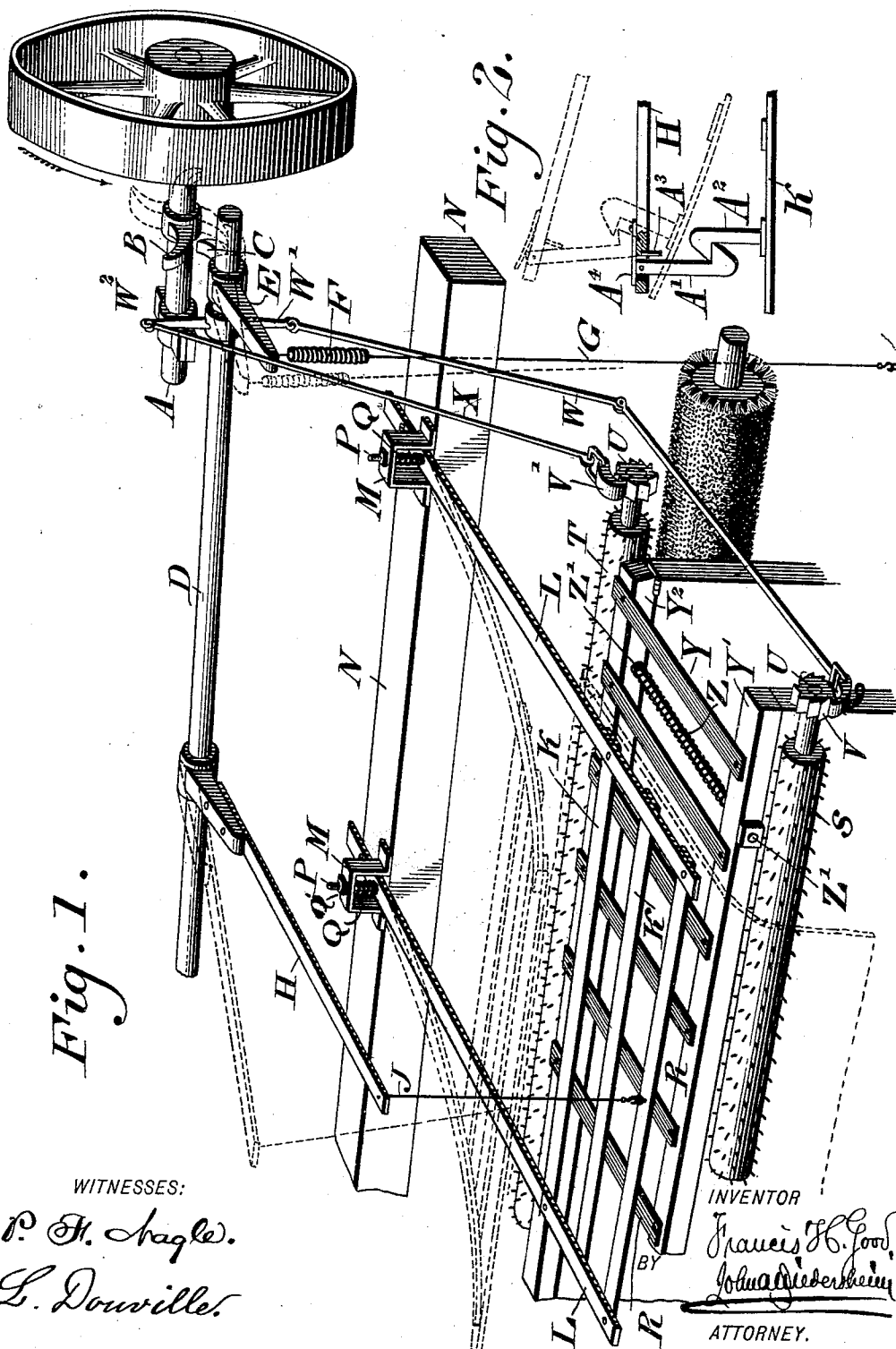


(No Model.)

F. H. GOOD.
CARPET CLEANER.

No. 499,986.

Patented June 20, 1893.



WITNESSES:
P. H. Nagle.
L. Douville.

INVENTOR
Francis H. Good.
BY
John A. Lieberman
ATTORNEY.

UNITED STATES PATENT OFFICE.

FRANCIS H. GOOD, OF PHILADELPHIA, PENNSYLVANIA.

CARPET-CLEANER.

SPECIFICATION forming part of Letters Patent No. 499,986, dated June 20, 1893.

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To all whom it may concern:

Be it known that I, FRANCIS H. GOOD, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Carpet-Cleaners, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a carpet cleaner or cleaning machine having a beater to which an effective striking motion is imparted, as will be hereinafter set forth.

It also consists of a bed for supporting the carpet while being struck or beaten, as will be hereinafter fully set forth.

Figure 1 represents a perspective view of a carpet cleaner embodying my invention, and Fig. 2 represents a partial side elevation and partial longitudinal section of a modification.

Referring to the drawings: A designates the driving shaft of the machine, the same being suitably mounted, and carrying the cams B which are adapted to engage at intervals with an arm C on the rock shaft D, the latter being suitably mounted and having connected with it the arm E to which is attached the spring F, which by means of a rod G continuous thereof is secured to the floor or any suitable portion of the frame of the device.

Connected with the shaft D is an arm H, the other end whereof has attached to it by means of the rod or cord J, the beater K, which is formed of suitable slats connected with strips L of elastic material. The inner ends of said strips pass through keepers M, and are secured to the beam N, or part of the frame, said keepers being also secured to said beam, and having depending from them the bolts T, which pass freely through the strips L, and are encircled by springs Q, which bear against the strips and serve by their pressure to restore the same to their normal position, it being noticed that said strips are elastic in their nature, so that they return to their normal position with a whipping or snapping action, this being transmitted to the carpet placed on the bed R beneath the beater.

Mounted on the frame in front and rear of the bed are feed rollers S and T, respectively, said rollers carrying ratchets U, with which engage pawls or dogs V, V', respectively.

Pivoted to the dog V is a jointed rod or connection W which is pivoted to an arm W' on the rock shaft D, the latter also carrying an arm W², which is pivotally connected with a rod X to which is pivoted the dog V'. By these means motion may be imparted to the dogs and consequently to the ratchets U, and the rollers S, T, it being however understood that only one dog is in engagement with a ratchet, the other one being thrown out of engagement with its ratchet, by which provision the carpet to be cleaned may be fed in either direction, or in opposite directions as desired or required.

The bed R consists of straps Y, of rubber or other elastic material. One end of each strap is secured to the stationary beam Y' of the frame, and the other end to the beam Y² which is hinged to the frame whereby when the straps Y are struck by the beater K, the blows cause said straps to be depressed, said straps yielding, owing to their elastic nature, and the hinged beam Y².

In order to increase the elasticity of the bed, and cause the parts thereof to resume their normal positions, I employ springs Z, which encircle the bolts Z' one end of each of which latter is connected with the stationary beam Y', and the other end passes freely through the hinged beam Y², and bears against the latter, so that as said beam Y² turns inwardly, due to the draft of the straps when struck, it compresses the springs Z, and when said straps are relieved, the springs, owing to their expansion, force back the beam, the straps being carried with them so as to be straightened out. It will be seen that as the rock shaft D is operated it raises the beater K, and when the cam B trips the arm C, the shaft is relieved, and the beater owing to the elastic nature of the strips L, quickly flies against the carpet, and strikes the same in the manner stated, the effect of which is evident, it being noticed that the return motion of the shaft D is accomplished, or at least vastly assisted by the spring F, which is connected with the arm E of said shaft, as hereinbefore specified.

The tension of the springs Q may be regulated by nuts Q' on the bolts P.

In Fig. 2 I show two hooks A', A², the hook

A' being pivoted to and depending from the arm H. The hook A² rises from the beater R, and is adapted to engage with said hook A'. Depending from the arm H, adjacent to the axis of the hook A' is a pin A³, which when said arm rises bears against the shank of the hook A', and forces it from the hook A², thus disconnecting the hooks, see the dotted position, whereby the beater R quickly drops and strikes the carpet. A spring A⁴ bears against the top of the hook A', so that when the arm lowers the hook A' is moved into engagement with the hook A² so that the beater may again be lifted when the arm is raised.

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

1. A carpet beater having a rotatable driving shaft with a cam thereon, a rock shaft with an arm adapted to be engaged by said cam, an arm secured to said rock shaft, and having a rising and falling beater connected therewith, an open bed below said beater, a feed roller and mechanism connected with said rock shaft for operating the same, said parts being combined substantially as described.

2. A carpet beater having a rock shaft with an arm thereon, a beater depending from said arm, and having an arm guided on one end on a stationary bolt, mechanism for oscillating the rock shaft in one direction, and a spring for operating it in the other direction,

said parts being combined substantially as described.

3. A carpet beater having a rock shaft with arm, a beater depending from said arm, and having a guiding arm, an open bed hinged to a stationary frame, feeding rollers and mechanism connected with said rock shaft for operating said rollers, said parts being combined substantially as described.

4. An arm carrying a beater, a beam supporting said arm, a guiding bolt for said arm, and a spring bearing against said arm, said parts being combined substantially as described.

5. A carpet beater having a rock shaft with arms on opposite sides, feed rollers, jointed arms connected with said rock shaft arm, and carrying pawls, and ratchets on said feed rollers engaged by said pawls, said parts being combined substantially as described.

6. A carpet beater consisting of a rock shaft, mechanism for operating the same, an arm on said rock shaft, a rising and falling beater operated by the movement of said rock shaft, and having a guiding arm, an elastic bed hinged on one side to a stationary frame, feeding rollers in front and rear of said bed, mechanism connected with the rock shaft for operating said rollers, said parts being combined substantially as described.

FRANCIS H. GOOD.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. JENNINGS.