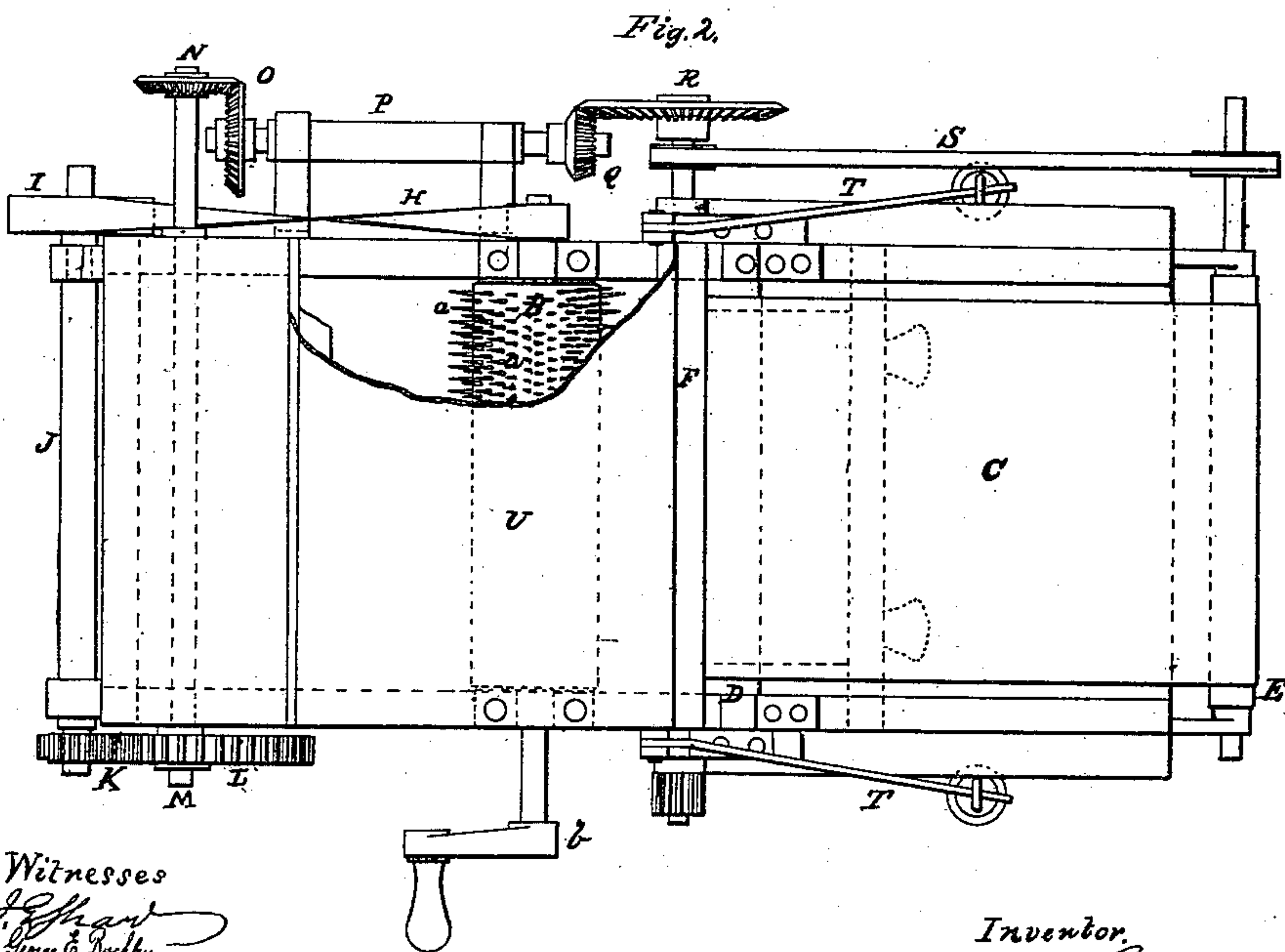
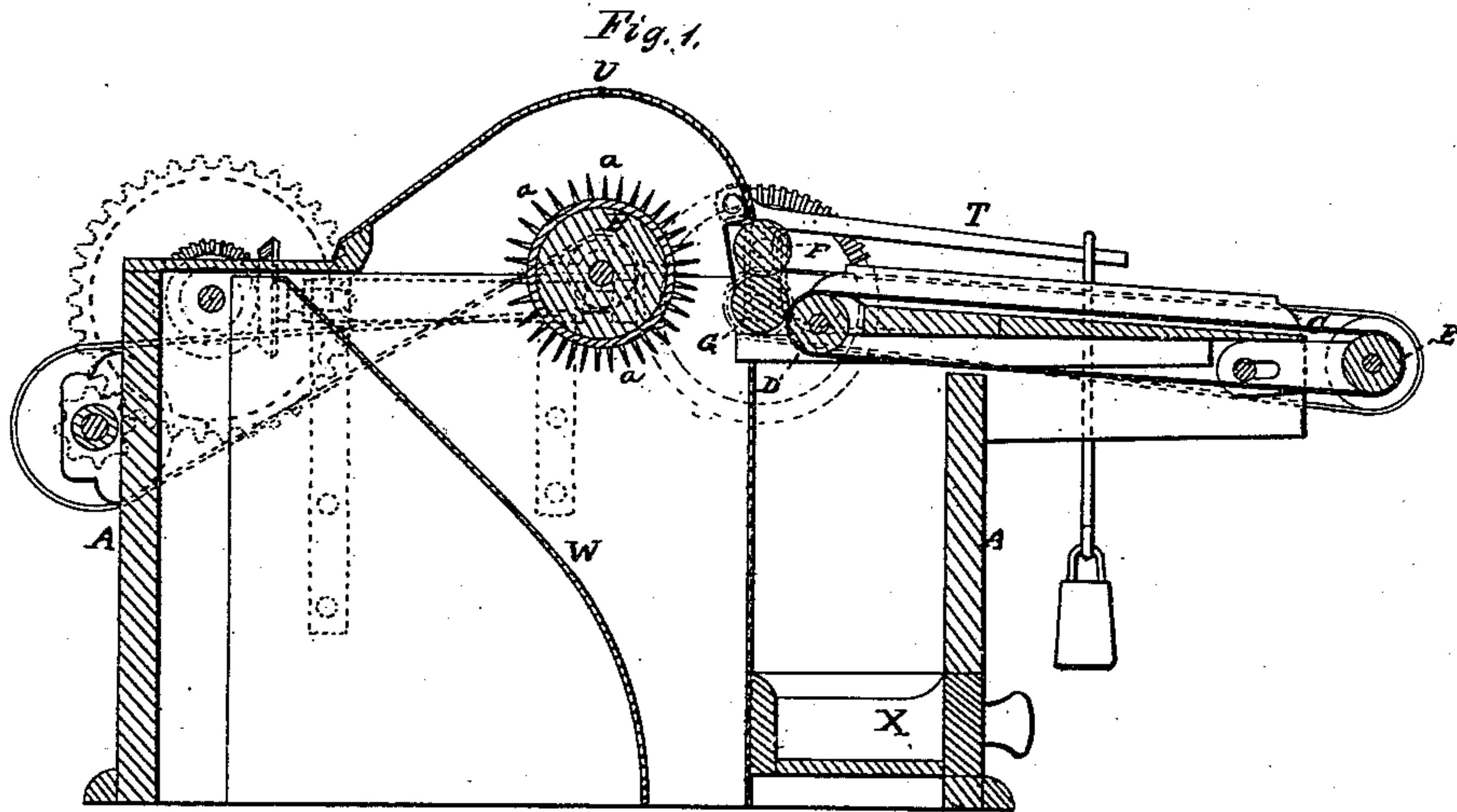


G. COX.
WADDING WASTE MACHINE.

No. 61,519.

Patented Jan. 29, 1867.



Witnesses
J. H. Shaw
George C. Buckley

Inventor.
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GEORGE COX, OF READING, PENNSYLVANIA, ASSIGNOR TO F. WILLCOX
AND G. L. JENKINS.

Letters Patent No. 61,519, dated January 29, 1867.

WADDING-WASTE MACHINE.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE COX, of Reading, Berks county, Pennsylvania, have invented a certain new and useful Wadding-Waste Machine; and I do hereby declare the following to be a full, clear, and exact description of the operation and construction of the same, reference being had to the annexed drawings, forming part hereof, and to the letters of reference marked thereon, in which drawings—

Figure 1 is a longitudinal vertical section.

Figure 2, a plan of the machine.

In wadding-mills, where what is known as cotton-waste is employed in the making of wadding, there is a waste even from the waste thus employed, and it is to utilize this waste of waste that my machine is adapted.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and mode of operation.

In the drawings, A is a cast-iron frame, made dust-tight by a lining of wood. The frame is about five feet long, four feet high, and thirty inches wide, the width being governed by the width of wadding intended to be produced. B is a picker cylinder, which consists of an iron shaft covered with wooden strips through which are inserted steel teeth *a* set about half an inch apart, and projecting outwards about an inch beyond the surface of the strips. C is an endless apron running upon the two rollers D and E. The waste being placed on the apron C is fed into the picker through the rollers F and G. Power is applied to the cylinder B by means of a driving-pulley represented by the crank *b*, fig. 2. On one end of the cylinder shaft the belt P connects a pulley on the opposite end of the cylinder shaft with another pulley I of about eight inches diameter on the end of shaft J, which carries at its opposite end a cog-wheel, K, of about three inches diameter, which gears into a larger cog-wheel L of about fourteen inches diameter on the shaft M, which carries at its opposite end the bevel cog-wheel N, of about four inches diameter, which gears into the cog-wheel O, of about four inches diameter, on the shaft P, which carries at its opposite end the bevel cog-wheel Q, of about two and a half inches diameter, which gears into the bevel cog-wheel R, of about six inches diameter, on the lower feed-roller G. Motion is imparted to the apron C by means of belt S. The rollers F G run in open boxes, as shown in fig. 1, being held down by means of weighted levers T. U is a bonnet or hinged lid, by means of which the cylinder is completely shut in at top. W is an inclined passage, open at bottom, down which slides the waste drawn in by the picker cylinder B. X is a case or drawer placed below the feed rollers F G, into which drawer the sand and dirt drop. My machine, when in operation, is placed in the card-room, elevated about a foot above the floor, so that the same endless apron that takes the web from the carding machines shall run under the inclined passage W, and take also the waste from this machine. It will be observed that the belt H is crossed. Now, when the teeth of the picker cylinder become bent from use, this belt may be applied straight, so that, without any change in the gearing, the direction of motion of the picker cylinder is reversed. The pulley I and the bevel cog-wheels K and Q are removable at pleasure, and when it is desired to accelerate or retard the motion of the feed, a smaller or larger pulley, as the case may be, is substituted for the pulley I, and a larger or smaller bevel-wheel is substituted either for the cog-wheel Q or for the cog-wheel K.

I have thus specified the particular gearing employed, because it is the best adapted to give that regular slow motion which is required for the feed, and at the same time permit to be made the changes mentioned by which that motion may be accelerated or retarded, and the direction of motion of the picker cylinder reversed at pleasure.

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

1. The combination of the picker cylinder B, enclosed passage W, feed rollers F G, endless apron C, and drawer X, or their equivalents respectively, in the manner and for the purpose substantially as shown and described.

2. The parts last mentioned in combination with the gearing for giving motion to the feed, substantially as shown and described.

Witnesses:

J. E. SHAW,

GEORGE E. BUCKLEY.

GEORGE COX.