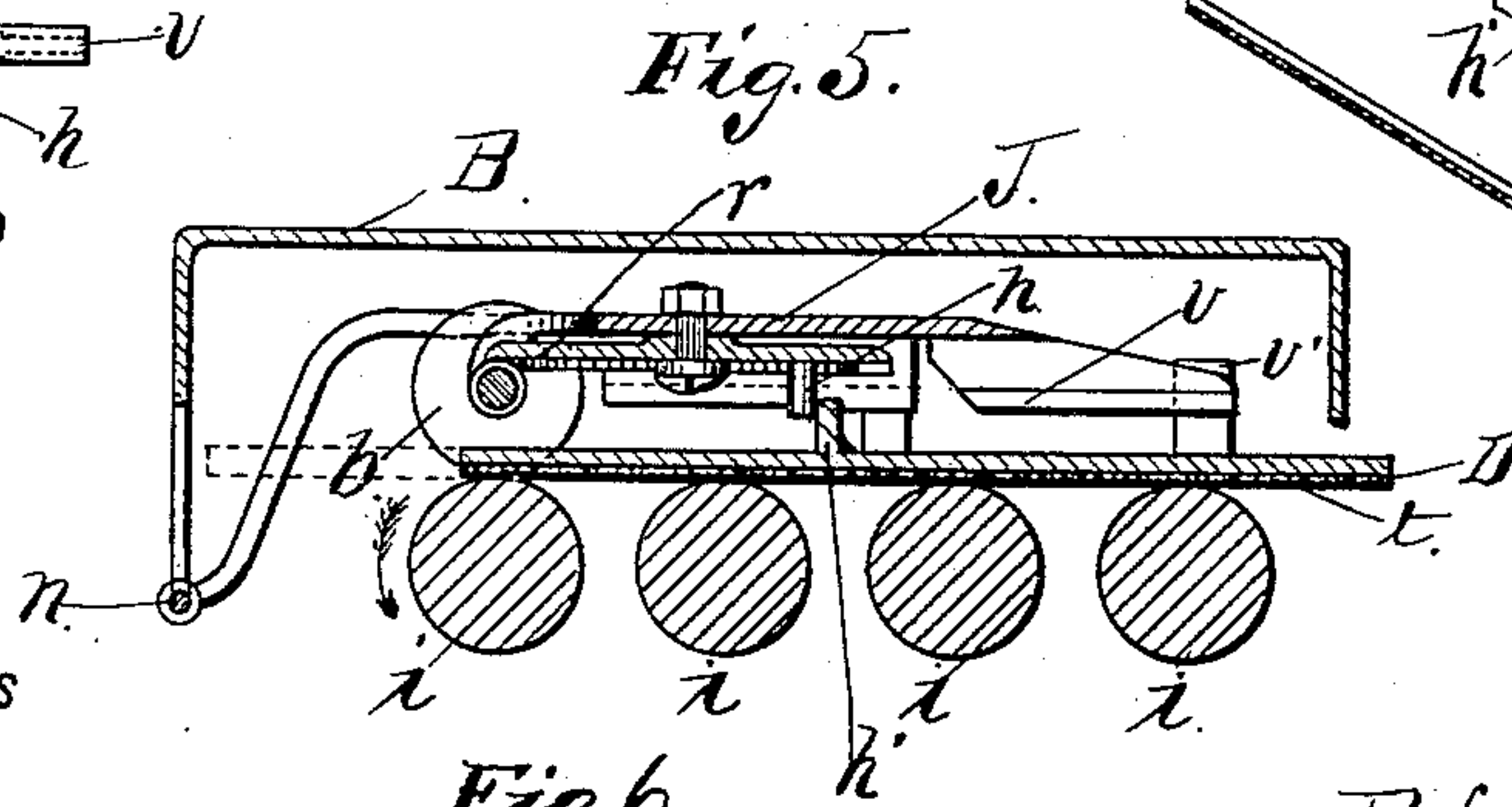
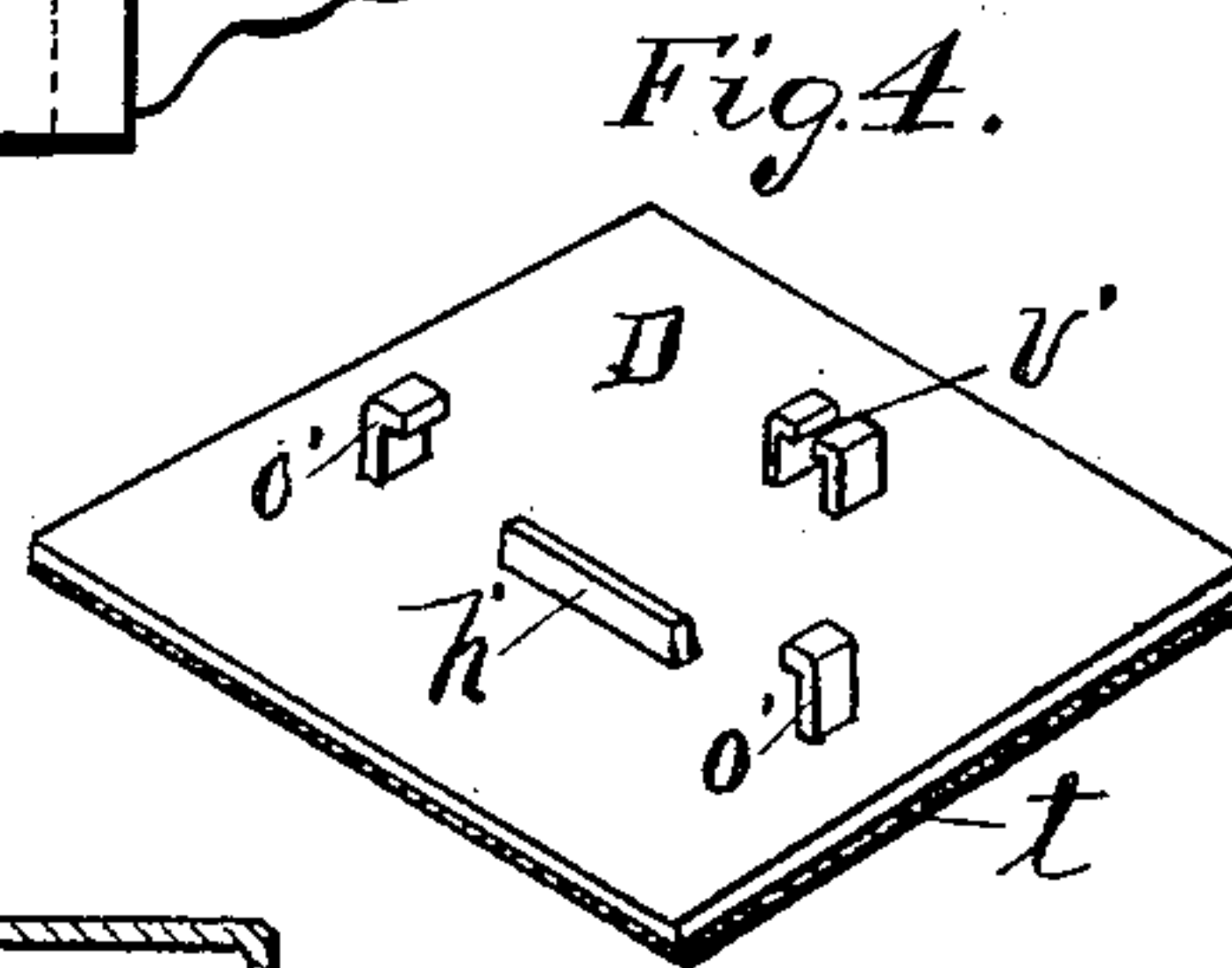
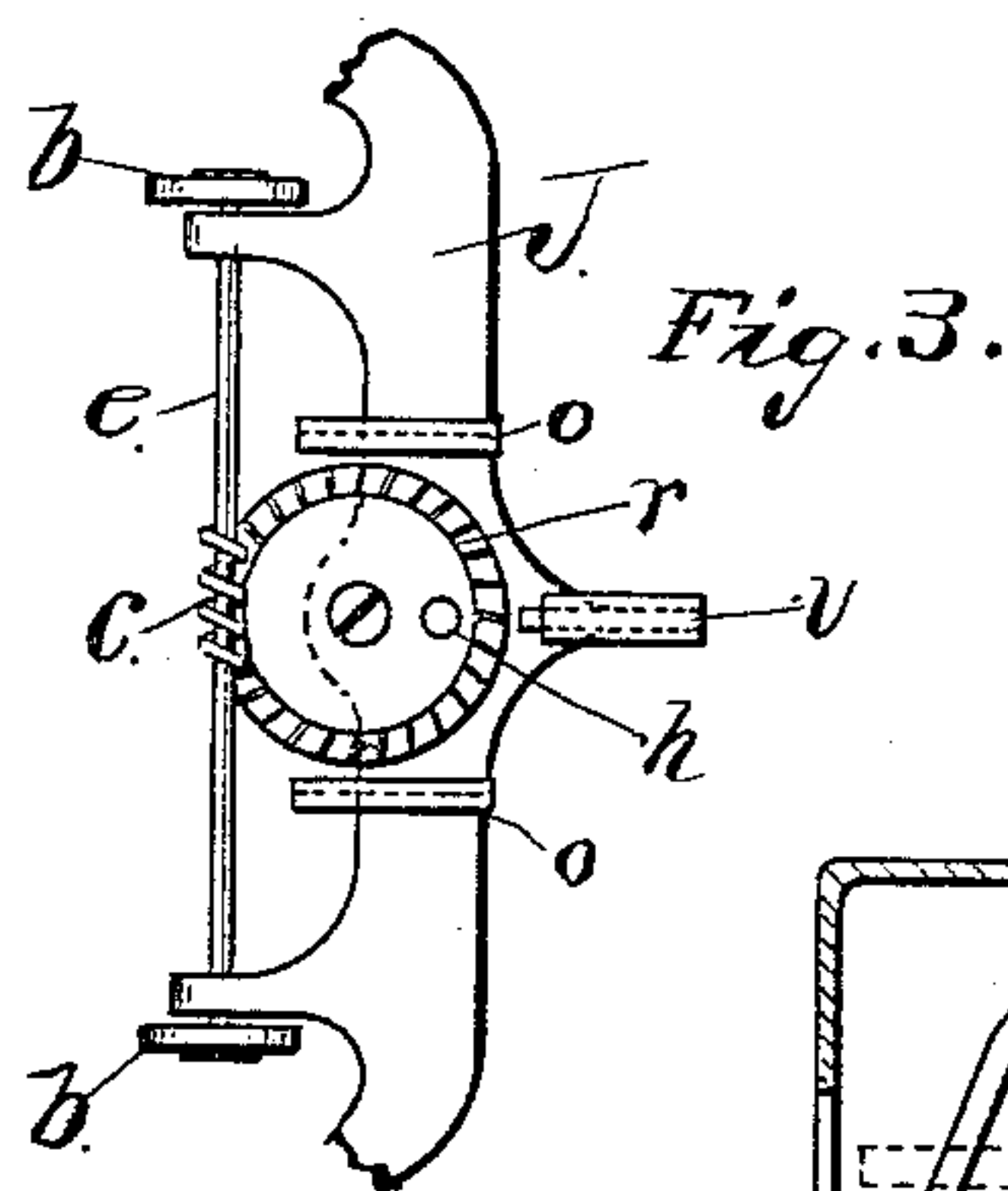
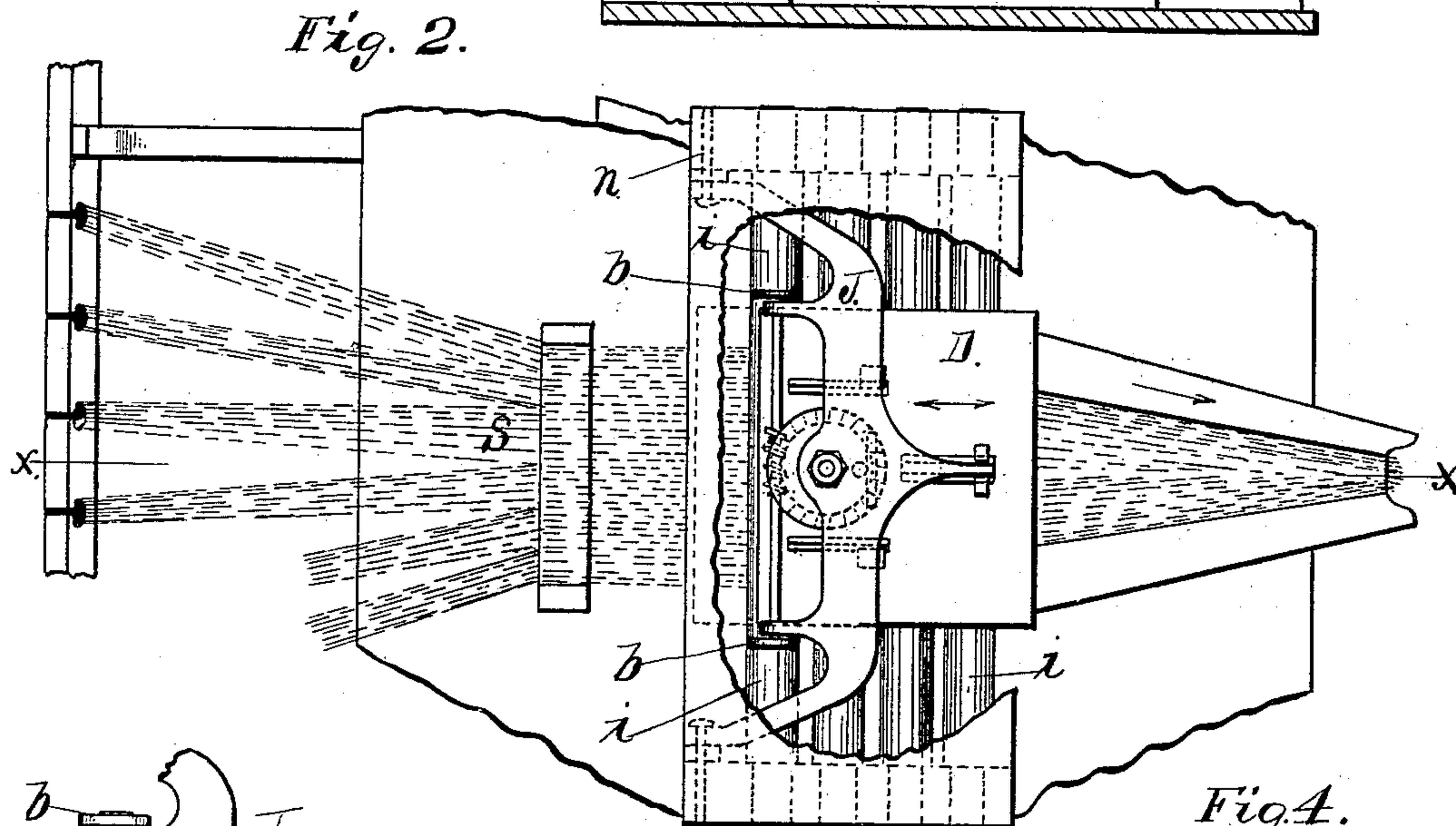
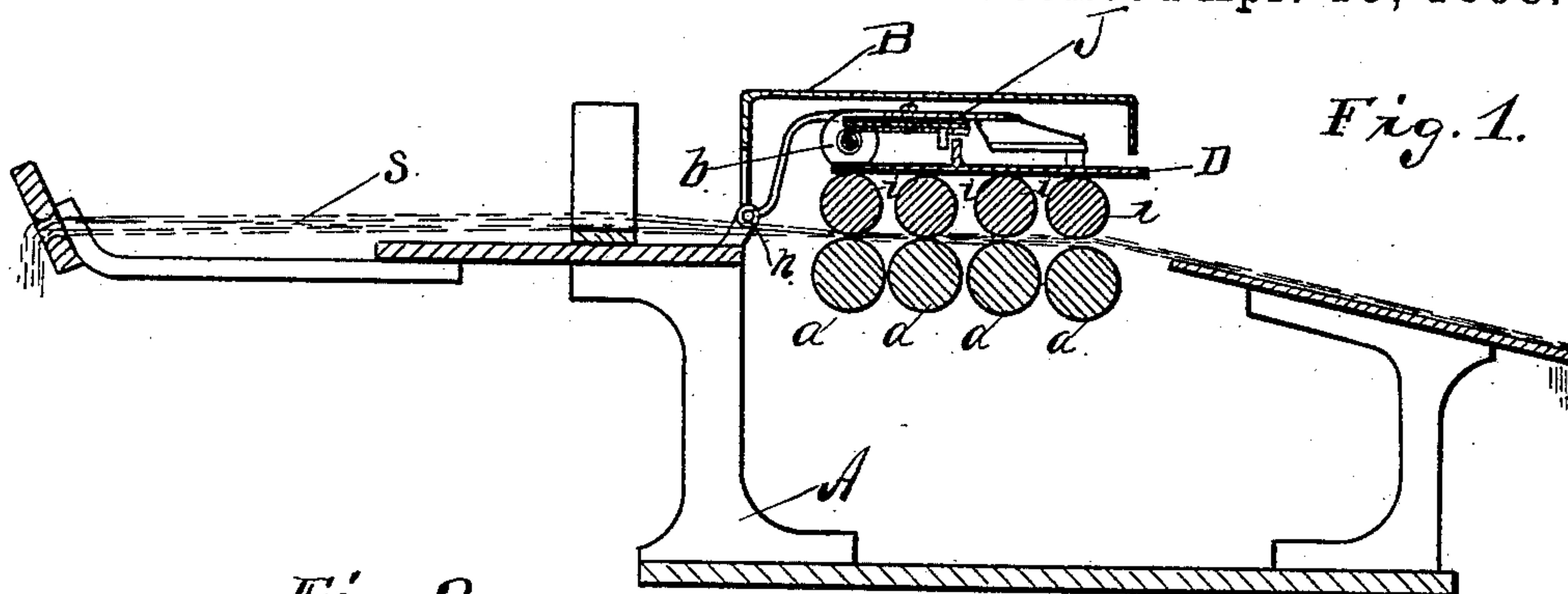


(No Model.)

R. S. MATTESON.
TEXTILE ROLLER CLEARER.

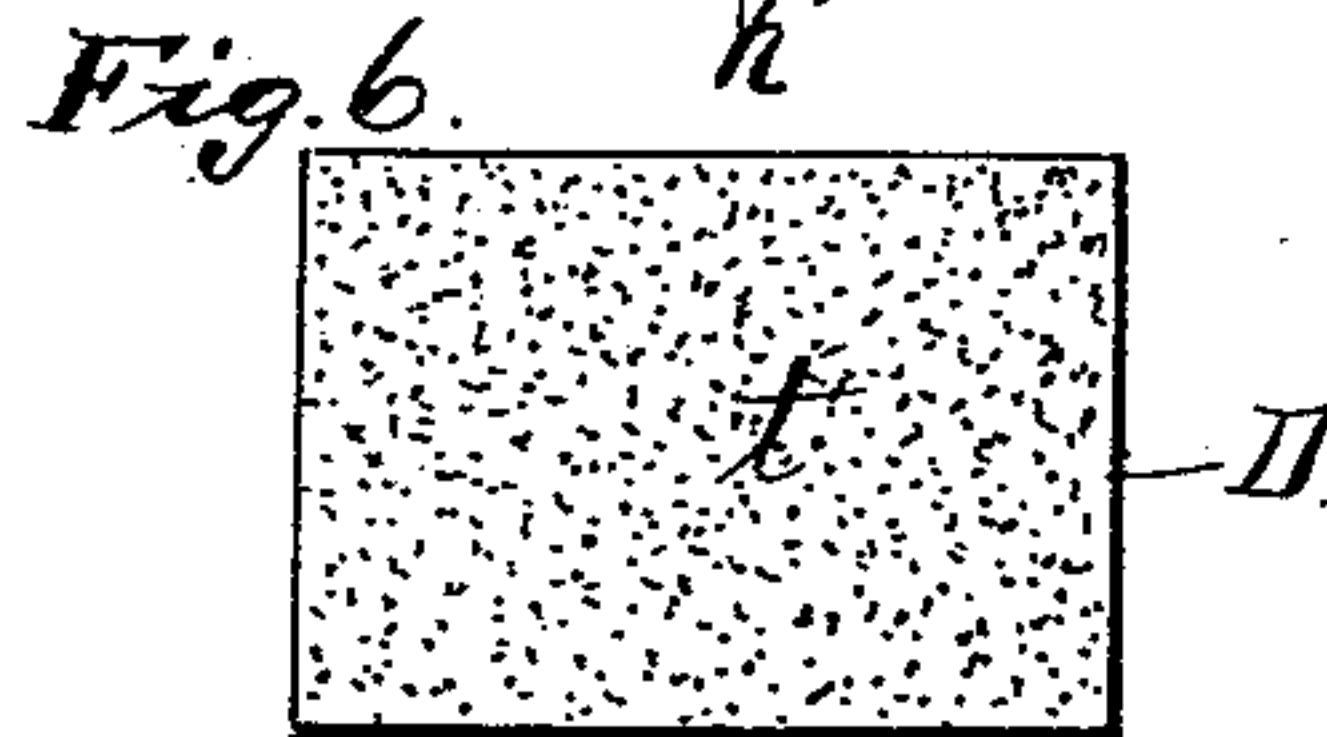
No. 602,626.

Patented Apr. 19, 1898.



WITNESSES

Howard E. Barlow
M. E. Lawton.



INVENTOR

Rufus S. Matteson.

BY

Arnold & Barlow.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

RUFUS S. MATTESON, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF TWO-THIRDS TO CHARLES H. FIELD, OF SAME PLACE, AND JOSIAH A. KING, OF SEEKONK, MASSACHUSETTS.

TEXTILE-ROLLER CLEARER.

SPECIFICATION forming part of Letters Patent No. 602,626, dated April 19, 1898.

Application filed February 6, 1897. Serial No. 622,256. (No model.)

To all whom it may concern:

Be it known that I, RUFUS S. MATTESON, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Textile-Roller Clearers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to the class of devices for clearing the drawing-rolls in textile machinery.

It is fully explained and illustrated in this specification and the accompanying drawings.

Figure 1 represents a vertical section of the head with the rolls and the clearer, taken on line *x x* in Fig. 2. Fig. 2 is a top view of the same shown in Fig. 1 with the cover of the rolls broken away to show the mechanism of the clearer. Fig. 3 shows the under side of the supporting-frame of the clearer. Fig. 4 shows the upper side of the clearer-plate. Fig. 5 is an enlarged representation of the section of the clearer shown in Fig. 1. Fig. 6 shows the surface side of the clearer-plate with its covering.

The object of this invention is to produce a clearer that will collect and retain the waste and work automatically over its surface and the working length of the rolls.

The construction and operation are as follows:

A represents the head, on which the lower rolls *a a* and the top rolls *i i* are supported.

B is the cover over the rolls. It is hinged at *n*, so as to admit of being turned up to get at the clearer. This cover B is broken away to show the clearer under it. The clearer consists of a plate D, the upper side of which is shown in Fig. 4, and the under side, which is covered with cloth and goes next to the rolls *i i*, is seen in Fig. 6. This plate D has a reciprocating motion across the rolls, as indicated by the double arrow in Fig. 2. The frame J that gives the reciprocating motion to the plate D is hinged at *n* on the same rod

as the cover B. This frame is held in connection with the plate D, its arm *v* passing through the double stud *v'* on the plate D and the rabbeted ridges *o o* on the frame J catching under the heads of the studs *o' o'* on the plate D, so that as the plate D slides back and forth it is guided at the three points *v'*, *o'*, and *o'*. The mechanism that gives the reciprocating motion to the plate consists of a small shaft *e*, held in bearings in arms on the frame J, which shaft has a small wheel *b* fast on each end that rests on and are turned by the top roll *i*. The shaft *e* has a worm-wheel *c* in its middle that engages in the teeth of a worm-gear *r*, held on a stud fast in the frame J. As the roll *i* turns the shaft *e* by its wheels *b* the worm *c* slowly turns the worm-gear *r* and a stud *h* in the face of that gear pushed against the ridge *h'* on the plate D and moves that plate back until the stud *h* passes the center and begins to go back. Then the regular motion of the rolls *i i*, (see arrow, Fig. 5,) on which the plate D rests, will move that plate forward again as fast as the receding motion of the pin *h* will let it go until the stud *h* passes the other center, when it will begin to push the plate back again, as before described. In this way the plate D receives a steady back and forward motion on the rolls, collecting on its cloth-covered face the lint or waste, &c., that would otherwise become attached to the sliver S and injure the yarn.

In case it is used as a bottom clearer a spring or other suitable means can be used to hold it in contact with the rolls.

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

1. In a clearer for rolls in textile-machines, the combination with the rolls to be cleared of a plate bearing on the rolls, means for giving said plate a reciprocating motion in a direction at right angles or nearly so to the axis of the rolls, flanges on a stationary part, and studs on the plate to engage the flanges to guide the plate in the desired direction, substantially as described.

2. The combination in a clearer for rolls for

the purpose specified, of a clearer-plate, a
motor-frame, a shaft held in bearings attached
to said motor-frame, wheels on said shaft re-
ceiving motion from the rolls, a worm-wheel
5 fast on said shaft, a worm gear-wheel held
on a stud fast in said motor-plate, and engag-
ing with the worm-wheel, a stud in the worm-
gear and arranged to push the clearer-plate

in one direction by a ridge or projection fast
on said plate, substantially as described. 10

In testimony whereof I have hereunto set
my hand this 3d day of February, A. D. 1897.

RUFUS S. MATTESON.

In presence of—

BENJ. ARNOLD,

HOWARD E. BARLOW.