

R. C. HIGGINS.

Improvement in Carpet-Sweepers.

No. 114,680

Patented May 9, 1871.

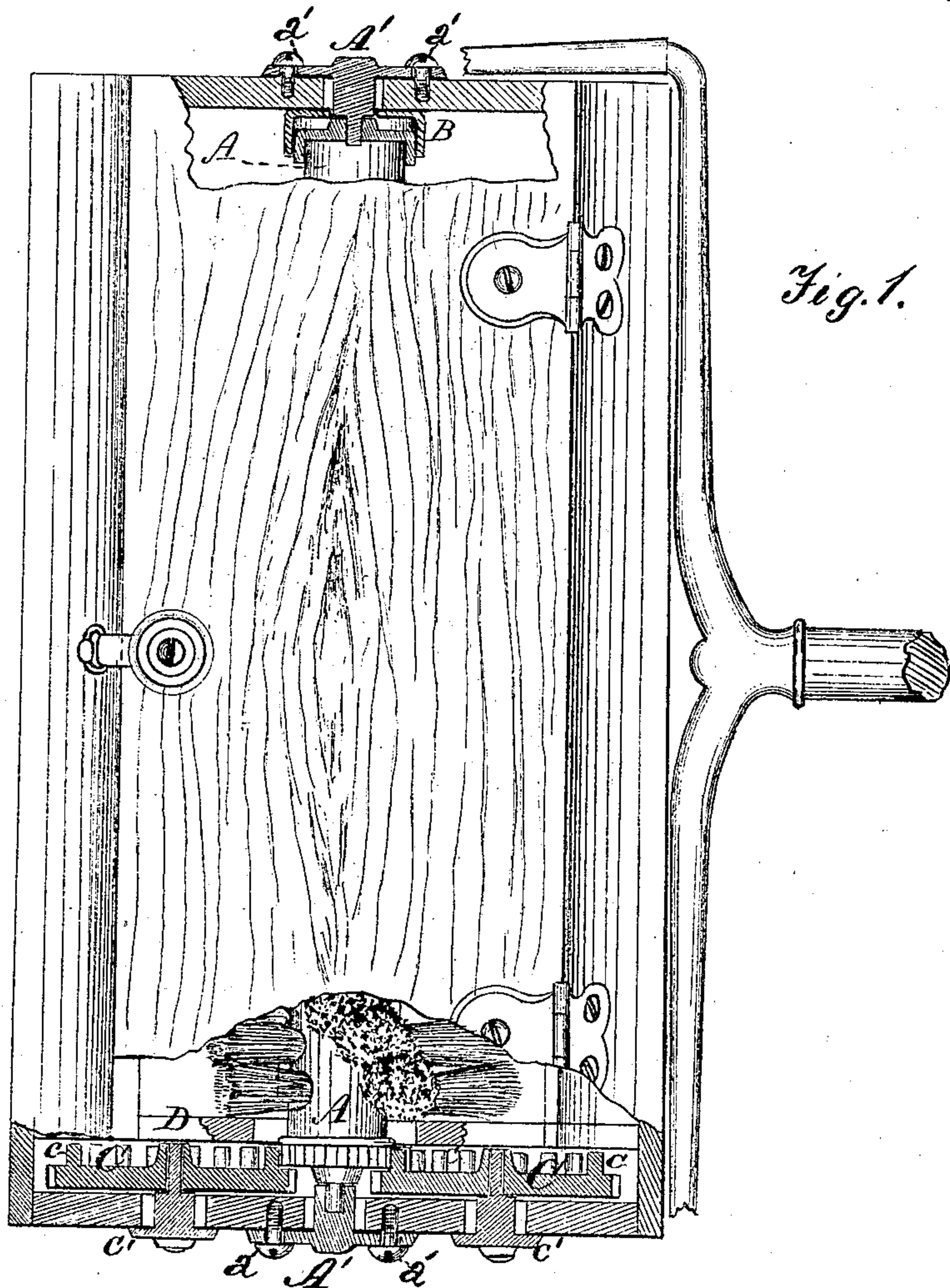


Fig. 1.

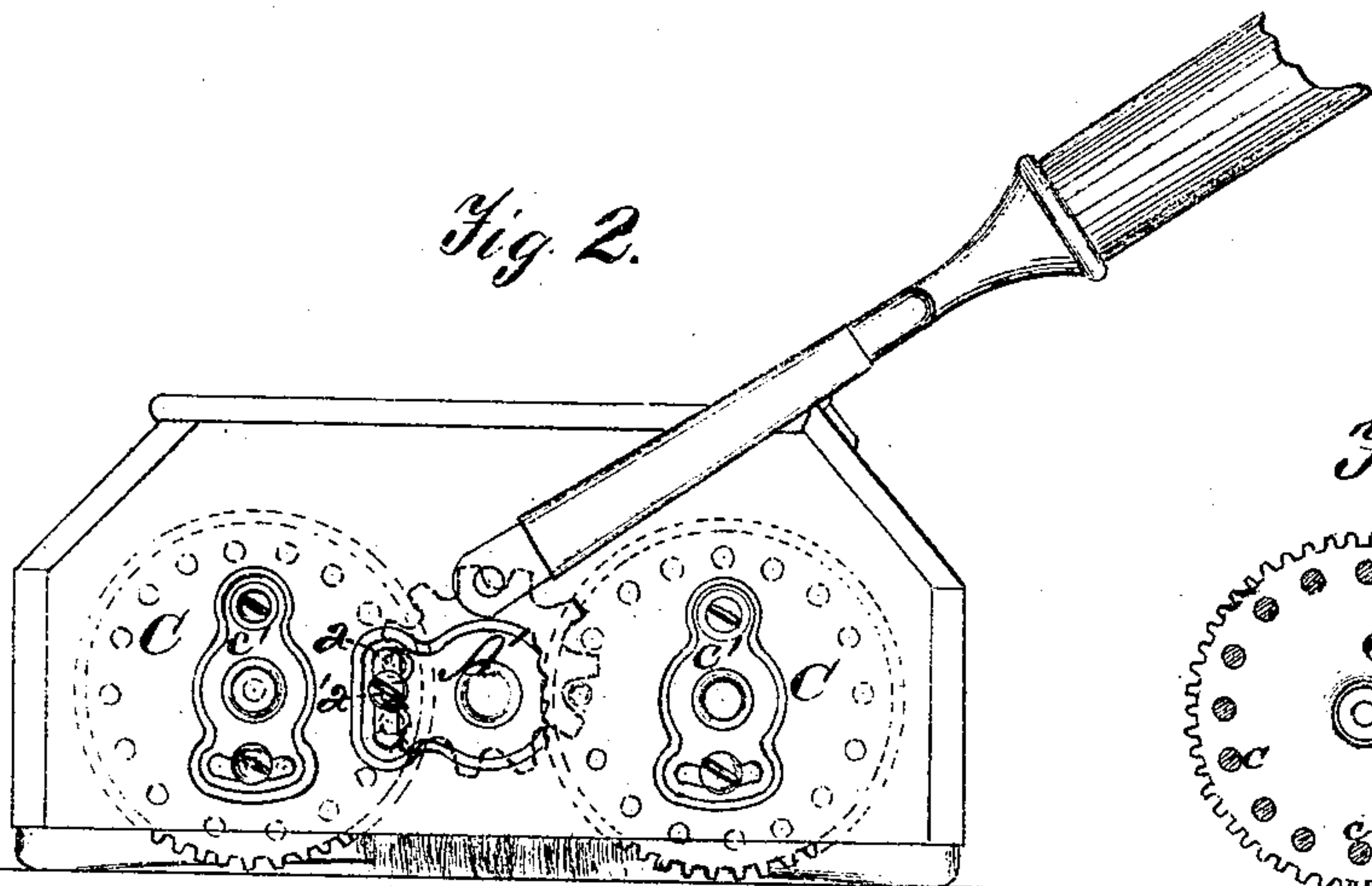


Fig. 2.

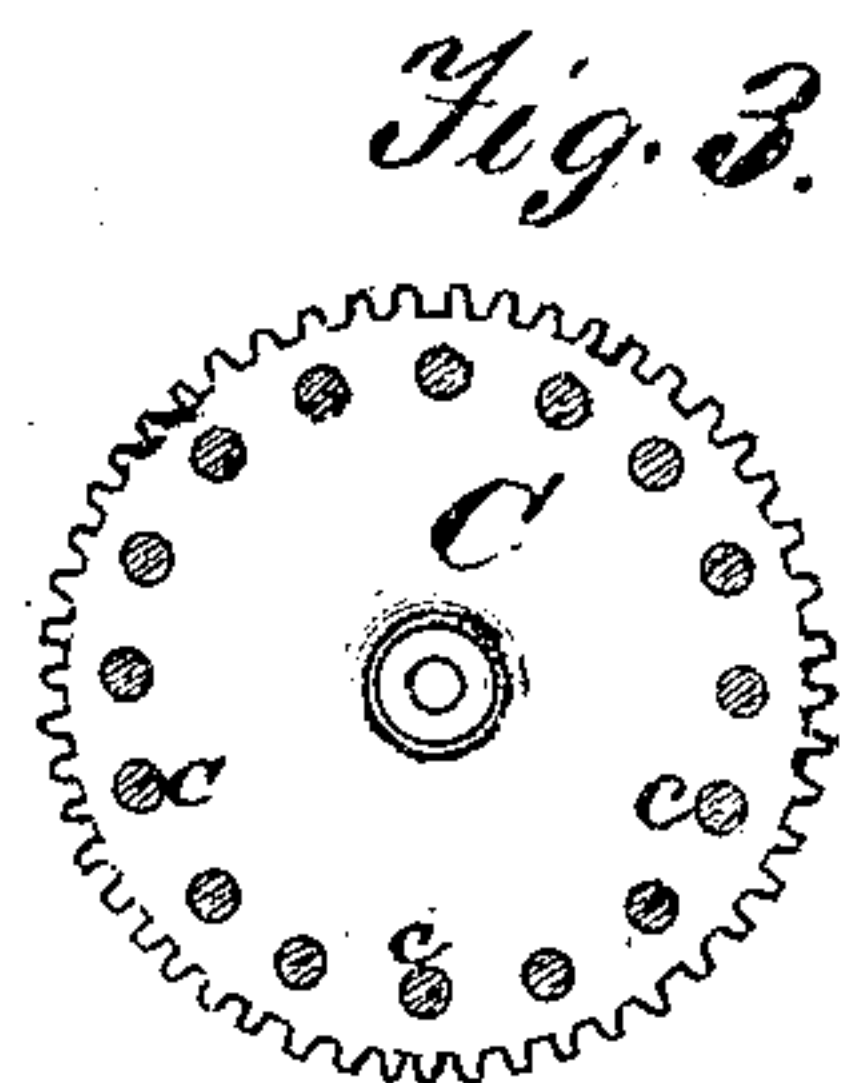


Fig. 3.

Witnesses

A. Ruppert  
J. H. Hinton

Inventor:

R. C. Higgins  
Per Adams & Co.



# UNITED STATES PATENT OFFICE.

REUBEN C. HIGGINS, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN CARPET-SWEEPERS.

Specification forming part of Letters Patent No. **114,680**, dated May 9, 1871.

*To all whom it may concern:*

Be it known that I, REUBEN C. HIGGINS, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Carpet-Sweepers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of the same, and in which—

Figure 1 represents a plan view of my carpet-sweeper. Fig. 2 is a side view thereof, and Fig. 3 is a side view of one of the driving or gear wheels of the same.

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

This invention refers to a carpet-sweeper; and it consists of improvements upon one granted to myself and Abraham Fuller on the 16th of November, 1869, substantially as will be hereinafter set forth and claimed.

To enable those skilled in the art to which my invention appertains to make and use the same, I will proceed to describe its construction and operation.

In the annexed drawing is illustrated one of the patented carpet-sweepers of R. C. Higgins and Abraham Fuller, granted the date above stated, to which my improvements are attached, and which consist of the employment of two or more driving or gear wheels, one of which being substituted in place of the balance-wheel made use of in the above-mentioned sweeper, whereby increased velocity is imparted to the revolving sweeping-brush, and of a shield or cap for preventing dust, &c., from collecting around one end of the brush shaft or axle at the point where it has its bearing in the brush-box, the opposite end of said brush-axle, at this point, being protected from dust, &c., by means of a transverse partition or board, through which it passes.

A in the above-referred-to drawing refers to the shaft or axle of the revolving brush of the sweeper, one end of which is capped, and receives the reduced cylindrical portion of a stud or right-angular plate, formed upon a plate screwed or otherwise secured to one end of the brush-box or receptacle for receiving the same, and the dust, &c., removed from the floor being swept, and which reduced part

of said stud forms a bearing for that end of said shaft which fits and revolves thereon.

The plate A' and its fellow, which are supplied with the lateral lugs or projections forming bearings for the brush-shaft, are supplied with slots and set-screws *a a'*, for the purpose of allowing the said shaft to be adjusted, when desired, in the required direction.

B refers to a cap or shield, which is of a semi-cylindrical form, but not so shown in the drawing, owing to its being drawn in section, and is fastened at one end, or that end thereof in contact with the end of the brush-box, to the inner side of the latter by nails or otherwise, passing through the vertical portion thereof and entering the said box. This cap or shield is located directly over that end of the shaft above alluded to, for the purpose of preventing dust, &c., from coming in contact therewith, whereby the same may be prevented from being clogged, or debarred from revolving freely when the sweeper is in use.

The opposite end of the said shaft A, which is journaled somewhat similar to the end above described, is provided with a pinion, the same as in Higgins and Fuller's patent hereinbefore alluded to, but not in that case supplied with two driving or gear wheels, C C, as is this, which are journaled, as shown in Figs. 1 and 2, and gear with the pinion upon the brush-shaft A, for the purpose of imparting increased velocity or motion to the said shaft and its brush, one of said wheels being made to take the place of the balance-wheel, used in connection with the Higgins and Fuller sweeper, from which it will be seen that the sweeper is not only balanced thereby, but its brush assisted in its operation of sweeping, as already above stated.

The wheels or driving-gear C C, in addition to the teeth constructed upon their peripheries, which teeth are solely for the purpose of giving motion to said wheels, and not to the brush-shaft, are also supplied with a series of isolated teeth, *c c c*, secured laterally to one of their sides, and by means of which and a pinion motion is imparted to the shaft of the brush.

One end of the axles of these wheels has its bearing within slotted plates *c' c'*, which are

fastened, by screws or otherwise, to one end of the receptacle A, the object of said slotted bearing-plates, also provided with set-screws, being for the purpose of allowing the said driving-wheels C C to be adjusted with reference to the brush, which they rotate or drive, when said brush is raised or lowered or adjusted by the means above set forth or described.

Disa partition, through which shaft A passes.

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

1. The cap or shield B, in combination with the revolving brush-shaft A of a sweeper, substantially as and for the purpose set forth.

2. The driving-wheels C C, supplied with the isolated teeth *c c*, brush-shaft A, with a pinion, and the adjustable bearing-plates *a' a'* and *c' c'*, all constructed and arranged to operate substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have hereunto signed my name this 13th day of March, A. D. 1871, in presence of two subscribing witnesses.

REUBEN C. HIGGINS.

Witnesses:

B. F. HAYES,

WM. M. CUDWORTH.