

(No Model.)

J. SOOTHILL.
DABBING BRUSH ACTUATING MECHANISM FOR WOOL COMBING MACHINES.
No. 462,598. Patented Nov. 3, 1891.

Fig. 1.

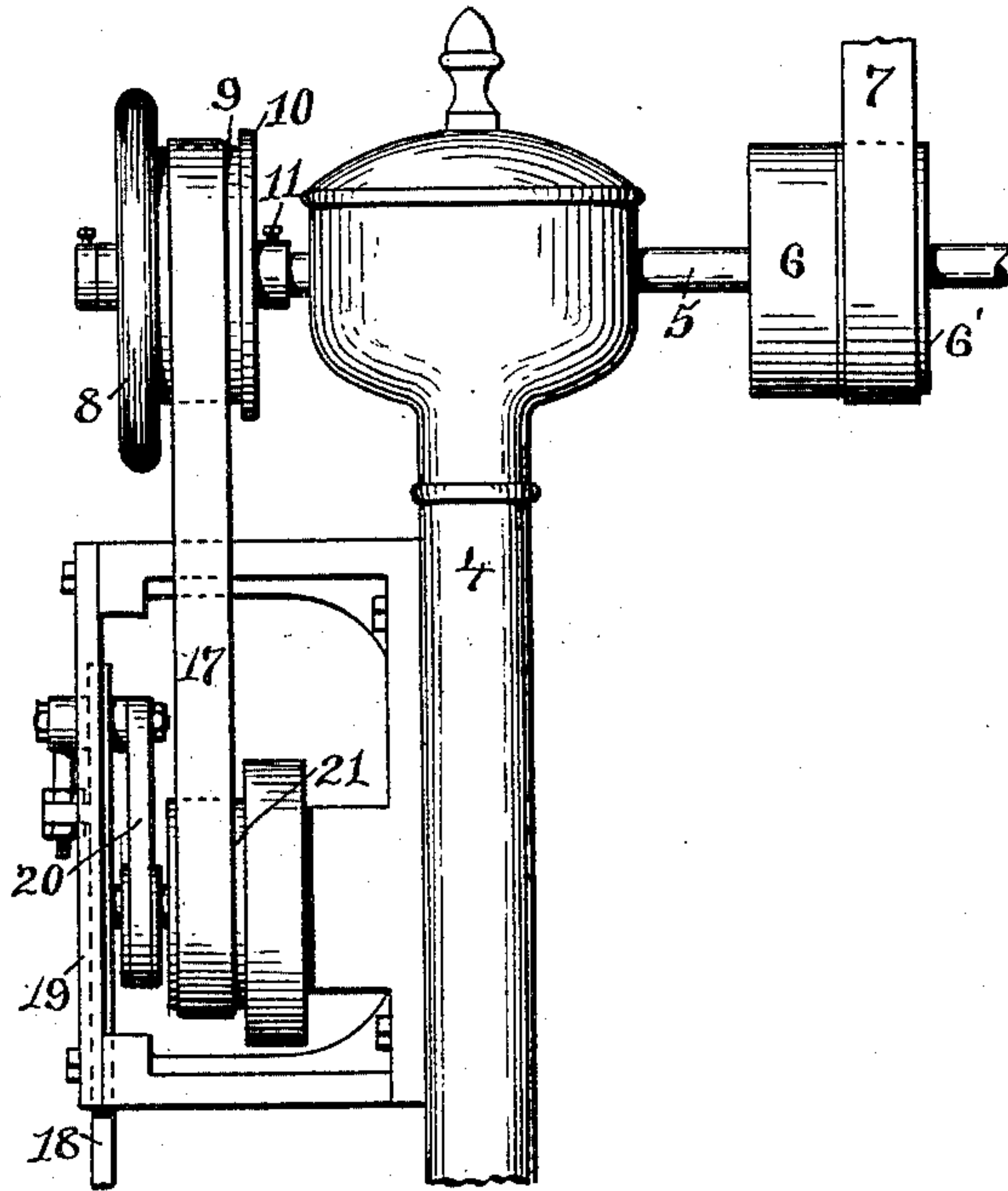


Fig. 2.

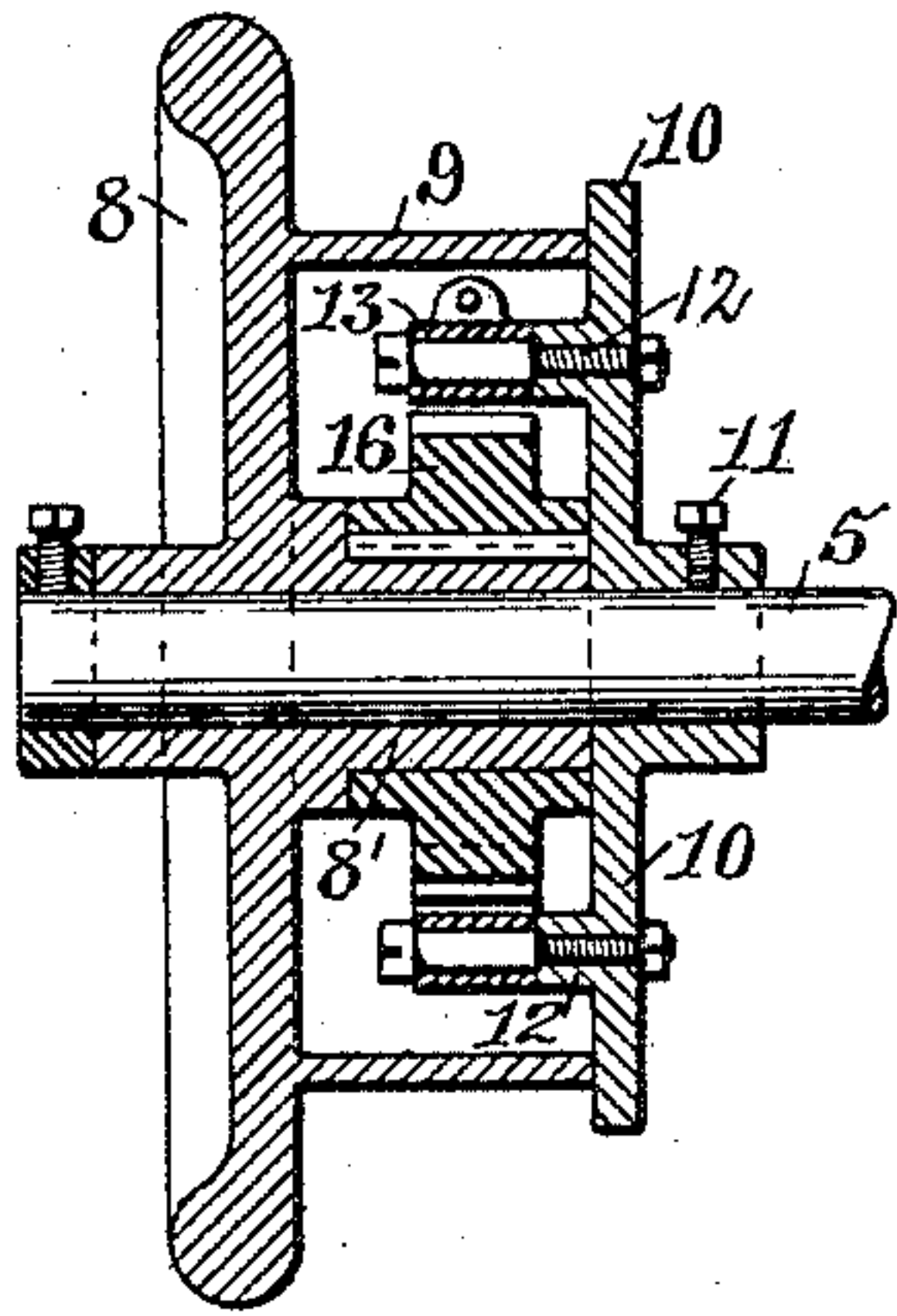
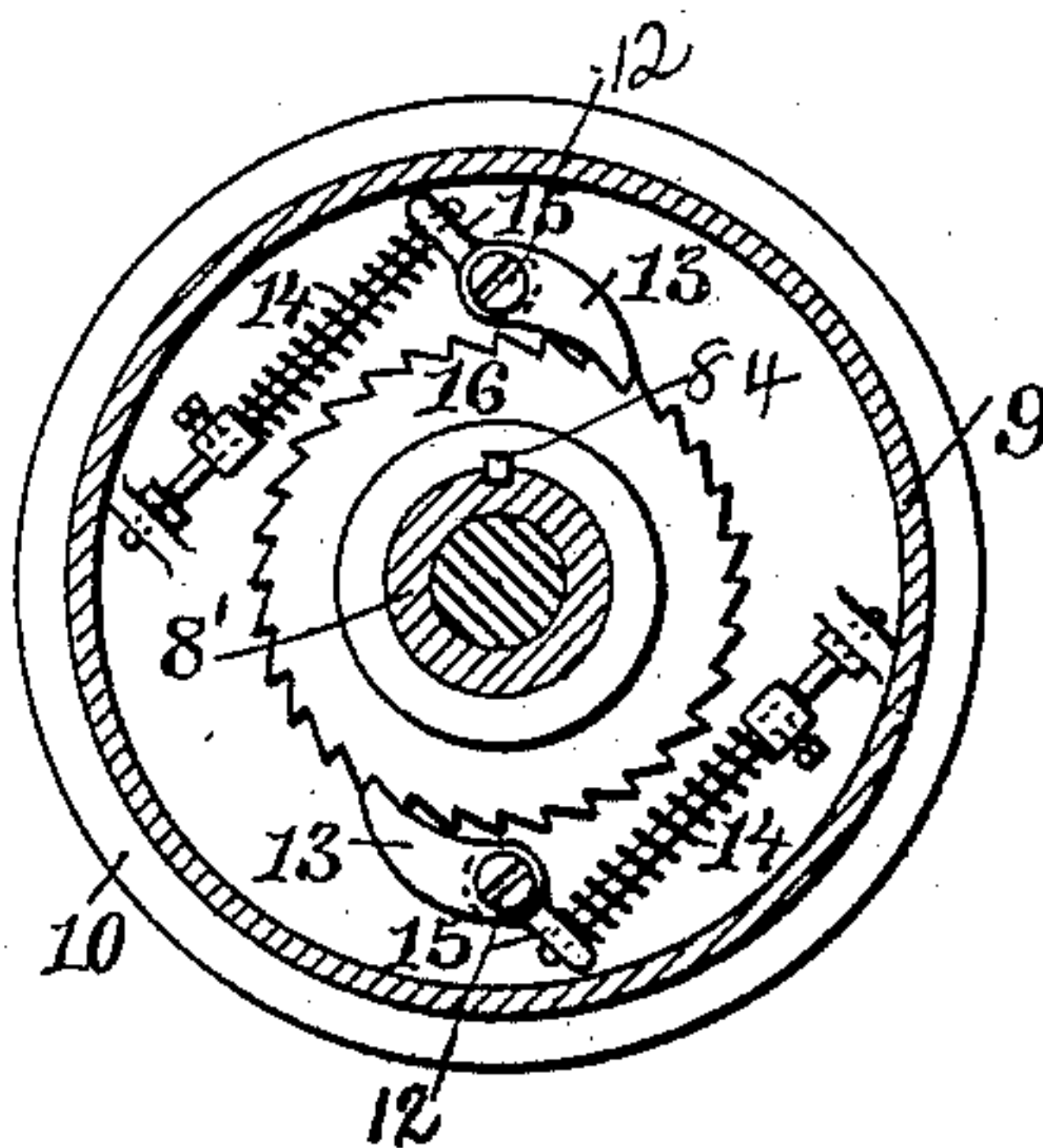


Fig. 3.



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JOHN SOOTHILL, OF JOHNSTON, ASSIGNOR OF ONE-HALF TO JAMES FLETCHER, OF PROVIDENCE, RHODE ISLAND.

DABBING-BRUSH-ACTUATING MECHANISM FOR WOOL-COMBING MACHINES.

SPECIFICATION forming part of Letters Patent No. 462,598, dated November 3, 1891.

Application filed April 13, 1891. Serial No. 388,702. (No model.)

To all whom it may concern:

Be it known that I, JOHN SOOTHILL, a subject of the Queen of Great Britain, at present residing in Johnston, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Dabbing-Brush-Actuating Mechanism for Wool-Comb-
5 ing Machines; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accom-
10 panying drawings, forming part of this specification.

This invention has reference to improvements in that part of a wool-combing machine known as the "dabber-driving" pulley.

The object of this invention is to produce a new and improved form of dabber-driving pulley which will continue in its operation for a short time after the comb has ceased to
20 revolve. To attain this end I have invented certain novel features of construction and combination of parts, as will be more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a counter-shaft support of a wool-combing machine and the dabber-driving mechanism secured thereto. Fig. 2 is a vertical sectional view of the improved dabber-
30 driving pulley. Fig. 3 is a view of the inner construction of the improved pulley.

In the ordinary construction of a wool-combing machine the dabber-driving pulley is rigidly secured to the counter-shaft and
35 stops and starts with the mechanism driving the comb and other portions of the wool-combing machine. In consequence of this construction the wool lying between the comb and the dabber-brush remains in that position until the machine is started. As the comb
40 begins to revolve at the first motion of the driving mechanism, the wool which has remained between the comb and dabber-brush is apt to be carried past the brush before the
45 brush is driven against the wool sufficiently to force that portion of the wool into the comb, thus causing what is called a "fault." My invention is for the purpose of overcoming such faults, and I will now proceed to describe it more particularly.

Similar numbers of reference designate corresponding parts throughout.

In the drawings, 4 indicates the counter-shaft support of a wool-combing machine, and 5 is the counter-shaft, 6 being a tight pulley
55 secured to said shaft, and 6' a loose pulley revolving thereon and driven by the belt 7. At the outer end of the counter-shaft 5 is secured the balance-pulley 8, which is revoluble
60 thereon, and has an inwardly-extending circumferential flange 9, the inner edge of this flange 9 moving around in easy contact with the back plate 10, which is secured on the
counter-shaft 5 by a set-screw 11 and is provided with the spindles 12 12, to which are piv-
65 otally secured the spring-operated pawls 13. These pawls may be operated, as shown in the drawings, by coiled springs 14, carried on
rods bearing against the ears 15; or they may be operated by other suitable springs, the ob-
70 ject being to force the end of the pawl into contact with the teeth of a ratchet-wheel 16, carried on the sleeve 8' of the balance-pulley
8 and secured thereto by a key 84. The teeth
75 cut on the ratchet-wheel 16 are cut in a direction so that by contact with the pawls 13 they keep the balance-pulley 8 on the flange 9, on
which the dabber-driving belt 17 is carried, from turning backward. The dabber-brush
80 is carried on the rod 18, which is moved up and down by a block sliding in guides in the frame 19 and operated by the crank-eccentric
20 and pulleys 21, to which motion is imparted through the belt 17.

The operation of my improved pulley is as
85 follows: When the belt 7 is shipped from the tight pulley 6 to the loose pulley 6', the belt driving the comb will also be shipped and the comb stopped. The weight and momentum
acquired by the balance-pulley 8 will, how-
90 ever, continue to revolve that pulley independently of the counter-shaft and to drive the dabber mechanism through means of the belt 17. The dabber-brush will thus be driven
95 down against the comb several times and sufficiently to force the wool lying under the dabber-brush into the comb. When now the machinery is started, the pawls 13 will engage
with the ratchet-wheel 16 and drive that wheel
100 and the balance-pulley 8, carrying the belt 17.

The dabber-brush will begin to operate before a new supply of wool is presented to its force, and therefore no wool can pass away from under the brush without being thoroughly
5 combed.

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

1. In a wool-combing machine, a balanced
10 dabber-driving pulley independently revolving on the counter-shaft and provided with a ratchet-wheel, and mechanism carried on said counter-shaft and adapted to engage said ratchet-wheel to drive said pulley, as de-
15 scribed.

2. In a wool-combing machine, the combination, with the dabber mechanism and a belt adapted to drive such mechanism, of a bal-

anced pulley independently rotatable on the counter-shaft and carrying the dabber-driv- 20 ing belt, and mechanism carried on said counter-shaft and adapted to drive said pulley, as described.

3. In a wool-combing machine, the combination, with the counter-shaft 5, having the 25 balanced loose pulley 8 carrying the dabber-driving belt and provided with the ratchet-wheel 16, keyed to the pulley-sleeve 8', of a back plate 10, having the spindles 12 12 and the spring-operated pawls 13 13 pivotally se- 30 cured thereto, as and for the purpose described.

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