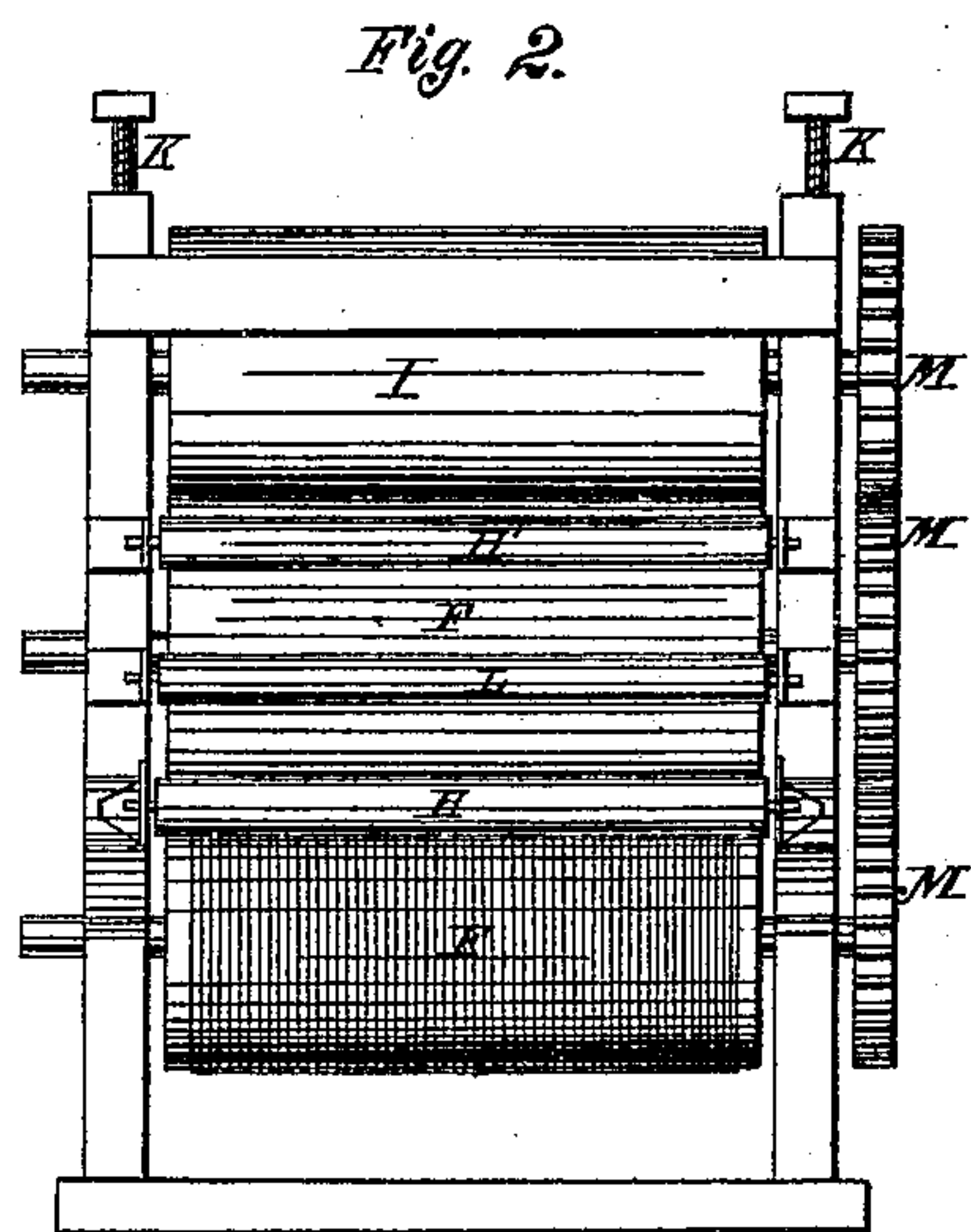
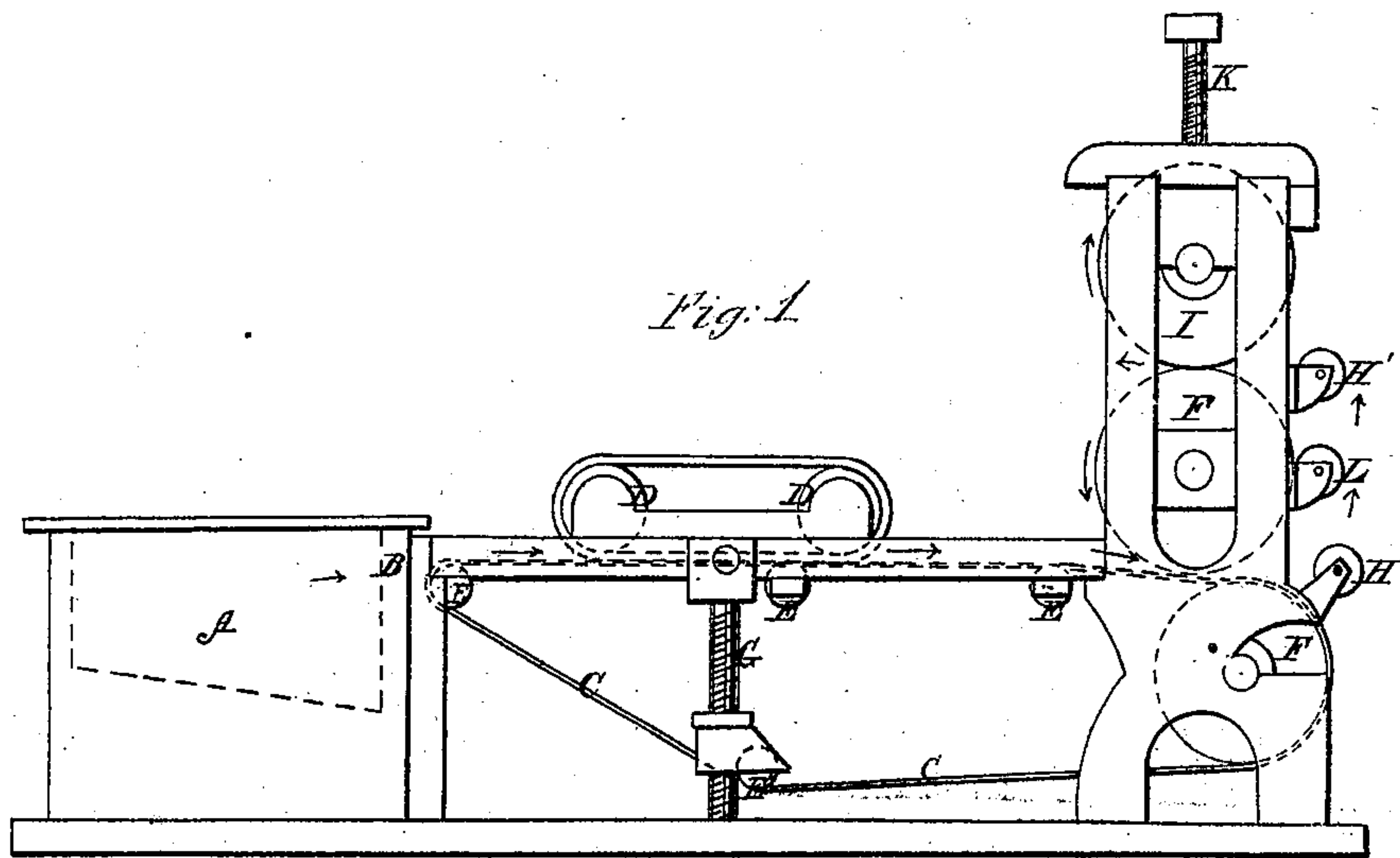


E. Wilmot.
Paper Mach.

N^o 71,108.

Patented Nov. 19, 1867.



Witnesses, { *F. Lehmann*
Jno. A. Ellis

Inventor,
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Per
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attys.

United States Patent Office.

EDWIN WILMONT, OF LAONA, NEW YORK.

Letters Patent No. 71,108, dated November 19, 1867.

IMPROVED PAPER-MAKING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, EDWIN WILMONT, of Laona, State of New York, have invented certain new and useful Improvements in Paper Machines; and I declare the following to be a full, true, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents a side elevation of my machine.

Figure 2 represents an end view of the same.

Letter A, (fig. 1,) represents a vat, in which the paper-pulp is placed, preparatory to being passed through the rollers. In the side of this vat there is an opening, B, (as shown in red lines,) out of which the pulp is drawn upon the endless belt C. Upon each side of this endless belt, upon the top of the frame, there is placed a pair of rollers, having a belt passing around them, for the purpose of acting as a guide to the pulp. Letter C represents an endless belt or apron, which is made of wire gauze, and which acts as a carrier to the pulp, conveying it to the rollers. This belt passes over the rollers E and E', and around the rubber roller F. To each side of the frame there is a screw-shaft attached, which is provided with a nut for the purpose of tightening and loosening the belt C. The bearings of the roller E' are so formed as to play loosely up and down upon these shafts, so that by moving the nuts, the belt is tightened or loosened at pleasure. Letters F F represent two rubber rollers, one of which is placed immediately over the other, between which the pulp is passed, for the purpose of having the water pressed out. Attached to the front of the frame, at which point the pulp passes from the two rubber rollers, there is placed a small wooden or iron roller, H, over which the pulp passes upwards, in the direction of the arrows, over the second roller H', and then between the two top rollers. As the pressure between the two lower rollers is not sufficient to press all of the water from the pulp, it is again passed through a second set of rollers, the top one of which being made of wood or iron. This wooden roller I and the top rubber roller F have both movable bearings, which work in a slot in the frame, and are governed in regard to their pressure on the pulp by the screws K K. Attached to each one of these rollers there is a cog-wheel, M, which work in one another, so that when one is set in motion it communicates the motion to each of the others. Letter L represents a small roller, which presses tightly against the upper roller F, so as to catch the water that is pressed from the pulp, while passing between the rollers I and F, and passes it off to one side.

The advantage of using rubber rollers is, the use of felts is entirely done away with, while the elastic nature of the rubber does all that is claimed for felt; while by using the third roller, (iron,) three times the amount of pressure is obtained.

The mode of operation is as follows: The flow of pulp is started from the vat A upon the endless belt C, which conveys it in the direction of the arrows, through the rubber rollers F. It is then passed upwards so as to pass between the rollers I and F, after which the paper is ready to pass upon the drying cylinder.

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

1. The employment of two or more rubber rollers, in combination with the endless apron C, substantially as and for the purpose set forth.
2. The rubber rollers F F in combination with the metallic or wooden roller I, for the purpose of giving additional pressure to the paper, substantially as and for the purpose set forth.
3. The employment of the rollers H H' and L, substantially as and for the purpose described.
4. In combination therewith, I claim the rubber rollers F F and metallic or wooden roller I, substantially as and for the purpose set forth.

In testimony that I claim the above, I set my signature in presence of two witnesses.

EDWIN WILMONT.

Witnesses:

EDGAR COLSON,
GEO. H. HALE.