

G. F. Taylor,

Carpet Sweeper.

No. 106429.

Patented Aug 16. 1870.

Fig. 1.

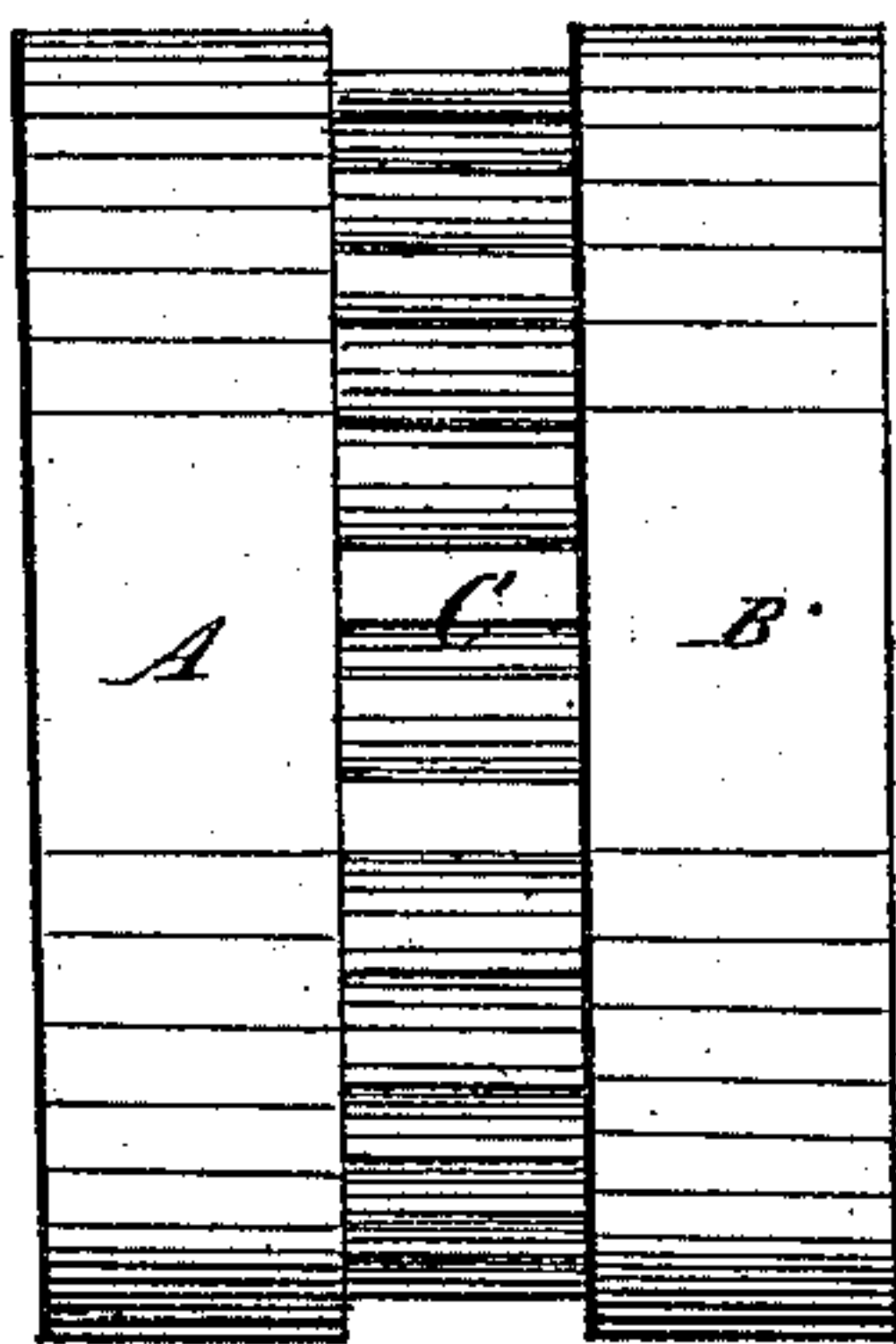


Fig. 2.

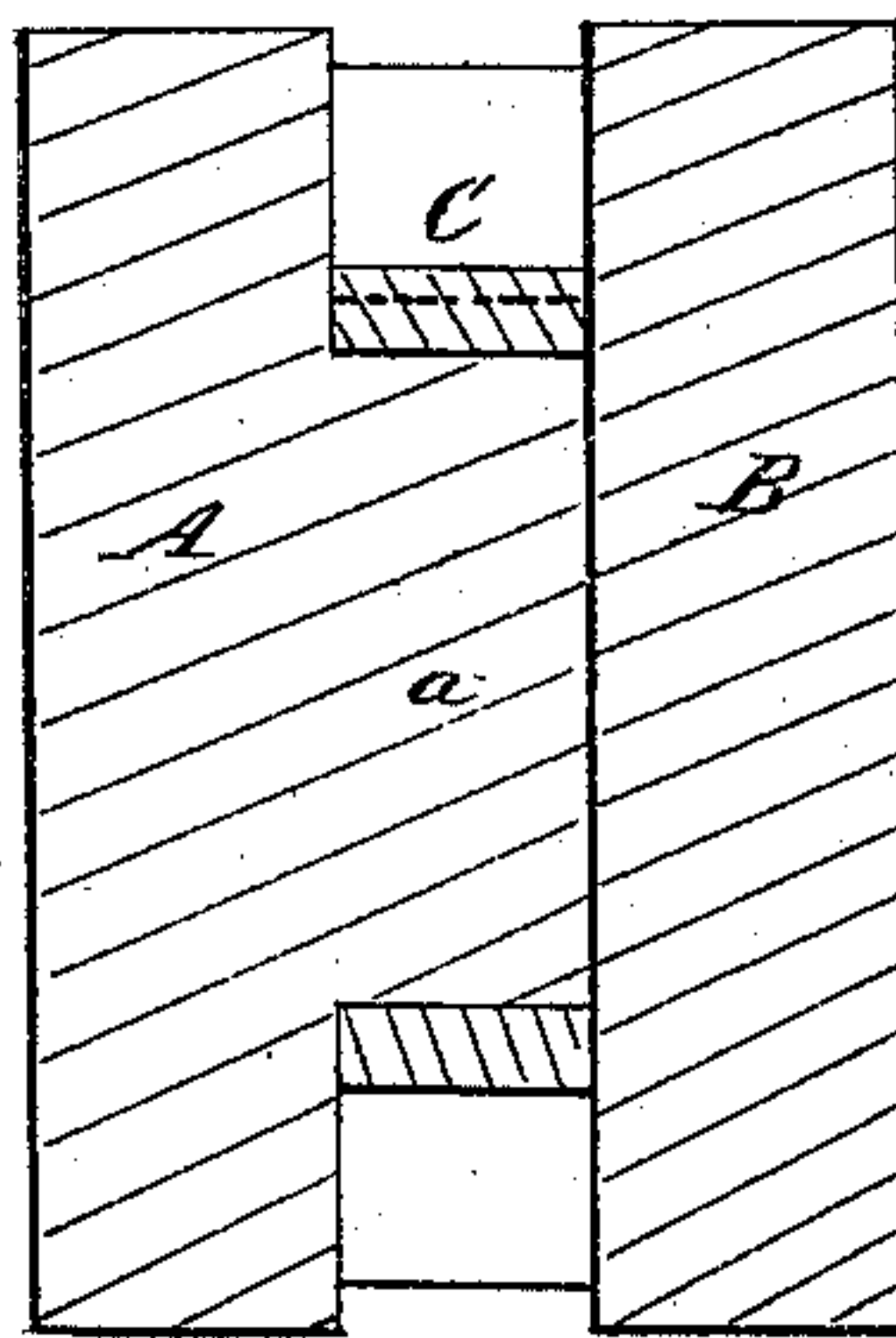


Fig. 3.

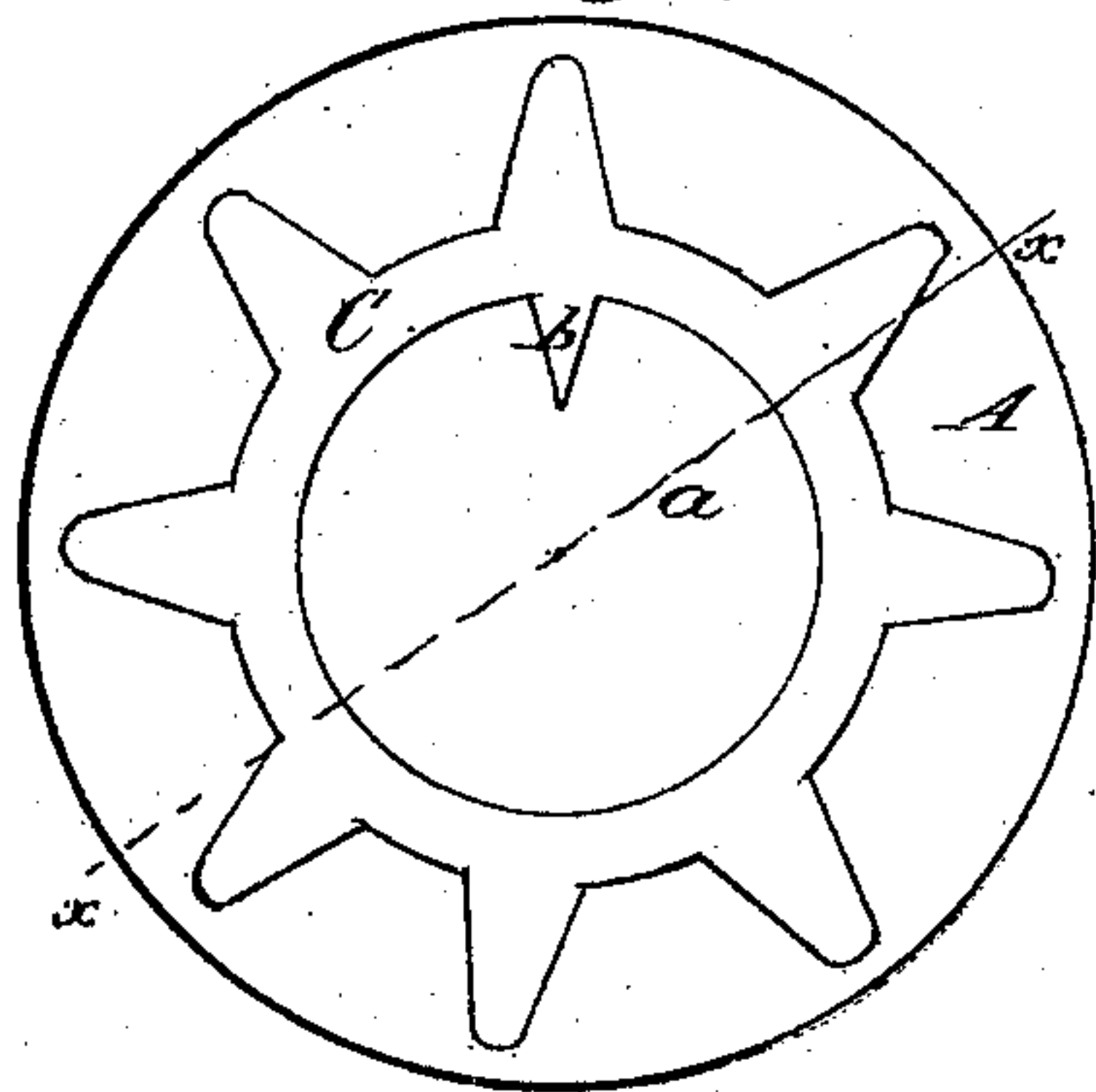
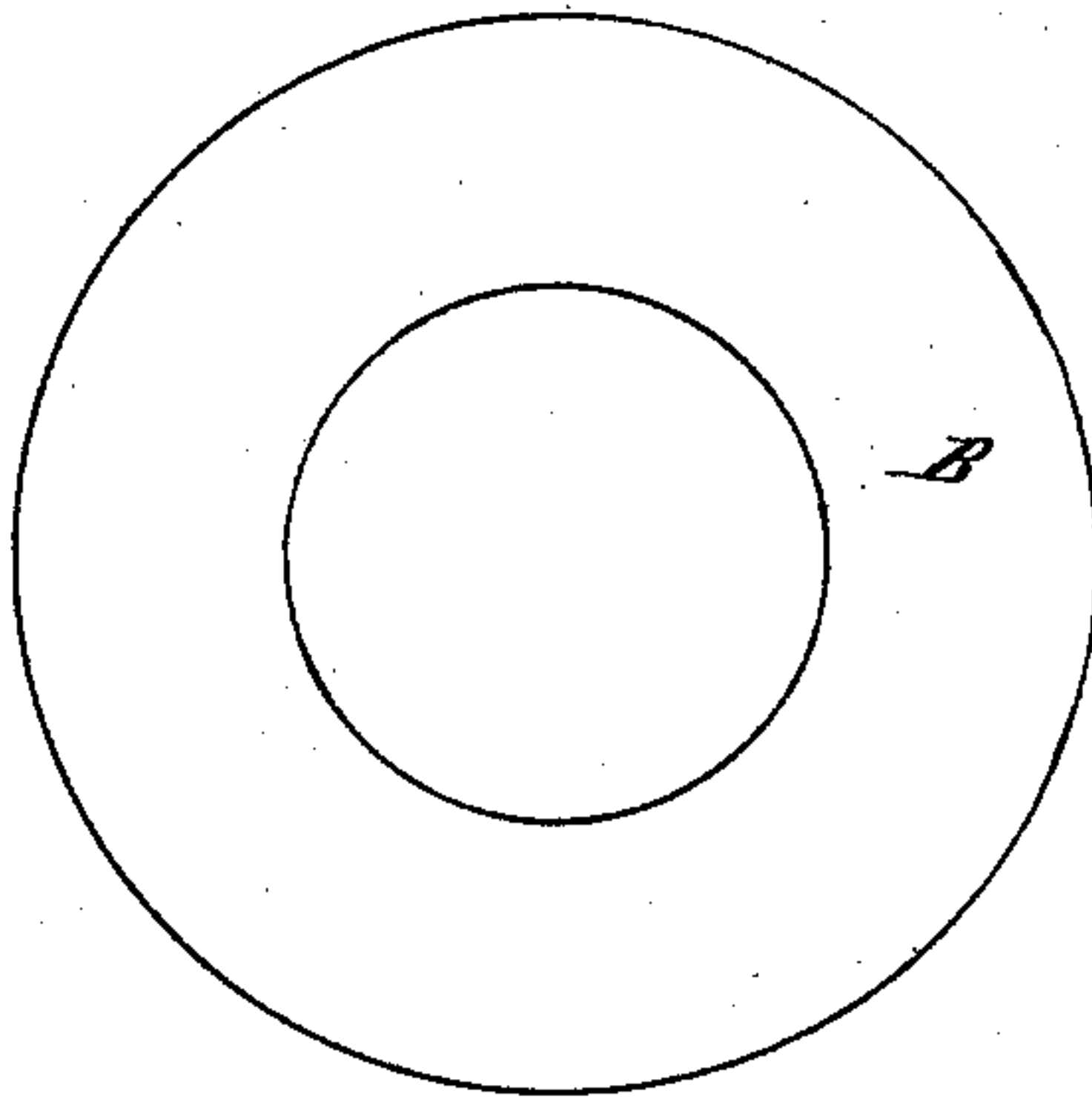


Fig. 4.



Witnesses.
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GILBERT FISK TAYLOR, OF NEW YORK, N. Y.

Letters Patent No. 106,429, dated August 16, 1870.

IMPROVED GEAR FOR CARPET-SWEEPING MACHINES.

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, GILBERT FISK TAYLOR, of the city, county, and State of New York, have invented a new and useful Improvement in Gear for Carpet-sweeping Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

This invention relates to an improvement in gear for carpet-sweeping machines, for which I made application for Letters Patent, and which was allowed November 30, 1869.

This machine, for which a patent was allowed, had its driving-gear constructed entirely of India-rubber, and consisted of a driving-wheel or pinion placed between two traction-wheels, all being cast or molded in one piece.

On testing this invention, it was found to operate well, being nearly noiseless in performing its work, and, with care and attention, sufficiently durable. Careless persons, however—servants—did, in some few instances, allow the rotary brush-cylinder to become choked or clogged, and while said cylinder was thereby rendered immovable, forced the machine along on the carpet, and broke the teeth of the driving-pinion, and, in one instance, rasped down the traction-wheels out of round.

The object of this present invention is to obviate this difficulty, provide against the carelessness of the users, and, to this end, I construct the gear of metal and India rubber combined, having the driving-wheel or pinion of metal, and the traction-wheels of India rubber, as hereinafter fully shown and described.

In the accompanying drawing—

Figure 1 is an edge view of my invention.

Figure 2, a section of the same, taken on the line *x*, fig. 3.

Figure 3, a side view of the same, with one of the traction-wheels removed.

Figure 4, a side view of the detached traction-wheel.

Similar letters of reference indicate corresponding parts in the several figures.

A B represent the two India-rubber traction-wheels, and

O, the metal driving-wheel or pinion.

The wheel A is cast or molded with a hub, *a*, projecting centrally from one side, said hub *a* and wheel A being cast or molded in one piece.

On this hub *a* the metal driving-wheel or pinion O is placed, and prevented from turning thereon by a horn or projection, *b*, which is fitted into the India-rubber hub *a*, as shown clearly in fig. 3.

The other traction-wheel B is also fitted on the hub *a*, the latter passing entirely through B, so that the outer side of the same and the end of the hub will be flush with each other.

The wheel B may be secured on the hub and to the side of the metal wheel or pinion O, by any suitable cement.

The metal wheel or pinion O gears into the pinion on the shaft of the brush-cylinders, and the India-rubber traction-wheels, as the machine is shoved along, communicate, through the medium of the metal wheel or pinion O, the rotary motion to the brush-cylinder.

This metal wheel or pinion O serves to protect the India-rubber traction-wheels A B, not permitting to wear materially, as the ends of the teeth of said wheel or pinion will soon come in contact with the carpet, as they are within a short distance of the peripheries of said wheels A B.

The teeth of the metal wheel or pinion O, of course, will not break, nor can said wheel or pinion work on the hub *a*, and the India-rubber traction-wheels A B insure the rotation of the brush-cylinder.

Thus, by this simple arrangement, the difficulty attending the carelessness of the users of my machine is fully obviated, and, at the same time, all of its advantages retained.

Having thus described my invention,

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

The metallic toothed ring C, cast with projection *b*, and fitted on the extension *a* of rubber rim A, where it is secured by the rubber collar or rim B, the whole constituting an improved gear-wheel for carpet-sweepers, as herein shown and described.

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Witnesses:

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