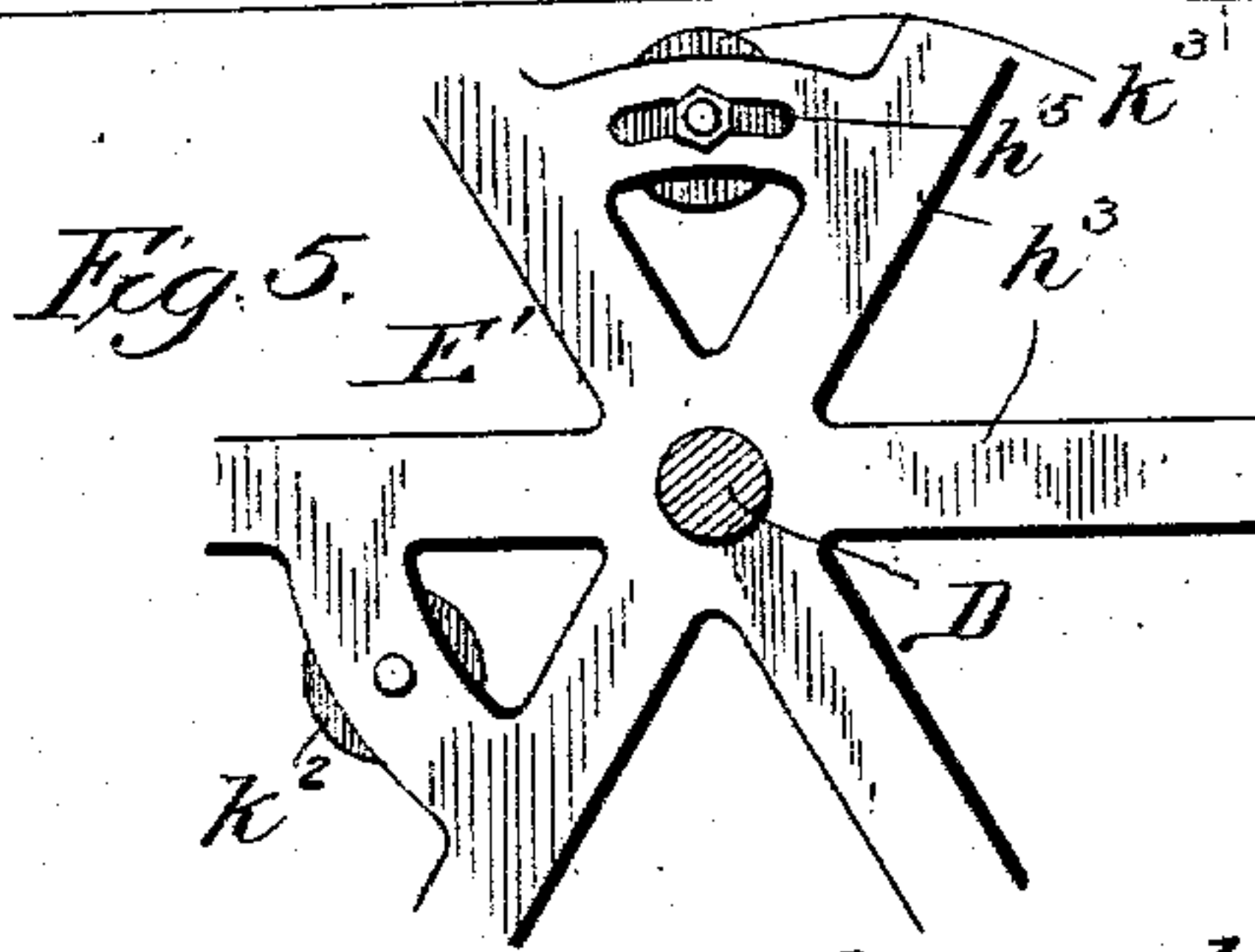
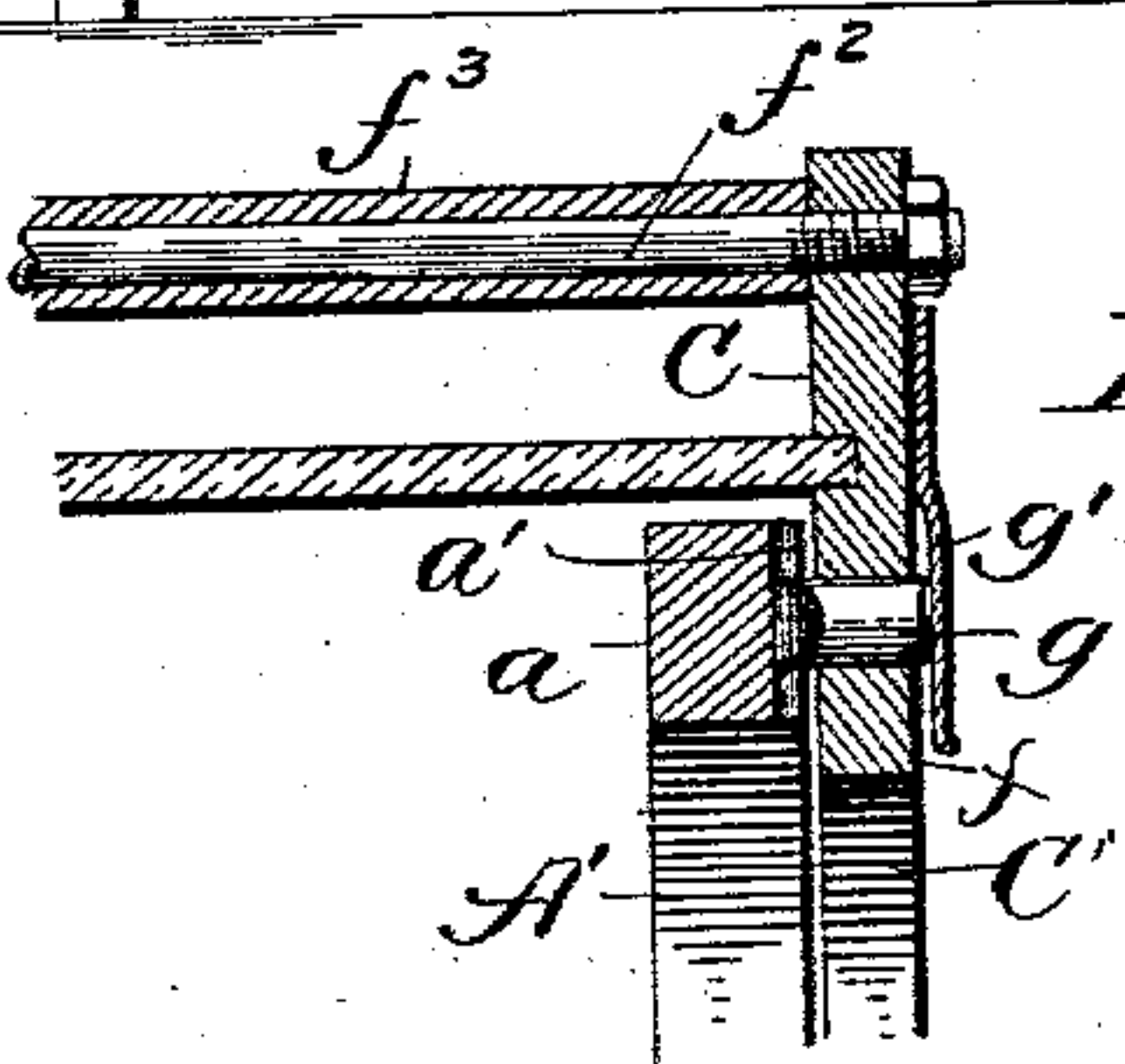
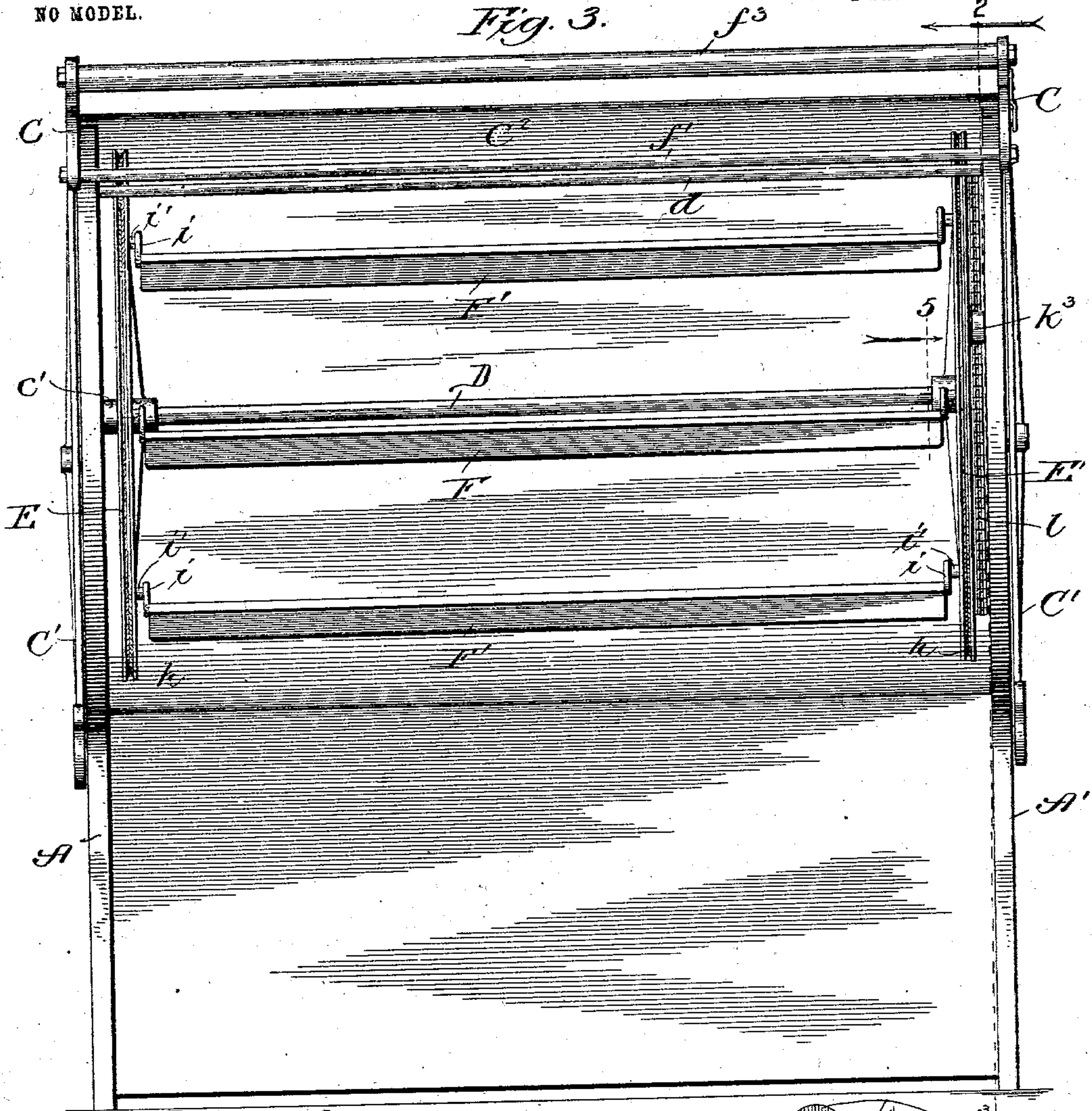
Witnesses:
Geo. C. Davison.
John Enders Jr.

Inventor:
Alexander Bever.
By Dymfouth Dymfouth & Lee
Attys.

A. BEVER.
CABINET SHOW CASE.
APPLICATION FILED JULY 17, 1902.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses:

Geo. C. Dixon.
John Enders Jr.

Inventor:

Alexander Bever.
By Dyrenforth, Dyrenforth & Lee,
Att'ys.

UNITED STATES PATENT OFFICE.

ALEXANDER BEVER, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
MARTIN C. HYER, OF NEW YORK, N. Y.

CABINET SHOW-CASE.

SPECIFICATION forming part of Letters Patent No. 730,512, dated June 9, 1903.

Application filed July 17, 1902. Serial No. 115,935. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER BEVER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Cabinet Show-Cases, of which the following is a specification.

My invention relates to improvements in cabinet show-cases in which a series of trays for displaying goods move in a circular path in the vertical plane, while the trays themselves are caused to extend at all times in horizontal planes. A cabinet show-case of this type is shown and described in Letters Patent of the United States, No. 557,948, granted to me April 7, 1896; and my present object is more especially to provide certain improvements upon my former construction with a view to rendering the device still more attractive and desirable and better adapted for its purpose.

In the drawings, Figure 1 is an end view of a cabinet show-case provided with my present improvements; Fig. 2, a vertical section of the same, the section being taken on line 2 in Fig. 3; Fig. 3, a side elevation of the device; Fig. 4, an enlarged broken section on line 4 in Fig. 1, and Fig. 5 an enlarged broken sectional elevation taken on line 5 in Fig. 3.

A A' are skeleton end frames, which may be of cast metal, having rectangular lower base portions and circular upper portions. For convenience of construction and to render them light and attractive the upper circular portions are formed with annular rims a and spokes b , which radiate from a central hub portion c . The end frames may be held together with tie-rods d . The opposite ends of the device may be closed with ornamental sheet-metal facings or with glass or any other suitable material, and the sides of the base portions may be closed in the same way. Fitting the sides of the upper circular portion are panes B B, of transparent glass, curved to conform to the rim a and terminating at the upper and lower ends at the tie-rods d . They thus leave a delivery-opening between the upper tie-rods d , which is normally closed by a swinging door C. The door is formed with vertical end frames C' C' of skeleton form, each having a central hub por-

tion C², pivotally mounted upon a stud e on or adjacent to the hub portion c of the respective end frame A or A'. The lower part of each frame C' is of segmental shape and provided with a slot e' , containing permanent weights e^2 toward opposite ends. The upper parts of the frames C' form segmental bars f , and the frames are connected together by tie-rods f' at opposite ends and a central tie-rod f^2 . The tie-rod f^2 between the side frames is surrounded by a sleeve f^3 , forming a handle by means of which the door may be swung upon the pivots e . Fitting the door-frame between the tie-rods f' , beneath the rod f^2 , is a pane of transparent glass C³, curved to the arc of the circle described by the segments f . At the top of the circular rim a of the end frames A' is a notch a' , (see Fig. 4,) and extending through the center of the adjacent segment f is a pin g , pressed normally against the rim a by a spring g' on the segment f . The pin g is beveled on opposite sides, and when the door is closed it enters the notch a' . It thus operates to hold the door steady when closed, but does not interfere with the opening of the door. As the door is opened the pin leaves the notch a' and slides under pressure of the spring against the surface of the rim a , thus operating, as the door is perfectly balanced by the weights e^2 , to hold the door open in any position to which it may be swung.

On the inner sides of the hub c are hollow lugs c' , forming bearing-sockets for the opposite ends of a shaft D. Fixed upon the shaft adjacent to the bearing-lugs c' are companion tray-carrying wheels E E'. The wheels are formed with outer rims h , one or both of which may be grooved, inner rims h' , connected to the outer rims h by bars or spokes h^2 , and spokes h^3 , radiating from a central hub.

F F are comparatively large or main trays, shown in the present instance to be four in number. They are provided centrally at opposite ends with upward-extending brackets i , carrying trunnions i' , which pass loosely through journal-bearings h^4 on the inner rims h' of the wheels E E'. The trunnions i at the wheel E' pass through the latter and carry at their outer ends pulleys or sprocket-wheels k .

Keyed upon the lug c' of the end frame A' is a stationary central pulley or sprocket-wheel K' in the plane of the sprocket-wheels k , and on the wheel E' in the relative positions shown
 5 are an idle sprocket-pulley k^2 and an idle tensioning sprocket-pulley k^3 , the latter being mounted in a slot h^5 , whereby it may be shifted. The pulleys k^2 k^3 are in the plane of the sprockets k k' , and running over the sprockets
 10 in the manner shown in Fig. 2 is an endless belt or drive-chain l . It will be noticed that the drive-chain engages only one side of the stationary sprocket-wheel k' between the idlers k^2 k^3 , whereby turning of the tray-car-
 15 rying companion wheels causes the chain to be moved longitudinally by its engagement with the central sprocket k' . The movement of the chain is such that the trays are turned on their trunnions i' at a rate of speed so
 20 proportioned to the speed of turning of the wheels that the trays will extend horizontally at all times. The chain operates to hold the trays rigidly against independent turning on their trunnions, so that they are firmly held
 25 against tipping out of the horizontal planes. Pivotaly mounted, preferably, upon the outer rims h of the companion wheels are intermediate smaller trays F' , which may swing independently on their fulcrums, but being
 30 comparatively narrow are caused by gravity to maintain themselves in horizontal planes in the turning of the companion wheels, which support them at opposite ends. The arrangement of the trays is such that when a large
 35 tray is brought to the highest point beneath the delivery-opening at the top of the casing a smaller tray will extend at each side in the same horizontal plane, as shown in Fig. 2.

Any desired means may be provided for
 40 turning the tray-support. In the drawings, Fig. 2, I have shown a shaft x in the lower part of the case provided with a pulley x' , from which a belt x^2 extends around one of the grooved wheels E or E' . The shaft x may
 45 be rotated continuously and stopped only when it is desired to place goods in or take them from the trays when they register with the opening at the top, or the shaft may be
 50 rotated only when it is desired to move the trays to place goods thereon or take them out.

The device may itself be made very attractive in appearance and affords a convenient means for displaying a large variety and number of goods in a small space and in an attractive way. A very clear view of the goods
 55 may be had through the panes B C^3 , and they are protected against the access of dust. The case also affords a means of protecting the goods from theft or handling, which protection may be increased by providing a lock
 60 upon the door in any convenient position. When it is desired to gain access to the tray, it is only necessary to take hold of the handle afforded by the part f^3 and swing it on the pivots e in either direction from the opening.
 65

While I prefer to construct my improved cabinet show-case throughout substantially as shown and described, it may be variously modified in the matters of details of construction without departing from the spirit of my
 70 invention as defined by the claims.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a cabinet show-case, the combination of a circular casing having end frames and a
 75 delivery-opening, a series of horizontal trays mounted to move in a circular path, in the vertical plane, in said casing to present them successively at said delivery-opening, and a door for said opening mounted at opposite
 80 ends on vertical weighted swinging frames pivoted upon said casing end frames, substantially as and for the purpose set forth.

2. In a cabinet show-case, the combination of a circular casing having end frames and a
 85 delivery-opening in its top, a series of horizontal trays mounted to move in a circular path, in the vertical plane, in said casing to present them successively at said delivery-opening, a door for said opening mounted at
 90 opposite ends on vertical weighted swinging frames, pivotaly mounted upon said casing end frames, and friction means between the door and casing frames for holding the door in any position to which it is swung, substan-
 95 tially as and for the purpose set forth.

ALEXANDER BEVER.

In presence of—

ALBERT D. BACCI,
 M. S. MACKENZIE.