

(No Model.)

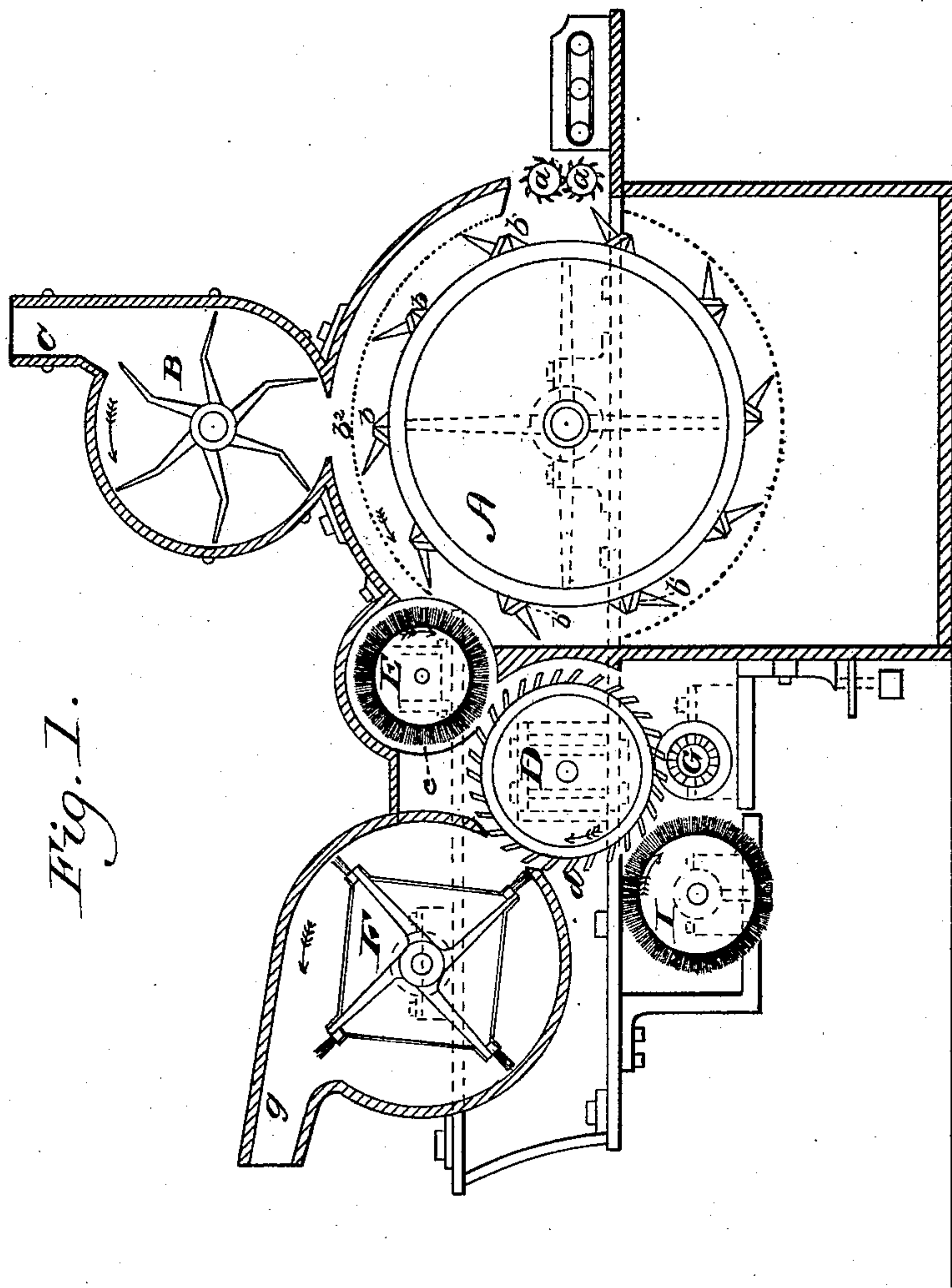
2 Sheets—Sheet 1.

J. R. CLARK & H. TINDELL.

MACHINE FOR PICKING AND BURRING WOOL OR COTTON.

No. 326,273.

Patented Sept. 15, 1885.



Attest:

*T. F. Campbell*  
*Edward L. Kempf.*

Inventors:

*John R. Clark,*  
*Henry Tindell,*  
*by Drake & Co.*  
*attys*

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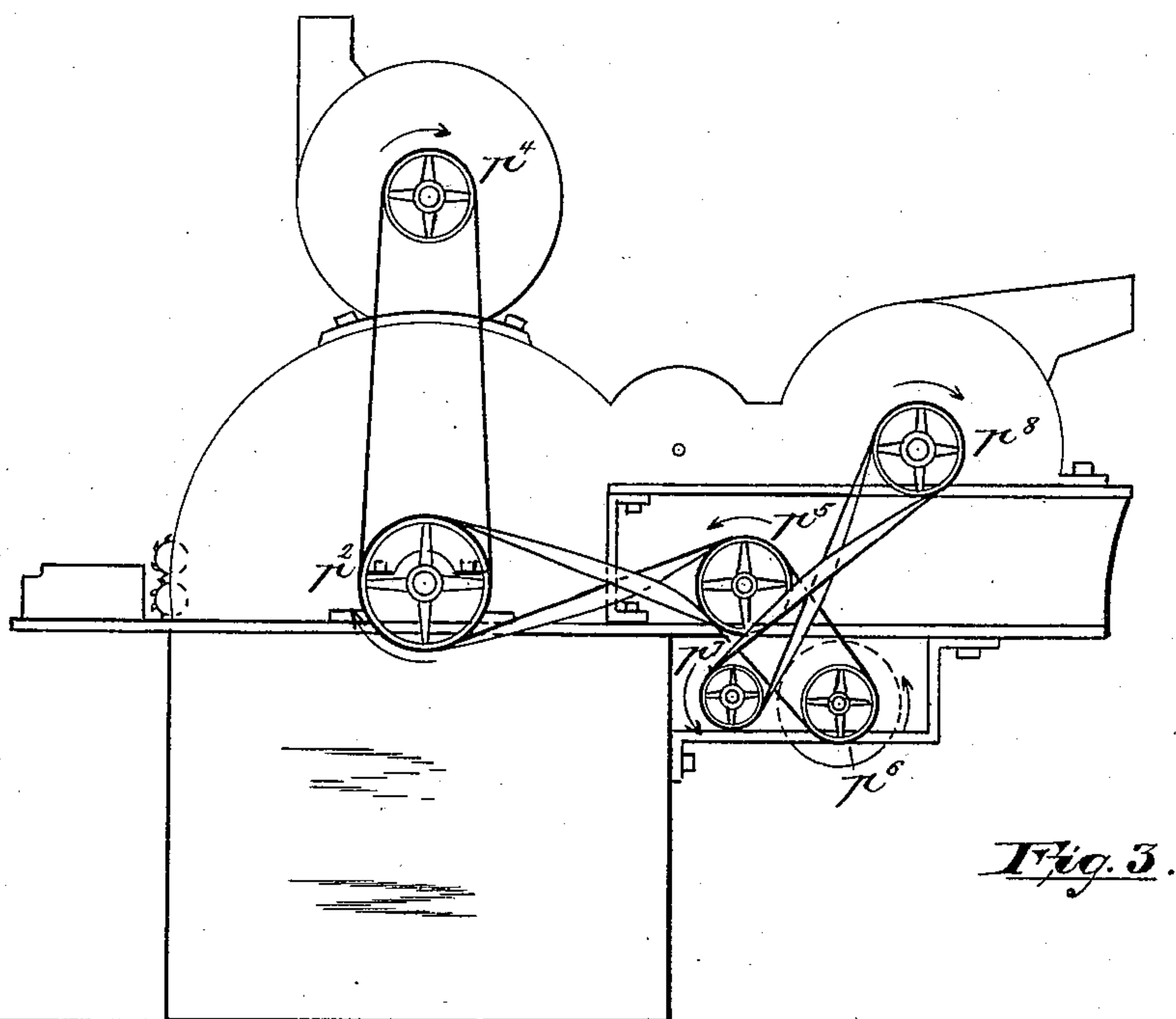
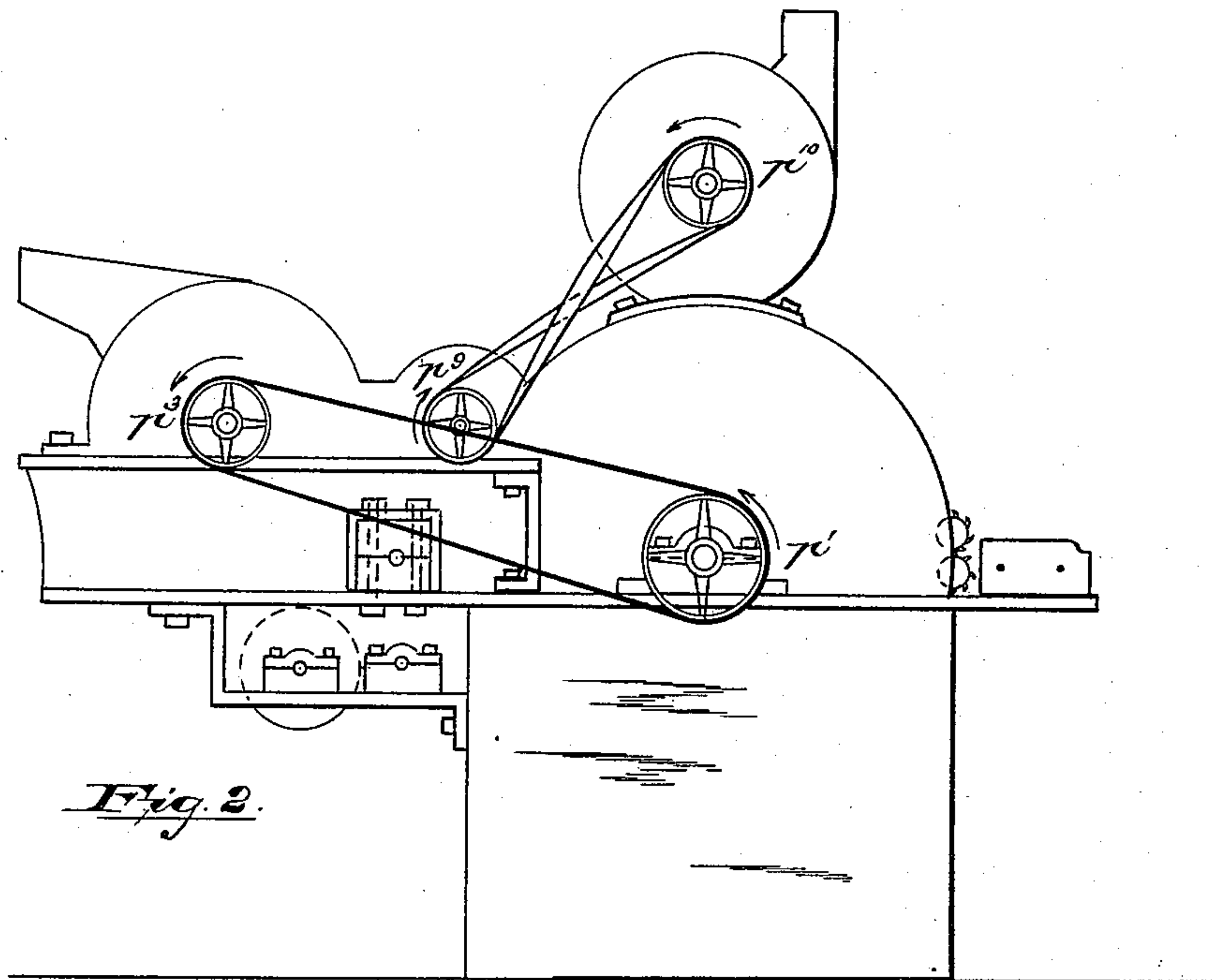
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*Attest:*

*Frederick F. Campbell.*  
*Oscar A. Michel.*

*Inventors:*

*John R. Clark,*  
*Henry Tindell,*  
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# UNITED STATES PATENT OFFICE,

JOHN R. CLARK AND HENRY TINDELL, OF HARRISON, NEW JERSEY.

## MACHINE FOR PICKING AND BURRING WOOL OR COTTON.

SPECIFICATION forming part of Letters Patent No. 326,273, dated September 15, 1885.

Application filed December 11, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN R. CLARK and HENRY TINDELL, citizens of the United States, residing at Harrison, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Machines for Picking and Burring Wool or Cotton; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to more thoroughly and perfectly remove the smaller particles of foreign matter from the wool to secure a higher grade of goods; and it consists in the arrangements and combinations of parts substantially as will be hereinafter set forth, and finally embodied in the clause of claim.

Referring to the two accompanying sheets of drawings, in which like letters of reference indicate corresponding parts in each of the figures, Figure 1, Sheet 1, illustrates in side elevation and partly in section the interior of the machine, and Figs. 2 and 3, Sheet 2, illustrate the outer opposite sides of said machine and the mechanism for driving the several cylinders arranged therein.

In said drawings, A represents a picking cylinder, by means of which the wool in close bunches containing dust, burrs, and other foreign matter, is loosened or separated, *b'* indicating the picking-teeth, which project at an incline from the periphery thereof. The wool is fed to the picking-cylinder by appropriate feeding devices—such, for example, as the rollers *a a*.

B is a suction-blower, which draws the dust and a large proportion of the finer particles of matter from the loosened wool through the perforated screen or plate *b''*, and causes the same to pass through the spout C to the open air.

D represents a burring-cylinder having the ordinary toothed ring-plates, *d*, the teeth of which are inclined, as shown, forming inclined notches or openings into which the wool is

forced by a brush which receives it from the picking-cylinder.

E indicates said brush, adapted to carry the wool from the picking to the burring cylinder and to deposit it in said openings, where it moves with the said burring-cylinder and comes under the influence of the clipper G, which latter acts to remove the burrs clinging to the wool in the said openings.

F is an ordinary fan or brush for removing the wool from the burring-cylinder after it has passed under the influence of the clipper.

In the machines heretofore in use of which we are aware the wool, after passing between the clipper and burring-cylinder, as described, was carried directly to the said face or brush for removing the wool and forcing it through the passage *g* to a suitable receptacle in a marketable condition. In removing the burrs from the wool in which they are entangled the clipper is apt to tear off from the burr small "shives," which remain in the wool, and, together with such other particles of foreign matter as remain after the burring process, tend to lower the grade of the same. To remove these shives, and to more thoroughly cleanse the wool of foreign matter, we arrange a brush, I, between the brush or fan F and the clipper G, into operative contact with the burring-cylinder, to brush the wool after it has passed the clipper and has been cleared of burrs. Said brush I moves in a direction opposed to that in which the teeth point, so as to brush the wool thoroughly without removing it from the said burring-cylinder.

These several brushes and cylinders are driven by any suitable gearing or belting, the preferred method of operation being illustrated by Figs. 2 and 3, in which the main shaft carrying the picking-cylinder is provided with pulleys *p'* *p''*, the former of which connects by a suitable belt with a pulley, *p'''*, Fig. 2, for operating the fan F. The pulley or pulleys *p''* connect by belting with, first, a pulley, *p''''*, Fig. 3, to drive the suction-blower, and also with a pulley, *p''''''*, of the burring-cylinder, the belt in the latter case being crossed to give reverse motion. The burring-cylinder pulley in turn transmits power to the pulley *p''''''''* of the brush I, while the clipper-pulley *p''''''''''* receives

its motion from the fan-pulley  $p^8$  on the same shaft with the pulley  $p^3$ . The pulley  $p^9$ , for operating the intermediate brush, E, receives its power from the pulley  $p^{10}$  on the same shaft  
5 with the pulley  $p^4$ .

As before intimated, we do not wish to be at all limited to the arrangements of the several driving mechanisms described.

We are aware that, broadly considered, it is  
o not new to arrange brushes in peripheral contact with burring-cylinders, such an arrangement being shown, for example, in our prior Patent No. 263,485, dated August 29, 1882.

Having thus described our invention, what  
5 we claim as new is—

In a machine for picking and burring wool, &c., the combination of a burring-cylinder, a clipper to remove the burrs clinging to the wool thereon, a fan or brush to remove the

wool from said burring-cylinder, and a brush 20 arranged between said clipper and fan or brush to brush particles of foreign matter from the wool while the latter moves on and with said burring-cylinder and after its passage under the influence of the clipper, and means, sub- 25 stantially as described, suitable for driving said parts, all said parts being arranged and operating substantially as and for the purposes set forth.

In testimony that we claim the foregoing we 30 have hereunto set our hands this 5th day of December, 1883.

JOHN R. CLARK.  
HENRY TINDELL.

Witnesses:

CHARLES H. PELL,  
EDWARD KEMPF.