

No. 725,689.

PATENTED APR. 21, 1903.

F. J. FARRELL.
APPARATUS FOR CLEANING CARPETS, &c.
APPLICATION FILED MAY 9, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

FIG. 1.

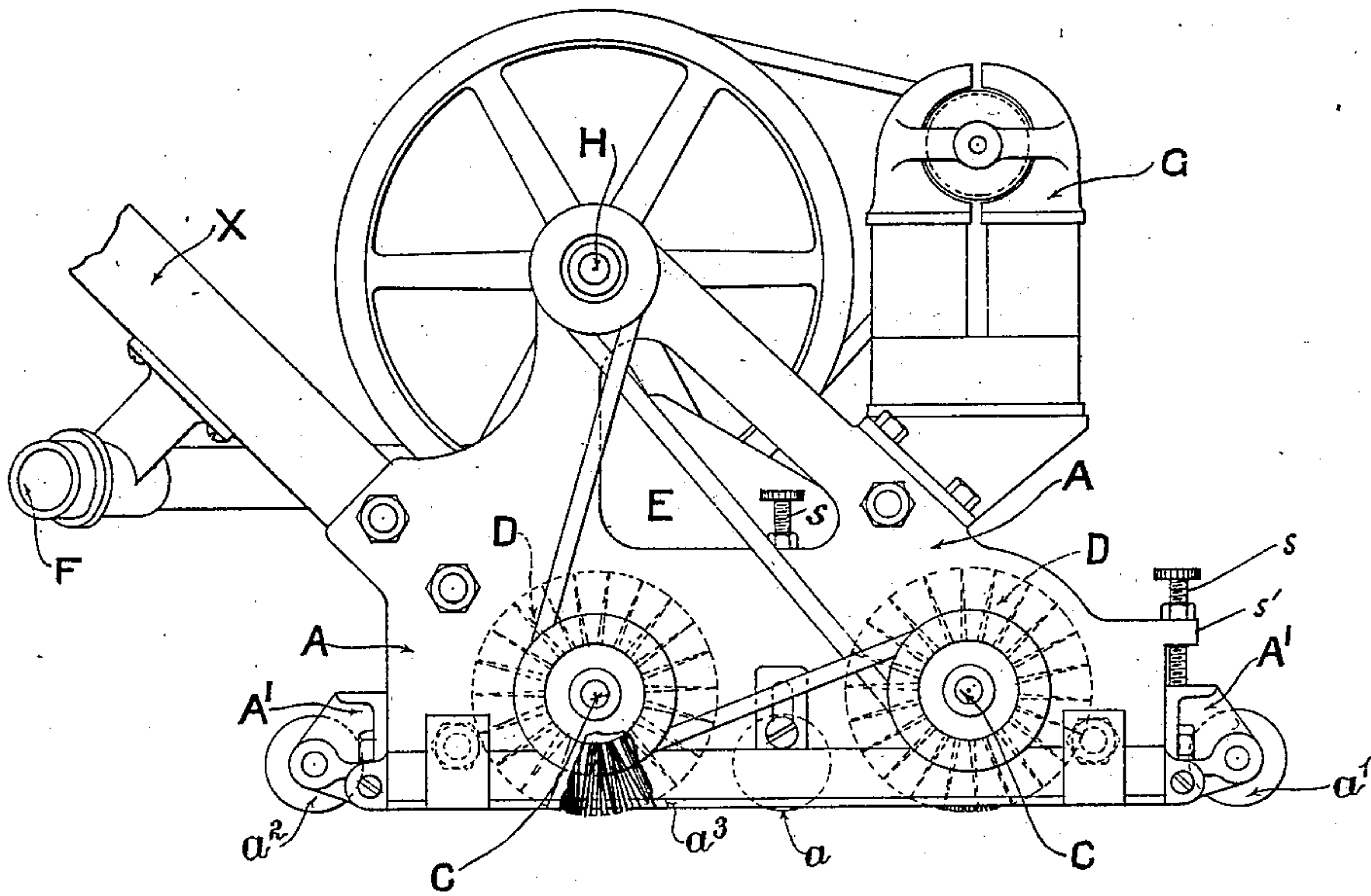
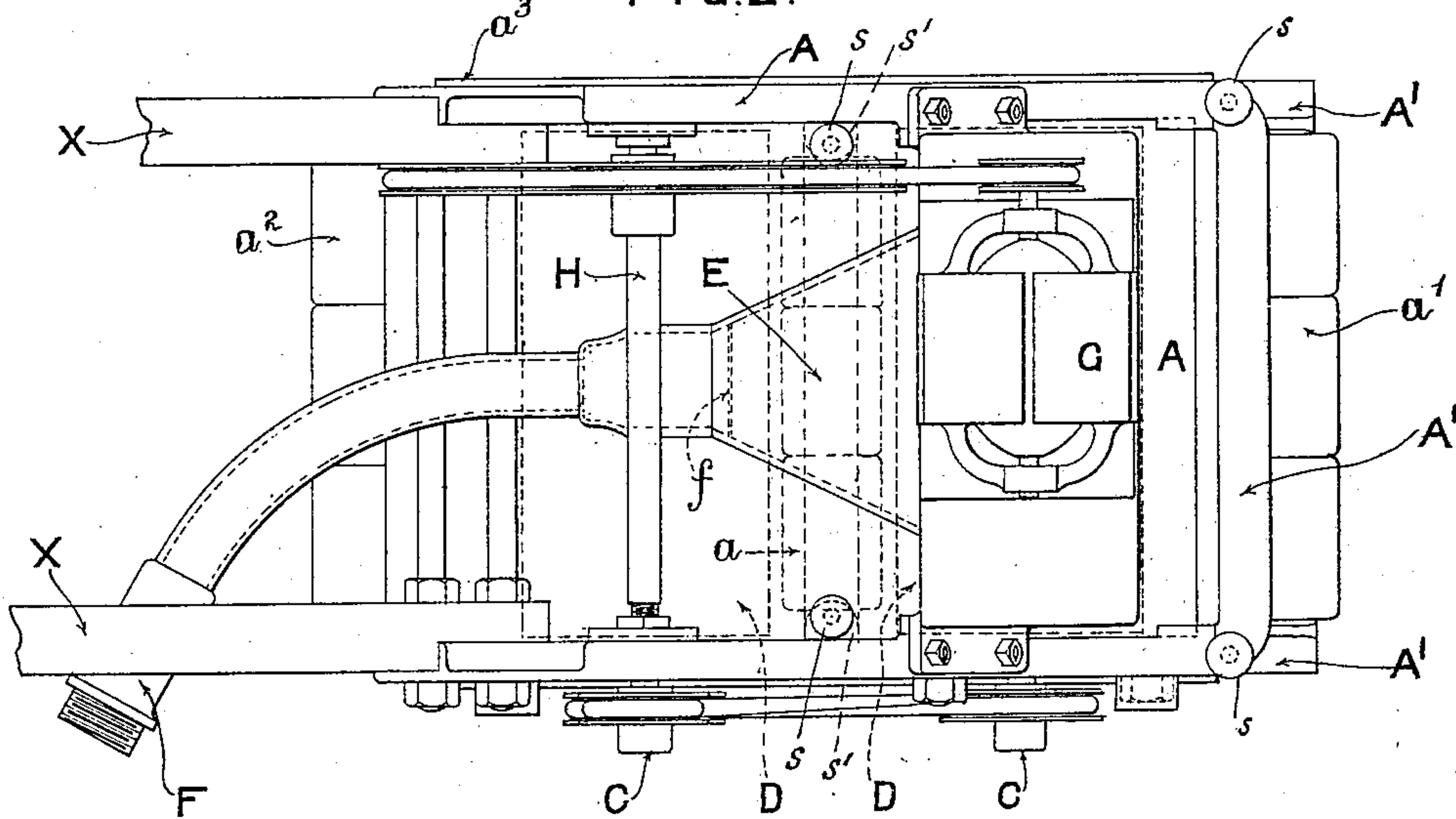


FIG. 2.



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2 SHEETS—SHEET 2.

FIG. 3.

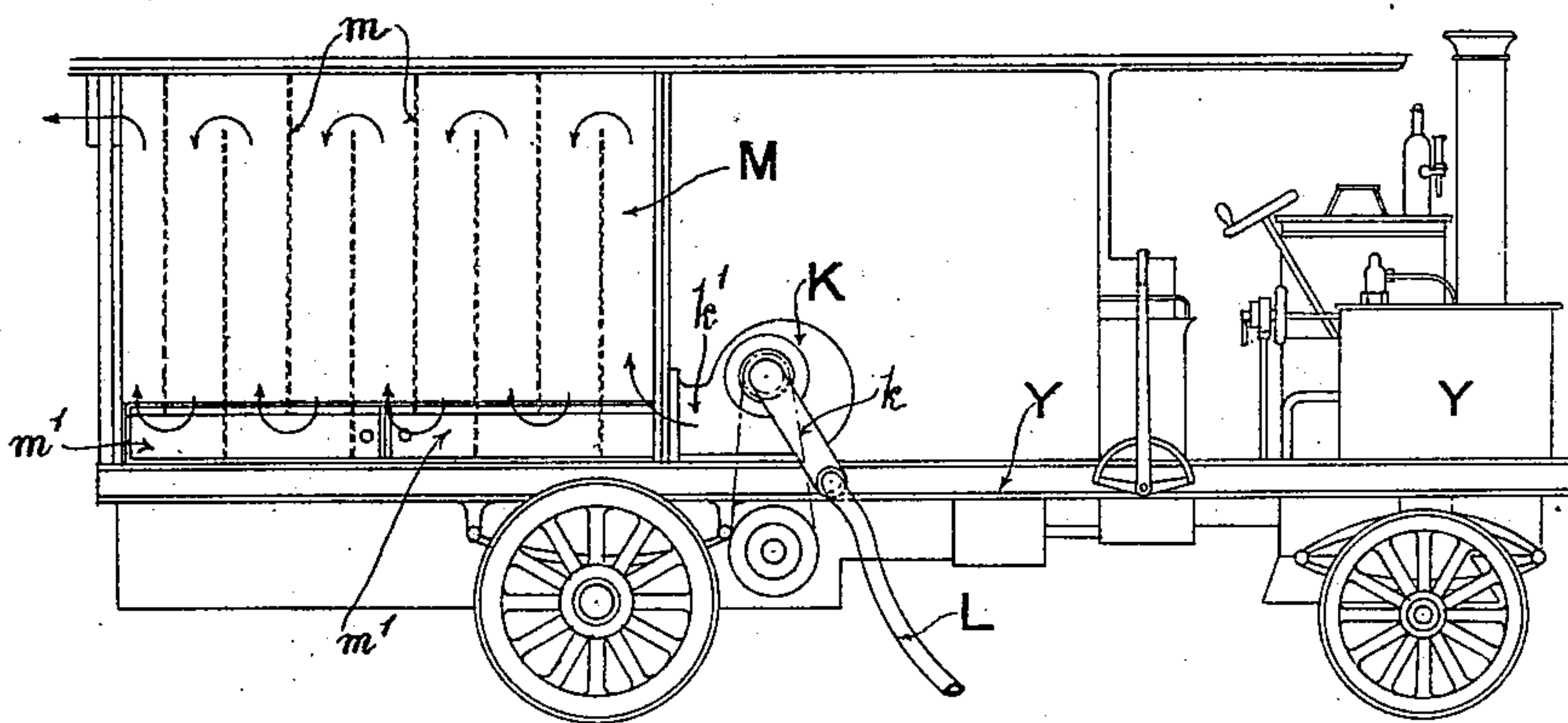


FIG. 4.

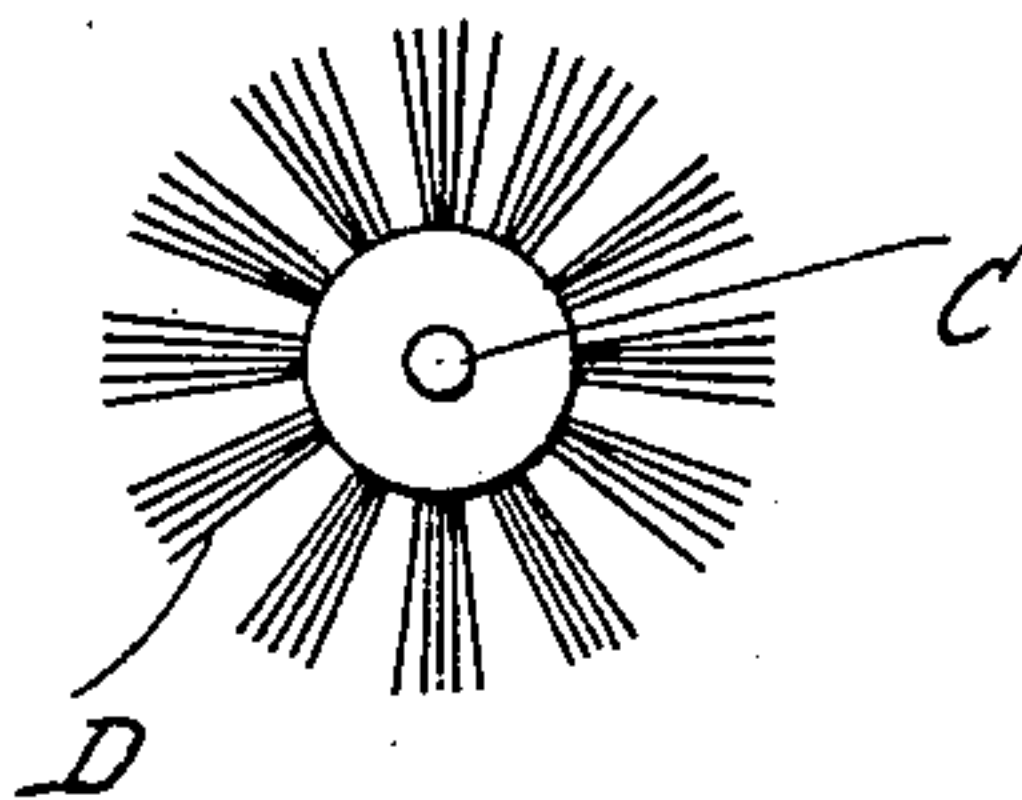
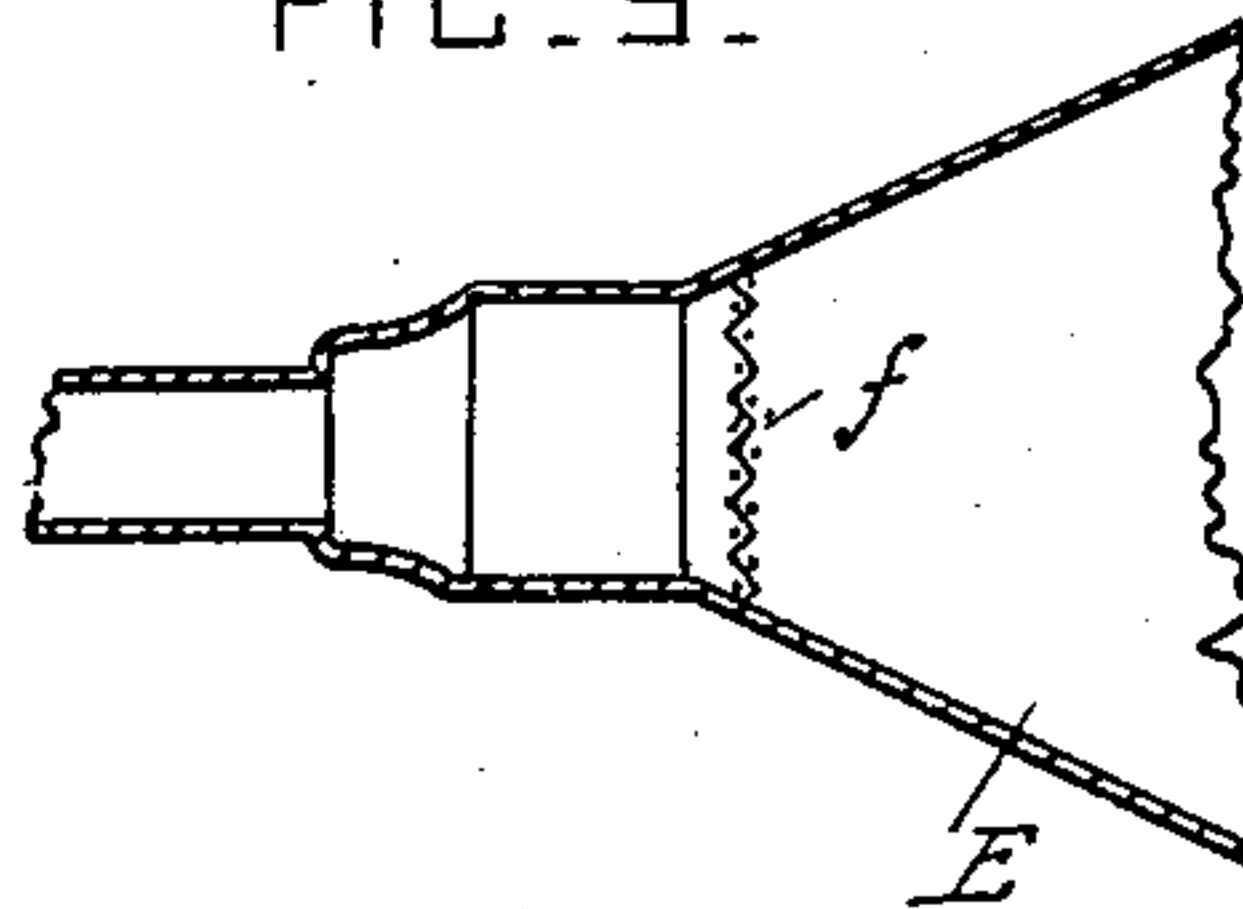


FIG. 5.



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FRANK JAMES FARRELL, OF LONDON, ENGLAND.

APPARATUS FOR CLEANING CARPETS, &c.

SPECIFICATION forming part of Letters Patent No. 725,689, dated April 21, 1903.

Application filed May 9, 1902. Serial No. 106,640. (No model.)

To all whom it may concern:

Be it known that I, FRANK JAMES FARRELL, technical chemist, a subject of the King of Great Britain, residing at 89 Albert Bridge road, London, in the county of Surrey, England, have invented a new and Improved Apparatus for Cleaning Carpets and the Like, (for which I have filed an application for Letters Patent in Great Britain and Ireland, numbered 20,178, and dated October 9, 1901,) of which the following is a full and complete specification.

This invention relates to an improved apparatus for removing dust from carpets and the like *in situ*, the object being to obviate the cost, labor, and inconvenience of taking up and relaying carpets when it is necessary to clean them.

According to the present invention I employ one or more revolving brushes carried in a suitable box or screen mounted on wheels or slides, so that it can be moved over the carpet *in situ*, the said brushes being driven from any convenient source of power. The box or screen containing the brushes is connected by means of a flexible tube with an exhaustor and a settling-chamber outside the building in which the carpet to be cleaned is located, the said blower receiving its motion from any suitable source of power.

In the accompanying drawings, which illustrate this invention, Figures 1 and 2, Sheet No. 1, are views in side elevation and plan, respectively, illustrating the brushing part of the apparatus intended to be used for cleansing the carpet *in situ* in the building; and Fig. 3, Sheet No. 2, is a view in elevation showing the other part of the apparatus intended to be used outside the building, consisting, essentially, of an exhaustor and a dust settling and collecting chamber. Fig. 4 is an end view of one of the rotary brushes. Fig. 5 is a sectional plan view of a part of the screen E, showing the grid *f*.

Referring to Figs. 1 and 2, the brushing apparatus consists, essentially, of a frame A, carrying in suitable bearings axles C C, each carrying a rotary brush D. These brushes are covered by a hood or screen E, in the top of which is an outlet-pipe terminating in a nozzle F, to which a flexible pipe is adapted

to be attached. In this pipe is placed a grid *f* of suitable mesh to collect pieces of paper and the like and prevent their passage into the exhaustor.

Onto the frame A is adjustably mounted an auxiliary frame A', carrying two sets of rollers *a'* and *a*², and in the main frame A is mounted another set of rollers, *a*, located between the rotary brushes. The auxiliary frame A' is formed as an enveloping dust screen or curtain provided with a rubber or flexible bottom edge *a*³, contacting with the surface of the carpet in order to effectually inclose the portion of carpet under treatment. The auxiliary frame A' is adjusted by set-screws *s* working in lugs *s'* on the frame A. The weight of the apparatus is so placed that the apparatus rests on the front and intermediate sets of rollers *a'* and *a*, the rear set *a*² being only brought into contact with the ground for the purpose of turning the apparatus. The adjustment of the auxiliary frame A' with respect to main frame A in the vertical plane by means of the set-screws shown enables the wear of the brushes to be compensated for. The apparatus is provided with suitable handles X (shown broken in Figs. 1 and 2) for propelling and manipulating purposes. On the frame A is mounted an electric motor G, which imparts motion to an intermediate shaft H, driving the axles C C of the rotary brushes D either by belts, as shown in the drawings, or by gearing, the arrangement being such that the brushes rotate inwardly toward one another. The other part of the apparatus consists, essentially, of an exhaustor driven by a suitable motor and of a settling-chamber. A convenient arrangement when current is available within or about the building for driving the motor of the brushing apparatus is that illustrated in Fig. 3 of the accompanying drawings, wherein the exhaustor K and the settling-chamber M are mounted on a self-propelled lorry Y, and the power necessary to drive the exhaustor is obtained directly by suitable gearing from the motor of the vehicle.

The inlet *k* of the exhaustor K is connected with the nozzle F of the pipe forming the outlet of the hood or screen E of the brushing apparatus by means of a flexible tube L, and

the outlet or discharge k' is connected with the settling-chamber M. This chamber M consists of a suitably-shaped box having alternately-placed screens m within it, which
5 are adapted to collect and throw down the dust blown into the chamber, suitable doors m' being provided by which dust may be removed from the chamber.

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

1. The combination, with a main frame, and rotary brushes journaled in the said frame; of a supporting-roller journaled in the said frame between the said brushes, an auxiliary
15 frame supported by the main frame, a supporting-roller α' journaled at the front end of the said auxiliary frame, a turning-roller α^2 journaled at the rear end of the said auxiliary frame and normally clear of the carpet, means
20 for adjusting the said rollers α' and α^2 vertically, a motor supported by the said main frame, and driving mechanism connecting the

said motor with the said brushes, substantially as set forth.

2. The combination, with a hollow main 25 frame, and rotary brushes journaled inside the said frame; of an adjustable auxiliary frame secured around the said main frame and provided with a flexible edge piece for bearing against the carpet, a supporting-roller 30 α journaled in the said main frame between the said brushes, a supporting-roller α' journaled in the front end portion of the said auxiliary frame, a turning-roller α^2 journaled 35 in the rear portion of the said auxiliary frame and normally clear of the carpet, a motor supported by the said main frame, and driving mechanism connecting the said motor with the said brushes, substantially as set forth.

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Witnesses:

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