C. W. CRONK.

Paper-Machines.

No. 152,216. Patented June 23, 1874.

Fig. 1.

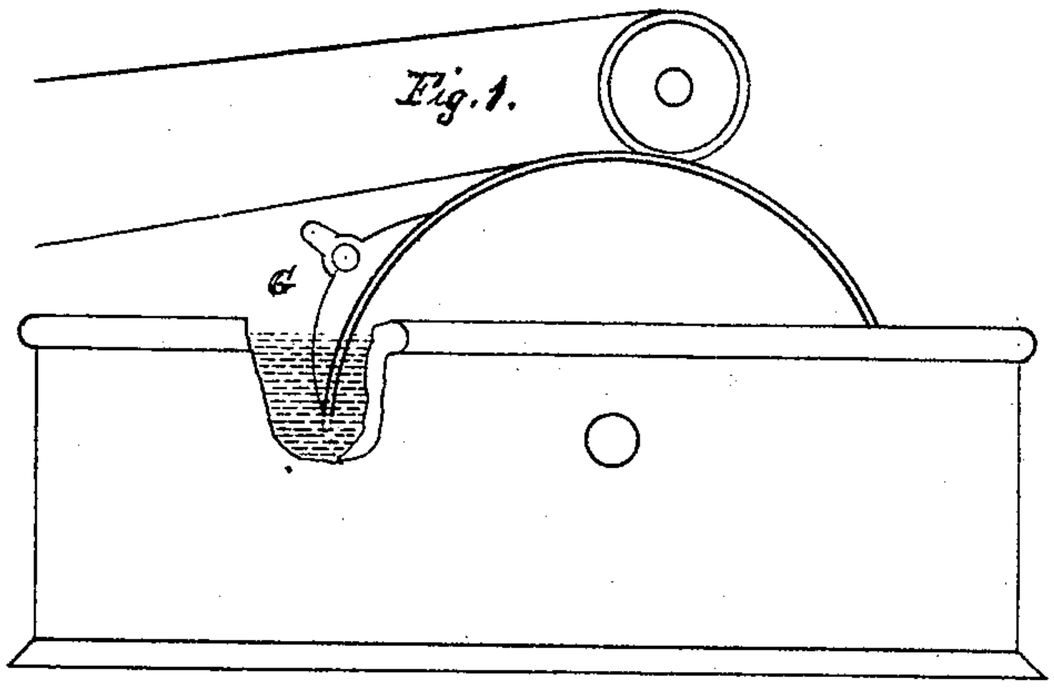


Fig. 2.

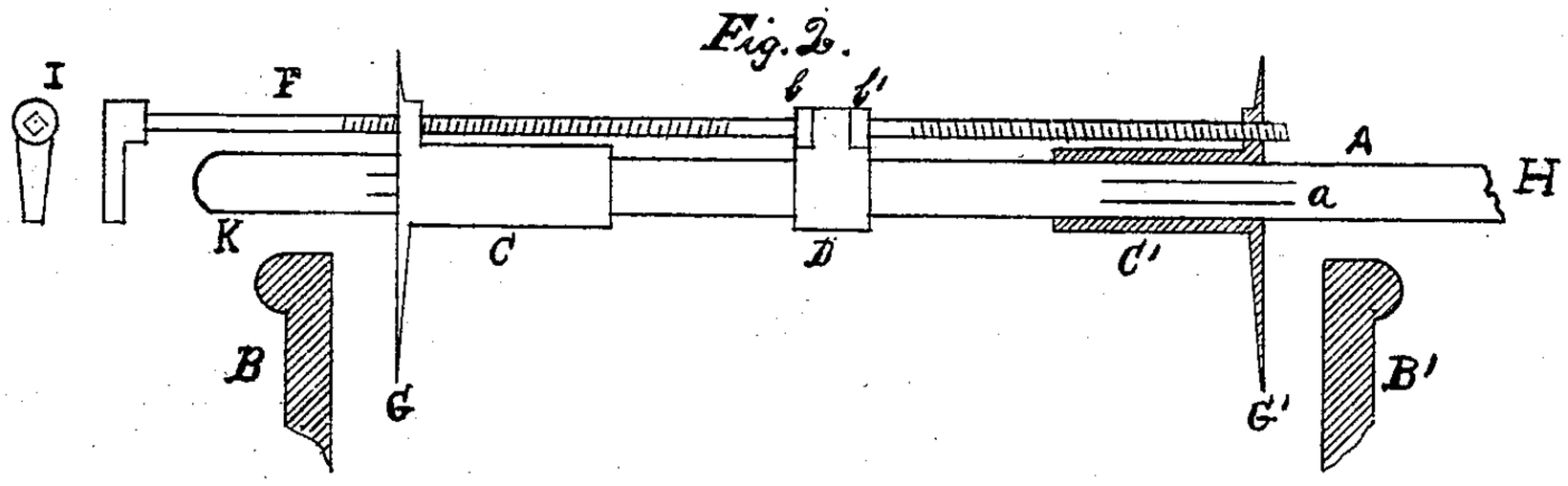


Fig. 3.

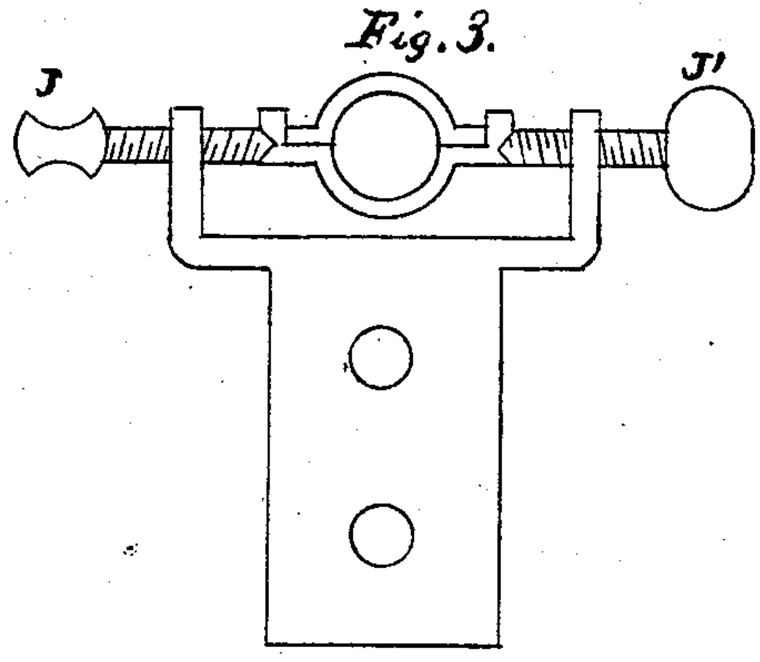
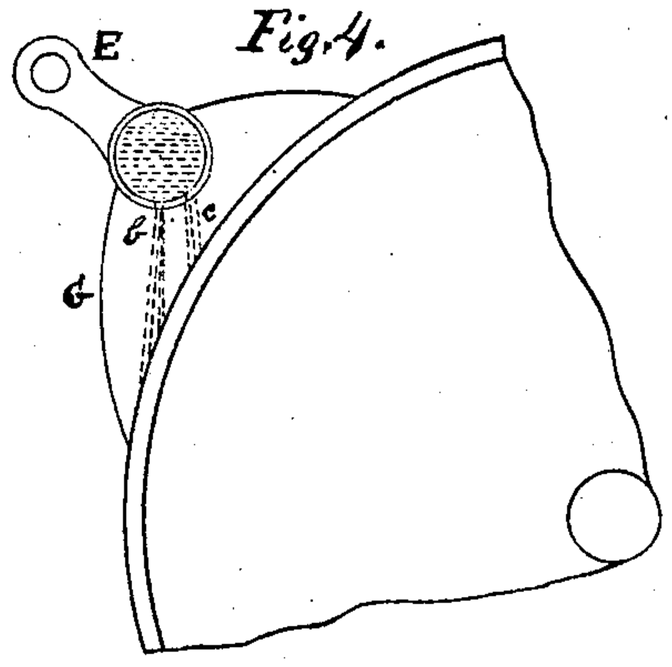


Fig. 4.



Witnesses

Jacob Frempter

Henry F. Ostrander

Inventor

Charles W. Cronk

UNITED STATES PATENT OFFICE.

CHARLES W. CRONK, OF NEWBURG, NEW YORK.

IMPROVEMENT IN PAPER-MACHINES.

Specification forming part of Letters Patent No. **152,216**, dated June 23, 1874; application filed March 21, 1874.

To all whom it may concern:

Be it known that I, CHARLES W. CRONK, of Newburg, Orange county, State of New York, have invented a Machine for Changing the Width of Sheets on the Mold of a Cylinder Paper-Machine, of which the following is a specification:

The object of my invention is to change the width of the sheets forming on the mold when the paper-machine is in operation, dispensing with the present slow process of stopping the machine and winding on linen strips to get the desired width, and increasing the production ten per cent. in the quantity made each day; and the following is a full and accurate description of the construction and operation, reference being had to the accompanying drawings and letters of reference marked thereon.

A brass pipe one and one-quarter of an inch internal diameter is provided, A, Figure 2, which sits across the top of the vat at G, Fig. 1, and secured in two adjustable bearings, Fig. 3, fitted to the sides of the vat at B B′. On this pipe are two sleeves, C C′, fitted water-tight. On these sleeves, at the outside edges, is a gage, shown at G G′, Fig. 2, the bearing-edges having a radius equal to the mold-cylinder, shown more fully at G, Fig. 4, and G, Fig. 1. On the top of the sleeves is a projection, shown at E, Fig. 4, which is tapped right-handed in one, and left-handed in the other, into which a screw-rod, F, Fig. 2, with corresponding threads, works to move the sleeves in or out to change the width of paper as desired. In the pipe, at *a*, two slots of one-sixteenth in width, and in length one inch less than the length of the sleeves, are cut, as shown more fully at *b* and *c*, Fig. 4. At D, Fig. 2, is a standard screwed to the pipe A, which carries the screw-rod F. At *b b′* are collars to prevent lateral motion of the rod. I is a crank to work the screw. At H connection is made with water-tank. At K a cap is screwed on pipe A.

The operation is as follows: Set the machine in the adjustable bearings. With the thumb-screws J J′ set the gages up to the molds. Care should be taken to set parallel with cylinder. Connect the pipe at H with the tank, then set the sleeves so as to cover the slots, and the mold will form a sheet the whole width. For a narrow size, turn the screw; the sleeves will move and open the slots, and the pressure will force the water out on the mold; wash the pulp off on the outside of the gages back in the vat, as shown at *b* and *c*, Fig. 4, leaving the web formed between the gages as the desired width of sheet for the felt to pick up.

I claim as my invention—

The tube A, provided with slots *a a′*, in combination with the movable sleeves C C′ and markers or gages G G′, and adjusting-screw F with crank I and attached to the vat B B′, for the purpose of changing the width of sheet of paper forming on the mold between the gages G G′, substantially as described.

CHARLES W. CRONK.

Witnesses:

JACOB TRUNSSER,

HENRY T. OSTRANDER.