

F. H. HOBERG.  
PAPER FEEDING CABINET.  
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1,154,633.

Patented Sept. 28, 1915.

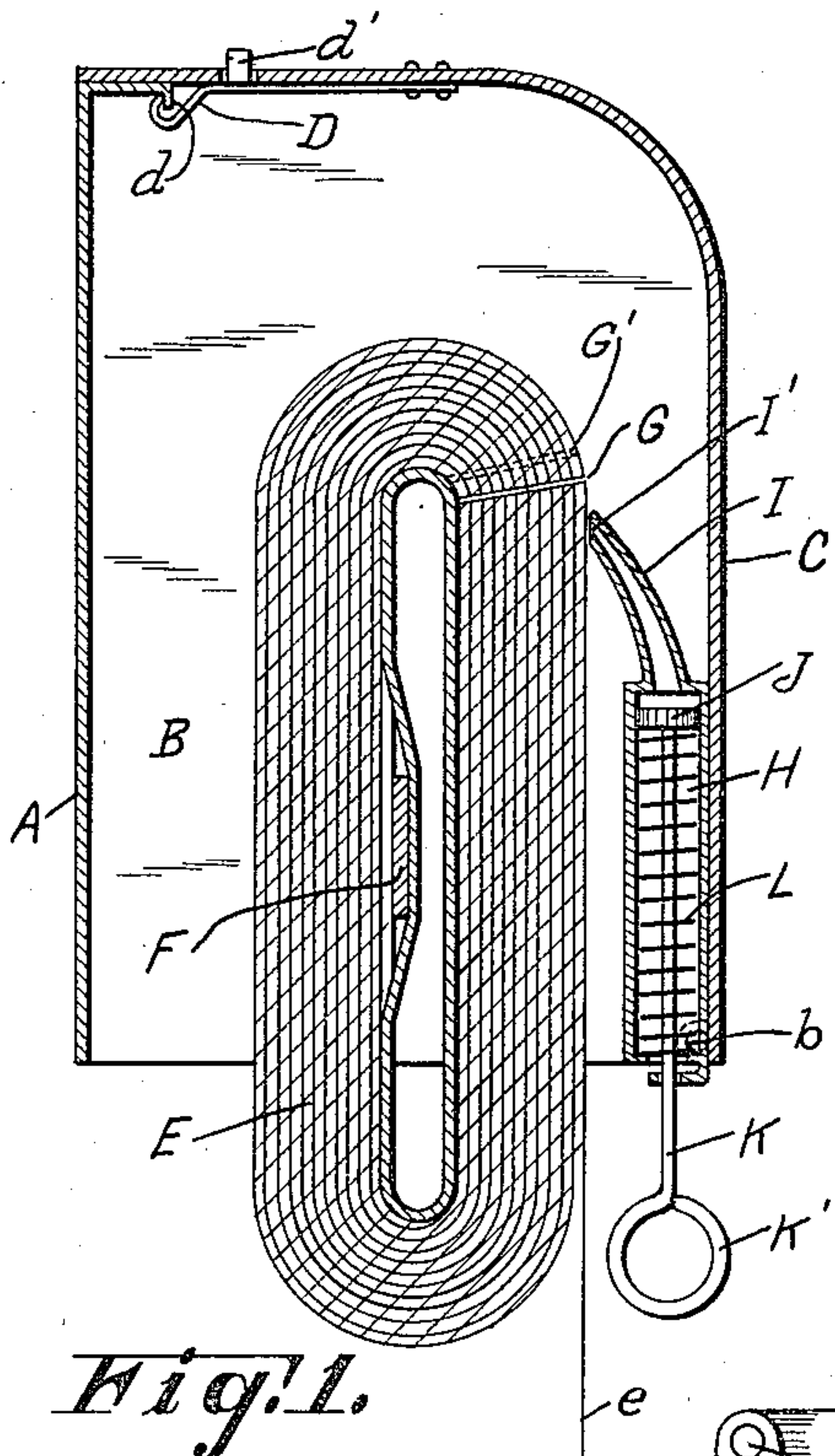


Fig. 1.

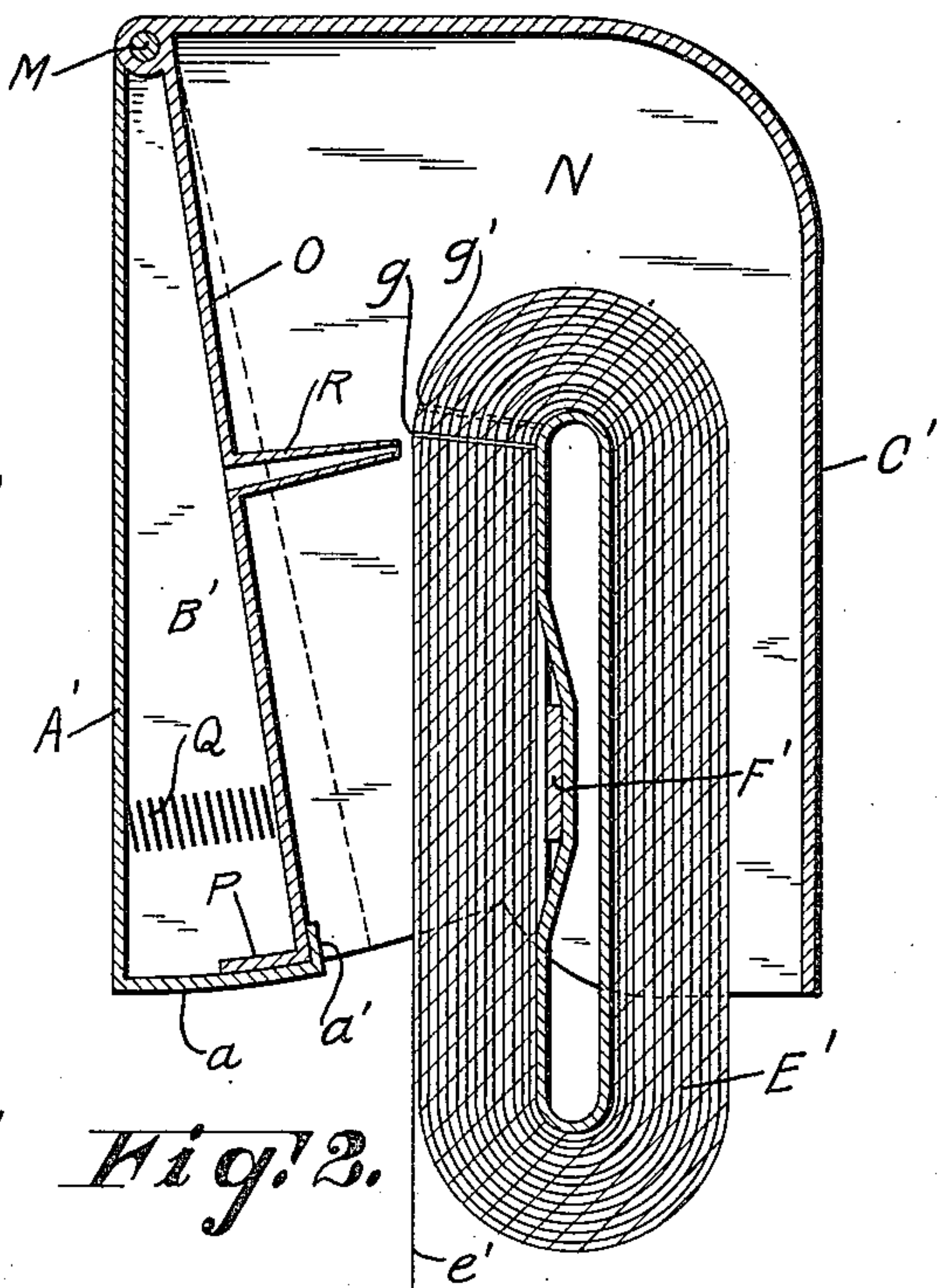


Fig. 2.

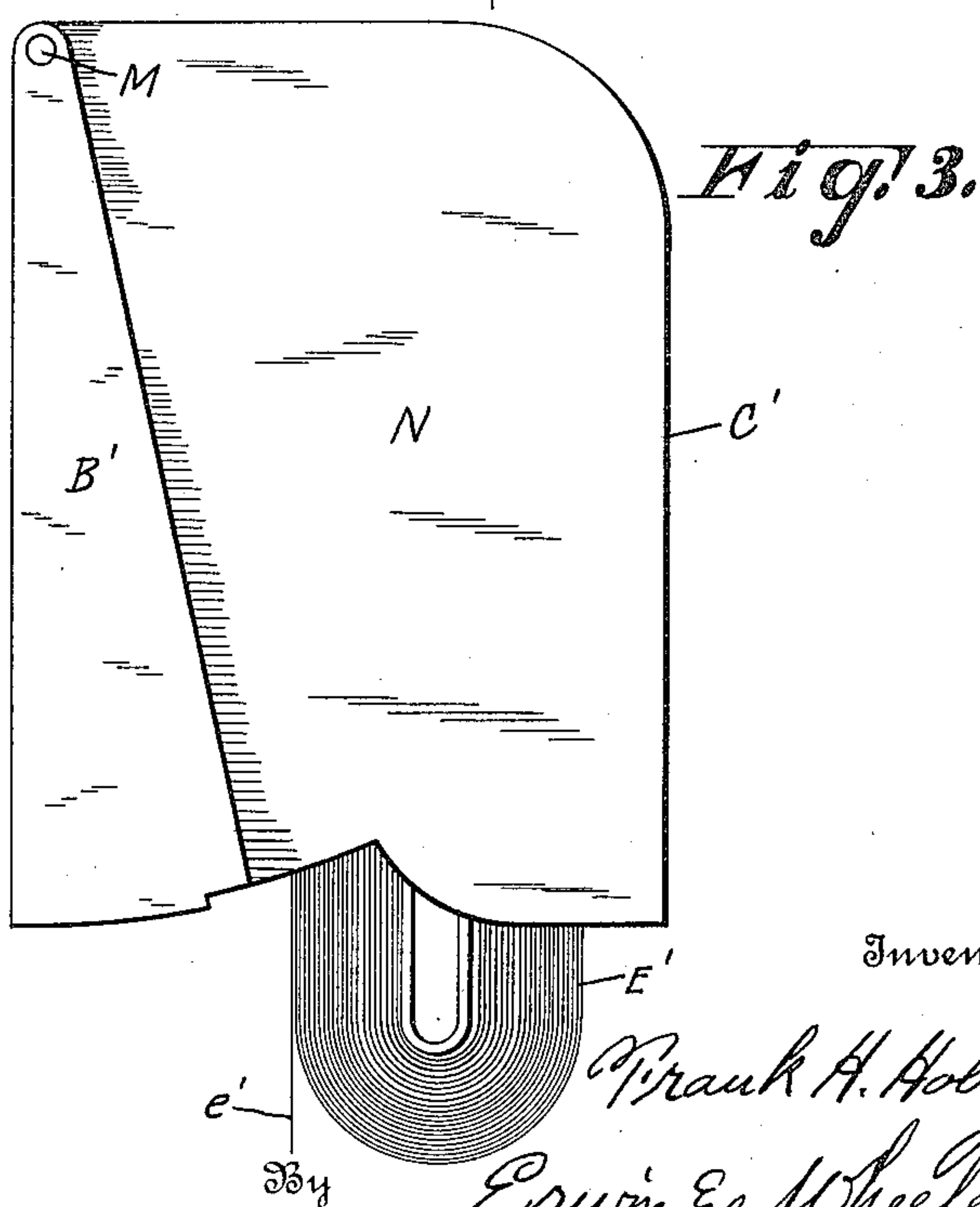
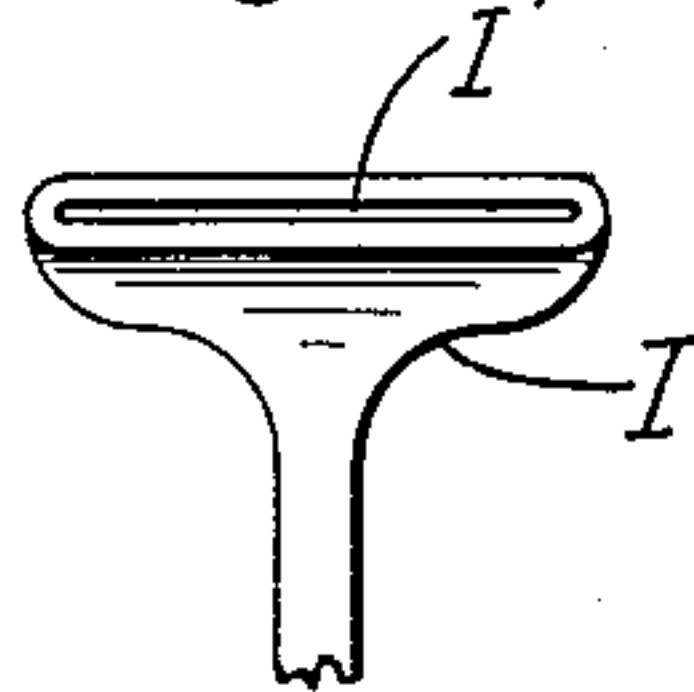


Fig. 3.

Fig. 4.



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# UNITED STATES PATENT OFFICE.

FRANK H. HOBERG, OF GREEN BAY, WISCONSIN.

## PAPER-FEEDING CABINET.

1,154,633.

Specification of Letters Patent.

Patented Sept. 28, 1915.

Application filed April 2, 1914. Serial No. 828,960.

*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 Paper-Feeding Cabinets, of which the following is a specification.

My invention relates to improvements in feeding cabinets for paper packages in which a sheet starter is employed for separating the raised free end of a sheet from the package to a sufficient extent to allow such end to drop by gravity through the open lower end of the cabinet.

In the drawings Figure 1 is a vertical sectional view of a cabinet embodying my invention, showing a rolled paper package therein; Fig. 2 is a similar view, showing a modified form of construction. Fig. 3 is an end elevation of the device shown in Fig. 2. Fig. 4 is a detail view of the nozzle I.

Like parts are identified by the same reference characters throughout the several views.

Referring to Fig. 1, the cabinet walls 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 is provided with a spring actuated latch D adapted to engage a catch *d* projecting from the back wall, the latch being actuated by a push button *d'*. The package E is supported from the end walls B of the cabinet by a bar F. The package of paper is slitted at G, whereby it is partially severed into a series of superposed sheets which may be successively torn off or separated from each other, substantially along the line of the slits, the outer sheet *e* in each case being permitted to drop through the lower end of the cabinet to a hanging position, where it may be readily grasped and torn off. When the pendent sheet *e* is torn off, the free end of the next succeeding sheet will occupy a position directly above the slit G, from which position it may be readily discharged by a blast of air directed against this end of the sheet. This end of the sheet may thus be blown backwardly in the direction of the opposing wall of the cabinet and permitted to drop by gravity through the open lower end to the hanging position indicated by the initial sheet *e* in Fig. 1. In said Fig. 1, I have secured an air compressing chamber H (preferably a cylinder) to the front wall

C, from which chamber air may be discharged through a flattened and tapered nozzle I having an outlet I' through which the air may be discharged against the outer surface of the paper package adjacent to the slit G. The nozzle I is formed to deliver air along a line having a slight upward inclination, which however is not great enough to carry the air wholly above the adjacent end of the sheet when the package is nearly exhausted. The package may also be provided with a plurality of slits in different portions thereof, the slits G extending inwardly from the ends of the package, and one or more other slits *g'* being formed in the middle portion of the package as indicated by dotted lines in Fig. 1, so that the blast of air will pass under the end of the sheet through at least one of such slits. The chamber H is provided with a spring actuated piston J. A piston rod K is connected to the piston J and extends downwardly through the lower end of the cylinder, a handle K' being provided at the lower end of the rod. A coiled spring L is interposed between the piston and the lower end of the cylinder. To discharge the free end of a sheet, the operator grasps the handle K' and draws outwardly thereon, compressing spring L. Upon releasing the handle, piston J is driven upwardly with a quick positive movement, forcing a blast of air through the nozzle I and blowing the free sheet from the top of the package.

Referring to Figs. 2 and 3, it will be observed that the back wall A is provided at each end with flanges B' and a curved bottom flange *a*, having an up-turned margin *a'*. But in this construction the cover plate C' is hinged to the back wall by a hinge pin M. End walls N are connected with the cover plate and a partition wall O is also connected with the cover plate and is formed to fit between the flanges B' of the back wall. This partition plate O is also provided with a flange P at its lower end, which substantially fits the inner surface of the flange *a* on the back wall. The plate O serves as a piston to compress air in the chamber formed between it and the back wall A'. A spring Q interposed between the walls O and A' is compressed when the wall O moves backwardly toward the wall A' and reacts to restore the wall O to normal position when pressure is relieved. The wall O is provided with a nozzle R, which is adapted



to direct air from the compression chamber between walls O and A' against the paper package E', which is suspended from the walls N by a supporting bar F'. The package E' is provided with slits *g*, *g'*, similar to the slits G, G' in Fig. 1, but the package is reversed from its position in Fig. 1, so that the slits are on the rear side and adjacent to the nozzle R.

In operation, pressure is applied by the operator against the front wall C' of the cabinet, pushing the entire package holding portion of the cabinet backwardly in the direction of the wall A'. The air between walls O and A' rushes outwardly through the nozzle R and blows the free end of the outer sheet from the top of the package E'. This end of the sheet then falls by gravity between the package and the front wall of the cabinet and hangs as indicated at *e'* in Fig. 2, where it can be readily grasped and torn off along the line of weakness formed by the line of slits *g*, *g'*. The operation may then be repeated for the discharge of the next succeeding sheet.

I claim:

1. A paper feeding cabinet provided with means for developing an air blast therein to initially dislodge a sheet of paper from a package contained within the cabinet.

2. A paper feeding cabinet provided with an air compressing chamber, and a nozzle

connected with said chamber adapted to deliver air in the direction of the upper portion of a paper package in said cabinet.

3. The combination with the walls of a paper feeding cabinet, of an air compressing chamber therein, a movable piston in said chamber, a spring for actuating said piston in one direction, a nozzle adapted to deliver air from said chamber across the upper portion of said cabinet, and means for actuating said piston from the exterior in opposition to the tension of the spring.

4. The combination with the walls of a paper feeding cabinet, of an air compressing chamber therein, a movable piston in said chamber, a spring for actuating said piston in one direction, a nozzle adapted to deliver air from said chamber across the upper portion of said cabinet, and means for actuating said piston from the exterior in opposition to the tension of the spring, said nozzle being provided with a flattened and tapered outlet adapted for air delivery in the form of a thin stream of air along the face of a rolled paper package near its upper end.

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

FRANK H. HOBERG.

Witnesses:

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IRMA D. BREMER.

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