

WITT & SINA.

Hemp Brake.

No. 68,477.

Patented Sept. 3, 1867.

Fig: 3.

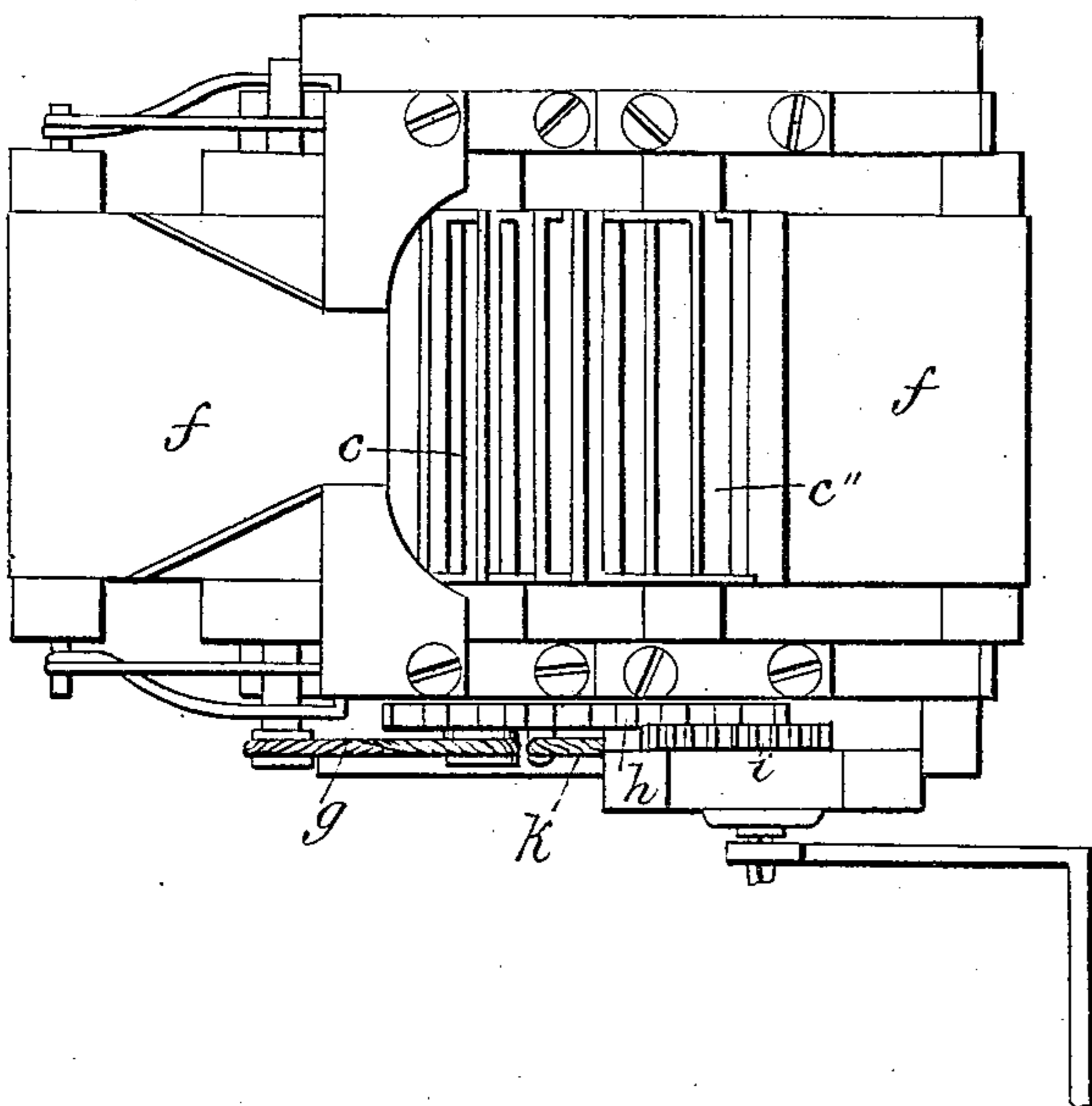


Fig: 4.

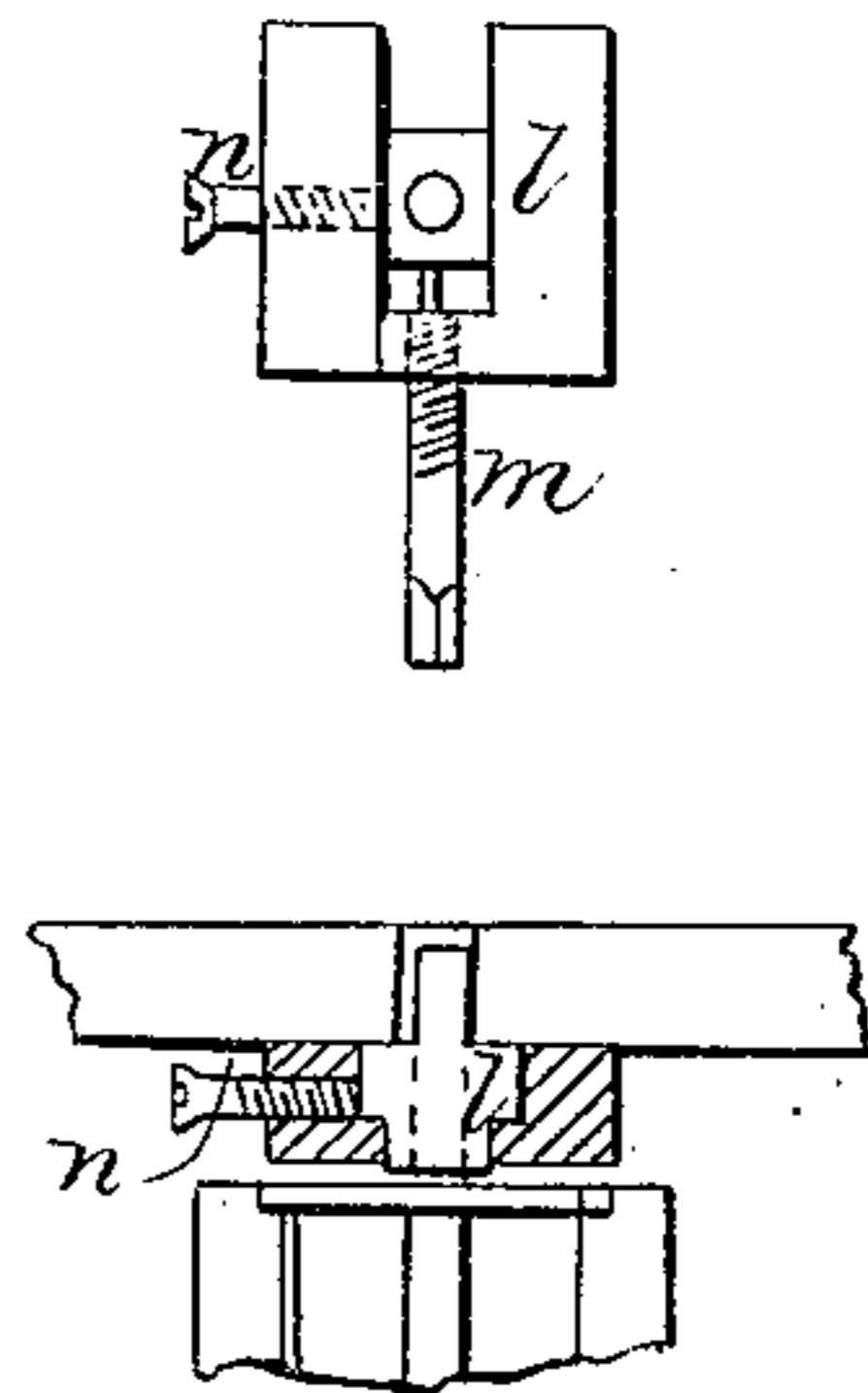


Fig: 2.

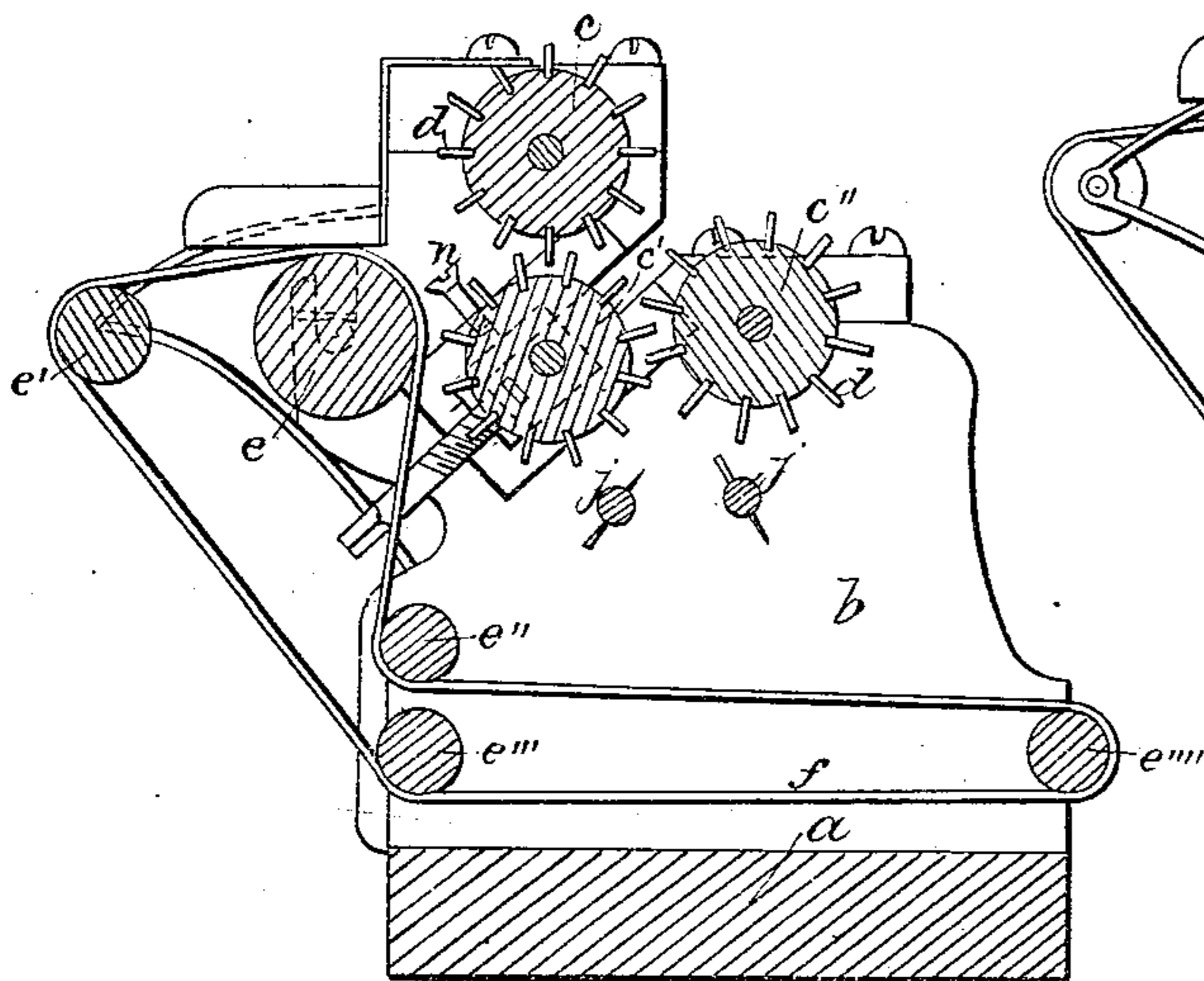
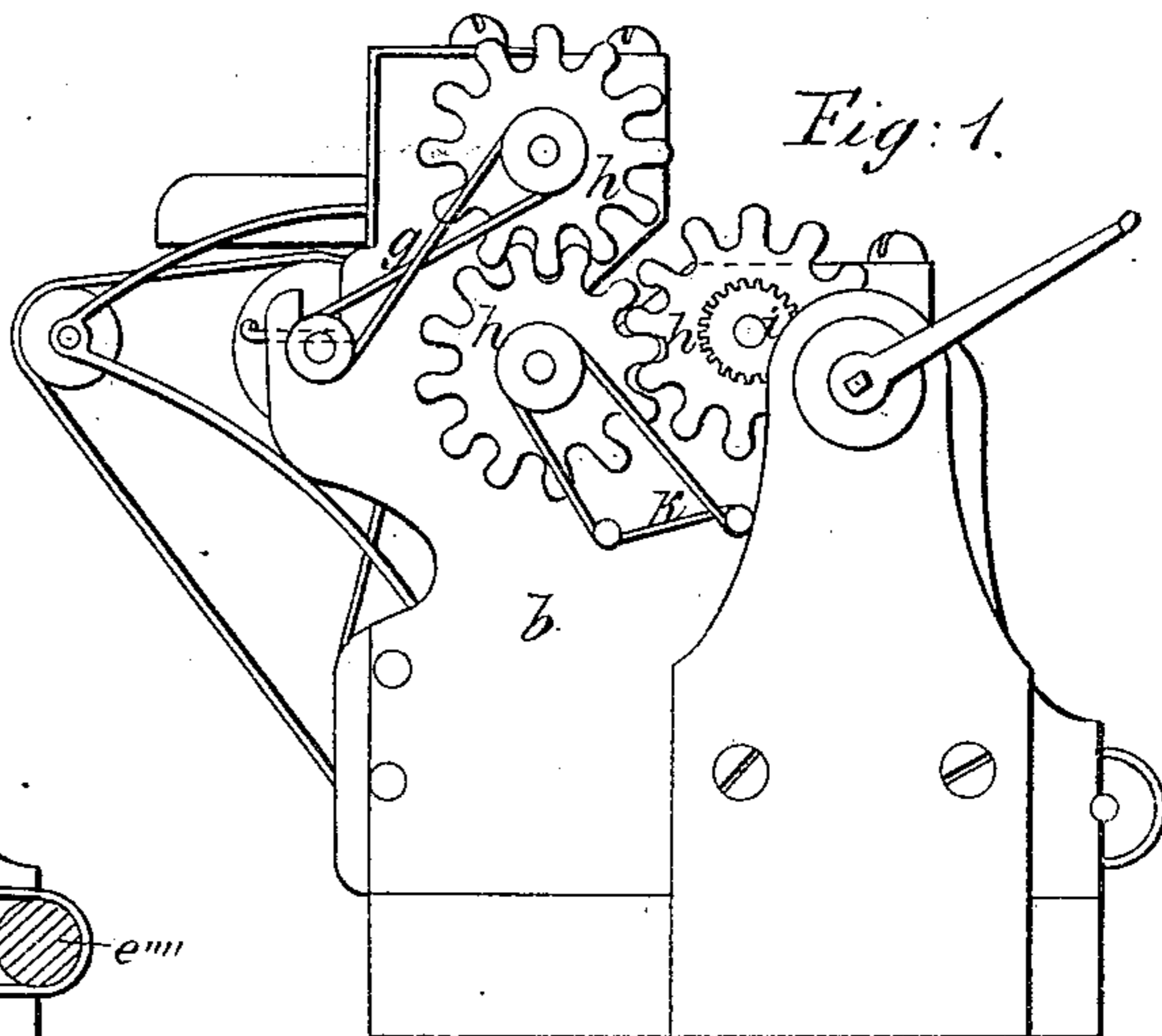


Fig: 1.



Witnesses  
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# United States Patent Office.

CONRAD WITT AND ANDRUS SINA, OF DAVENPORT, IOWA.

Letters Patent No. 68,477, dated September 3, 1867.

## IMPROVEMENT IN HEMP-BRAKES.

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

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, CONRAD WITT and ANDRUS SINA, of Davenport, in the county of Scott, and State of Iowa, have invented a new and improved Flax and Hemp-Brake; and we do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of our invention consists in three cylinder brake-rollers, so arranged that the brake-knives mesh into each other, and the said knives are only placed about three-fourths ( $\frac{3}{4}$ ) inch apart on the circumference of the cylinders. The cylinders are propelled by gearing running into each other. The hemp or flax, in its raw state, is carried into the machine, and taken from the machine broken by means of a canvas apron run upon five (5) rollers, propelled by belting running upon pulleys attached to the pinions of one of the cylinder brake-rollers, and upon the largest roller. Underneath the cylinder brake-rollers are placed two cleaners, which consist of two fans, with toothed edges secured to the pinions, which run rapidly and knock the shives from the fibre part of the flax or hemp as it passes through. There are set-screws attached to the journals of the forward under cylinder brake-rollers for the purpose of letting the knives of the brake-rollers mesh into each other at a greater or less distance, as the case may require.

Figure 1 is a side view, showing the gearing, &c., of our invention.

Figure 2 is a section.

Figure 3 is a plan looking down upon the machine.

Figure 4 is a section of slide journals on each end of brake-roller C'.

Similar letters of reference indicate corresponding parts in the four (4) figures.

*a*, figs. 1 and 2, is the bottom of frame; *b*, figs. 1 and 3, sides of frame; *c c' e''*, figs. 2 and 3, the cylinder brake-rollers; and *d*, figs. 2 and 3, the knives upon said brake-rollers, which are left apart so that shives will drop through said cylinder brake-rollers. *e e' e'' e''' e''''*, fig. 2, rollers, upon which the canvas platform runs, and *f* is the said canvas. The roller *e* is propelled by belting *g*, shown in fig. 1, running upon a pulley attached to pinion of cylinder of brake-roller *c*. *h*, fig. 1, is the gearing connecting brake-rollers together. *i*, fig. 1, is the pulley or gearing to which is attached the power to propel the whole machine. *j j'*, fig. 2, are the cleaners, propelled by belting *k*, shown in fig. 1, running upon a pulley attached to pinion of brake-roller *c'*. *l*, in fig. 4, is the slide journal on each end of cylinder brake-roller *c'*. *m* are the set-screws, for regulating the meshing together of the knives in brake-rollers *c c' e''*, shown in fig. 2. *n* are the set-screws for holding journals *l* in a firm position. The canvas platform *f* to be extended to any desired length at both front and rear to suit the convenience of machine.

What we claim as our improvement, and desire to secure by Letters Patent, is—

The manner in which the flax or hemp is carried into and taken from the machine by canvas platform *f*, running upon rollers *e e' e'' e''' e''''*, fig. 2.

We claim the form of the construction of the cylinder brake-rollers *c c' e''* with knives *d*, meshing into each other and as regulated by slide journal *l*, fig. 4.

We furthermore claim cleaners *j j'* shown in fig. 2. Thus the above constitutes our claim as heretofore set forth.

CONRAD WITT,  
ANDRUS <sup>his</sup> ~~×~~ SINA.  
mark.

Witnesses:

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