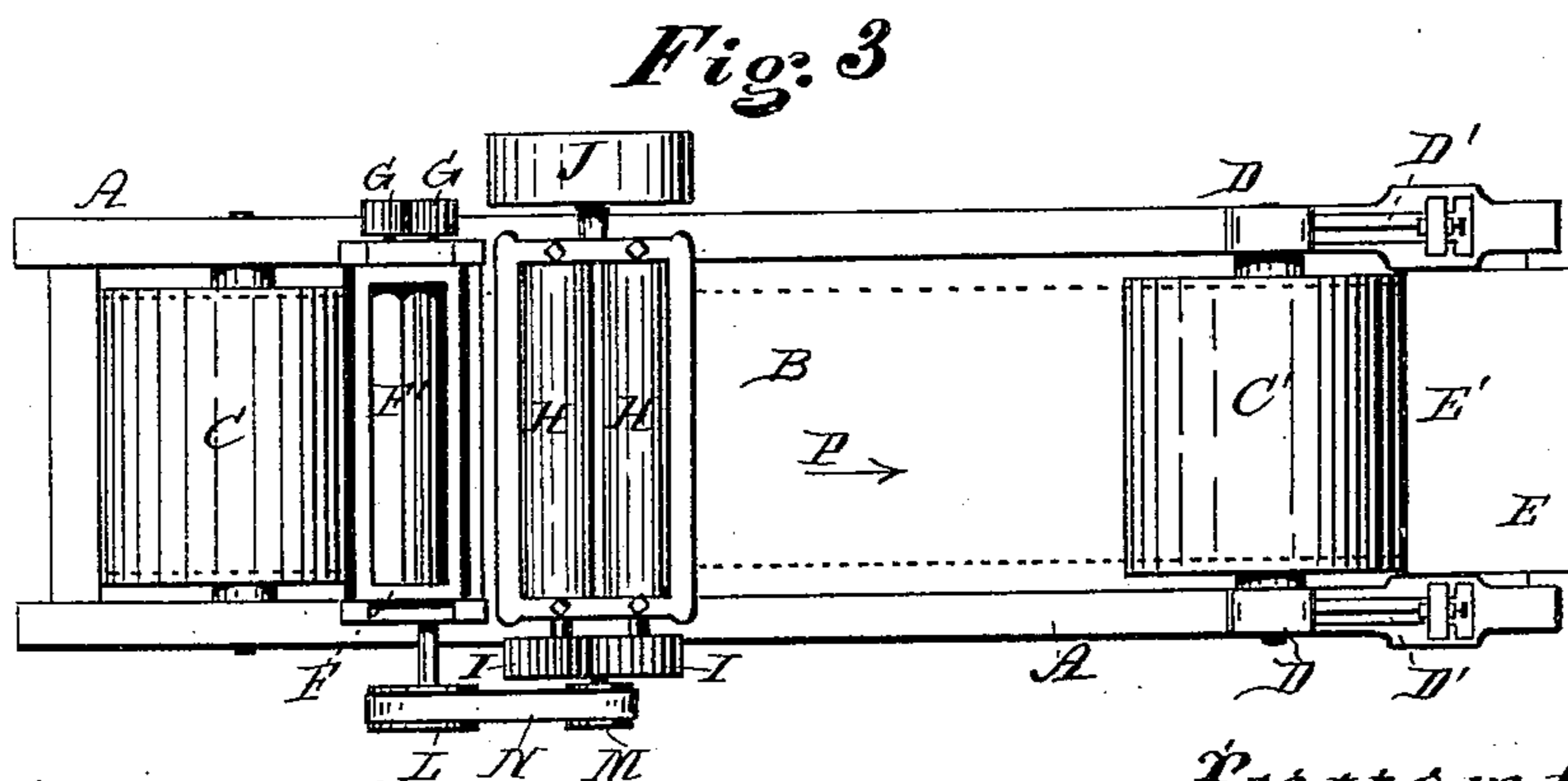
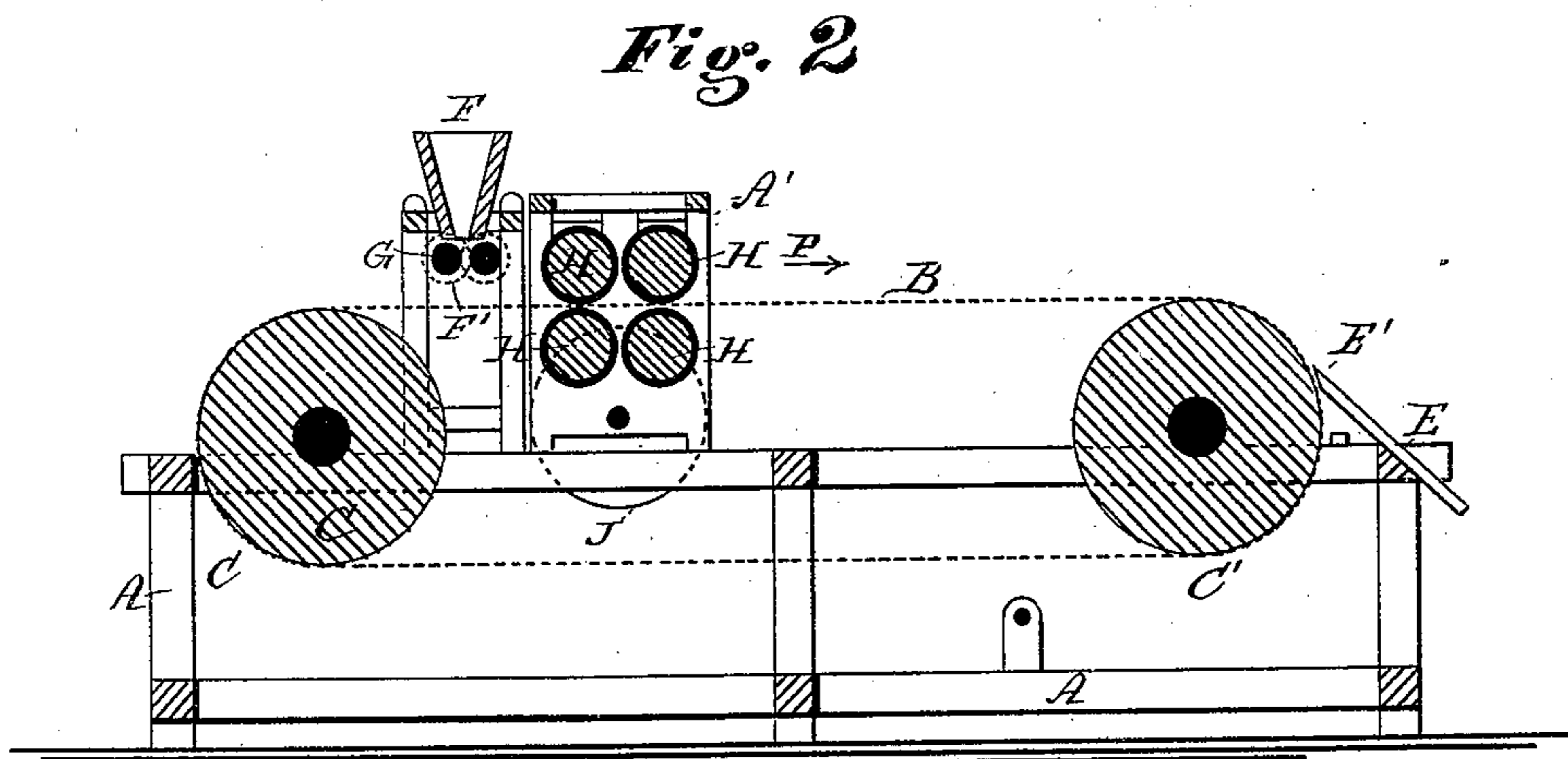
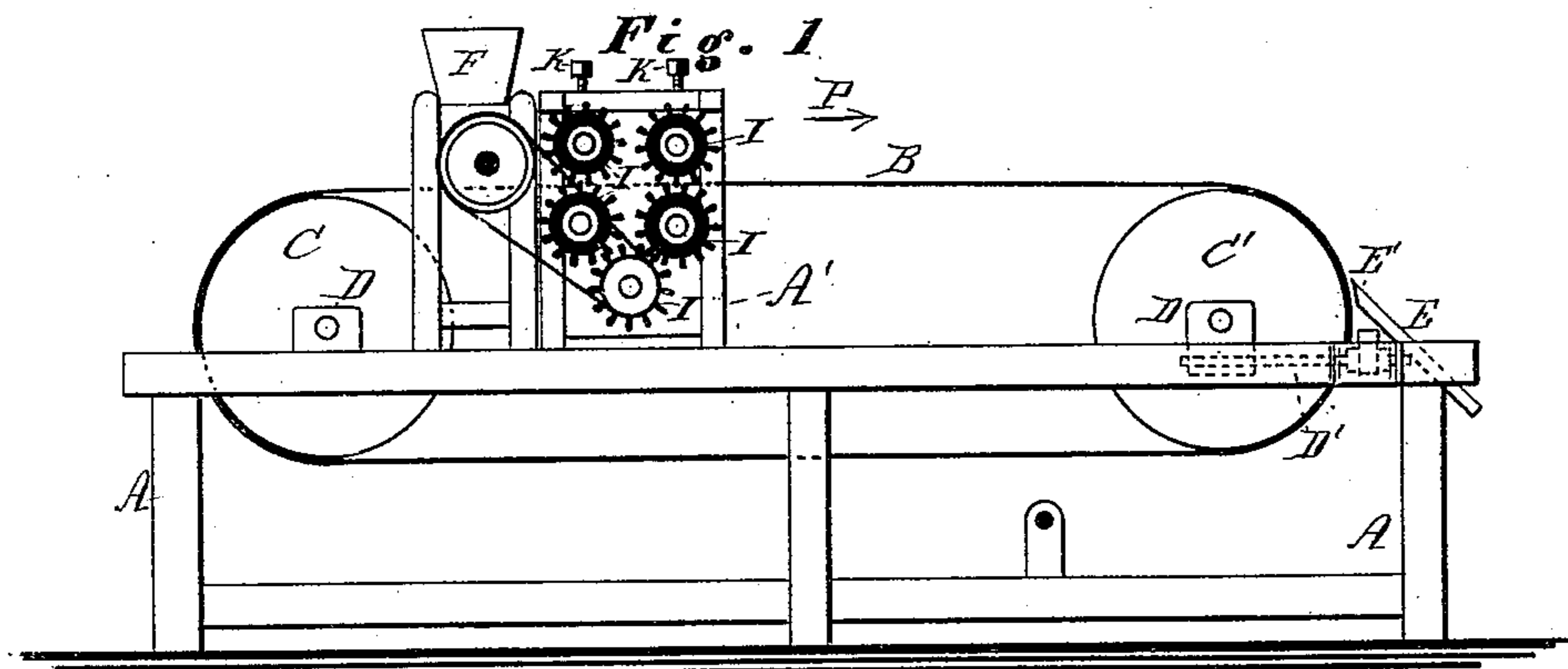


J. T. NOYE.  
Machine for Condensing Swill.

No. 205,758

Patented July 9, 1878.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

JOHN T. NOYE, OF BUFFALO, NEW YORK.

## IMPROVEMENT IN MACHINES FOR CONDENSING SWILL.

Specification forming part of Letters Patent No. **205,758**, dated July 9, 1878; application filed February 18, 1878.

*To all whom it may concern:*

Be it known that I, JOHN T. NOYE, of the city of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Condensing Swill, and Distillery and Sugar-House Slops, or similar material, which improvements are fully described in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation; Fig. 2, a vertical longitudinal section through the center of the machine which I employ; and Fig. 3 represents a plan or top view.

The object of this invention is to separate the liquid from the more solid parts of the matter to be condensed; and it consists in subjecting the same to a drying process by means of a hopper provided with rollers arranged to receive and condense without dividing the material and deposit it upon an endless belt of woven wire or other equivalent reticulated substance, in combination with a series of rollers for squeezing out the water or other liquid, and a means for taking the matter thus condensed from the endless belt, as will be more clearly hereinafter described.

In said drawings, A represents the frame of the machine; B, the endless belt or screen, of woven or porous material. It is arranged upon the drums C C', the drum C' being set in sliding blocks or boxes D, so as to be made adjustable lengthwise of the frame by means of a wrench and the screws D', so that the belt B may be tightened when necessary.

E represents an inclined plate having the edge E' as close to the belt as possible without touching or bearing too hard against it. Its object is to take the material from the screen as it moves under it.

F is a hopper, arranged at the top of the machine for receiving the material to be condensed. It is provided with two rollers, F', through which the material passes from the hopper to the belt B. They are geared together by the gear-wheels G. (Shown in Fig. 3 and by dotted lines in Fig. 2.)

The letters H in Fig. 2 represent four rollers, through which the endless belt or screen

passes. They are covered with rubber or other elastic material, and are geared together by the gear-wheels I. (Shown in Figs. 1 and 3.)

J is the driving-pulley.

The rollers I are adjustable to or from each other, the upper ones being fitted in boxes that slide in the frame A', so that they may be adjustable vertically by means of set-screws K, so as to press the material more or less.

The rollers F' are connected with the driving-shaft by means of the pulleys L M and belt N.

The operation of the machine is as follows: The material is put into the hopper F, and it passes through the rollers F', which condense without dividing the material, and assist in feeding it into the belt or screen, when a large portion of the liquid is separated from the more solid matter by passing through the screen B. The movement of the screen in the direction of the arrow P carries the material through the squeezing-rollers H, thereby further expelling the liquid and condensing the more solid matter, after which it is separated from the screen by the inclined plate E, over which it passes and falls into a suitable place or box arranged to receive it.

This invention is adapted to separate the liquid from any matter requiring such separation.

I do not claim the apparatus herein described, as somewhat similar apparatus has been used for various purposes; but I am not aware that swill has ever heretofore been utilized by pressing it without dividing it and separating the solid and liquid portions, as set forth.

I claim as my invention—

The mode described of treating swill, consisting in passing it between plain rollers, whereby the solid portions are condensed without dividing the same, transferring it to an endless reticulated band, and again compressing it on the band between rollers, as set forth.

JOHN T. NOYE.

Witnesses:

JAMES SANGSTER,  
F. P. STIKER.