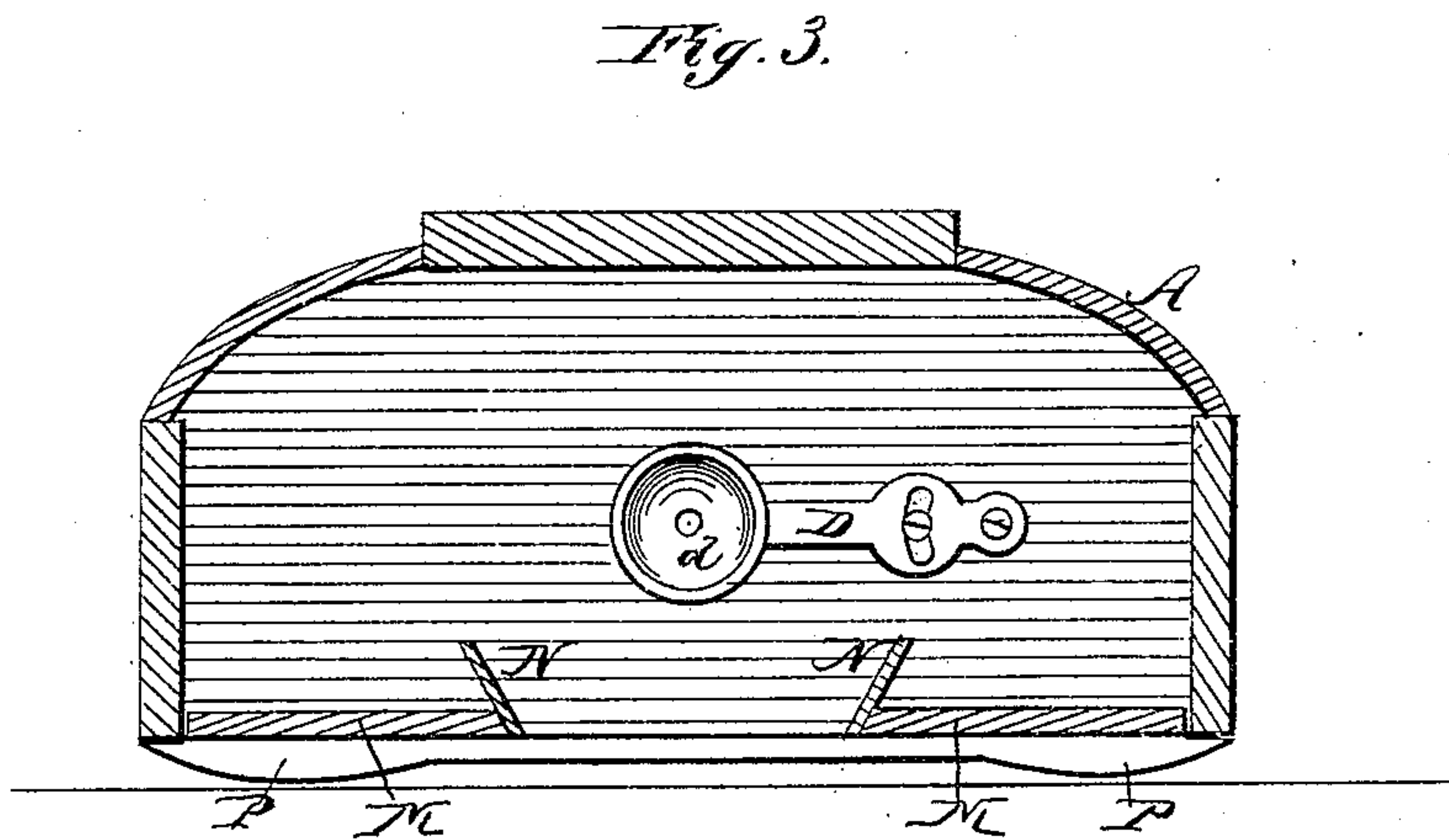
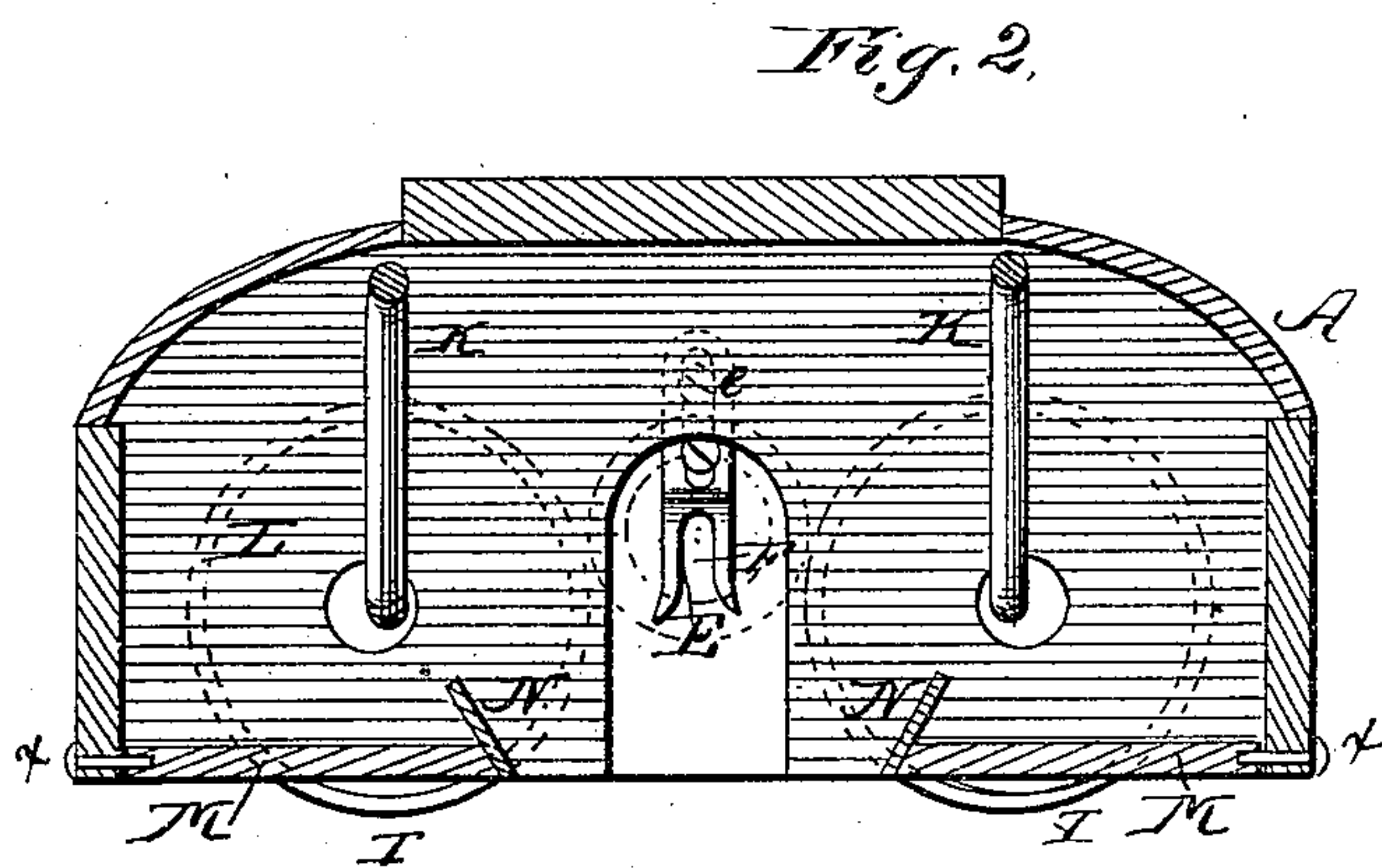
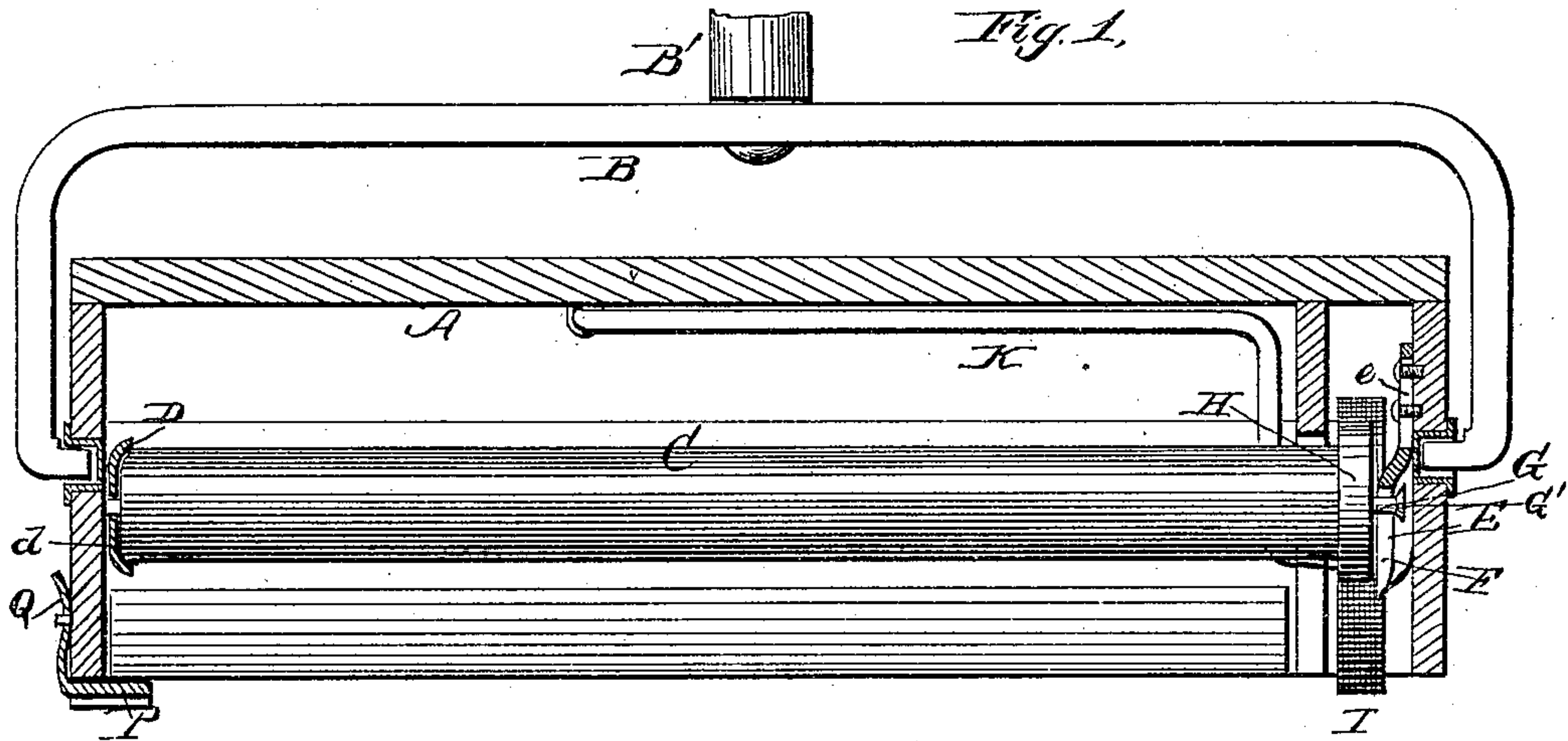


(No Model.)

W. J. DREW.  
Carpet Sweeper.

No. 238,662.

Patented March 8, 1881.



Witnesses:  
H. C. McArthur  
John C. Rogers.

Inventor:  
W. J. Drew.  
Per: H. Alexander  
Attorney



# UNITED STATES PATENT OFFICE.

WALTER J. DREW, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO THE  
MICHIGAN CARPET SWEEPER COMPANY, OF SAME PLACE.

## CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 238,662, dated March 8, 1881.

Application filed October 25, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER J. DREW, of the city of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Carpet-Sweepers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, and in which—

Figure 1 is a central longitudinal section, and Figs. 2 and 3 are cross-sections, showing opposite ends of the machine.

This invention relates to that class of carpet-sweepers in which a rotary brush is arranged to collect dust and dirt from a floor or carpet and deposit it in a pan or receptacle provided in connection with the brush-inclosing case, which is supported by driving-wheels, and pushed over the floor by means of a suitable handle.

The improvement consists, first, in the combination, with the rotary brush, of a swinging bearing formed with a cup-shaped socket for receiving one of the journals of the brush, and a fixed bearing bifurcated and recessed at its lower end to receive the remaining journal of the brush; second, in the combination, with the rotary brush, of a roller secured upon the brush-spindle, a pair of supporting and driving wheels arranged to bear against the brush-roller, a spring, upon the ends of which the driving-wheels are mounted, and a swinging bearing for one of the ends of the brush-spindle, all as hereinafter more fully described.

The letter A indicates the casing within which the rotary brush is arranged. This casing is open at its bottom, as usual, and is provided with the hinged bail B, to which the handle B' is secured in any suitable way.

The rotary brush C is journaled at one of its ends in a swinging bearing, D, and at its remaining end journaled in a bearing, E, the construction and arrangement of these bearings being as follows: The swinging bearing D consists of a bar or plate, which is pivoted at one of its ends to the casing, and which, at its other end, is formed or provided with a cup-shaped socket, d, formed to receive an end of the brush-spindle. The bearing E, which is

located at the opposite end of the casing, consists of a slotted plate or casting, which is secured to the casing by means of bolts or screws passing through its slot e, by reason of which it is adapted to be vertically adjusted. This bearing is bifurcated at its lower end, as at F, in order to receive a journal, G, which is secured upon one end of the brush-spindle, and at the rear or inner side of its bifurcated and it is recessed, as at G', in order to receive a head, G', upon the outer end of the journal G. The brush thus journaled has a free vertical or up-and-down play, so that it will readily accommodate itself to any irregularities of the floor over which it will be moved.

The end of the brush which is adjacent to the above-described slotted bearing is provided with an elastic-faced roller, H, which, when the brush is arranged in position for operation, is brought into contact with the two elastic-faced driving-wheels I I. These driving-wheels support one end of the sweeper, and as the sweeper is impelled over the floor impart, by frictional contact, a rotary movement to the brush-roller, and hence a like motion to the brush. The driving-wheels are mounted upon the ends of a spring, K, which is secured to the casing, and formed so that its ends will project through openings in a partition, L, at one end of the casing. The spring so arranged to carry the driving-wheels serves to hold the said wheels against the roller on the brush-spindle, and also admits of a certain vertical play of the driving-wheels, whereby when the sweeper is pushed forward over the floor and depressed the driving-wheels will retract to a certain extent within the casing, thus bringing the rotary brush closely down upon the floor. As the sweeper is drawn backward, however, and the pressure thereon relieved, the driving-wheels will extend below the casing sufficiently to raise the brush from contact with the floor or carpet.

The hinged dust-pan of this sweeper consists of the boards M, hinged or pivoted either to the partition L or to the casing, inclined strips N being secured to the inner opposing edges of these boards, so as to retain the dust which has been swept up by the brush. These strips are arranged so that the brush will strike against them during its rotation, thereby



beating out the dust therefrom, which as it falls is collected by the said dust-pan. In the present case I have shown the dust-pans pivoted by means of pivots *x x* passed through the sides of the case and into the boards. The ends of the boards which are opposite to their hinged ends are connected together by a shoe or runner, *P*, which rests upon the floor and supports one end of the sweeper. The hinged dust-pan is held closed by a suitable spring-catch, *Q*, secured to the shoe and runner, so as to prevent the pan from being accidentally opened.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the rotary brush in a carpet-sweeper and its driving-wheels, of the swinging bearing *D*, formed with a cup-shaped socket for receiving one of the journals of the brush, and the bearing *E*, bifurcated and recessed at its lower end in order to receive the remaining journal of the brush, substantially as described.

2. The combination, with the rotary brush in a carpet-sweeper, of the roller *H* upon one end of the brush-spindle, the supporting and driving wheels *I*, arranged to bear against the brush-roller, a spring, *K*, upon which the driving-wheels are mounted, and the swinging bearing *D* for one of the ends of the brush-spindle, substantially as described.

3. The within-described carpet-sweeper, consisting, essentially, of casing *A*, rotary brush *C*, swinging bearing *D*, having cup-shaped socket *d*, slotted bearing *E*, headed journal *G*, driving-wheels *I I*, mounted upon tension-spring *K*, and bottom *M*, all constructed and arranged to operate as herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

W. J. DREW.

Witnesses:

HENRY J. FELKER,  
WM. M. ROBINSON.