

No. 709,122.

Patented Sept. 16, 1902.

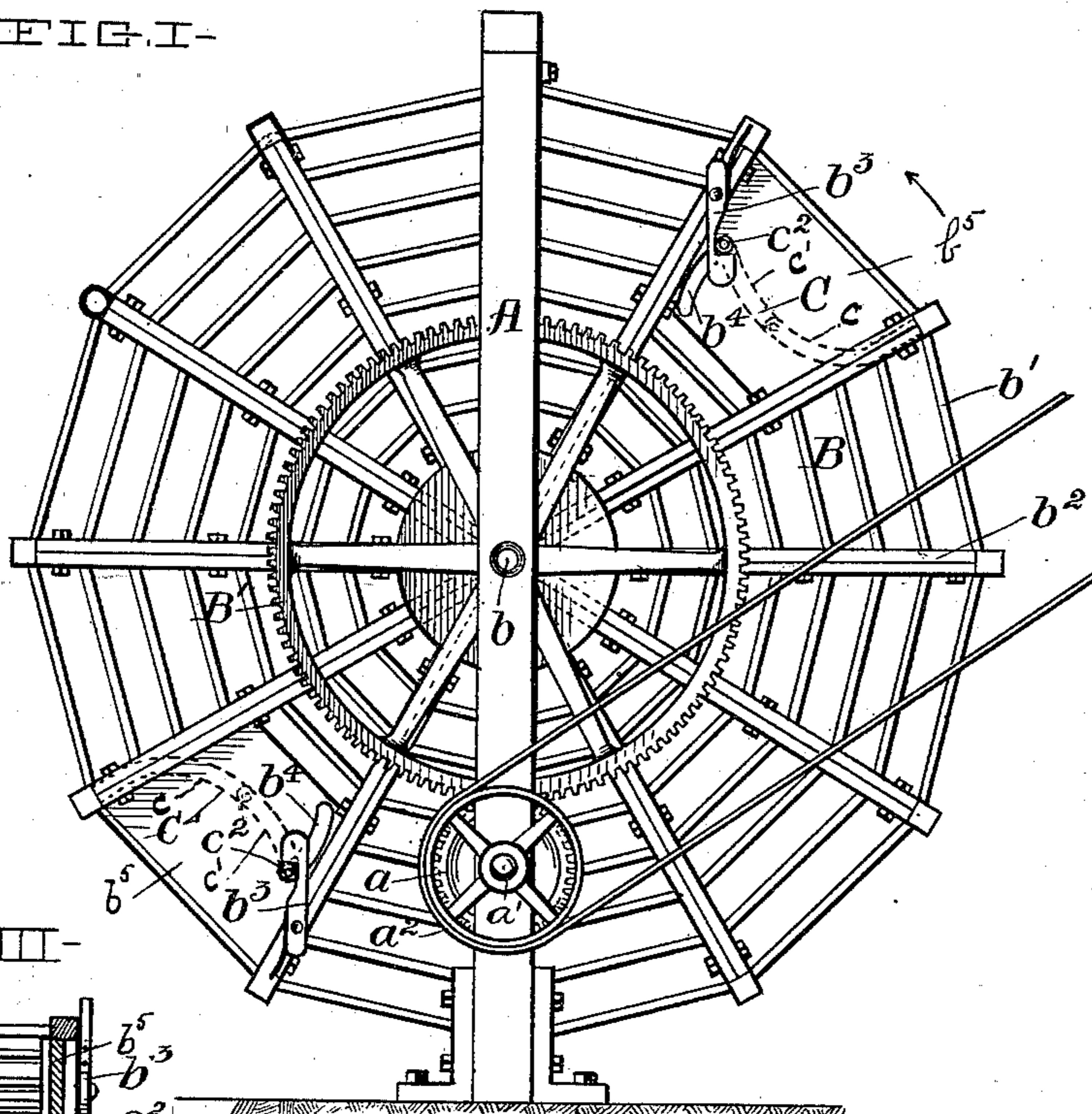
E. C. STENTZ.

DEVICE FOR CLEANING CARPETS.

(Application filed Nov. 27, 1901.)

(No Model.)

-FIG. I-



-FIG. III-

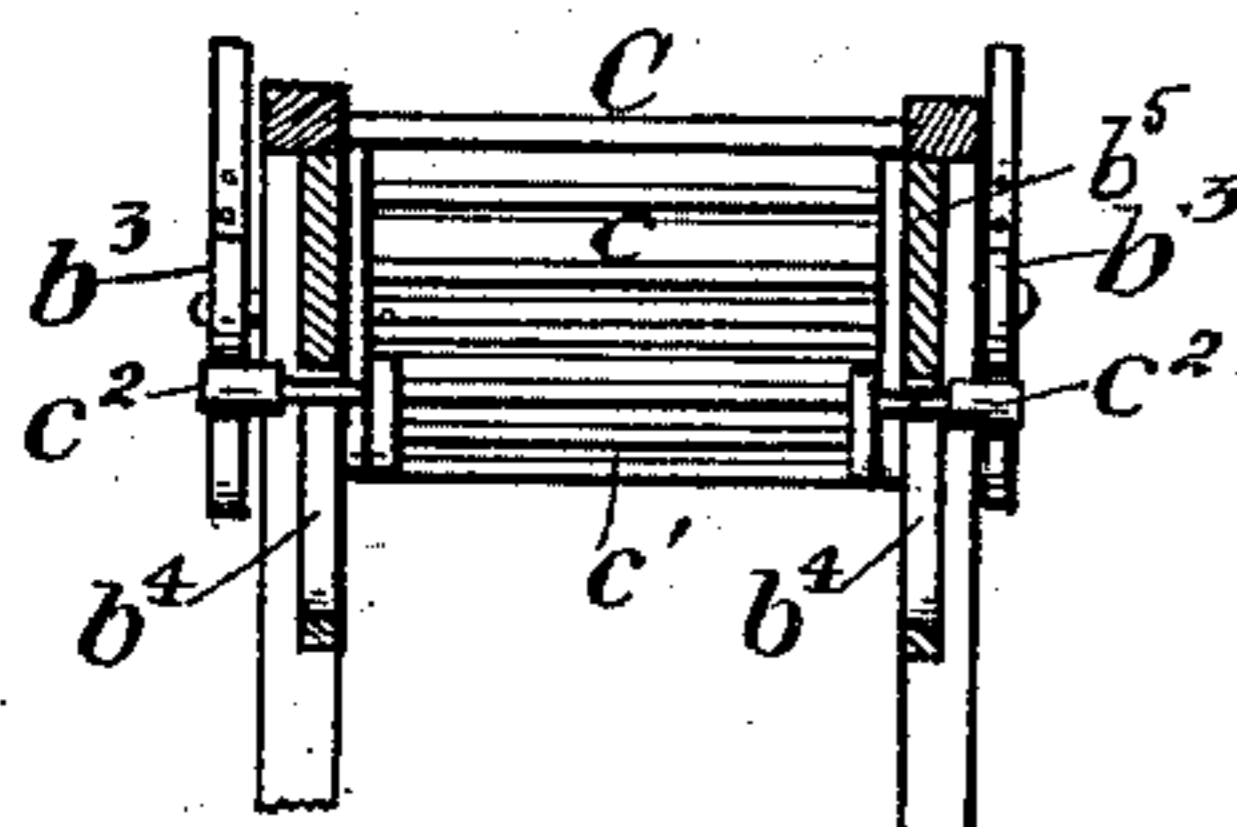
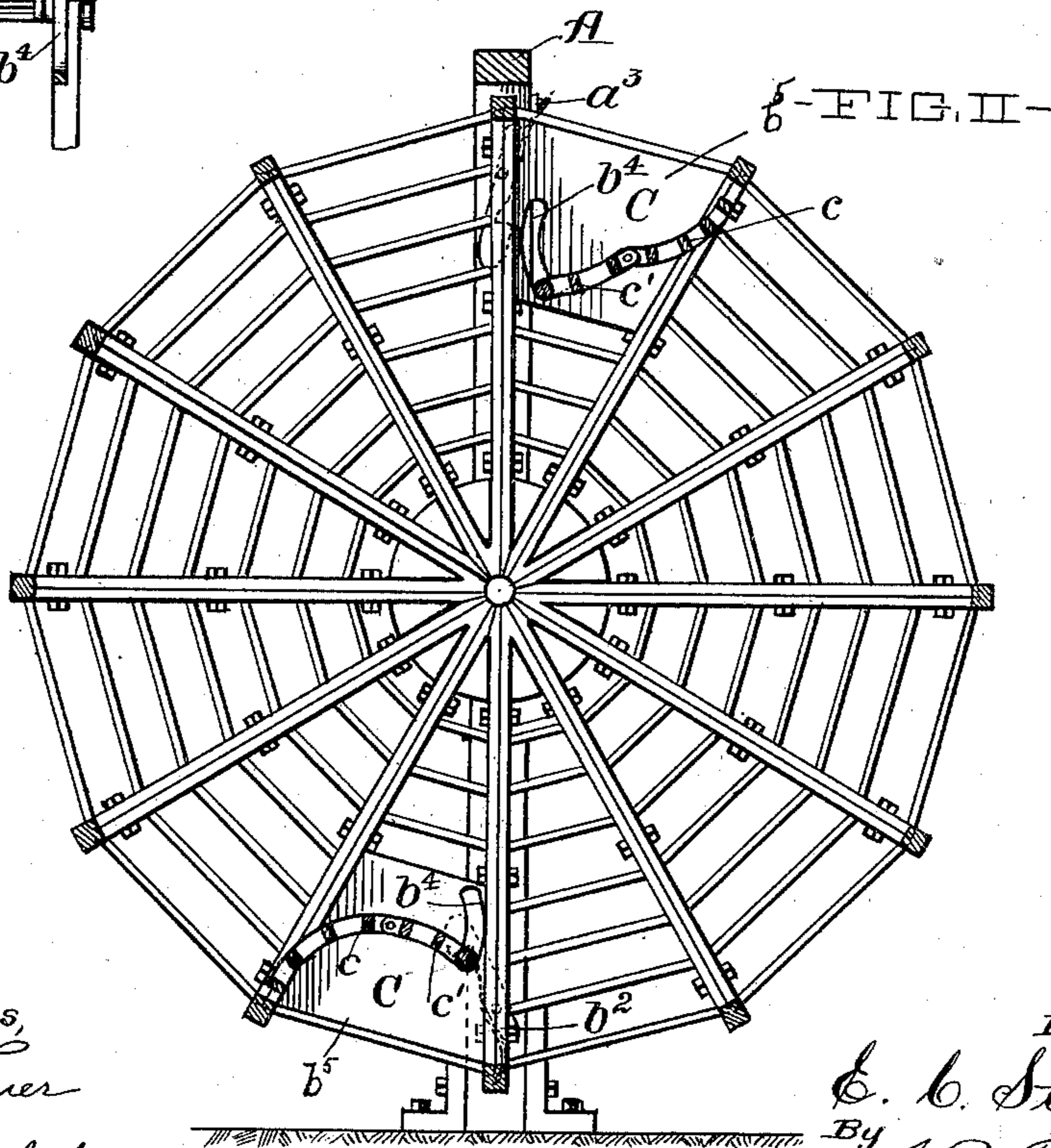


FIG. II-



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UNITED STATES PATENT OFFICE.

EARL C. STENTZ, OF CLEVELAND, OHIO.

DEVICE FOR CLEANING CARPETS.

SPECIFICATION forming part of Letters Patent No. 709,122, dated September 16, 1902.

Application filed November 27, 1901. Serial No. 83,828. (No model.)

To all whom it may concern:

Be it known that I, EARL C. STENTZ, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Devices for Cleaning Carpets, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates to devices for cleaning carpets, and particularly to that class of such devices in which a rotary drum provided with interior means for elevating the carpet to the top of and then dropping same to the bottom of the drum is employed.

The object of said invention is to provide such interior means as will elevate the carpet to the highest possible point in the drum, then release same, so as to obtain the greatest possible fall, and thus increase the effectiveness of the device.

Said invention consists of means herein-after fully described, and specifically set forth in the claims.

The annexed drawings and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings, Figure I represents a front elevation of a device embodying my said invention, Fig. II represents a vertical longitudinal cross-section of same, and Fig. III a detail transverse section.

Upon an upright frame A is journaled, by means of trunnions b , a drum B, built of wooden strips b' , secured to radial arms b^2 . Upon the front is secured a gear-rim B' , meshing with a pinion a , secured to the inner end of a shaft a' , journaled in the lower part of the frame, a belt-pulley a^2 being secured to the outer end of said shaft, by means of which such shaft and drum may be rotated in the direction indicated by the arrow in Fig. I. Diametrically opposite each other upon the interior of the drum are located two elevating-pockets C C, similarly constructed, each such pocket consisting of an outer slatted and fixed diaphragm portion c , extending transversely

of the drum the entire distance between the front and rear sides thereof, such portion extending angularly from such interior and preferably made somewhat concave, as shown in Fig. II. To the bottom of said portion is secured a hinged portion c' , also extending across the drum and normally suspended, so as to form with portion c a pocket for receiving and elevating the carpet by means of latches b^3 , hung upon the outside of the drum, such latches engaging pins c^2 , secured to the member c' , and projecting through slots b^4 formed in and plates b^5 forming part of the drum sides, as shown in Fig. III.

Upon the upper portion of each side of the frame A is secured a pin a^3 or any other suitable well-known means, which projects into the path of the upper end of the latch b^3 on the corresponding side of the machine, so that as each latch reaches the upper part of its travel it is engaged by such pin and tripped, thereby effecting the release of the corresponding member c' , which is thus permitted to drop into the position shown in Fig. II. A carpet held in the elevator-pocket is thus discharged therefrom and permitted to fall to the lower part of the machine.

The device operates as follows: The carpet to be cleaned having been inserted into the drum through a suitable door, such drum is rotated, as previously described. During such rotation the carpet is caught by one of the elevating-pockets, carried upwardly, and held, as a result of its concave form, until it nearly reaches the highest point in the revolution of the pocket. At such point the latches suspending the hinged diaphragm portion c' are engaged to release the latter, which is thus permitted to drop, the carpet being thereby discharged from the pocket upon the bottom of the drum, the slots b^4 limiting the drop of member c' . Upon further rotation of the drum member c' drops into the position it occupies when suspended, the latches b^3 being swung by gravity to reengage pins c^2 . Such reengagement takes place before the pocket reaches the extreme bottom of the drum's rotative path, so that each pocket is ready to take up the carpet immediately after it is dropped from above.

Other modes of applying the principle of my invention may be employed instead of the

one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any one of the following claims or the equivalent of such stated means
5 be employed.

I therefore particularly point out and distinctly claim as my invention—

1. A device for cleaning carpet, comprising a rotary drum having a transversely-located
10 pocket upon its interior, such pocket consisting of a stationary and a suspended hinged diaphragm portion; and means for releasing such hinged portion at a predetermined point in the drum's rotation.

15 2. In a device for cleaning carpet, the combination with a rotary drum having a transversely-located pocket upon its interior, such pocket consisting of a stationary and a hinged portion, a latch secured to said drum engaging said hinged portion, and means secured
20 to a stationary portion of the device for engaging said latch to disengage said hinged portion, whereby the latter is permitted to

drop at a predetermined point in the drum's rotation. 25

3. In a device for cleaning carpet, the combination of a rotary drum having transversely-located pockets upon its interior, each such pocket consisting of a stationary and a hinged portion, each end of the latter provided with
30 a pin projecting through the contiguous drum-wall, a latch hung upon the outside of each such wall and adapted to engage the contiguous pin and thereby hold such hinged portion suspended, and pins secured to a stationary
35 part of the device adapted to engage each latch to release said hinged portion whereby the latter is permitted to drop at a predetermined point in the drum's rotation.

Signed by me this 22d day of November, 40 1901.

EARL C. STENTZ.

Attest:

A. E. MERKEL,
D. T. DAVIES.