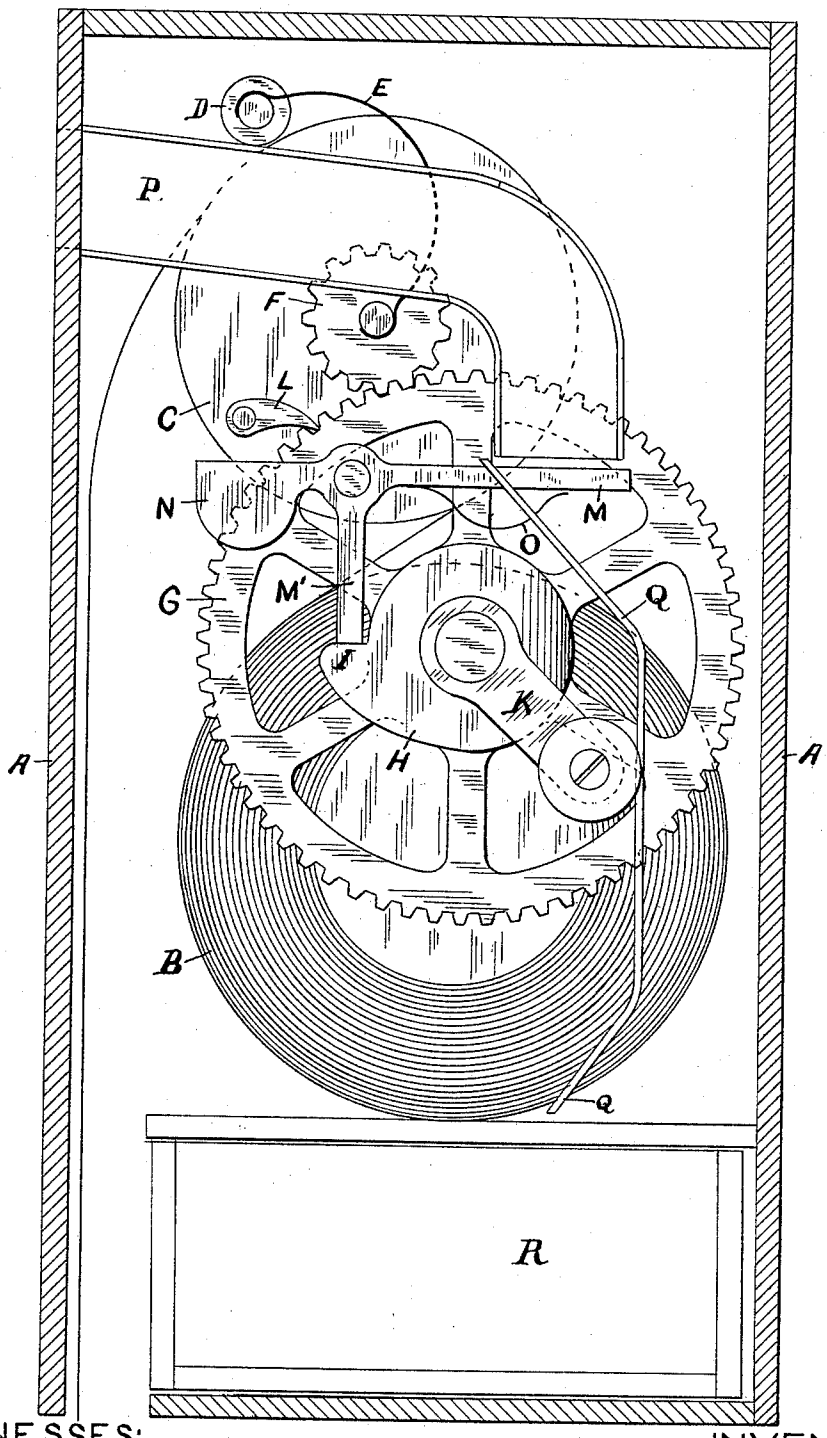
(No Model.)

E. S. GRAVER.

MACHINE FOR FURNISHING TOILET PAPER.

No. 430,848. Patented June 24, 1890.



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UNITED STATES PATENT OFFICE.

ERWIN S. GRAVER, OF PHILADELPHIA, PENNSYLVANIA.

MACHINE FOR FURNISHING TOILET-PAPER.

SPECIFICATION forming part of Letters Patent No. 430,848, dated June 24, 1890.

Application filed September 21, 1889. Serial No. 324,637. (No model.)

To all whom it may concern:

Be it known that I, ERWIN S. GRAVER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Machine for Furnishing Toilet-Paper, of which the following is a specification.

My invention relates to the construction of a machine for furnishing toilet-paper.

Referring to the accompanying drawing, which is a side view of the machine with the side of the case removed, A is a case containing a roll of paper, the necessary mechanism, and a money-drawer.

B is a roll of paper, the free end of which passes around the cylinder C and down through the bottom of the case, as shown. The cylinder C is ordinarily made of wood, sanded.

D is a roller, by which the paper is held upon the cylinder C, and which is held in bearing upon the paper by springs E, of which one only is shown.

F is a toothed wheel upon the shaft of the cylinder C.

G is a toothed wheel gearing with the wheel F, having upon its shaft a cam H, which has upon it a shoulder or stop I, all within the case, and having upon its shaft, also, the crank K without the case.

L is a pawl, which engages with the teeth of the wheel G.

M is a bell-crank arm having a weight N slightly heavier than its horizontal arm, and having its perpendicular arm M′ of such length as, when in its normal position, to engage with the shoulder I of the cam H, which forms a detent for it.

O is a spring under the horizontal arm of the bell-crank M.

P is a flattened tube or channel extending from a slot in the front of the case, through which tube a coin may be dropped upon the horizontal arm of the bell-crank.

Q is a guide, by which such coin, when released, is guided into the money-drawer R.

The machine in its normal condition stands, as shown in the figure, locked between the pawl and the stop, and its operation is as follows: When a coin is dropped into the slot, it falls upon the horizontal arm of the bell-crank, which descends until the spring O rests upon the cam H, and at the same time the perpendicular arm of the bell-crank is moved forward clear of the flat part of the stop I, and the mechanism may be turned forward by the crank. Upon turning the crank the curved extension part of the stop I engages with the perpendicular arm M′ of the bell-crank and moves it forward, thus moving the horizontal arm M, upon which the coin rests downward, so that the coin drops from it upon the guide Q and into the drawer. The continued movement of the feed-roll delivers from the bottom of the box the regulated quantity of paper, which is determined by the proportion of the two gear-wheels and the size of the cylinder C, and at the end of one revolution of the crank the machine is locked, as before. The return of the bell-crank to its proper position is made positive by the action of the stop I, passing under the spring O.

The crank is shown upon the shaft of the larger gear-wheel G, but may be upon the shaft of the smaller gear-wheel F, as shown in dotted lines, and so operate directly the feed-cylinder C, or the mechanism may be operated by pulling the strip of paper without using a crank.

I claim as my invention—

1. A machine for furnishing toilet-paper, consisting, essentially, of a feed-roller, gearing connected to said feed-roller and having a detent and a crank, a bar adapted normally to engage with said detent and hold the gearing and by the weight of a coin to be so far disengaged therefrom as to release the gearing, a chute adapted to carry a coin and deposit it upon the bar, and devices whereby, when a strip of paper is delivered from the feed-roller by the operation of the gearing, the coin is discharged from the bar and the detent is re-engaged.

2. The combination of a roll for carrying paper, a chute adapted to carry a coin, a counterbalanced bar adapted to receive the coin and to be moved thereby, mechanism having a crank adapted to revolve said roll and to deliver a strip of paper therefrom, a pawl adapted to engage with said mechanism, and a detent in said mechanism adapted to engage

with said bar in opposition to said pawl in the normal position of the bar and to be released therefrom when the bar has been moved by the coin.

3. The combination of a roll for carrying paper, a chute adapted to carry a coin, a counterbalanced bar adapted to receive the coin, mechanism adapted to revolve said roll and to deliver a strip of paper thereby, a detent in said mechanism adapted to engage with said bar in its normal position and to pass partially clear therefrom when the bar is lowered by the coin, said detent having a projection adapted upon the operation of the mechanism to engage with the bar and still further lower it, so as to release the coin.

4. The combination of gearing F G, pawl L, arm M, and cam H, having detent I.

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