

(No Model.)

2 Sheets—Sheet 1.

J. ROOD.

MACHINE FOR SHAVING SKINS.

No. 339,323.

Patented Apr. 6, 1886.

Fig. 2.

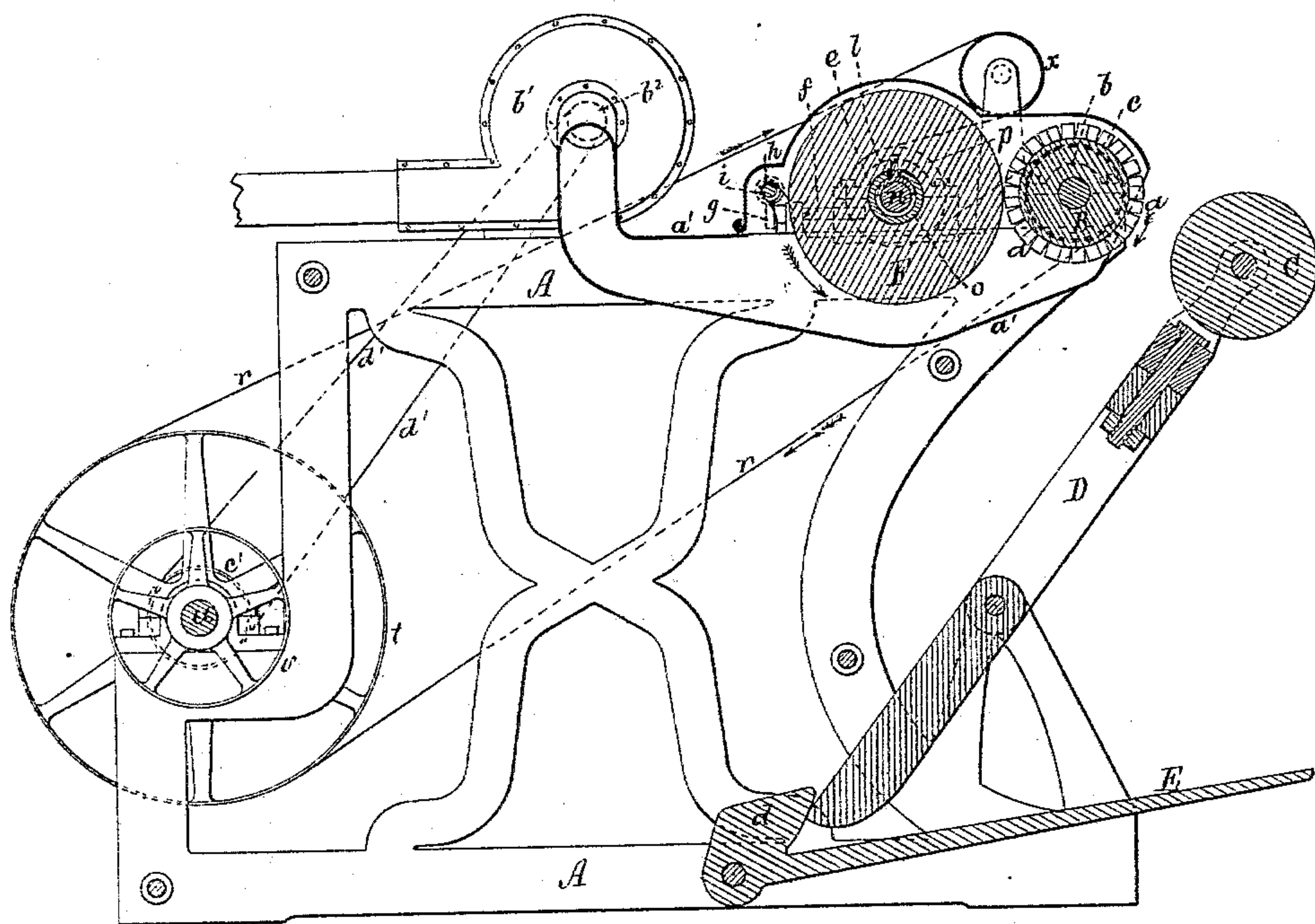
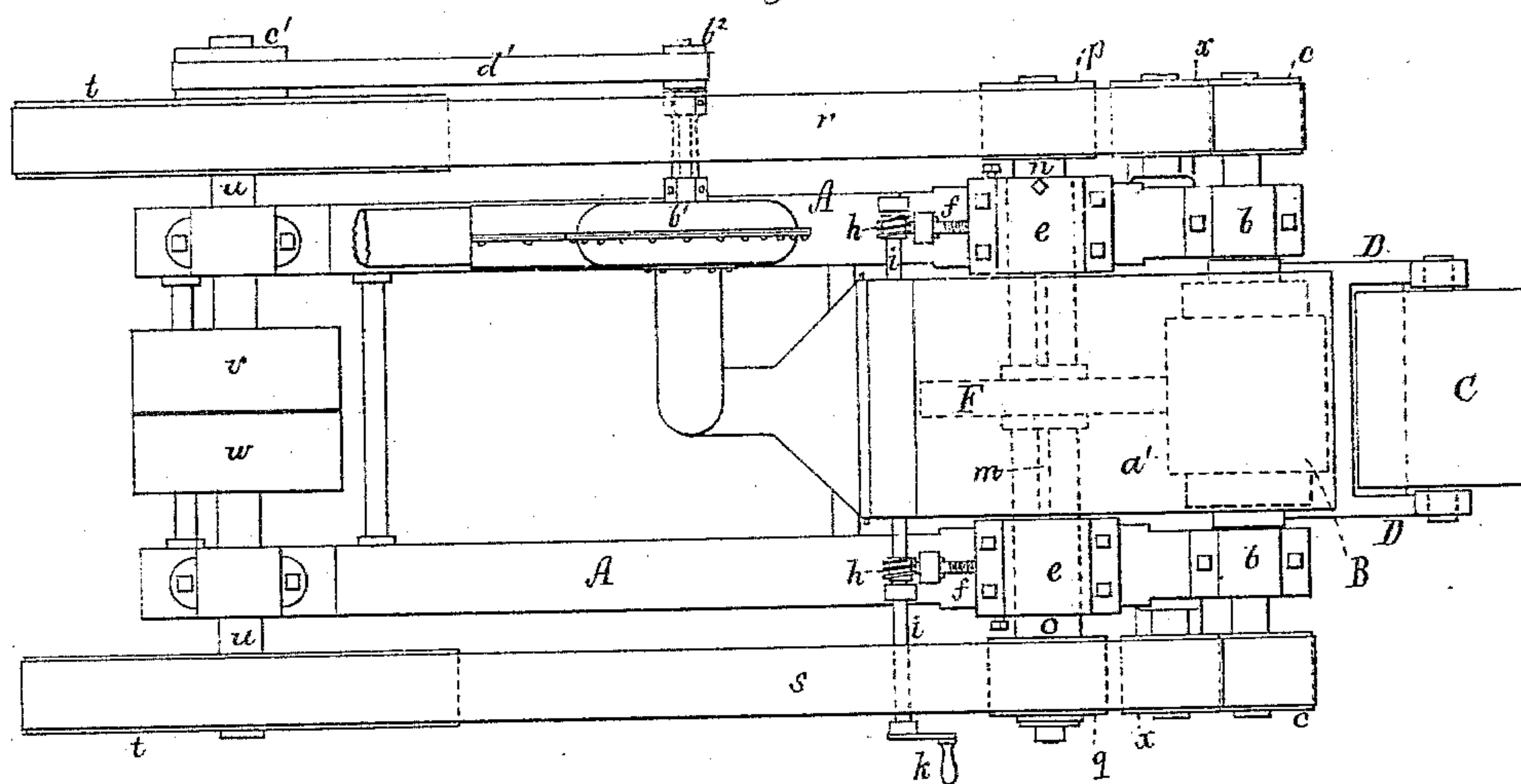


Fig. 1.



Witnesses.

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(No Model.)

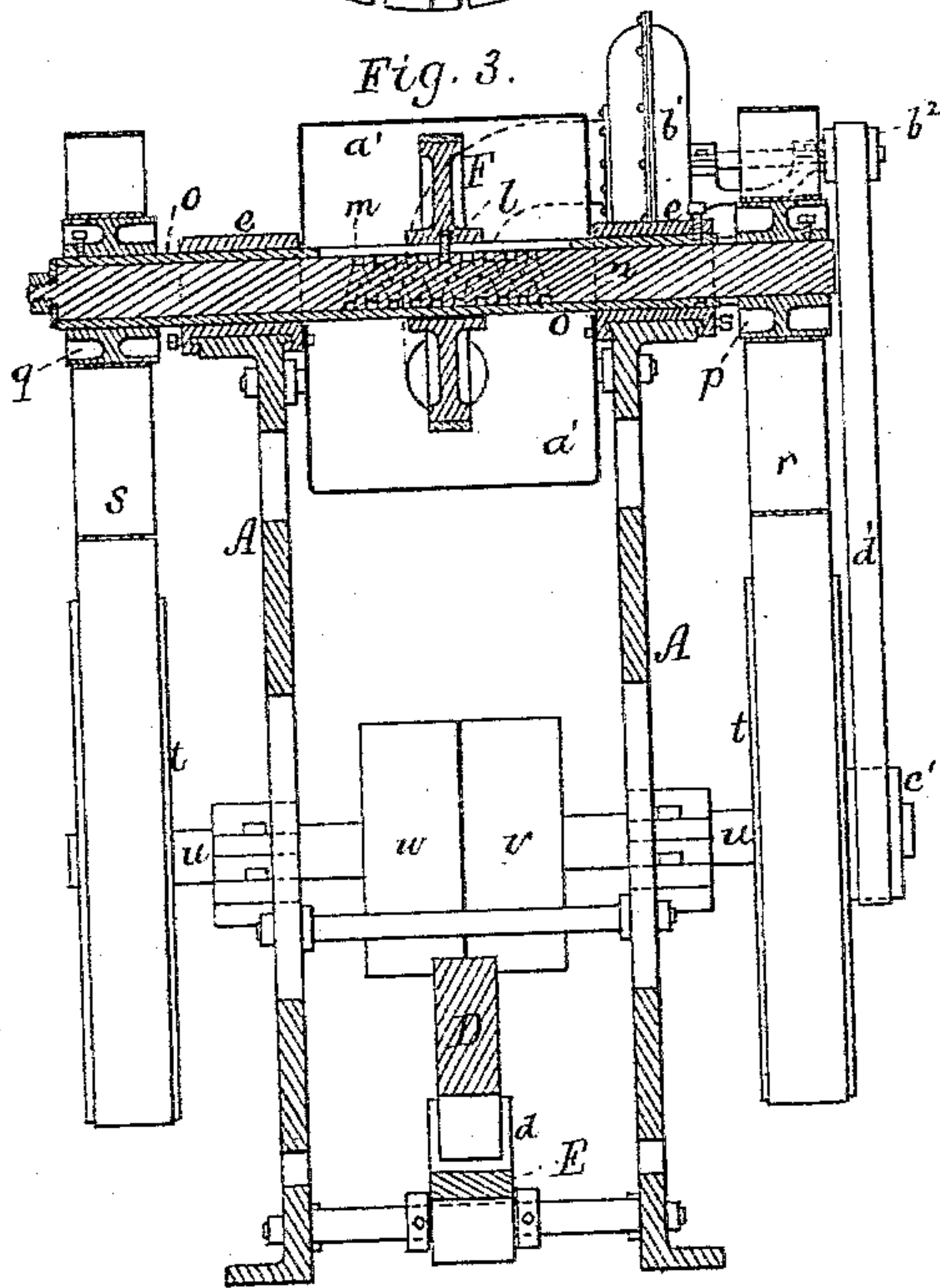
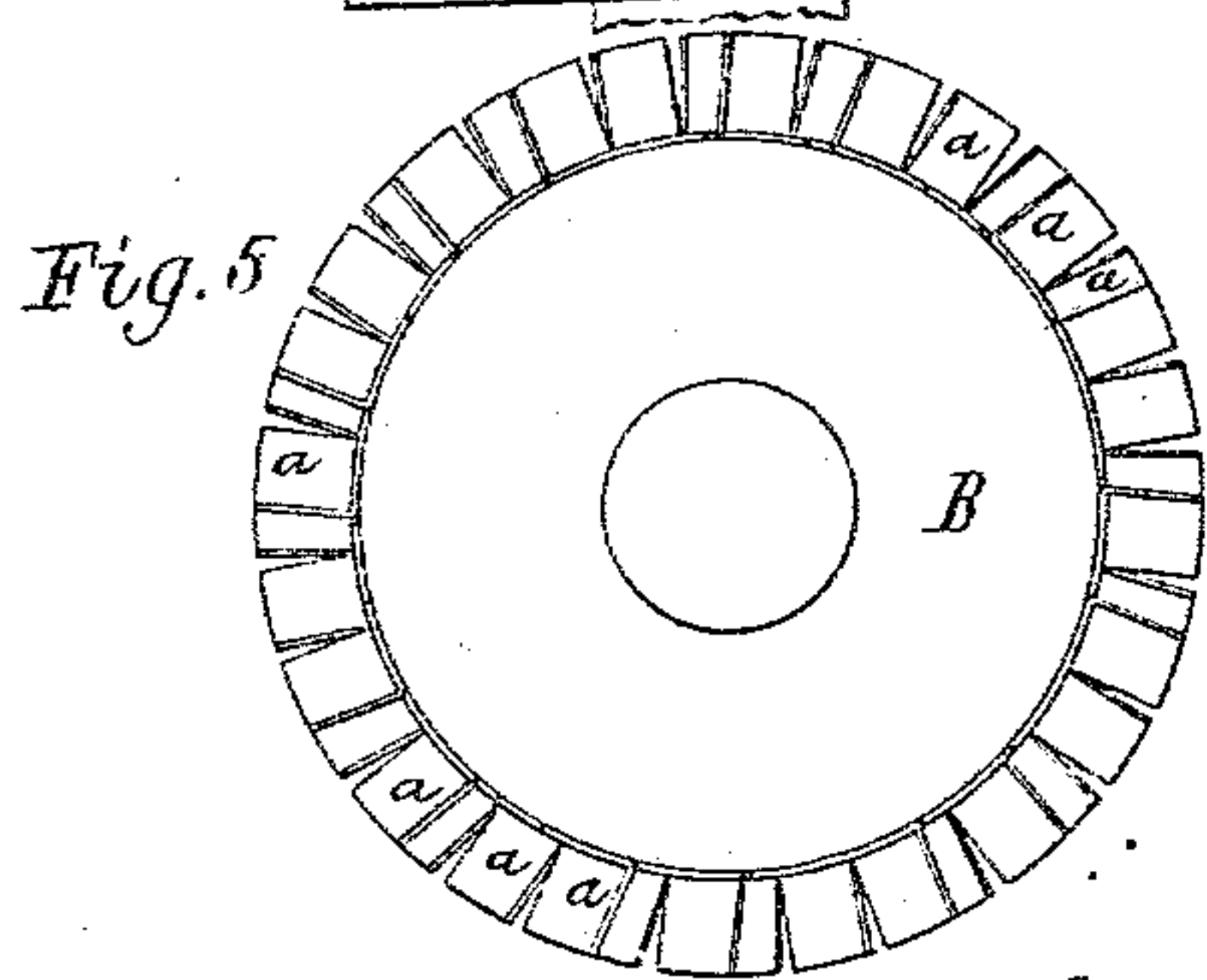
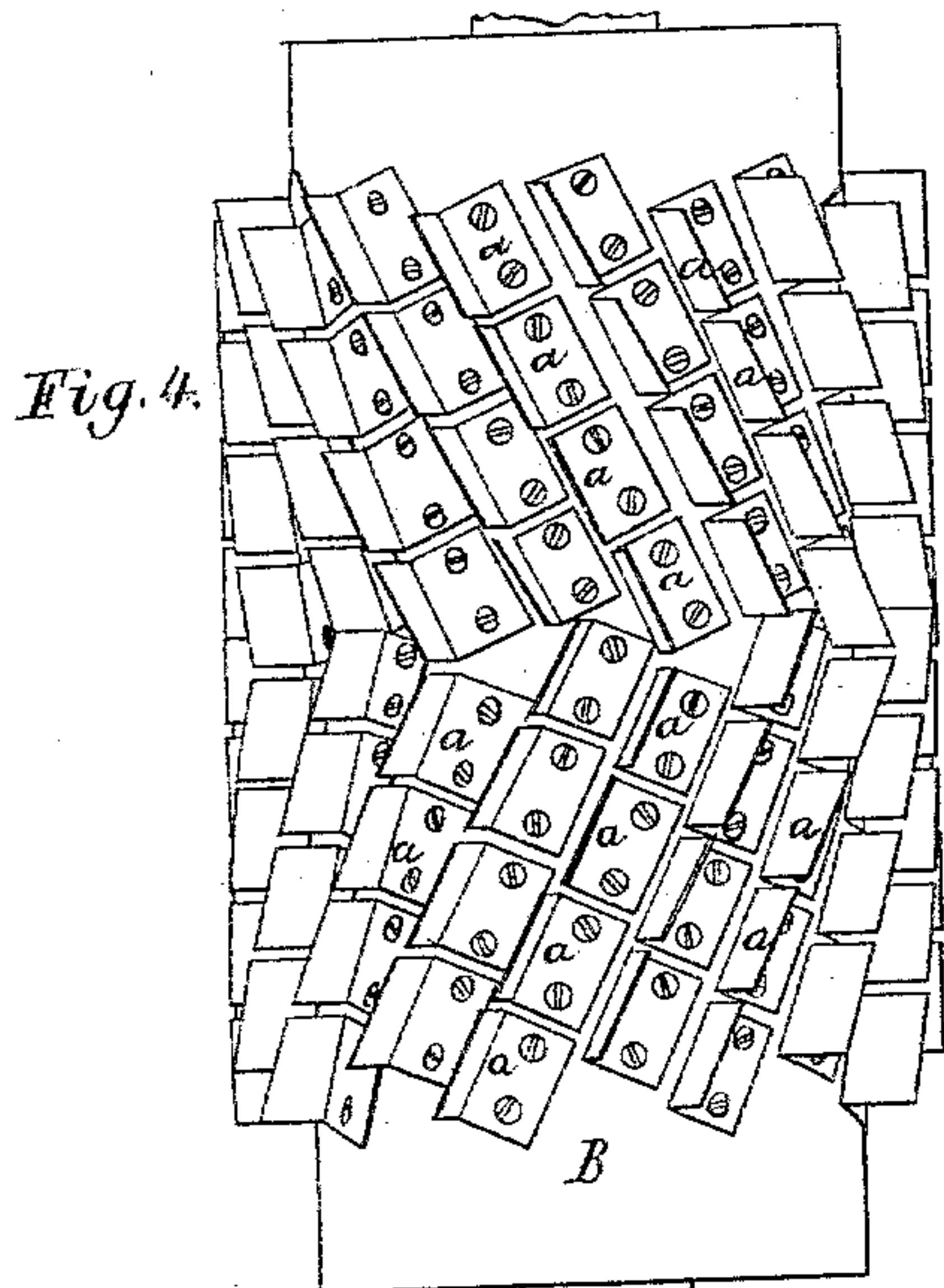
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Witnesses

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UNITED STATES PATENT OFFICE.

JOHN ROOD, OF SALEM, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO ROOD & VAUGHAN, OF SAME PLACE.

MACHINE FOR SHAVING SKINS.

SPECIFICATION forming part of Letters Patent No. 339,323, dated April 6, 1886.

Application filed August 17, 1885. Serial No. 174,597. (No model.)

To all whom it may concern:

Be it known that I, JOHN ROOD, of Salem, in the county of Essex, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Machines for Shaving Skins; and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

10 Figure 1 is a top view, and Fig. 2 a longitudinal and median section, of a machine embodying my invention, the nature of which is defined in the claims hereinafter presented. Fig. 3 is a transverse section taken through
15 the cutter-sharpening wheel, while Fig. 4 is a top view, and Fig. 5 an end view, of the cutter-cylinder of such machine.

In such drawings the frame for supporting the operative parts is represented at A. Within
20 such frame, at one end of it, is a cutter-cylinder, B, provided on its external periphery with sets *a* of knives, arranged obliquely thereon, as shown. The shaft of such cylinder is supported in boxes *b b*, and has fixed on it, at each
25 end of it, a pulley, *c*. In rear of the cutter-cylinder B is a roller, C, within and pivoted to a lever, D, arranged in and fulcrumed to the frame A. The lower arm of such lever rests against a cam, *d*, extending up from a pedal, E, arranged as shown and pivoted to the
30 frame A. By pressing downward the pedal the roller C will be moved toward the cutter-cylinder, the roller moving by its own weight away from such cylinder and causing the pedal
35 to rise, and the foot of an operative being lifted from the pedal. In front of the cutter-cylinder B there is a grinding-roller, F, whose shaft *o* is supported in adjustable boxes *e e*, each of which is provided with a screw, *f*, for
40 moving it either way lengthwise of the machine, in order to set the guiding-wheel up to the cutter-cylinder as such wheel and the cutters of such cylinder may become worn.

Each screw *f* is provided at its outer end
45 with a worm-gear, *g*, to engage with a screw, *h*, fixed on a shaft, *i*, arranged as shown and provided with a crank, *k*, for revolving it, (the said shaft.) The grinding-wheel is provided with mechanism for reciprocating it laterally with
50 a slow motion.

The grinding-wheel is to slide on its shaft *o*, lengthwise thereof, such shaft being tubular, and it is slotted longitudinally at *m* for a fork, *l*, pivoted to the wheel, to pass through the slot and engage with a screw-grooved shaft, *n*, that
55 extends within the shaft *o*, lengthwise thereof. This shaft *n* has in it spiral grooves, one of which runs in a direction opposite to that of the other and crosses it. Both grooves open into each other at their extreme ends. There is
60 fixed on the shaft *n* a pulley, *p*, for revolving it, such pulley having a diameter a little less than that of the pulley *q* of the shaft *o*. The above mechanism for giving a reciprocating motion to the grinder is well known and in
65 common use in various kinds of machines.

Endless belts *r* and *s* extend around the two pulleys *p* and *q*, and also about larger pulleys *t t*, fixed on a driving-shaft, *u*, provided with a fast pulley, *v*, and a loose one, *w*, all being
70 arranged as represented. Each belt also goes around one of the pulleys *c* of the cutter-cylinder shaft, and also about a guide-pulley, *x*. (See Fig. 2.)

Around the grinder and cutter cylinders is
75 a case or conduit, *a'*, which, open at its rear end, is to receive the shavings and transmit them to a suction-blower, *b'*, to draw air through the case and discharge such air and the shavings therefrom. The shaft of the fan-
80 wheel of such blower is provided with a pulley, *b''*, about which and a pulley, *c'*, fixed on the driving-shaft, an endless belt, *d'*, runs.

The knives of each range or set of the cutter-cylinder are arranged in angular rows, as
85 shown, those of each row breaking joints with those of the next row—that is to say, each knife of any row is to extend across the joint or space between two knives of the next preceding row. Each knife is a thin blade or
90 plate of metal bent at a right angle and fastened to the cylinder. In this case each knife is elastic and can bend a little under the pressure of the grinding-wheel. The knives by being elastic adapt themselves to the skin,
95 and operate better and surer than rigid spiral knives, and therefore these elastic knives constitute an important feature in the machine.

On the machine being put in operation, so as to cause the cutter-cylinder and the sharp-
100

ening-wheel to revolve in the directions indicated by the arrows thereon, a skin to be shaved or dressed on its flesh side is to be introduced between the cutter-cylinder and the roller C, and with the hair side of the said skin against such roller, after which the latter is, by means of the pedal, to be moved forward, so as to cause the skin to be carried up to the cutter-cylinder, which, revolving, will shave down or remove from the skin the protuberous parts to be taken from it, the skin in the meantime being pulled and drawn upward upon the roller.

I claim—

1. The machine substantially as described, consisting of the cutter-cylinder B, having a series of knives, the presser-roller C, the grinding-wheel F, and the air-conduit and blower arranged and provided with mechanism, substantially as explained, for operating such cylinder, roller, wheel, and blower, as set forth.

2. The cutter-cylinder having the elastic or spring knives, as described, in combination with the presser-roller, the grinding-wheel, and the air-conduit and blower arranged and provided with mechanism, substantially as explained, for operating such cylinder, roller, wheel, and blower, as set forth.

3. The cutter-cylinder having the elastic or spring knives, as described, arranged so that those of each row shall break joints with those of the next preceding row, in combination with the presser-roller, the grinding-wheel, and the air-conduit and blower arranged and provided with mechanism, substantially as explained, for operating such cylinder, roller, wheel, and blower, as set forth.

JOHN ROOD.

Witnesses:

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