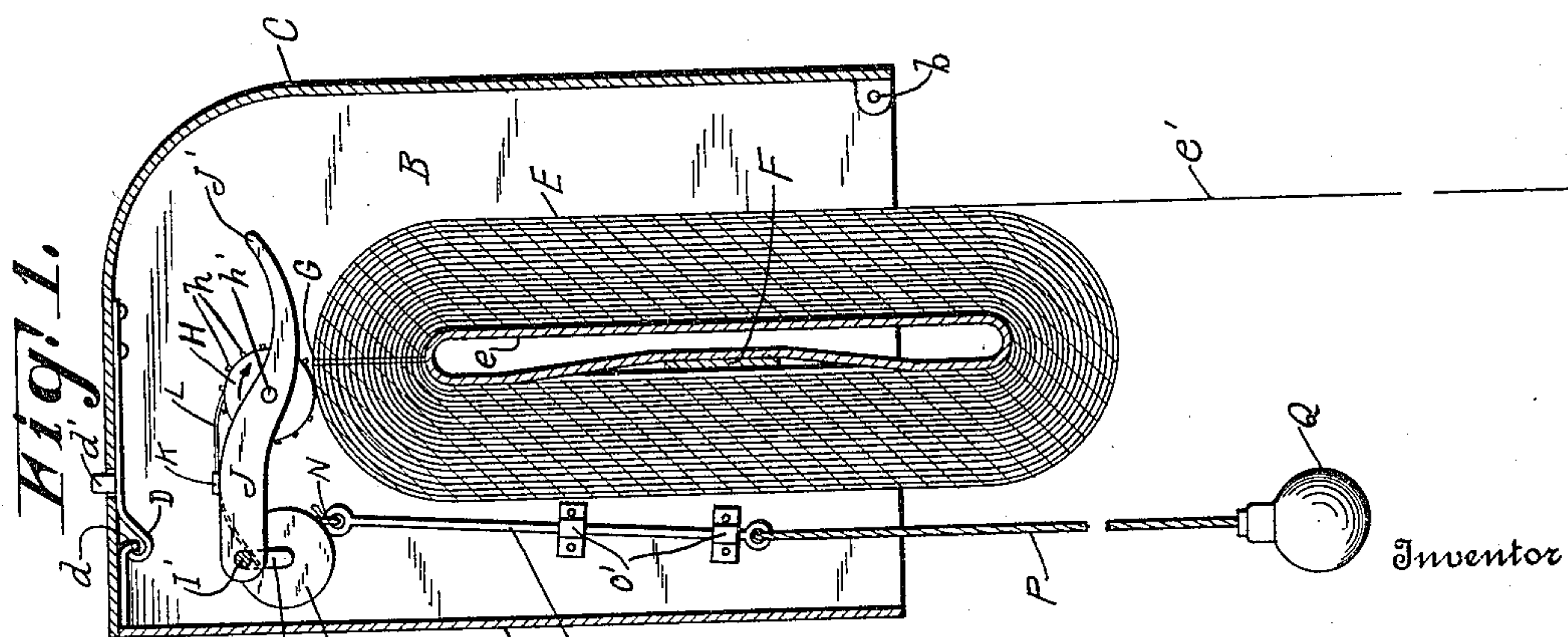
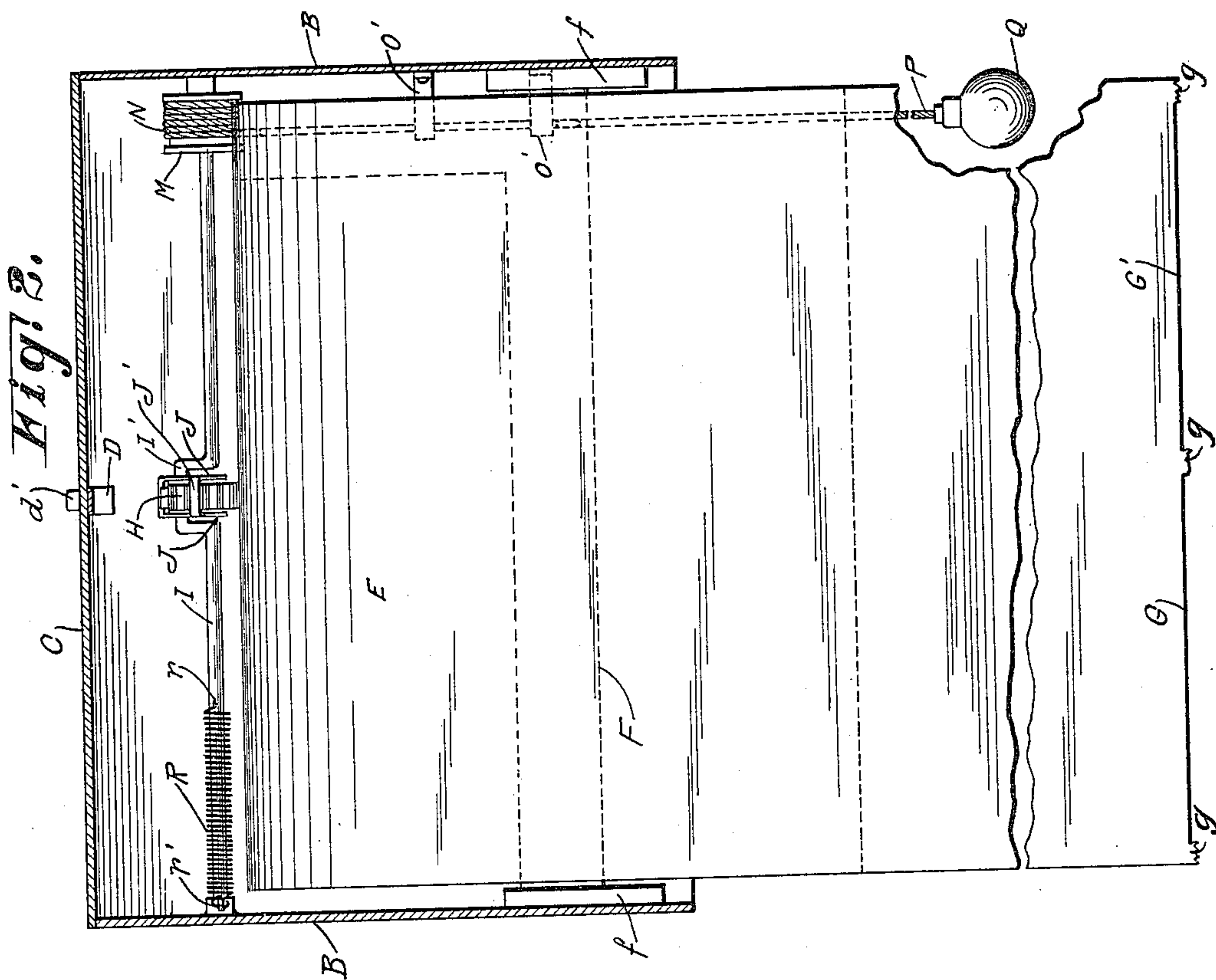


F. H. HOBERG.
FEEDING CABINET.
APPLICATION FILED APR. 17, 1914.

Patented Sept. 28, 1915.

1,154,634.



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FRANK H. HOBERG, OF GREEN BAY, WISCONSIN.

FEEDING-CABINET.

1,154,634.

Specification of Letters Patent.

Patented Sept. 28, 1915.

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To all whom it may concern:

Be it known that I, FRANK H. HOBERG, a citizen of the United States, residing at Green Bay, county of Brown, and State of Wisconsin, have invented new and useful Improvements in Feeding-Cabinets, of which the following is a specification.

My invention relates to improvements in feeding cabinets for rolled paper packages of that type in which the lower end of the cabinet is open and sheets of paper permitted to drop and hang through the opening, whereby the sheets may be successively grasped and torn off from the remainder of the package.

The object of my invention is to provide means whereby, as each sheet is torn away from the package, the end of the succeeding sheet from which the removed sheet is torn, will not be automatically separated from the package and permitted to hang, but an additional operation will be required in order to expose the free end of the succeeding sheet through the cabinet opening.

My invention is especially adapted for use in feeding paper toweling and particularly in economizing paper by not only delaying the sheet delivery, but by requiring an operation, the character of which will discourage wastefulness and prevent wholesale withdrawals of the sheets.

In the drawings, Figure 1 is a transverse sectional view of a paper cabinet embodying my invention. Fig. 2 is a longitudinal sectional view of the cabinet, showing the package and feeding apparatus in elevation.

Like parts are identified by the same reference characters in both views.

The cabinet walls preferably comprise a back wall A, end walls B, and a cover wall C, which includes the front and top of the cabinet and is hinged to the end walls B at *b*. The cover wall C is preferably provided with a spring actuated latch D adapted to engage catch *d* connected with the back wall A. The latch may be actuated by a push button *d'*. The package E is wound upon a core *e*, which is supported from the cabinet by a holding plate F, which plate is adapted to engage in tilting brackets *f* secured to the end walls B. The plate F preferably passes through slits in the core *e* and is adapted to prevent the package from rotating upon its support.

All of the above described features are disclosed and claimed in a former applica-

tion filed by me and are therefore not claimed herein and need not be more particularly described.

The package E herein disclosed is partially severed at G, G', near the upper end of the front side and substantially at the upper end of the core. The outer sheet *e'* of the package is permitted to hang through the open bottom of the cabinet as shown, whereby it may be grasped and removed by tearing it across the tongues *g*, thus severing it from the next succeeding sheet.

The upper end of the succeeding sheet tends to drop and hang by gravity in substantially the position occupied by the first sheet *e'*, but owing to the fact that this upper end partially overlaps the top of the package and also owing to the frictional adhesion of the sheet upon the sheet beneath it, the dropping of the free end cannot be relied upon. It is also undesirable that it should drop automatically for the reason that the paper might then be too easily withdrawn and waste or theft would be facilitated. I therefore provide a bearing roller H in the upper portion of the cabinet, which is adapted for both vertical and rotary movement, and is located to bear upon the top of the package. Its normal position is at the rear of the slit or slits and in proximity thereto. The surface of this roller is roughened, preferably by providing it with projecting ribs or teeth *h* to increase its frictional engagement with the paper. The specific character of the frictional bearing surface of the roller is, however, not essential to my invention.

The crank shaft I extends longitudinally through the cabinet near the back wall A. A pair of levers J are hung upon this crank shaft and the roller H is provided with axial bearing shafts or studs *h'*, which are journaled in these levers. The forward ends of the levers are curved upwardly as shown at J' to prevent the ends of the lever from catching upon the package. The levers are connected with each other not only by the roller H rotatably journaled therein, but also by a cross bar K to which a flat spring L is secured. One end of the spring L engages underneath the crank I'. The other end bears upon the periphery of the roller H. The spring therefore tends to press the levers J downwardly and to hold roller H in contact with the package. The forward portion of the spring L also serves as a

pawl, whereby the roller is permitted to rotate only in the direction indicated by the arrow in Fig. 1.

The crank shaft I is provided with a pulley M near one end of the cabinet and a cord or chain N is wound upon this pulley and connected with a rod O, which extends downwardly along the inner face of one end wall B, said wall being provided with suitable guides O' for the rod. Another cord or chain P is connected with the lower end of the rod and extends through the open bottom of the cabinet, its lower extremity being provided with an actuating knob Q. When the cord or chain N is wound upon the pulley M, it is obvious that a downward pull upon the knob Q will rotate the crank shaft I and the crank I' will impart a reciprocatory movement to the levers J and the roller H supported by said levers. During the forward movement, roller H will travel upon the surface of the package as a rotating wheel, but during the backward stroke, spring L will prevent rotation and the ribs h, (or other frictional surface with which the roller is provided), will pull the upper end of the outer or free sheet away from the package and permit it to drop by gravity as above explained. Before the roller is actuated, however, its pressure upon the upper end of the free sheet will tend to retain it in the position in which it was originally wound upon the package. After the knob Q has been manually depressed and released, an automatic retractive rotation takes place in the shaft I to raise the knob by rewinding the cord or chain N upon the spool M. This automatic rotation of shaft I may be provided for by employing a spring R, which is coiled about one end of the shaft I with one extremity secured thereto at r and the other end connected with the end wall B at r'.

I claim—

1. A device for starting sheets from rolled paper packages, comprising the combination with a holder for paper rolls having an open bottom for sheet delivery, of a frictional bearing member located in the upper portion of said holder and adapted to rest upon the top portion of a package supported by the holder, and means for manually reciprocating said member to dislodge the upper ends of the sheets from the roll and permit them to fall through said open bottom.

2. A device for starting sheets from rolled paper packages, comprising the combination with a cabinet having a sheet delivery opening in its bottom, of a holder adapted to hold partially slitted paper rolls with the slit at the upper portion of the roll, a frictional bearing member connected with the walls of the cabinet and adapted to rest upon the top portion of a package supported by the

holder, and means for manually reciprocating said member upon the roll adjacent to the slit therein, to dislodge the upper ends of the sheets successively and cause them to fall through the opening in the bottom of the cabinet.

3. A device for starting sheets from rolled paper packages, comprising the combination with a holder for paper rolls, provided with a sheet delivery aperture at its lower end, of a movable sheet starter having a sheet gripping surface and supported in part by a package on said holder, means for reciprocating said roller upon the surface of the roll, and means for holding the roll against rotation.

4. The combination with a package holder designed to support partially slitted rolled packages of paper, of a sheet starter supported to bear upon the package in the rear of the slit, said starter being adapted to prevent the end of the sheet upon which it bears from dropping by gravity, and means for manually reciprocating the sheet starter to deliver said end of the sheet downwardly.

5. The combination with a package holder open at the bottom and designed to support partially slitted rolled paper packages and having a stationary member adapted to engage in said slit, of a crank, a swinging carrier member connected with said crank and adapted to be reciprocated thereby, a frictionally surfaced starting device carried by said member in a position to swing into contact with the paper package adjacent to the slit, and means for manually operating said crank.

6. The combination with a package holder designed to support partially slitted rolled paper packages, of a crank, a swinging carrier member connected with said crank and adapted to be reciprocated thereby, a frictionally surfaced starting device carried by said member in a position to swing into contact with the paper package adjacent to the slit, and means for manually operating said crank, said crank operating means comprising a spool connected therewith, a spring for automatically rotating the spool in one direction, and a flexible connection wound upon said spool and provided with a suspended member adapted to be manually grasped and pulled to actuate the crank.

7. The combination with a package holder designed to support partially slitted rolled paper packages, of a crank, a swinging carrier member connected with said crank and adapted to be reciprocated thereby, a frictionally surfaced starting device carried by said member in a position to swing into contact with the paper package adjacent to the slit, and means for manually operating said crank, said starting device comprising a roller journaled in said carrier member and a pawl, adapted to prevent rotation of the

roller when moved in the sheet starting direction.

8. The combination with a package holder designed to support partially slitted rolled
5 paper packages, of a crank, a swinging carrier member connected with said crank and adapted to be reciprocated thereby, a frictionally surfaced starting device carried by said member in a position to swing into con-
10 tact with the paper package adjacent to the slit, and means for manually operating said crank, said starting device comprising a

roller journaled in said carrier member and a pawl, adapted to prevent rotation of the roller when moved in the sheet starting di- 15 rection, said pawl comprising a spring adapted to also press said roller forcibly against the package.

In testimony whereof I affix my signature in the presence of two witnesses.

FRANK H. HOBERG.

Witnesses:

GEO. A. RICHARDS,
F. K. SUESS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."