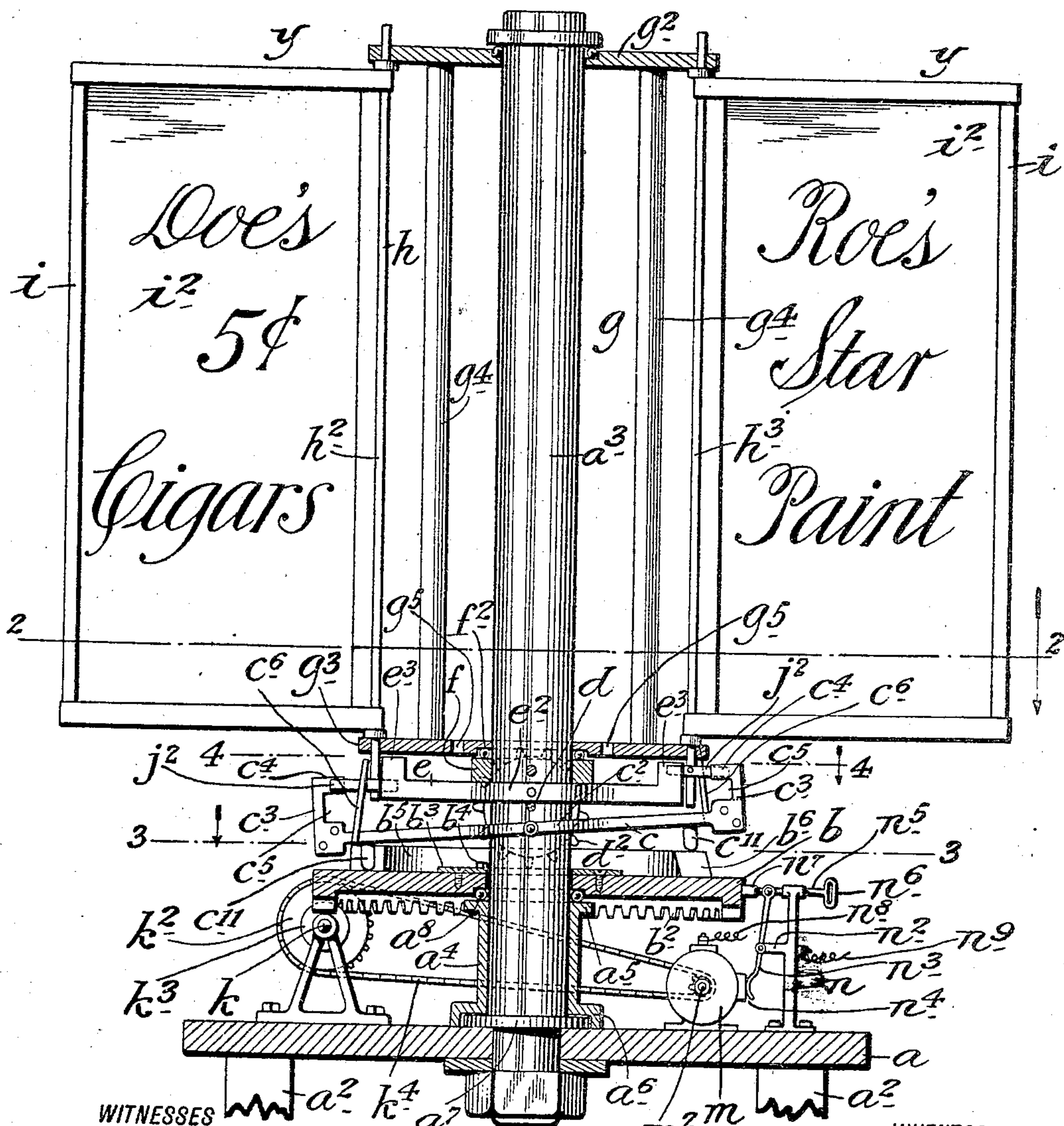


943,179.

J. V. CASEY.
ADVERTISING APPARATUS.
APPLICATION FILED NOV. 9, 1908.

Patented Dec. 14, 1909.
3 SHEETS—SHEET 1.

Fig. 1.



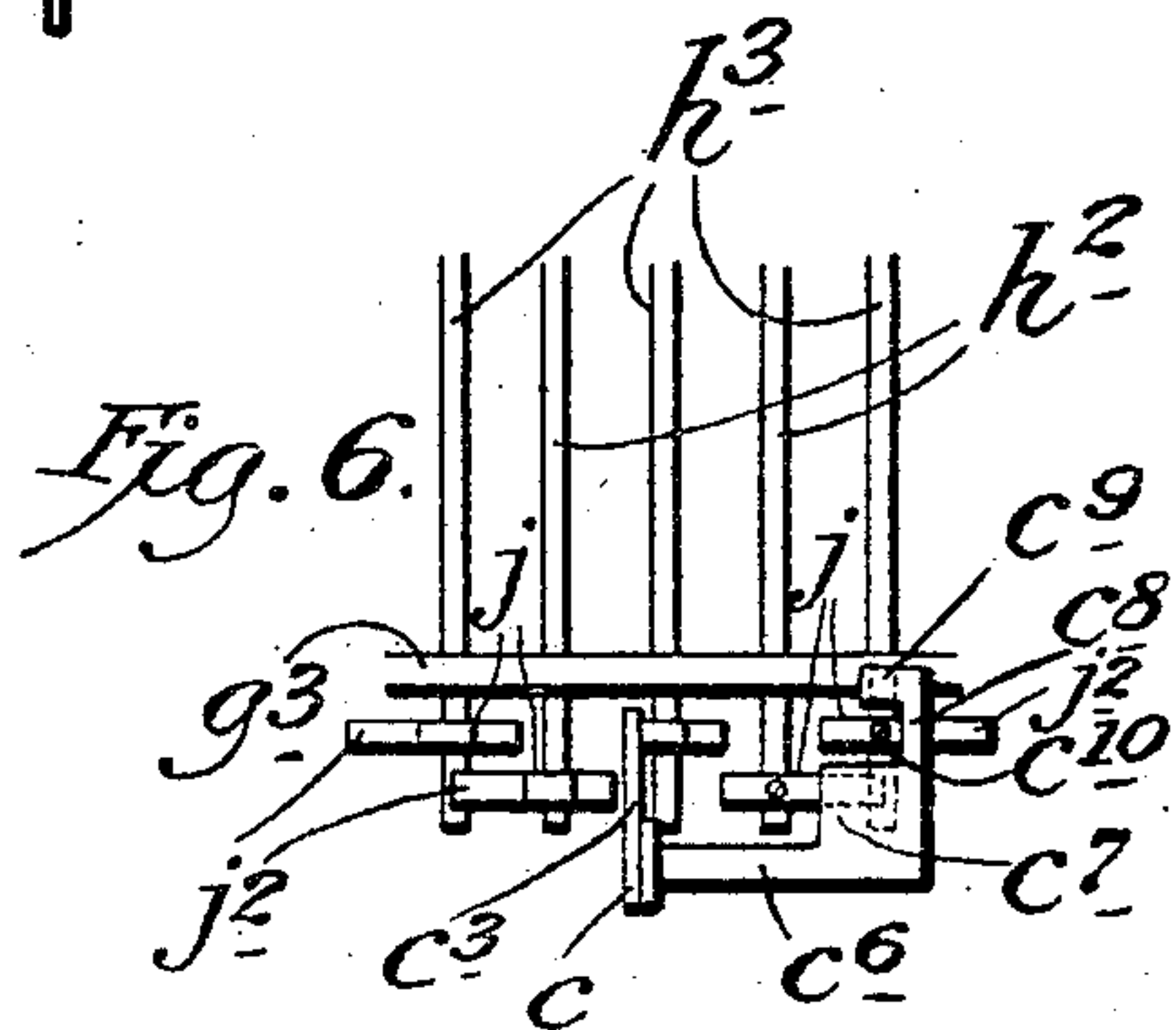
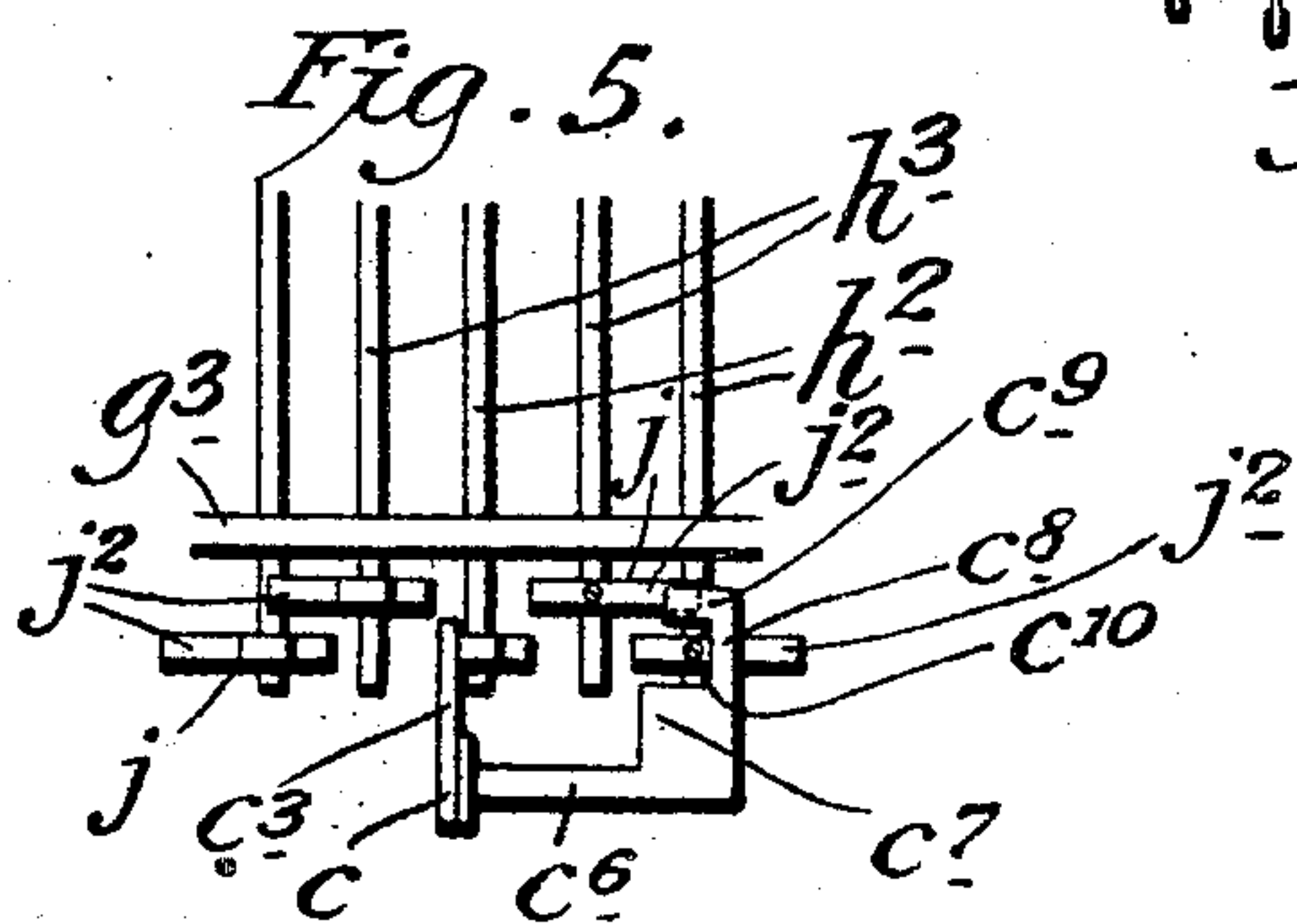
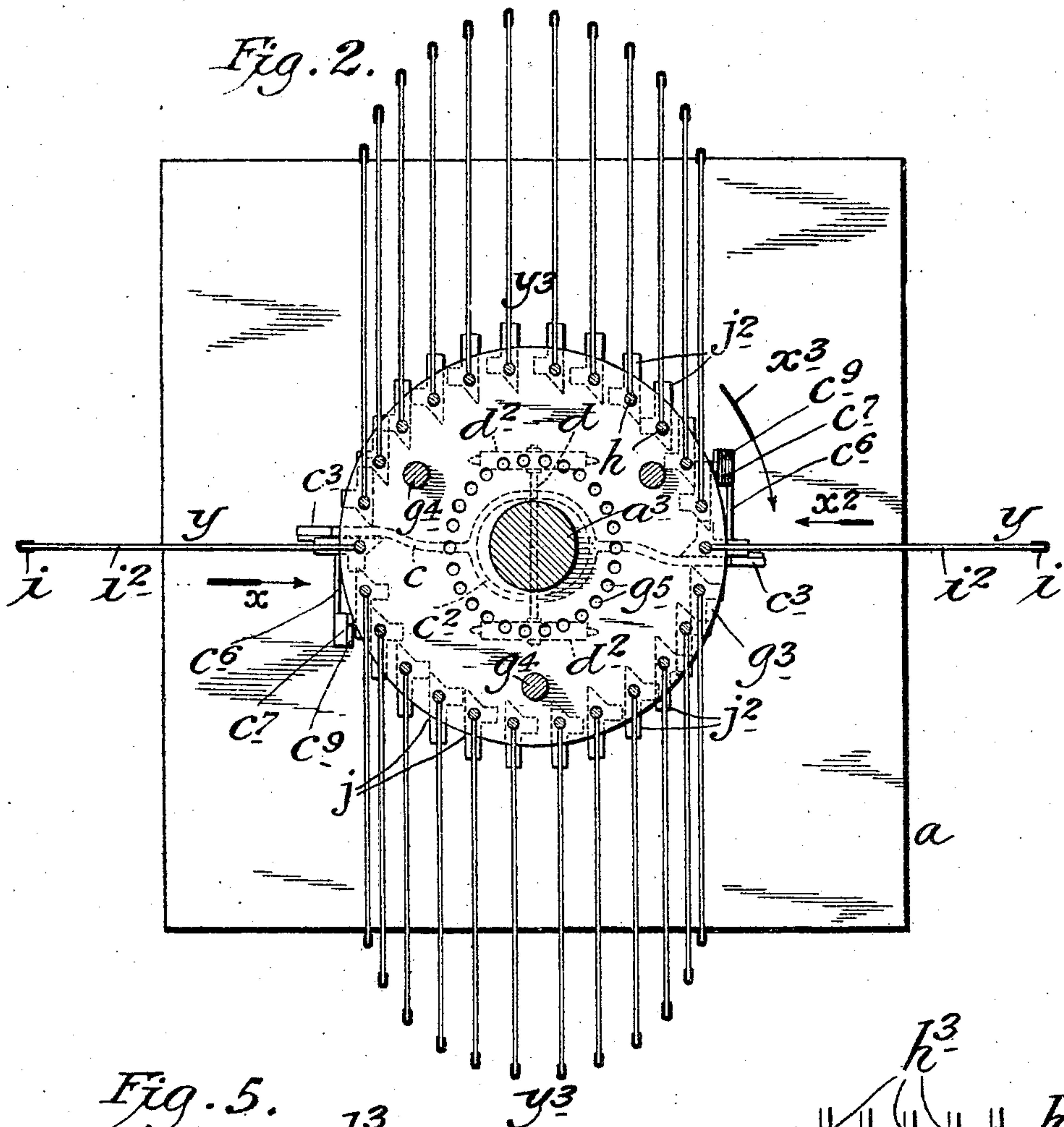
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943,179.

3 SHEETS—SHEET 2.



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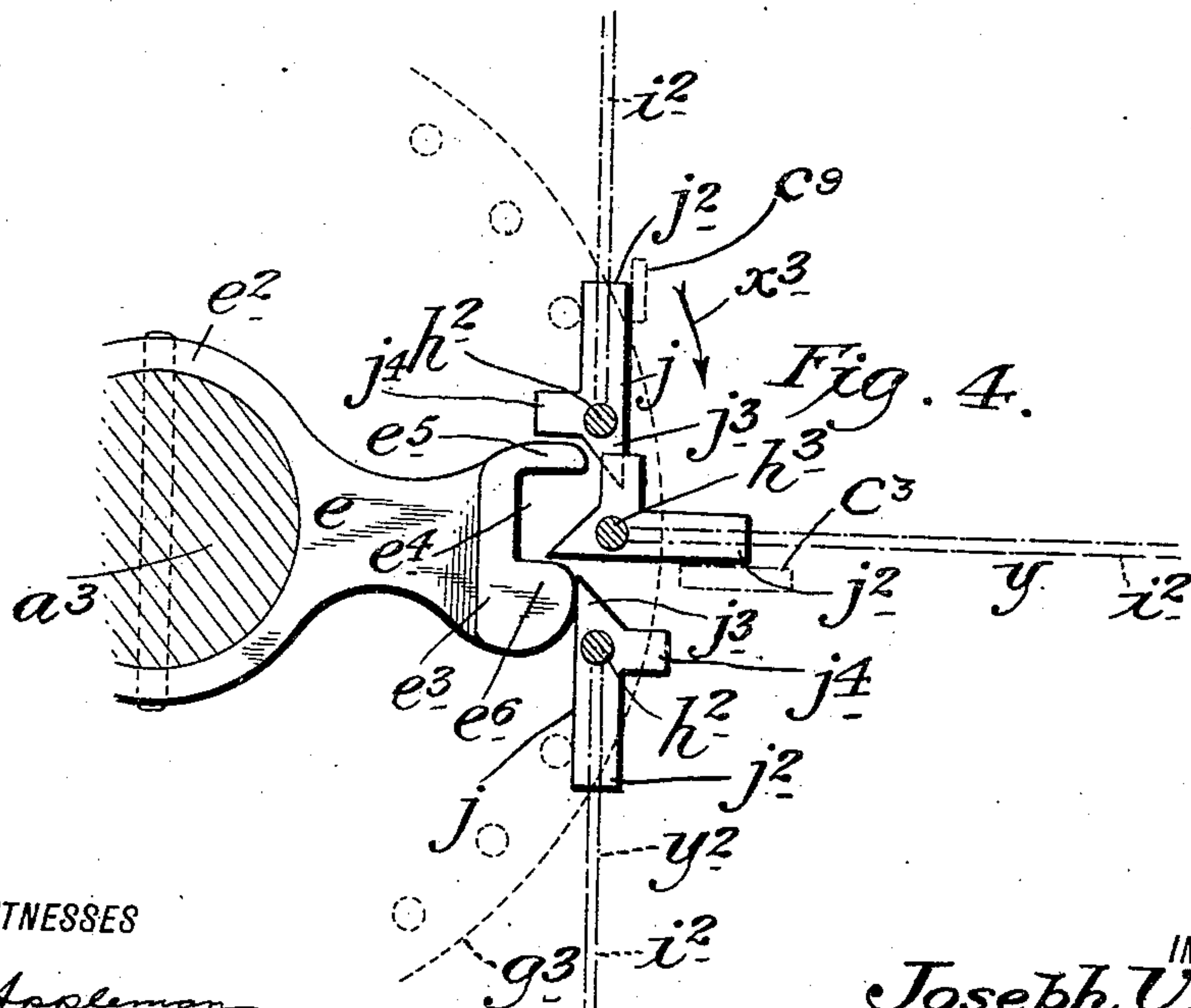
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3 SHEETS--SHEET 3.



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JOSEPH V. CASEY, OF BROOKLYN, NEW YORK.

ADVERTISING APPARATUS.

943,179.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed November 9, 1908. Serial No. 461,703.

To all whom it may concern:

Be it known that I, JOSEPH V. CASEY, a citizen of the United States, and residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Advertising Apparatus, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to advertising apparatus or devices; and the object thereof is to provide an improved apparatus or device of this class which is designed for use in railway stations, hotels or other public places or localities, and which is attractive in appearance, and by means of which a large number of articles may be advertised by the same apparatus or device, and with these and other objects in view the invention consists in an apparatus or device of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a sectional side elevation of my improved advertising apparatus with part of the construction omitted, Fig. 2 a section on the line 2—2 of Fig. 1 with part of the construction omitted, Fig. 3 a partial section on the line 3—3 of Fig. 1, with part of the construction broken away, Fig. 4 a partial section on the line 4—4 of Fig. 1, and on an enlarged scale, Fig. 5 a detail view looking in the direction of the arrow α of Fig. 2, and;—Fig. 6 a detail view looking in the direction of the arrow α^2 of Fig. 2.

In the practice of my invention, I provide a suitable base or support a having legs a^2 and centrally of which is secured a vertical stationary shaft a^3 on the bottom portion of which is placed a sleeve a^4 having a top flange a^5 and a bottom rim a^6 , and the shaft a^3 is provided with a flange or collar a^7 which fits in said flange or rim.

Mounted on the shaft a^3 above the sleeve a^4 is a rotatable disk b provided on its bottom surface with an annular gear b^2 , and secured to the top of the disk b centrally thereof is a plate b^3 through which the shaft a^3

also passes, and the plate b^3 is provided at opposite points with teeth b^4 , and the disk b is also provided on the top surface thereof with a segmental rib b^5 provided at one end with a cam face b^6 , and the length of the rib b^5 is approximately one-half of a circle.

Pivoted to the shaft a^3 above the disk b is a rock bar c , and passing transversely through the shaft a^3 above the rock bar c is a stationary gear shaft d provided at its opposite ends with sprocket gears d^2 . Mounted on the shaft a^3 above the rock bar c is a stationary trip bar e above which a collar f is secured to the shaft a^3 .

Placed between the disk b and the flange a^5 of the sleeve a^4 are ball bearings a^8 , and mounted on the collar f is a frame g comprising top and bottom disks g^2 and g^3 connected by rods g^4 , and between the collar f and the frame g are placed ball bearings f^2 , and the bottom disk g^3 of the frame g is provided with circularly arranged apertures g^5 in which the teeth of the gears d^2 operate, and the disk g^3 and gears d^2 constitute co-acting gears in the operation of the apparatus as hereinafter described.

The frame g is provided with a plurality of vertically arranged rods h which pass through the peripheral portion of the disks g^2 and g^3 and are rotatable therein, and these rods carry frames i in which are placed panels i^2 on which any suitable advertisement or advertisements may be placed, and the rods h extend downwardly below the disk g^3 a predetermined distance as clearly shown in the drawings.

The rods h in the frame g for the purpose of this description will be designated by the reference characters h^2 and h^3 , and as so designated said rods are arranged alternately and these rods are provided on their lower end portions and below the disk g^3 of the frame g each with a horizontal tripper j comprising a shank portion j^2 which ranges in the same plane as the corresponding frame i , a triangular nose j^3 in line with the shank j^2 , and a projection j^4 at right angles to said shank, and the trippers j on the rods h^2 and h^3 are arranged in different horizontal planes, the said trippers on the rods h^3 being in a plane higher than the trippers on the rods h^2 as clearly shown in Figs. 1, 5 and 6, and the said trippers are rigidly secured to said rods.

The trip bar e is provided with a central

ring portion e^2 through which the shaft a^3 passes, and said bar is provided at its opposite ends with upwardly directed heads e^3 in the outer surfaces of which are recesses e^4 forming two projections e^5 and e^6 . The rock bar c is also provided with a central ring portion c^2 through which the shaft a^3 passes, and each end thereof is provided with a vertically arranged arm c^3 having an inwardly directed nose or projection c^4 at the top thereof, and between which and the head of the arm is a recess c^5 .

Secured to the opposite end portions of the rock bar c are supplemental arms c^6 which range laterally therefrom at right angles thereto and are provided with heads c^7 having upwardly directed fingers c^8 provided with inwardly directed noses c^9 between which and the heads c^7 are recesses c^{10} , and the opposite end portions of the rock bar c are provided with downwardly directed pins c^{11} adapted to operate in connection with the opposite end portions of the rib b^5 .

Supported beneath one edge portion of the disk b is a shaft h having a gear wheel h^2 and a worm gear h^3 , and in the construction shown I also provide an electric motor m , the shaft m^2 of which is provided with a gear which is geared in connection with the gear h^2 by a drive chain h^4 . Supported adjacent to the motor m is a standard n provided centrally with an inwardly directed arm n^2 to which is pivoted a contact lever n^3 which is adapted to connect with the motor m at n^4 , and passed through the top of the standard n is a slidable bolt n^5 provided at its outer end with a handle n^6 and to the inner end portion of which the contact lever n^3 is pivoted, and said bolt is provided at its inner end with a contact head n^7 adapted to bear on the perimeter of the disk b , and the circuit wires of the motor are connected one with said motor as shown at n^8 and another with the standard n as shown at n^9 . The disk b is also provided, as shown in Fig. 3, with a peripheral recess o of predetermined length, and when the apparatus is in operation the head n^7 of the bolt n^5 bears on the periphery of the disk b , and the lower end of the contact lever n^3 makes contact as shown at n^4 , and whenever it is desired to stop the apparatus the bolt n^5 is forced inwardly and enters the recess o in the disk b , and this breaks the contact at n^4 as will be readily understood.

The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof. When the motor m is in operation the disk b is continually rotated, and as the said disk is rotated the pins c^{11} on the opposite end portions of the rock bar c are alternately struck by the cam face b^6 at one end of the

rib b^5 , and in this operation the opposite end portions of the rock bar c are alternately raised and lowered. In this operation the teeth b^4 come in contact with the teeth of the wheels d^2 at each half revolution of the disk b , and this operation gives the gear wheels d^2 a movement which is transmitted to the frame g , and said frame is rotated one step, or a distance equal to the distance between the centers of the rods h . The parts of the apparatus are so arranged that the rock bar c is operated just before the teeth b^4 come in contact with the gear wheels d^2 . The inwardly directed noses or projections c^4 at the opposite ends of the bar c , the heads c^7 of the supplemental arms c^6 connected with said bar, and the noses c^9 on said head c^7 act as stops against which the shanks j^2 of the trippers j at the lower ends of the rods h bear when the frame g is at rest or stationary, and these stops operate to hold the frames i in the position shown in Fig. 2. As shown in Fig. 1, the nose c^4 at the right is up and in the path of the shank j^2 of a tripper j carried by a rod h^3 , and the nose c^4 at the left is down and in the path of the shank j^2 of a tripper j carried by a rod h^2 , and the rock bar c is held in this position by the pin c^{11} at the right resting on the rib b^5 until the cam face b^6 comes in contact with the pin c^{11} at the opposite end of the rock bar c . During the time the noses c^4 are held in the position just described the head c^7 of the arm c^6 , at the right, (see Fig. 6) is up and in the path of the shank j^2 of a tripper j carried by a rod h^2 , while the nose c^9 at the left, (see Fig. 5) is down and in the path of the shank j^2 of a tripper j on a rod h^3 . When the cam face b^6 of the rib b^5 reaches the opposite pin c^{11} , or that one at the left, (see Fig. 1,) the bar c is rocked, and this operation drops the nose c^9 on the right in the path of the shank j^2 of a tripper j on a rod h^3 , and the recess c^{10} above the head c^7 of the supplemental arm c^6 allows the shank j^2 of a tripper j on a rod h^2 to pass while the head c^7 of the arm c^6 at the left is up and in the path of the shank j^2 of a tripper j on a rod h^2 , and the recess c^{10} above the head c^7 allows the shank j^2 of a tripper j on a rod h^3 to pass, and the projections j^4 of the trippers j then strike the projections e^5 of the trip bar c and two of the rods h , in opposite positions are given a 90° rotation, and the frames i on said rods are held in the position shown at y in Figs. 1, 2 and 4, and when the frame g is further rotated the noses j^3 of the adjacent trippers j contact with the projections e^3 at the ends of the bar c and the frames h at y are given another movement of 90° and thrown into the position indicated at y^2 in Fig. 4. The rotation of the frame g is in the direction of the arrows x^3 in Figs. 2 and 3, and the above operation will be repeated as long as the

machine is in operation, two of the frames *i* being thrown into the position shown at *y* in Figs. 1, 2 and 4 at each half revolution of the disk *b* and the frame *g*, the remaining frames *i* being held approximately in the position shown at *y*² in Fig. 2, and from the foregoing description it will be seen that as long as the machine is in operation the frame *g* is given an intermittent rotary movement, and at the end of each movement two of the frames *i* are thrown into the radial positions *y* at the opposite sides of the apparatus and held there until the next movement of the frame *g* when said frames *i* are thrown into the tangential position *y*² indicated in Fig. 4, and the next succeeding frames *i* thrown into the position indicated at *y*, and this result is produced as long as the machine is in operation.

As shown in Fig. 2 of the drawing, the sign frames *g* extend in parallel planes on the opposite sides of the shaft *a*³, but it will be understood that this will not be the exact position of these sign frames in the operation of the apparatus. As the frame *g* rotates clockwise as shown in this figure, the left hand sign frame *g* at the bottom of said figure, and the right hand sign frame at the top of said figure will be stopped by the parts *c*³ as will be readily understood, and the remaining sign frames *y*³ at both sides of the shaft *a*³ in the intermittent or step by step movement of the frame *g* will assume different positions, the general direction of which will be as shown in Fig. 2.

With the construction herein shown and described two of the frames *i* are thrown into the radial position shown in Fig. 2 at the same time and at the end of each movement of the frame *g*; but it will be apparent that by leaving off the stop and tripper mechanism at one end of the rock bar *c* and at the same end of the bar *e* only one of said frames will be thrown into the radial position shown in said figure, and my invention is not limited to the details of construction herein shown and described, and various changes therein and modifications thereof may be made, within the scope of the appended claims, without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In an advertising apparatus, a vertically arranged rotatable frame, a plurality of rods rotatably mounted therein around the axis thereof, sign frames connected with said rods, means for giving said frame an intermittent rotary movement, and means for throwing a part of said sign frames at the opposite sides of the rotary frame into a radial position at the end of each of said movements.

2. In an advertising apparatus, a rotary frame provided with a vertical shaft and comprising connected top and bottom members, vertically arranged rotatable rods mounted in said frame in a circle around the shaft thereof, sign frames connected with said rods, means for giving said frame an intermittent rotary movement, and means for throwing two of the sign frames at opposite sides of the rotary frame into a radial position at each intermittent movement of said rotary frame.

3. In an apparatus of the class described, a vertical shaft, a rotary disk mounted thereon, a rock bar arranged transversely of said shaft and adapted to swing in a vertical plane, a trip bar arranged in the same plane with the rock bar and above the same, a rotary frame mounted on said shaft above the trip bar and provided with rods which are rotatable in said frame and arranged in a circle around the shaft, sign frames connected with said rods, devices for giving the rotary frame an intermittent movement, and devices connected with the lower ends of said rods and with the ends of the rock bar and the trip bar for turning two of said rods and the sign frames thereon at the opposite sides of said rotary frame into a radial position at each intermittent movement of said frame.

4. In an advertising apparatus, a rotary frame provided with a vertical shaft, a plurality of vertical rods arranged in a circle around said shaft, sign frames connected with said rods, means for giving said frame a step by step movement, and means for throwing a plurality of said sign frames into a radial position at each movement of said frame.

5. In an apparatus of the class described, a vertically arranged stationary shaft, a rotary disk mounted thereon and provided on the bottom thereof with a circular gear, a worm gear shaft operating in connection with said circular gear, a motor geared in connection with the worm gear shaft, a rotatable frame mounted on the shaft above said disk and provided with a bottom plate having circularly arranged apertures adapted to serve as a gear, rotatable rods mounted in said frame and in a circle around said shaft and extending downwardly through said plate, a gear wheel mounted on said shaft and the teeth of which operate in the circularly arranged apertures formed in said plate, said gear wheel being adapted to be operated by said rotary disk, trippers connected with the lower ends of said rods, a transversely arranged bar connected with said shaft and adapted to operate in connection with said trippers, a vertically movable rock bar mounted on said shaft between said last named bar and said rotary disk and adapted to be operated by said disk and pro-

vided with end devices adapted to operate in connection with said trippers, said rods being also provided with signs.

6. In an apparatus of the class described,
5 a vertically arranged stationary shaft, a rotatable frame mounted thereon and provided with a bottom plate, vertically arranged rotatable rods mounted in said frame and in a circle around said shaft and extending downwardly through said plate, trippers connect-
10 ed with the lower end portions of said rods, the trippers of the alternately arranged rods being connected therewith in different horizontal planes, a stationary transverse bar
15 connected with said shaft below the said frame and provided with end members adapted to operate in connection with said trippers, a rock bar connected with said shaft below said stationary bar and provided

at its ends with stop devices adapted to operate in connection with said trippers and arranged in the same vertical plane as said rock bar, and other stop devices connected with the ends of said rock bar and extending at right angles thereto and also adapted
25 to operate in connection with said trippers, means for operating said rock bar and devices for giving said rotary frame a step by step movement.

In testimony that I claim the foregoing as
30 my invention I have signed my name in presence of the subscribing witnesses this 7th day of November 1908.

JOSEPH V. CASEY.

Witnesses:

C. E. MULREANY,
A. R. APPLEMAN.

It is hereby certified that in Letters Patent No. 943,179, granted December 14, 1909, upon the application of Joseph V. Casey, of Brooklyn, New York, for an improvement in "Advertising Apparatus" errors appear in the printed specification requiring correction as follows: Page 3, lines 21 and 27, the reference-letter "*g*" should read *i*; same page, line 31, the reference-letter "*g*" should read *i*, and same page, line 35, after the word "shown" the word and reference-letter *at g* should be inserted; and that the proper corrections have been made in the files and records of the Patent Office and are hereby made in the said Letters Patent.

Signed and sealed this 21st day of June, A. D., 1910.

[SEAL.]

F. A. TENNANT,
Acting Commissioner of Patents.