

No. 882,208.

PATENTED MAR. 17, 1908.

J. R. NYE.  
CARPET AND RUG CLEANING MACHINE.

APPLICATION FILED FEB. 8, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

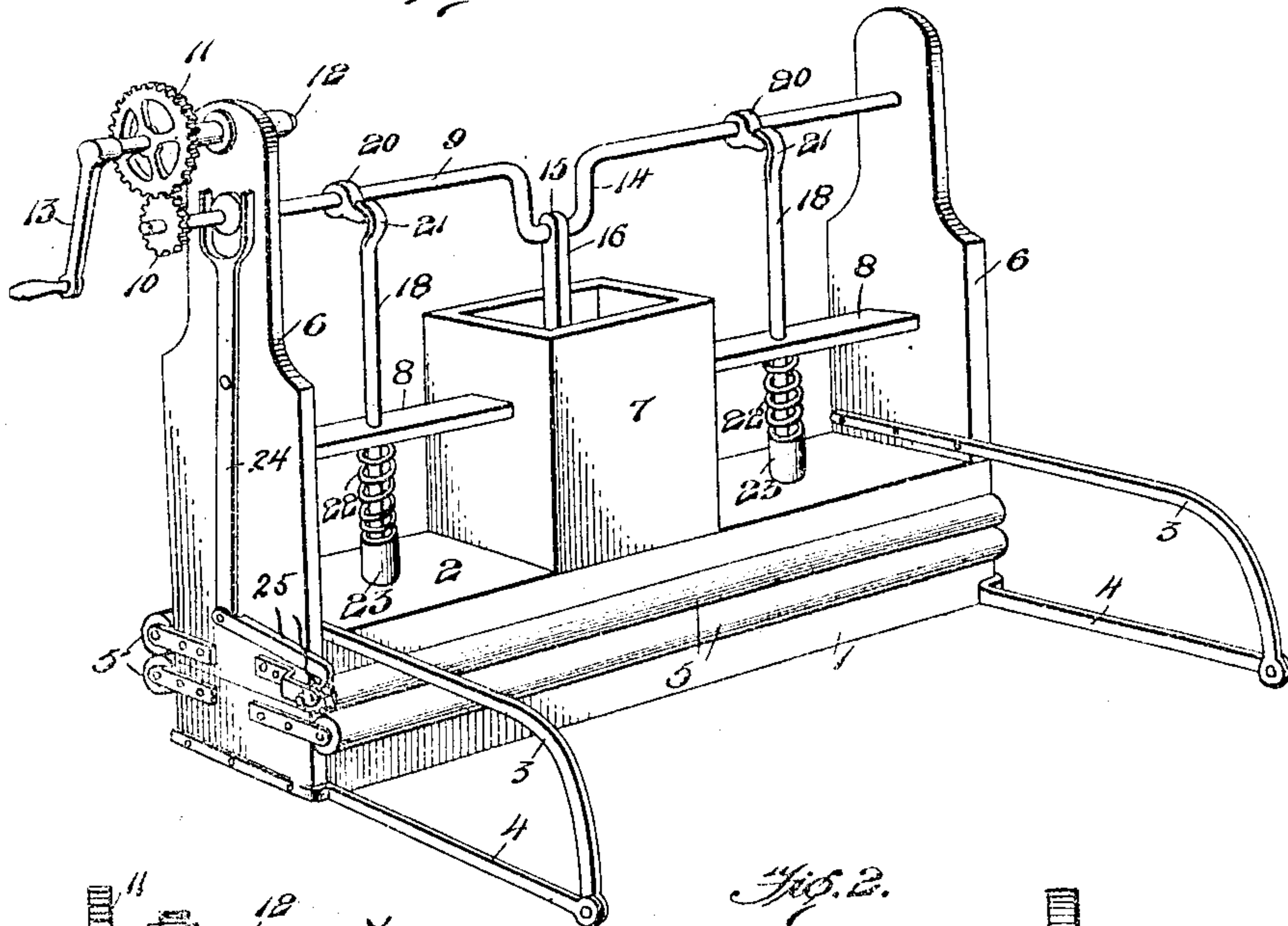
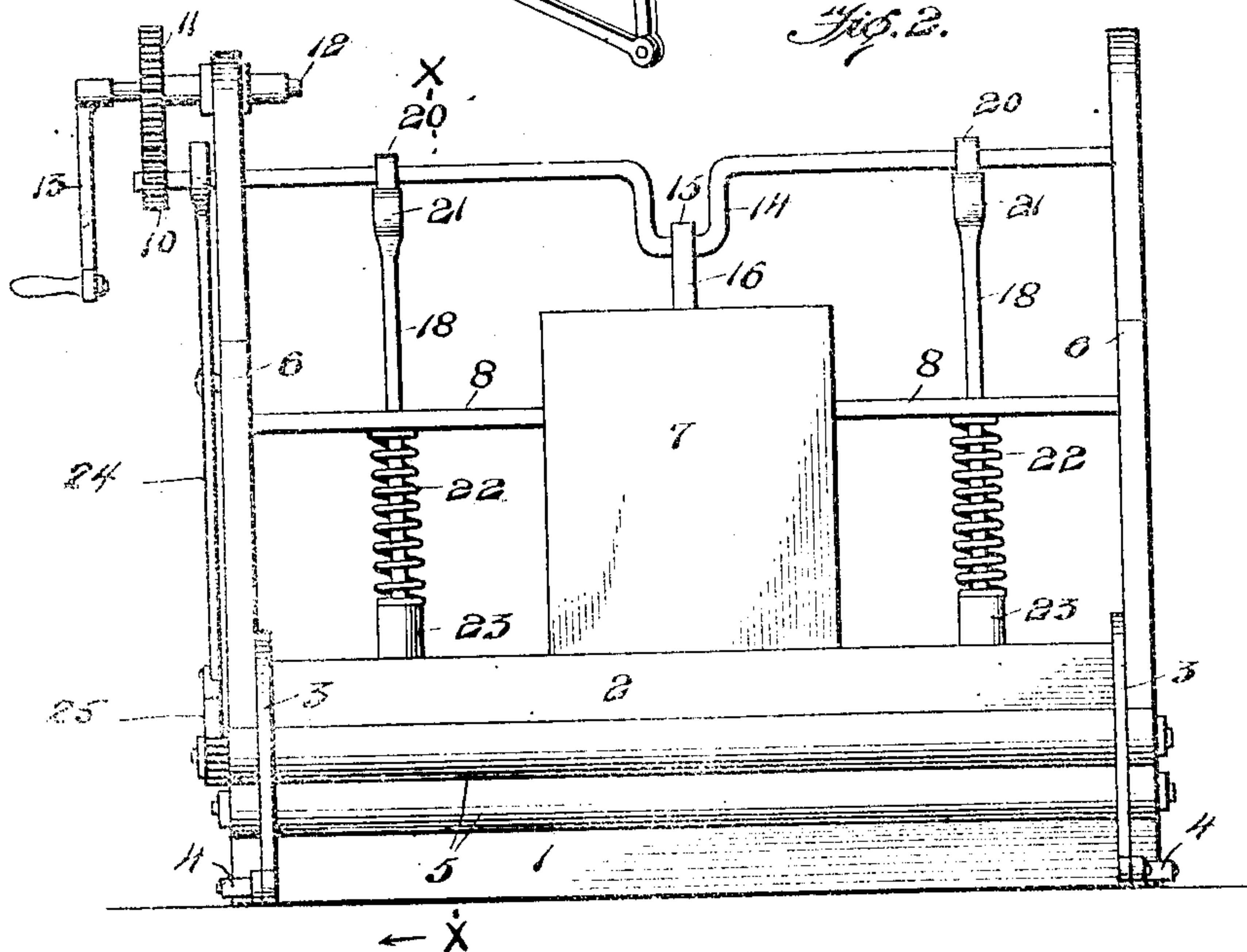


Fig. 2.



Witnesses.  
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Inventor:  
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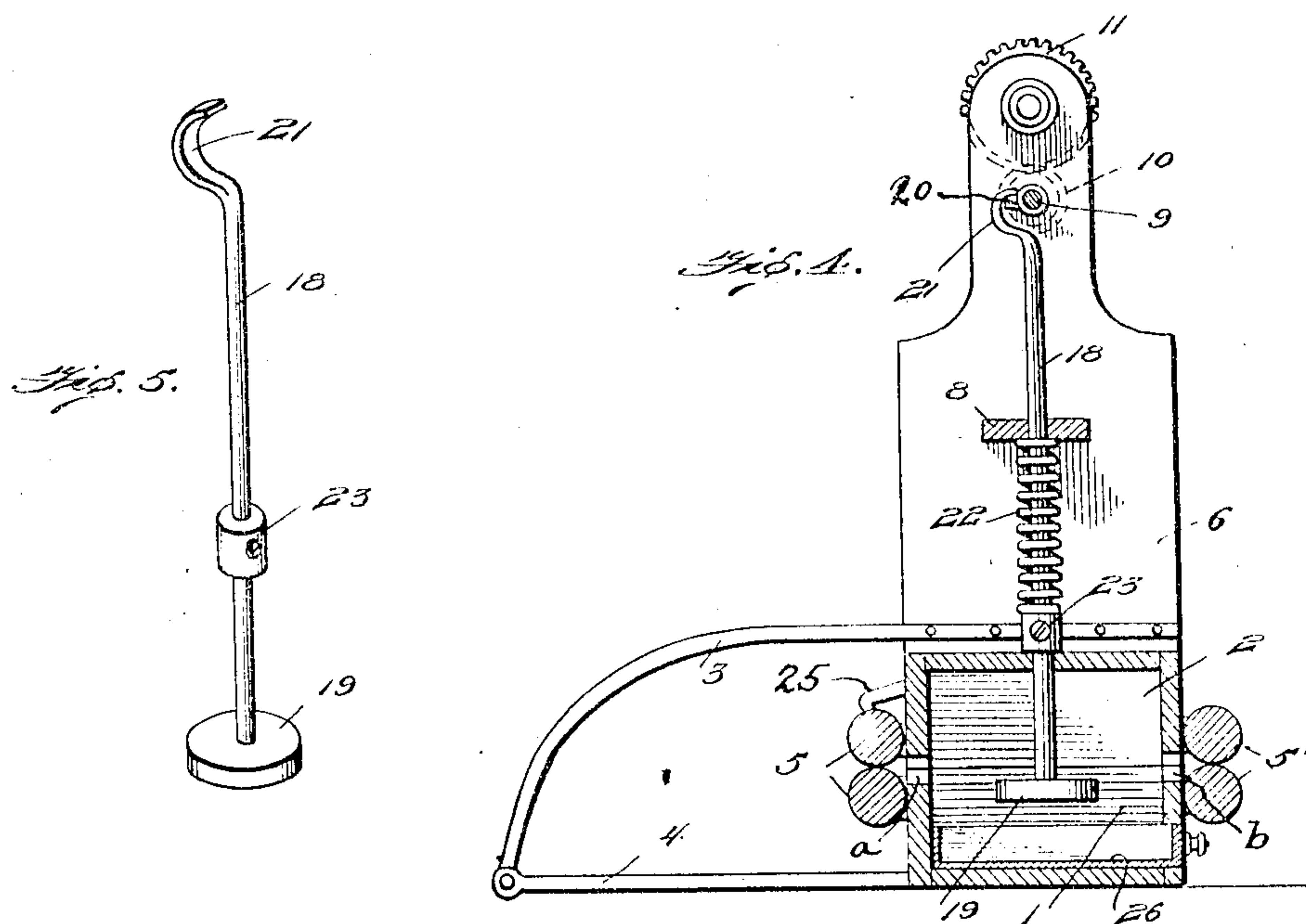
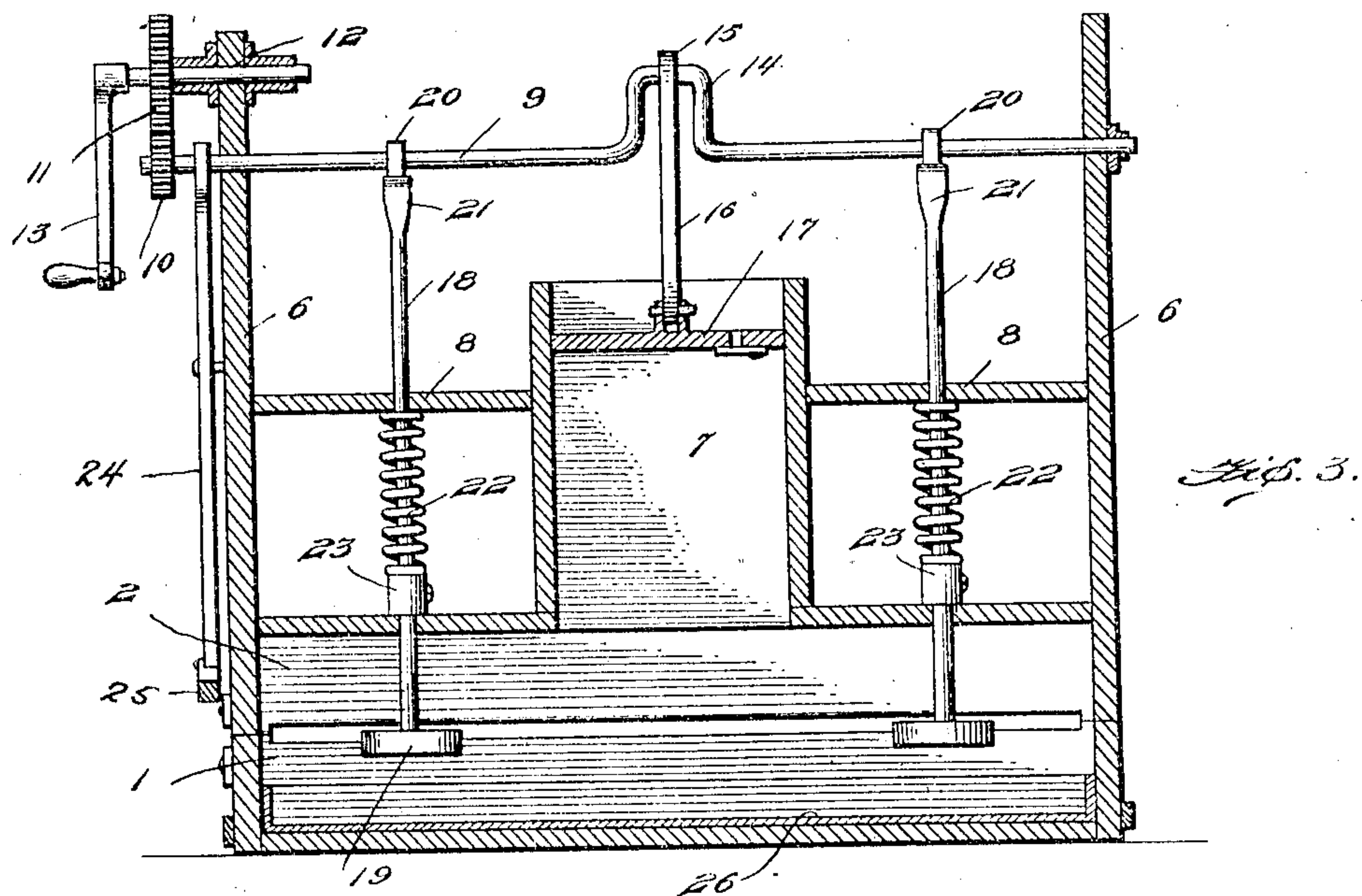
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# UNITED STATES PATENT OFFICE.

JOHN R. NYE, OF WATERVILLE, MAINE

CARPET AND RUG CLEANING MACHINE.

No. 882,208.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed February 8, 1907. Serial No. 356,426.

*To all whom it may concern:*

Be it known that I, JOHN R. NYE, a citizen of the United States, residing at Waterville, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Carpet and Rug Cleaning Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

My present invention relates to improvements in carpet and rug cleaning machines, the main object being the provision of a small portable apparatus which can be furnished to each house, whereby the carpets and rugs may be cleaned rapidly and thoroughly without the necessity of sending the same to be cleaned.

To this end my invention consists of a box or casing, through which the carpet or rug is fed and during such feeding action the carpet is acted upon by a pneumatic as well as a beating process, the dust or dirt being collected within the box or casing and not allowed to pass out into the surrounding air.

To more clearly illustrate my invention attention is invited to the accompanying drawings, in which:—

Figure 1 is a perspective view of the complete machine in operable position. Fig. 2 is a front elevation. Fig. 3 is a longitudinal sectional view through the complete apparatus. Fig. 4 is a cross section taken on line X—X on Fig. 2. Fig. 5 is a detailed view of one of the beaters.

Referring to the drawings: The numeral 1 designates the lower section of the box or casing, while 2 is the upper section, these two sections being hinged together by means of the hinges or arms 3 and 4. By means of the shape and length of these arms, the upper section can be tilted so that the sections separate at a great distance, as if they were jaws to permit the rug or carpet to be inserted and to get access to the beaters and pneumatic device, hereinafter set forth. Mounted at the junction of the two sections of the casing are two pairs of rolls 5 and 5', by means of which the rug or carpet is fed between the two sections. Connected to the ends of the section 2, of the casing are the up-rights or standards 6, while centrally of said sections and in communication therewith, is a hollow casing 7, connected to the standards by means of braces or plates 8, the purposes of which will presently appear.

Journalled in the upper ends of the stand-

ards 6, is a shaft 9, carrying upon one end a small pinion or gear 10, which meshes with the large driving pinion or gear 11, which is journaled in the upper extended end 12 of one of the standards 6, a crank 13 being provided whereby the pinions are operated. Centrally of the shaft 9, I provide the crank arm 14, to which is connected the upper end 15 of the piston rod 16.

The piston 17 forces air through the rug only on its downward stroke, and as the rolls 5 and 5', feed the rug through the slots *a* and *b* very slowly, that is there being about eight strokes of the piston to every revolution of the rolls 5 and 5', the portion acted upon by the beaters 19 and the currents of air from the down stroke of the piston 17, is held in suspension long enough to have the dust and dirt thoroughly loosened by the beaters. The portion of the dust that passes through the carpet or rug falls into the drawer 26, while the loose dirt and dust that remains can be easily brushed from the carpet or rug. By operating the invention, it has been found that a greater portion of the loose dust or dirt is precipitated into the drawer, when the piston 17 is operated, than when the beaters 19 only are operated; and it is therefore more desirable to use the piston 17 in conjunction with the beaters 19.

In order to thoroughly loosen or remove the dirt within the rug or carpet (so that the current of air will properly precipitate it), I provide the sliding rods 18, which pass through the section 2 and the braces 8 as clearly shown, and carried upon their lower ends are the beaters 19. In order to operate these rods so that the beaters will strike the carpet or rug within the box, I provide the shaft 9, with the two cams or projections 20, which are adapted to engage the hooked ends 21, of the rods 18, and raise the same a predetermined distance, at which time the said hooked ends are released and the springs 22, which have been compressed between sleeves 23 and the braces 18, are released and cause the beater heads 19 to be projected instantly against the upper surface of the rug or carpet within the casing.

In order that power may be transmitted to the upper roll of the pair 5, I provide the pivotal rod 24, and the pawl and ratchet 25 which is connected to the end of the upper roll of the pair 5.

Thus as the shaft 9, is rotated, the cam.



27, operates the yoke 28, so as to reciprocate the rod 24, which imparts motion to the upper roll 5, through the pawl or ratchet 25, the rug being moved through the casing, as it is wedged sufficiently between the two rolls 5, to have motion imparted to it as the upper roll is rotated. The pair of rolls 5', are used only to allow the rug to feed smoothly without dragging, as would be the case, were a stationary edge used instead of the rolls 5'.

From the foregoing description taken in connection with the drawings, it is evident that I provide a carpet and rug cleaning machine which is very simple in construction and operation, and by means of which the dust and dirt may be removed from the carpet or rug and yet be retained within the casing of the machine, a removable drawer receptacle 26, being provided for such purpose.

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

1. In a machine of this character, the combination of a casing, composed of an upper and a lower section, separated so as to allow the free passage therebetween of the article to be cleaned, hinges securing said sections together, a pair of standards carried by the upper section, a shaft journaled therein, a pair of beaters mounted in the upper section to act upon the article within the casing and operably connected to said shaft, a device for forcing air upon and

through the article carried by the upper section and operably connected to the shaft, and means for revolving said shaft to operate the beaters and air forcing device.

2. In a machine of this character, the combination of a casing divided horizontally into an upper and a lower section, hinges securing the sections together so that the upper section can be tilted to admit a carpet or rug between the sections, a pair of standards carried by the upper section, a shaft journaled therein, two pairs of rolls secured to the sections so that the rug or carpet will pass between the pairs when between the sections, means operably connected with one roll and the shaft whereby as the shaft is revolved, the roll is revolved to feed the rug or carpet between the sections, a pair of beaters mounted in the upper section to act upon the rug or carpet, said beaters being operably connected with the shaft, means for forcing air upon and through the rug or carpet carried by the upper section and operably connected with the shaft, and means for revolving the shaft and thereby operating the feeding roll, air forcing means and beaters, simultaneously.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN R. NYE.

Witnesses:

H. B. BLOCK,  
HAROLD E. COOK.