

(No Model.)

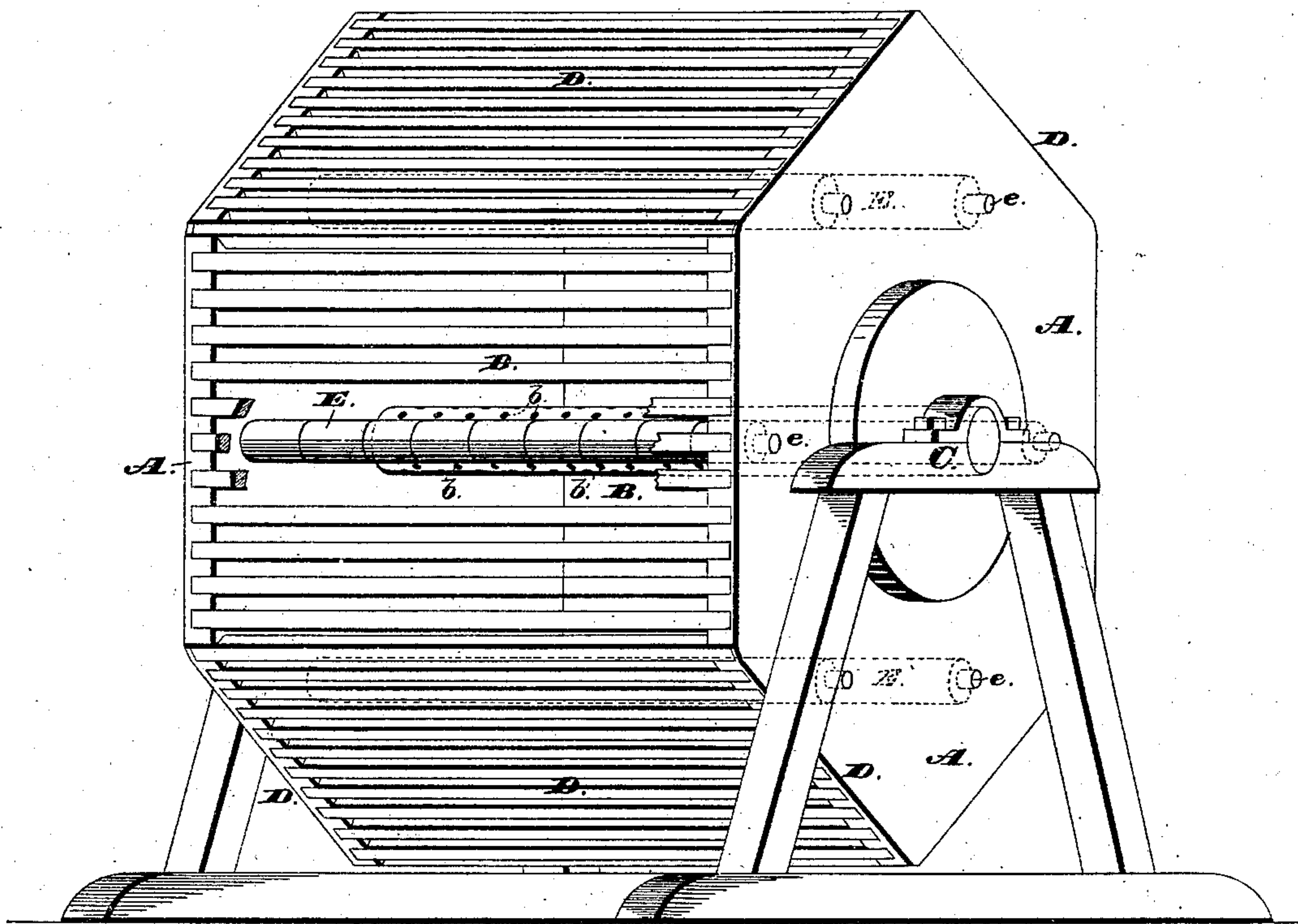
2 Sheets—Sheet 1.

J. L. LEACH.
CARPET CLEANER.

No. 286,832.

Patented Oct. 16, 1883.

Fig. 1.



Witnesses:

Jas. E. Hutchinson.
Henry C. Hazard

Inventor.

John L. Leach, by
Crindle and Russell, his Attys

(No Model.)

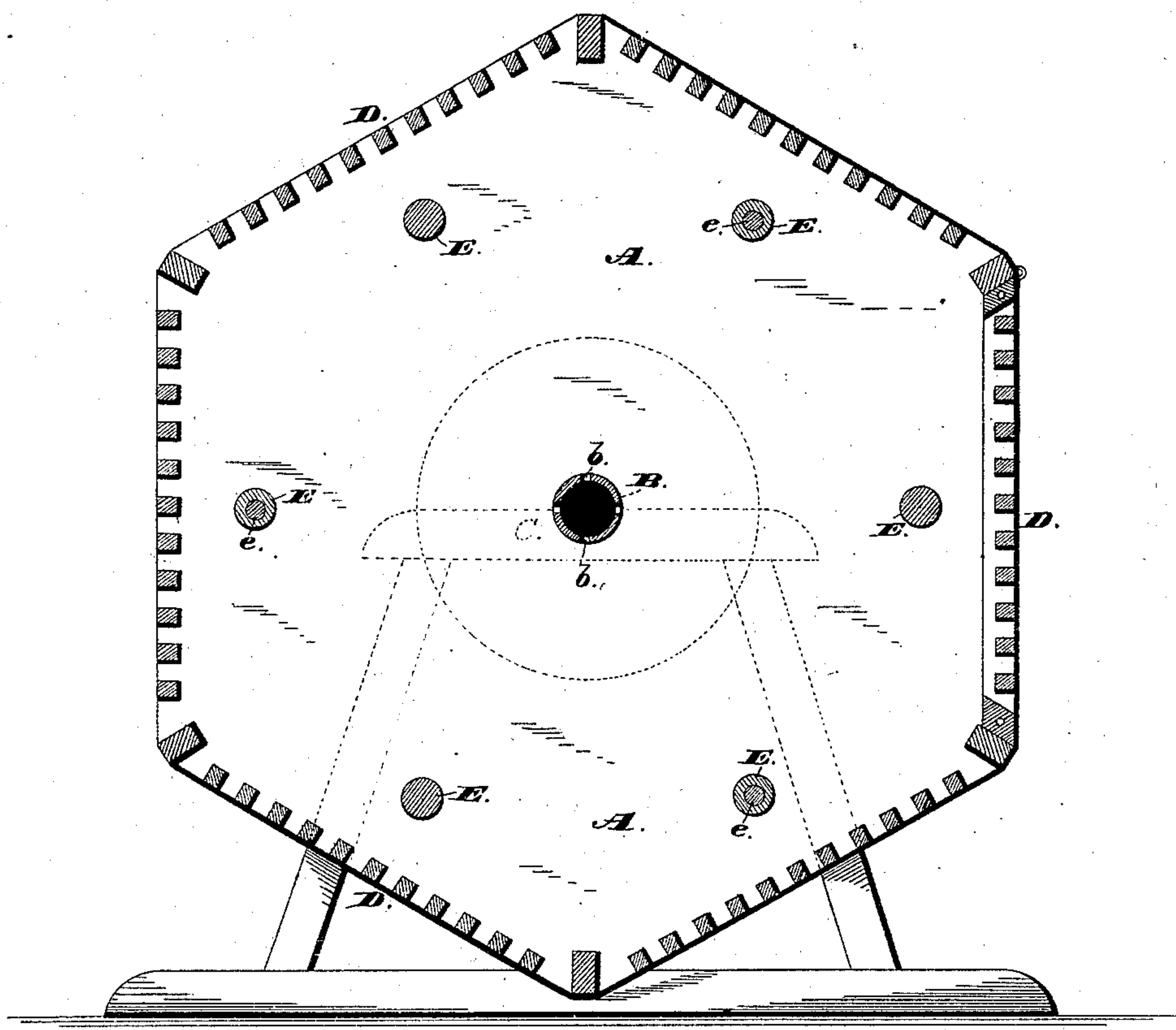
2 Sheets—Sheet 2.

J. L. LEACH.
CARPET CLEANER.

No. 286,832.

Patented Oct. 16, 1883.

Fig. 2.



Witnesses:

Gas. E. Hutchinson.
Henry C. Hazard.

Inventor.

James L. Leach, by
Grindle & Russell, his Attys.

UNITED STATES PATENT OFFICE.

JESSE L. LEACH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO SETH B. RYDER, OF ELIZABETH, NEW JERSEY.

CARPET-CLEANER.

SPECIFICATION forming part of Letters Patent No. 286,832, dated October 16, 1883.

Application filed May 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, JESSE L. LEACH, of Philadelphia, in the county of Philadelphia, and in the State of Pennsylvania, have invented certain new and useful Improvements in Carpet-Cleaners; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my improved apparatus as arranged for use, and Fig. 2 is a vertical section of the same upon a line having a right angle to the axis.

Letters of like name and kind refer to like parts in each of the figures.

My invention is an improvement upon a carpet-cleaner which was patented to Thos. Ferry upon the 26th day of August, 1879, No. 218,949; and it consists in a journaled revoluble cage provided with a series of rollers which are arranged to engage with and lift the carpet, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A and A represent the ends of my cage, which ends are secured to or upon a shaft, B, that is journaled within suitable bearings, C, so as to be capable of revolution therein. The periphery D of said cage is preferably composed of slats, wire-cloth, or other like material through which air may circulate freely, and has preferably twelve sides, although, if desired, a greater or less number may be used. At points radially inward from equidistant portions of the periphery D of the cage are a series of rollers, E, which longitudinally are arranged parallel with the shaft B, and have each a length substantially equal to the distance between the ends A, within which they are journaled. In place of each single roller, which extends the entire distance between said heads, if desired, a number of short rollers may be arranged end to end upon a rod, e, that extends between and is secured to said heads. The shaft B is hollow, and within the cage is provided with radial openings b, through which air forced into one end of said shaft may pass outward into said cage. A door formed within one of the ends or within the periphery of said cage, for the insertion

within or removal therefrom of carpets, completes the device, the operation of which is as follows, viz: The carpet to be cleaned having been placed within the cage and the door secured, said cage is caused to revolve, and air is forced inward through the hollow axis. As each roller comes into contact with the carpet it engages with and carries the same upward until near or above the center of the apparatus, when said carpet becomes detached and falls downward upon the lower side of said cage, during which operation it is partially turned, so as to expose a different portion of its surface, while, by its impact upon said cage-bottom, a portion of the dust or dirt contained in said carpet is driven outward. The operation described is repeated until no more dust remains in the carpet, after which the latter is removed from the cage. In consequence of the movement of the rollers, no injury is possible to the carpet from the clinging of the latter to the former, while the releasing therefrom of said carpet is certain and ready, and a new surface is presented at each fall. The current of air passing outward from the hollow shaft causes the dust within the cage to be more effectually and quickly removed than would otherwise be practicable, and lessens the time necessary for cleaning a carpet.

I am aware that the use of rollers for the purpose of lessening friction is not new, and therefore do not claim the same, broadly.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

The hereinbefore-described carpet-cleaner, consisting of a journaled cage having a slatted or grated periphery, and provided at suitable points around its inner side with lifting-rollers, which are journaled parallel with the axis of said cage, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of May, 1883.

JESSE L. LEACH.

Witnesses:

JOS. S. RILEY,

WM. H. MONTGOMERY.