

(No Model.)

2 Sheets—Sheet 1.

W. DENTON.  
CARDING MACHINE FOR MAKING MOTTLED ROVINGS.

No. 410,823.

Patented Sept. 10, 1889.

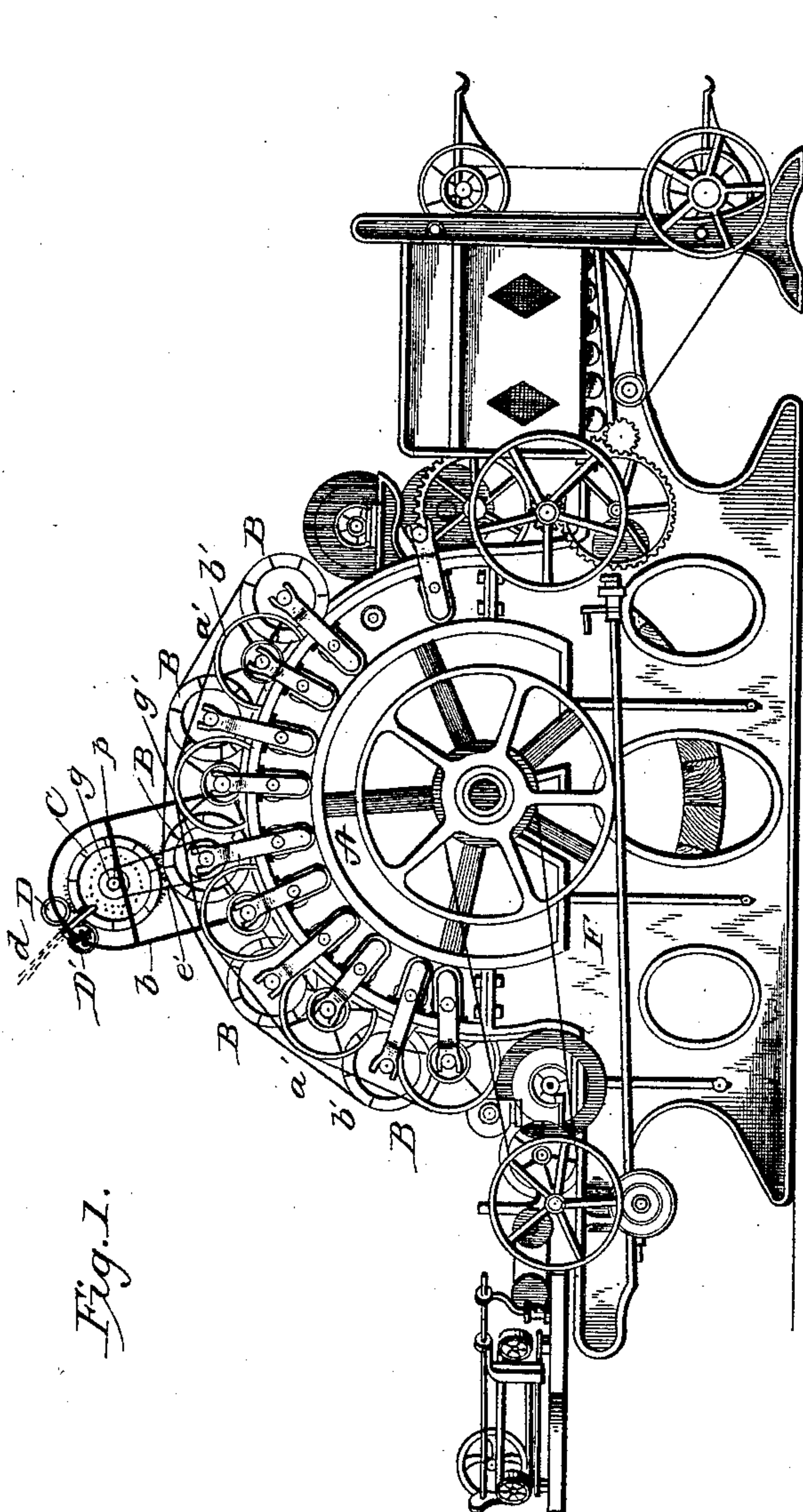


Fig. 1.

*WITNESSES*

F. L. Ourand.  
W<sup>m</sup> S. Hulse

F. L. Ourand  
W<sup>m</sup> S. Hulse

*INVENTOR*

INVENTOR  
Whitley Denton  
Duell, Laass & Duell, Attorneys  
By Benj. E. Leavel  
Asso. Attorney

By Ben E. Cowd  
Asso. Attorney

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2 Sheets—Sheet 2.

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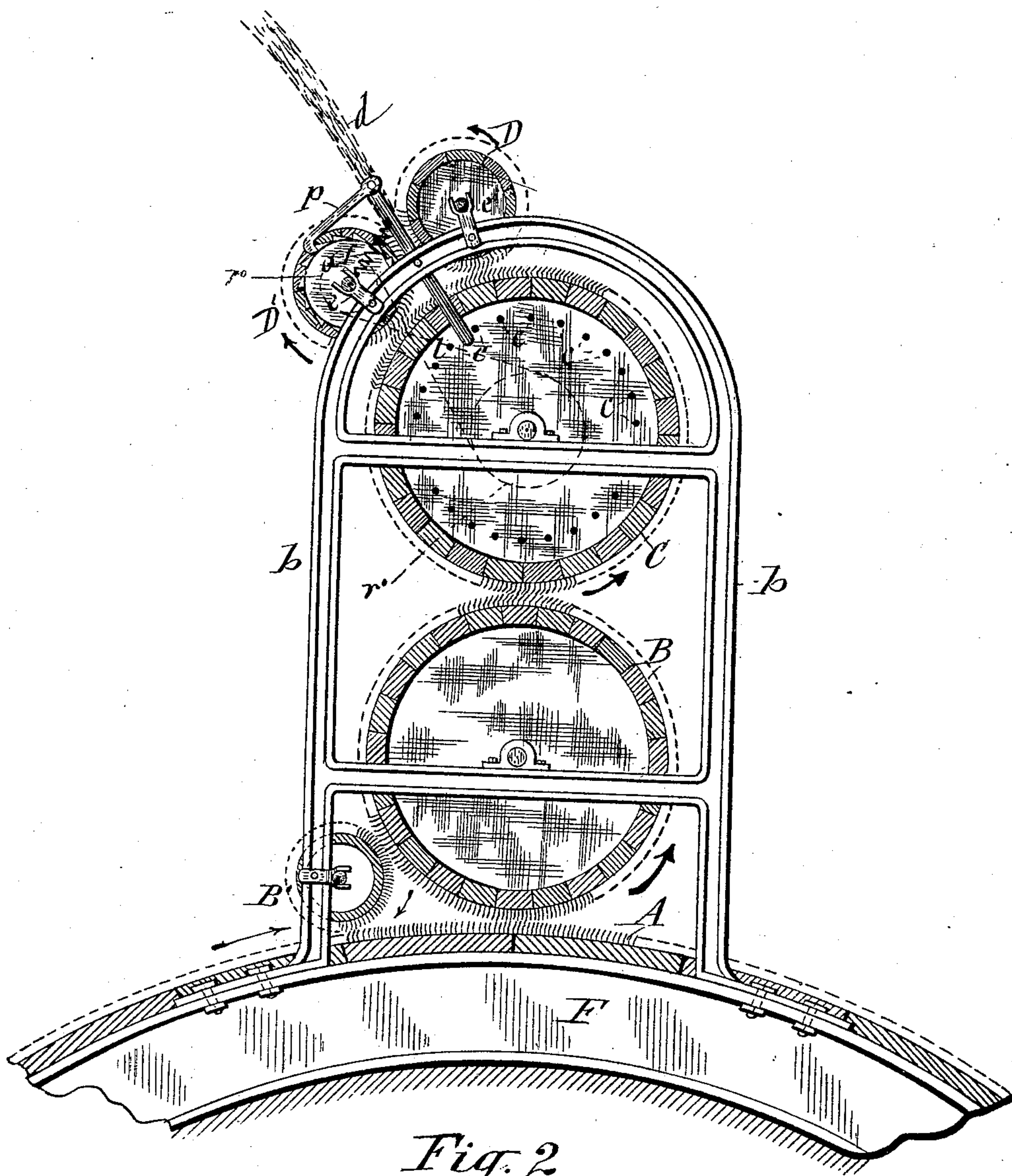


Fig. 2

WITNESSES:

A. F. Walz,  
J. J. Laass.

INVENTOR :

Whitley Denton

BY

Wuell, Laass & Wuell  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

WHITLEY DENTON, OF CENTREVILLE, MICHIGAN.

## CARDING-MACHINE FOR MAKING MOTTLED ROVINGS.

SPECIFICATION forming part of Letters Patent No. 410,823, dated September 10, 1889.

Application filed February 2, 1889. Serial No. 298,539. (No model.)

*To all whom it may concern:*

Be it known that I, WHITLEY DENTON, of Centreville, in the county of St. Joseph, in the State of Michigan, have invented new and useful Improvements in Carding - Machines for Making Mottled Rovings, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention is designed to be used on machines termed "finisher-cards" by manufacturers of woolen and cotton yarns.

It consists in certain novel improvements in carding-machines, whereby strips or longitudinal tufts of different colors can be practically mixed in the process of carding, as will be fully understood from the following description, taken in connection with the annexed drawings, in which—

Figure 1 is a side elevation of a finisher-card equipped with my invention, and Fig. 2 is a view illustrating clearly in detail my improved carding and mixing device.

Similar letters of reference indicate corresponding parts in both figures.

Referring to the annexed drawings by letter, A designates the main carding-cylinder, mounted on a frame F in the usual manner.

B B designate a series of workers, in connection with one or more of which I employ a supplemental worker C, according to the number of different colors to be applied to the roping produced by the machine. This supplemental worker C is mounted in standards b, secured to the main frame F, and it is arranged with its periphery in proximity to the periphery of a worker B, so as to transfer the wool carried on the supplemental worker C to the worker B.

The belts a' b' drive the workers and strippers of the machine, and the worker C has a pulley g on its shaft connected by a belt e' to a pulley g' on the shaft of a worker beneath.

D D' designate a pair of feed-rolls by means of which the drawings or web d is fed to the worker C. Said feed-rolls are mounted on brackets e e, secured to the standard b, and to one end of one D' of the feed-rolls is rigidly secured a ratchet-wheel a. To one end of the worker C is attached a series of pins c, arranged equidistant apart in a circle concentric to the axis of said worker. To the standard b is pivoted a lever l, one end of which is in the path of the pins c, and to the

opposite end of said lever is connected a pawl p, which engages the ratchet-wheel a. A spring f is connected to one end of the support e of the feed-roll D', having the ratchet, and the opposite end of this spring is connected to lever l, thus operating to draw the upper end of the latter to the feed-roll D'. The pins c coming successively in contact with the lever l during the rotation of the worker C, swing this lever intermittently away from the ratchet-wheel a, and by means of the pawl p impart an intermittent rotary motion to the feed-roll. A pulley r (shown by dotted lines, Fig. 2) is attached to one end of the feed-roll D' and connected by a belt with a pulley r' on the shaft of the supplemental worker C to allow a continuous rotary motion to be imparted to said feed-roll when such a motion is desired.

The stripper B' transfers the fleece from the lower worker B to the main cylinder A, as shown in Fig. 2.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the frame F, of the main cylinder A, the worker B, the standards b, rigidly secured to said frame, the supplemental worker C, mounted in said standards and arranged in close proximity to the worker B, the pins c on one end of the worker C, the feed-rolls D D', the ratchet-wheel a, secured to feed-roll D', the spring-actuated lever l, pivoted to one of the standards b and having one end in the path of the aforesaid pins c, and the pawl p, pivoted to the outer end of the said lever and engaging the ratchet-wheel, substantially as set forth.
2. The combination, with the main frame F and the standards b, of the main cylinder A, the two workers B C, the pins c, on the end of worker C, a stripper B', arranged in the relation to the worker B, as shown, the two feed-rolls, one of which is provided with a ratchet-wheel, and a pawl and spring-actuated lever l, all arranged and adapted to operate as specified.

In testimony whereof I have hereunto signed my name, in the presence of two witnesses, at Centreville, in the county of St. Joseph, in the State of Michigan, this 14th day of January, 1889.

WHITLEY DENTON. [L. s.]

Witnesses:

CHAS. A. STURGIS,  
CHAS. ERBSMEHL.