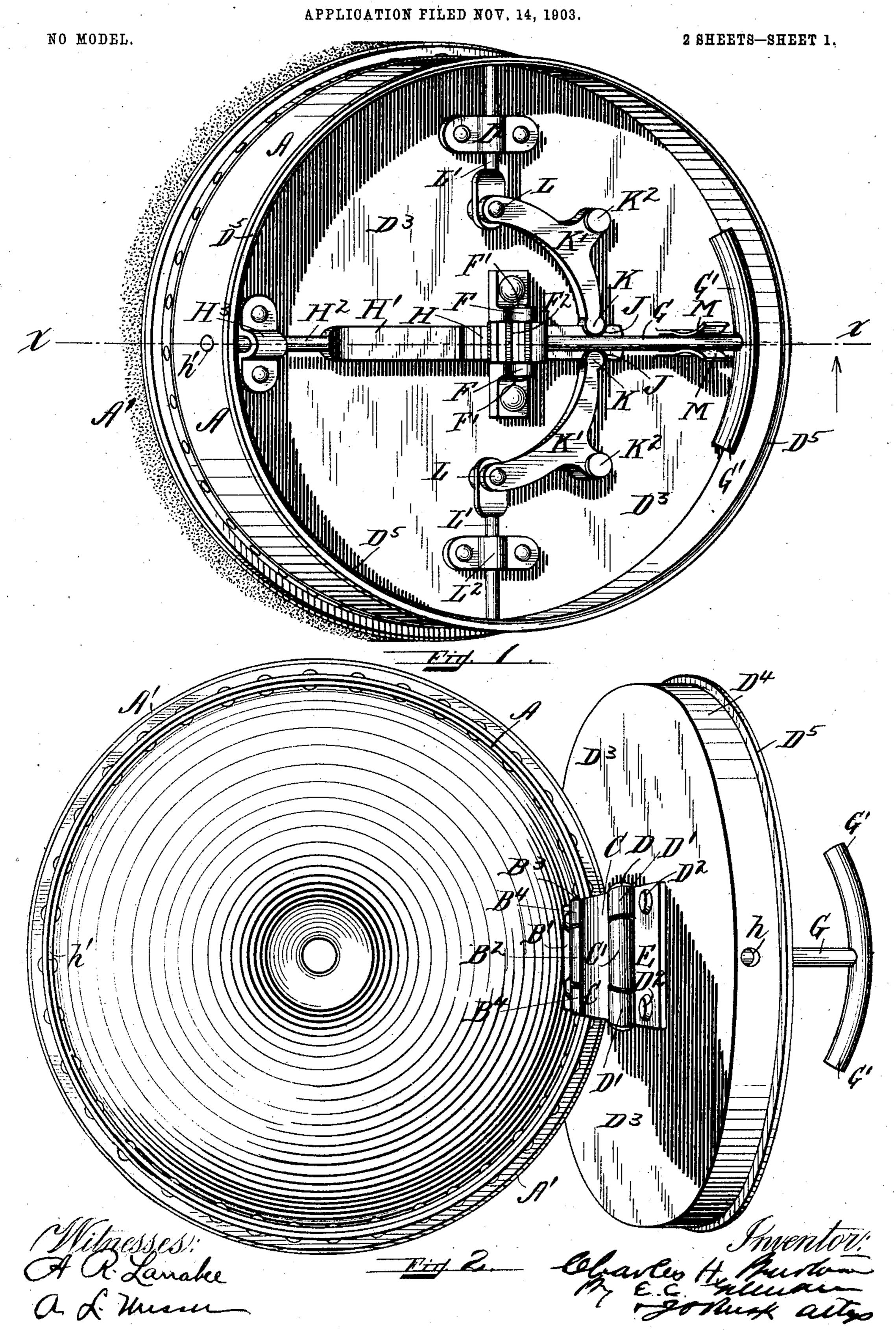
C. H. BURTON. PNEUMATIC CARRIER.

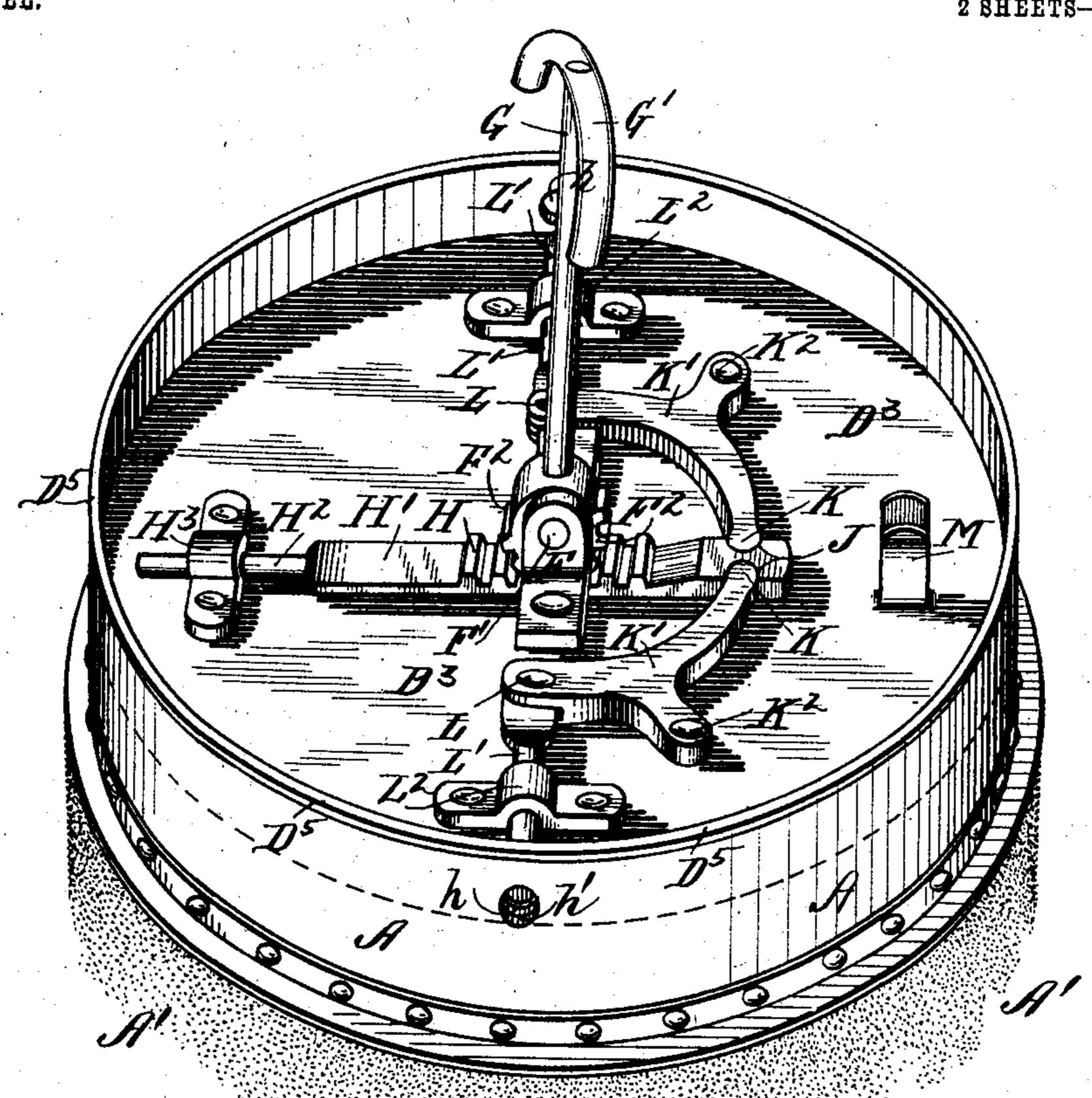


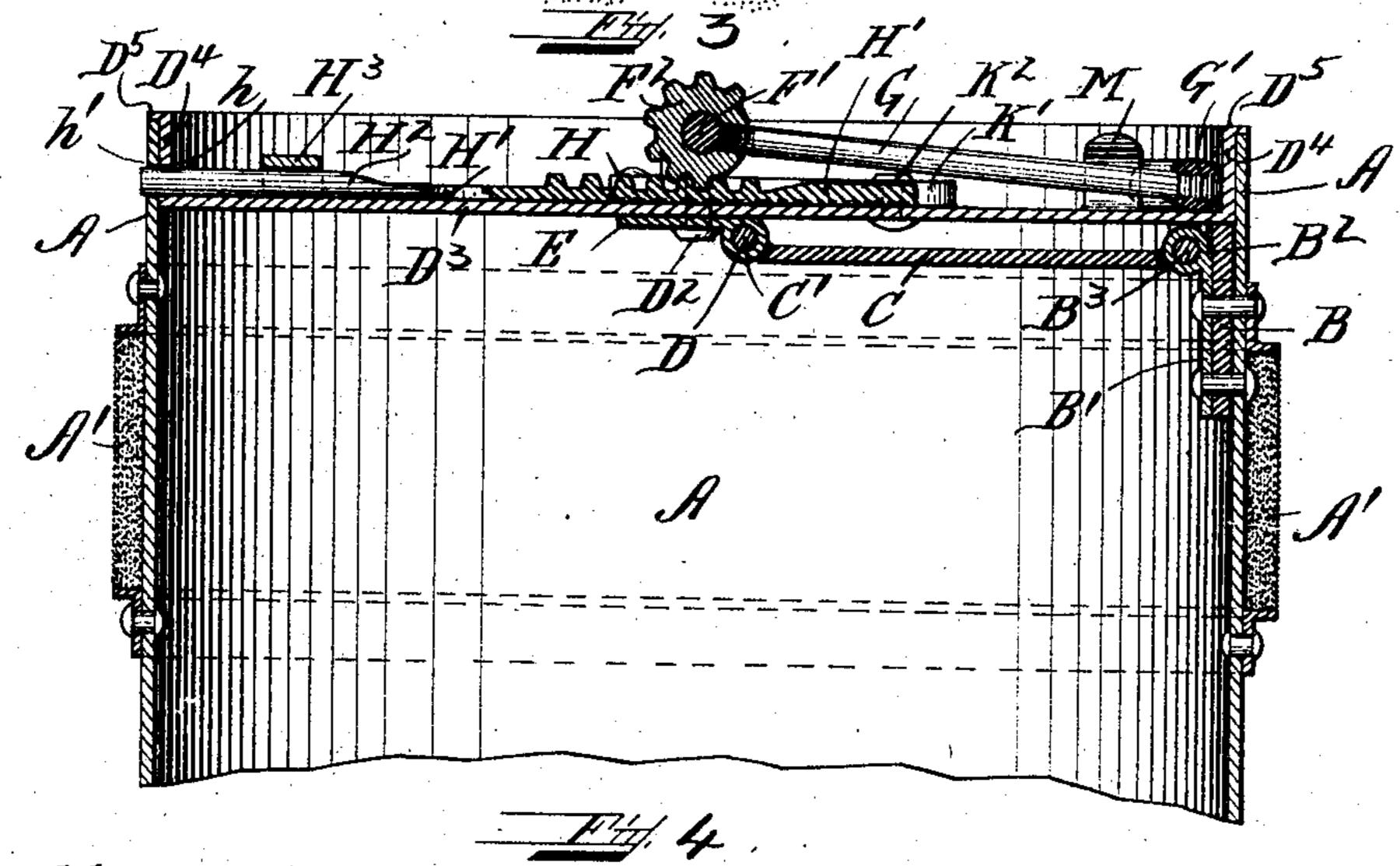
C. H. BURTON. PNEUMATIC CARRIER.

APPLICATION FILED NOV. 14, 1903.

NO MODEL.

2 SHEETS-SHEET 2.





United States Patent Office.

CHARLES H. BURTON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO AMERICAN PNEUMATIC SERVICE COMPANY, OF DOVER, DELAWARE, A CORPORATION OF DELAWARE.

PNEUMATIC CARRIER.

SPECIFICATION forming part of Letters Patent No. 768,030, dated August 23, 1904.

Application filed November 14, 1903. Serial No. 181,139. (No model.)

To all whom it may concern:

Be it known that I, Charles H. Burton, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Pneumatic Carriers, of which the following is a specification.

My invention relates to new and useful improvements in pneumatic-despatch apparatus; and its object is to produce a water-tight cover for the open end of carriers, with improved locking mechanism for said cover.

My invention consists of certain novel features hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which illustrate a construction embodying my invention, Figure 1 is a perspective view of one head of the carrier with the cover locked in position. Fig. 2 is an end view of the open end of the carrier with the cover in perspective. Fig. 3 is a perspective view of the open end of the carrier with the cover closed and showing the locking mechanism unlocked. Fig. 4 is a cross-sectional view through one end of the carrier and cover on the line X X, Fig. 1.

Like letters of reference refer to like parts throughout the several views.

A represents the shell of the carrier, provided near one end with the friction-packing 30 A' of ordinary construction and provided on its interior with a metallic plate B, to which is secured by suitable bolts the metallic plate B', and at the upper end of said plate B' is the eye B², in which is located the center of the 35 shaft B³. Said shaft B³ extends into the eyes B⁴, Fig. 2, of the plate C, and by means of said shaft the plates B' and C are pivotally connected. Through the eye C' of the plate E passes the shaft D, which also extends through 4° the eyes D' of the plate C. By means of said shaft the plates C and E are pivotally connected, and by means of the bolts D² the plate E is firmly secured in its position on the under side of the cover D³, which is provided 45 with an outwardly-extending circular flange D⁴, provided with a transverse rim D⁵, which fits over the outer end of the shell A, as shown in Fig. 4. Secured in the center of the top

of the cover are two opposite bearings F, in which is journaled the shaft F', to which is 50 fixed fast the toothed segment-gear F², and secured fast to said gear is the lever G, having a handle G'. This toothed segment-gear engages with the rack H on the bar H' to reciprocate the same in the top of the cover. On 55 one end of said rack-bar H' is the bolt H², controlled in its movements by the guide H³, fast on the top of the cover, and said bolt is adapted to be moved outwardly to engage the holes h h', respectively, in the flange D⁴ of the cover 60 and the shell of the carrier. In the opposite end of the rack-bar H are located two semicircular recesses J, in which are located the rounded ends K of the bell-crank levers K', pivoted at K² to the cover D³. The other ends 65 of said bell-crank levers are pivoted at L to the bolts L', controlled in their movements by the guides L², secured to the cover D³.

With the parts in the position shown in Fig. 2, articles having been placed in the car- 70 rier, the cover is moved over and closed in the position shown in Fig. 3. The operator then taking hold of the handle G moves the same toward the right, thereby operating the rack-bar H, which shoots out the bolt H² and 75 the bolts L', which pass through openings in the cover and shell corresponding to openings h h', through which at the same time the bolt H² passes, moving the parts into the position shown in full lines, Fig. 1, and sec- 80 tion, Fig. 4. As the handle is pressed down at the end of its movement it engages a suitable spring-catch M, between the leaves of which the rod G is held against displacement during the travel of the carrier through the 85 tube.

When the carrier has reached its destination, the operator taking hold of the handle G' moves the same and the coöperating parts from the position shown in Fig. 1 to that 90 shown in Fig. 4, when the cover is raised and the cover opened for the removal of the articles despatched. This operation for the locking and unlocking is repeated for each trip of the carrier through the tube. This 95 construction of the cover, together with the

locking mechanism, produces a water-tight carrier for preventing water which might be in the despatch-tube from entering the carrier.

Having thus described the nature of my invention and set forth a construction embodying the same, what I claim as new, and desire to secure by Letters Patent of the United

States, is—

1. In a pneumatic-despatch-tube carrier, a plate pivoted to the shell of the carrier, a cover pivoted to said plate and provided with a circular flange to fit into the shell of the carrier, locking mechanism on the exterior of the 15 cover for locking the cover to the shell of the carrier, a lever pivoted in the center of the exterior of the cover for locking and unlocking said locking mechanism, and means for holding said lever against displacement upon 20 the locking of the cover to the shell of the carrier.

2. In a pneumatic-despatch-tube carrier, a plate pivoted to the shell of the carrier, a cover pivoted to said plate and provided with an out-25 wardly-projecting circular flange to fit into the shell of the carrier, locking mechanism on the exterior of the cover for locking the cover to the shell of the carrier, a lever pivoted in the center of the exterior of the cover 30 for locking and unlocking said locking mech-

anism, and means for holding said lever against displacement upon the locking of the

cover to the shell of the carrier.

3. In a pneumatic-despatch-tube carrier, a 35 plate pivoted to the shell of the carrier, a cover pivoted to said plate and provided with an outwardly-projecting circular flange and a transverse rim adapted to fit respectively within the shell of the carrier and over the edge of 40 the shell, locking mechanism on the exterior of the cover for locking the cover to the shell of the carrier, a lever pivoted in the center of the exterior of the cover for locking and unlocking said locking mechanism, and means 45 for holding said lever against displacement upon the locking of the cover to the shell of

the carrier.

4. In a pneumatic-despatch-tube carrier, a plate pivoted to the shell of the carrier, a cover 5° pivoted to said plate, bolts on the exterior of said cover for securing the cover to the shell of the carrier, a rack-bar and coöperating bellcrank levers for operating said bolts, a gear | adapted to engage with the rack on said rackbar for operating said rack and said bell- 55 crank levers to operate said bolts to lock and unlock the cover, and a lever for operating said gear and provided with a suitable handle.

5. In a pneumatic-despatch-tube carrier, a plate pivoted to the shell of the carrier, a cover 60 pivoted to said plate, bolts on the exterior of said cover for securing the cover to the shell of the carrier, a rack-bar and coöperating bellcrank levers for operating said bolts, a gear adapted to engage with the rack on said rack- 65 bar for operating said rack and said bellcrank levers to operate said bolts to lock and unlock the cover, a lever for operating said gear and provided with a suitable handle, and a yielding catch for holding said lever against 70 displacement upon the locking of the cover to the shell of the carrier.

6. In a pneumatic-despatch-tube carrier, a movable cover mounted on the body of the carrier and provided with an outwardly-pro- 75 jecting circular flange and a transverse rim and adapted to fit respectively within the shell of the carrier and over the edge of the shell, locking mechanism on the exterior of the cover for locking the cover to the shell of the 80 carrier, and a lever pivoted in the center of the exterior of the cover for locking and un-

locking said locking mechanism.

7. In a pneumatic-despatch-tube carrier, a movable cover mounted on the body of the 85 carrier and provided with an outwardly-projecting circular flange and a transverse rim and adapted to fit respectively within the shell of the carrier and over the edge of the shell, locking mechanism on the exterior of 90 the cover for locking the cover to the shell of the carrier, a lever pivoted in the center of the exterior of the cover for locking and unlocking said locking mechanism, and means for holding said lever against displacement 95 upon the locking of the cover to the shell of the carrier.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 12th day of November, 100 A. D. 1903.

CHARLES H. BURTON.

Witnesses:

A. L. Messer, A. R. LARRABEE.