

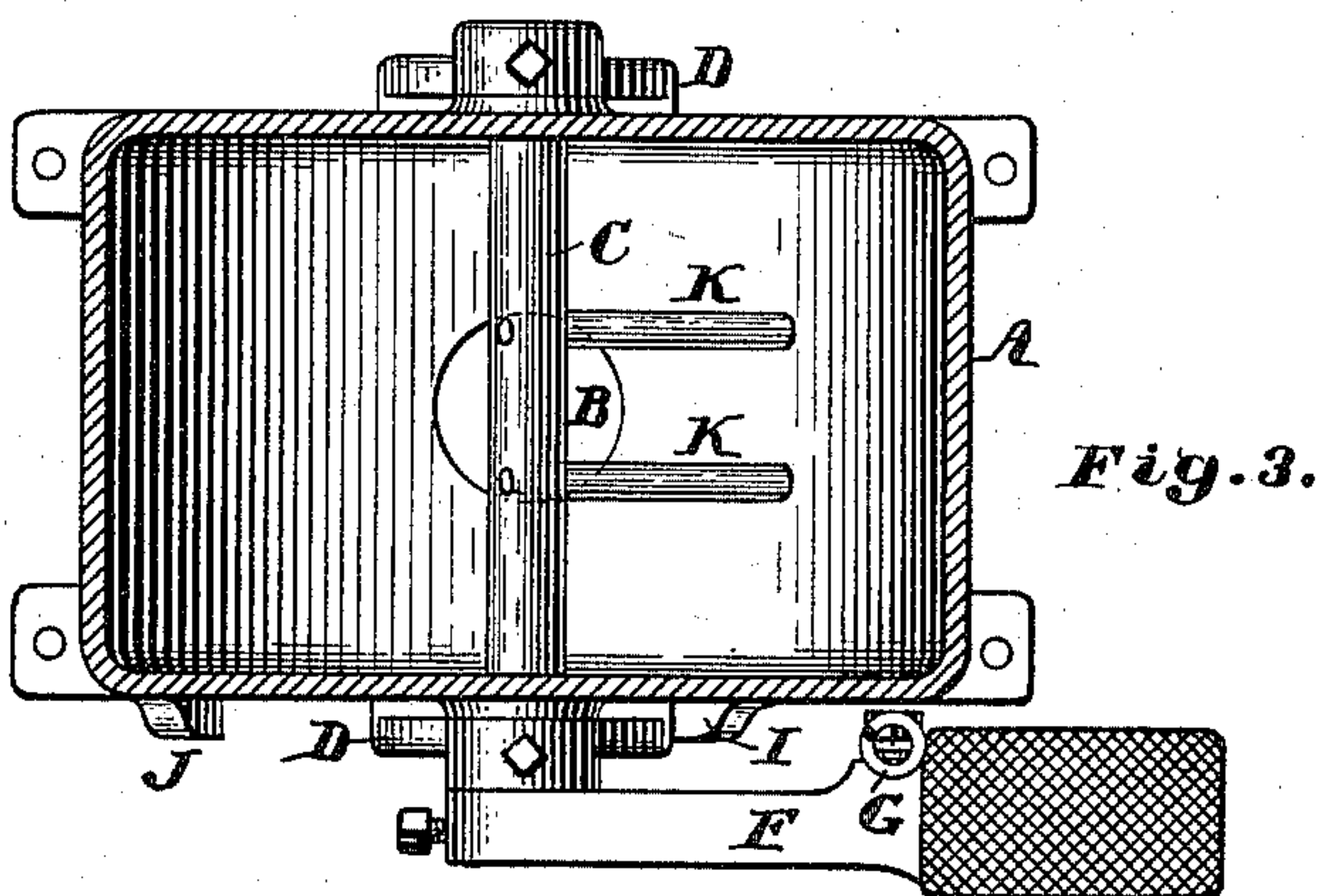
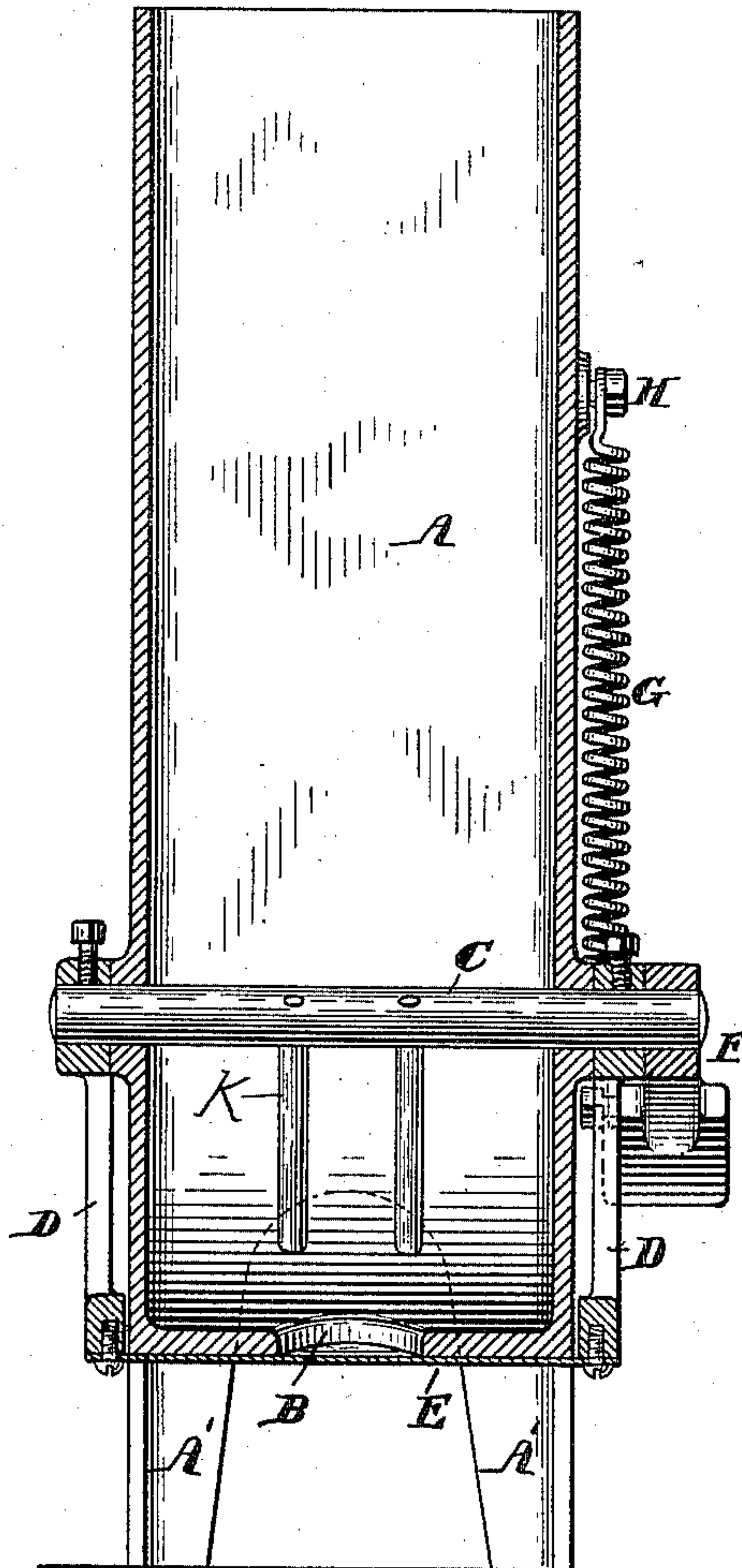
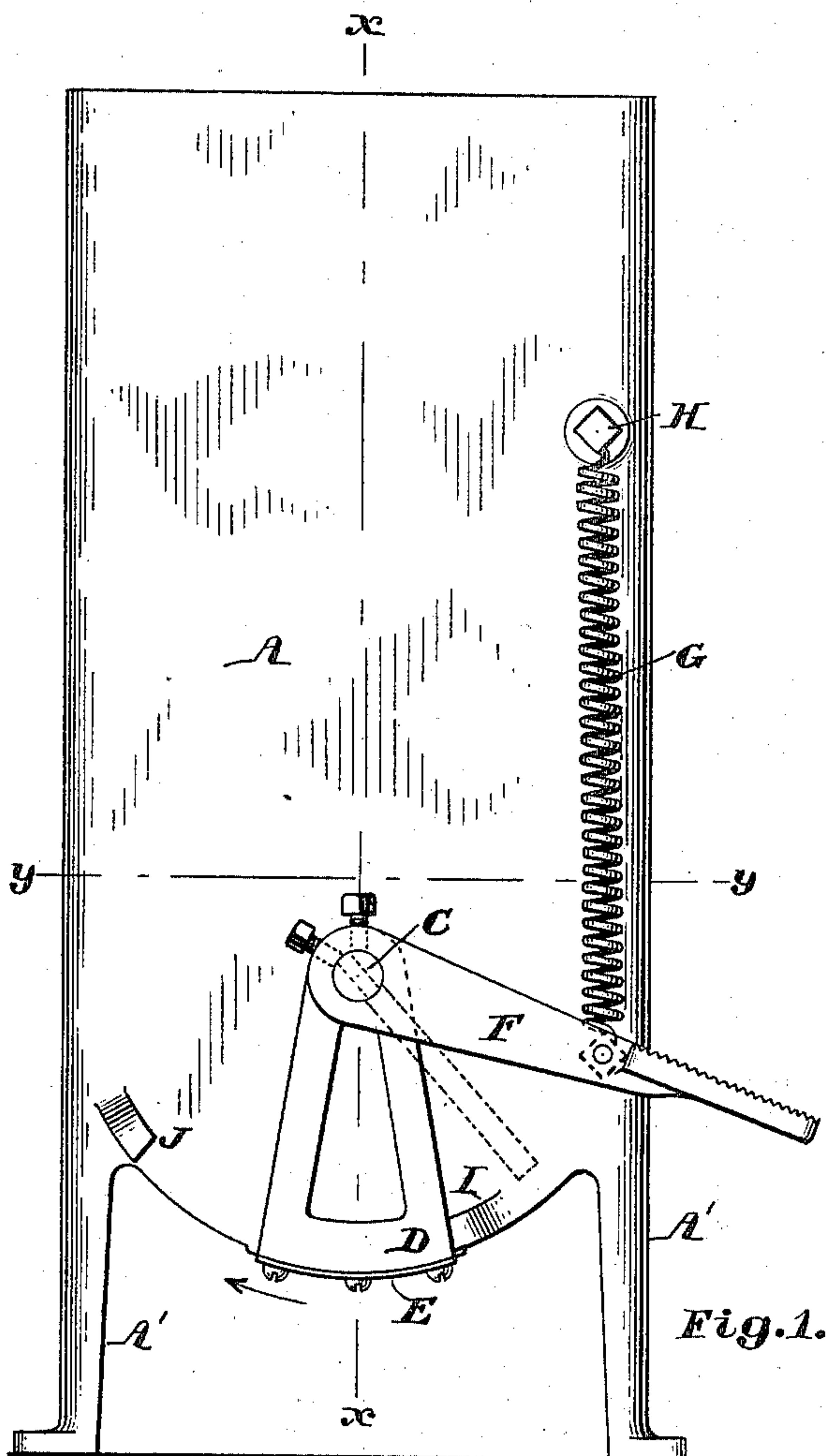
(No Model)

E. C. COLLINS.

SAND BOX FOR ELECTRIC CARS OR SNOW PLOWS.

No. 586,014.

Patented July 6, 1897.



Witnesses:
William E Shaw
Walter E. Lombard

Inventor:
Edward C. Collins.
by N. C. Lombard
Attorney.

UNITED STATES PATENT OFFICE.

EDWARD C. COLLINS, OF TAUNTON, MASSACHUSETTS, ASSIGNOR TO THE
TAUNTON LOCOMOTIVE MANUFACTURING COMPANY, OF SAME PLACE.

SAND-BOX FOR ELECTRIC CARS OR SNOW-PLOWS.

SPECIFICATION forming part of Letters Patent No. 586,014, dated July 6, 1897.

Application filed March 15, 1897. Serial No. 627,469. (No model.)

To all whom it may concern:

Be it known that I, EDWARD C. COLLINS, of Taunton, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Sand-Boxes for Electric Cars or Snow-Plows, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to sand-boxes for electric cars and snow-plows; and it consists in certain novel features of construction, arrangement, and combination of parts, which will be readily understood by reference to the description of the accompanying drawings and to the claims hereto appended and in which my invention is clearly pointed out.

Figure 1 of the drawings is a side elevation of a sand-box embodying my invention. Fig. 2 is a vertical section on line $x x$ on Fig. 1; and Fig. 3 is a sectional plan, the cutting-plane being on line $y y$ on Fig. 1.

In the drawings, A is the sand-receptacle, having a semicircular bottom, through which is cut the discharge-opening B, and provided with the supporting-legs A' A', all formed integral, as shown.

C is a shaft mounted in suitable bearings in said receptacle, with its axis coinciding with the center of the curve of the bottom of said receptacle, and having firmly secured thereon at each side of said receptacle a pendant arm D, the lower ends of which are curved to the same radius as the lower portion of the receptacle-bottom immediately surrounding the discharge-opening B and have secured thereto the sheet-metal valve E, also curved transversely to fit the curve of the receptacle-bottom, as shown in Fig. 1.

F is a pedal-lever firmly secured upon the shaft C, outside of one of the arms D, in position to be acted upon by the motorman's foot to move the shaft C, the arms D, and the valve E about the axis of said shaft in the direction indicated by the arrow on Fig. 1 against the tension of the spring G, connected at one end to said pedal and at its other end to the bolt H, said spring serving to normally hold one of the arms D in contact with the lug I, so that the opening B will be closed by the valve E.

J is a stop-lug to limit the rearward movement of the arms D and valve E.

The shaft C has set therein, within the receptacle A, one or more arms K, which serve to agitate the contents of the receptacle and insure the discharge of a quantity thereof through the discharge-opening B at each depression of the pedal F, the tension of the spring G causing a return of the pedal F, the arms D D, and valve E to their normal positions when the operator's foot is removed from the pedal F.

The sand discharged from the receptacle A through the opening B will fall into a funnel connected to a suitable pipe for conveying said sand to the rail directly in front of the wheel. Said funnel and pipe are not shown, as they are not of my invention.

The sand-box is portable and may be readily changed from one car to another when desired.

The operation of my invention will be readily understood from the foregoing without further explanation here.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a sand-box for electric cars, the combination of a receptacle for holding the sand having a semicircular bottom provided with a discharge-orifice in the lowest part thereof; a valve for closing said opening arranged to be moved in an arc of a circle, concentric with the curve of the bottom of said receptacle; means, to be operated by the motorman's foot, for opening said valve; and a spring for closing the same.

2. The combination of the receptacle A provided with a semicircular bottom having the opening B therein; the shaft C; the arms D, D; the valve-plate E carried by said arms D, D; the pedal F; and spring G.

3. The combination of the receptacle A provided with a semicircular bottom having the discharge-opening B therein; the shaft C; the arms D D and K K, and the pedal F carried by said shaft; the valve-plate E carried by the arms D, D; and the spring G, all constructed arranged and operating substantially as described.

4. In a track-sanding device for electric

cars the combination of a sand-holding receptacle having a semicircular bottom and a discharge-orifice in said bottom; an oscillating valve located beneath said receptacle and
5 arranged to normally close said orifice; means for moving said valve in an arc of a circle to open it by a pressure imparted by the operator; and a spring for closing the same.

In testimony whereof I have signed my name to this specification, in the presence of 10 two subscribing witnesses, on this 12th day of March, A. D. 1897.

EDWARD C. COLLINS.

Witnesses:

EDGAR L. CROSSMAN,
H. T. ALBRO.