

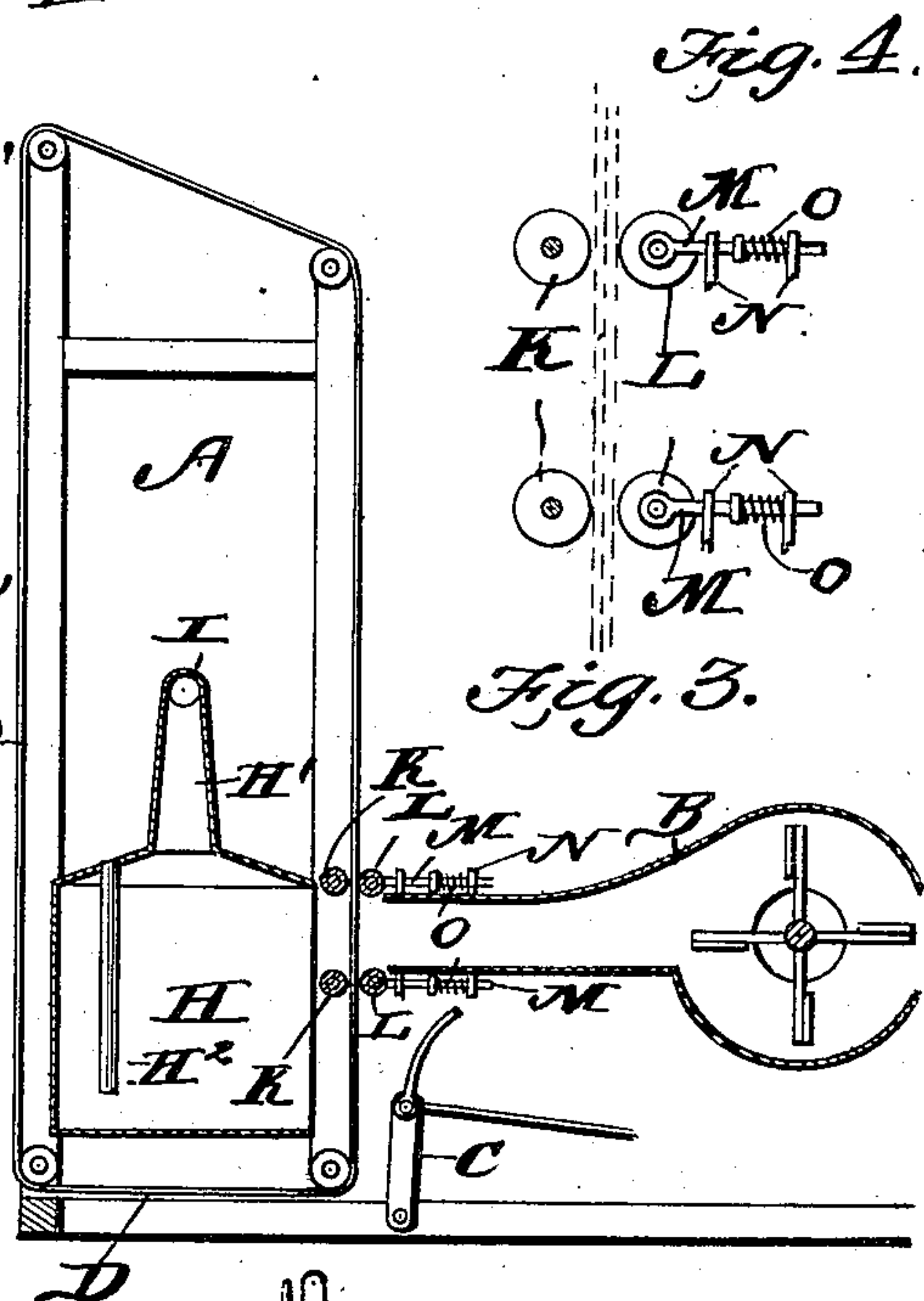
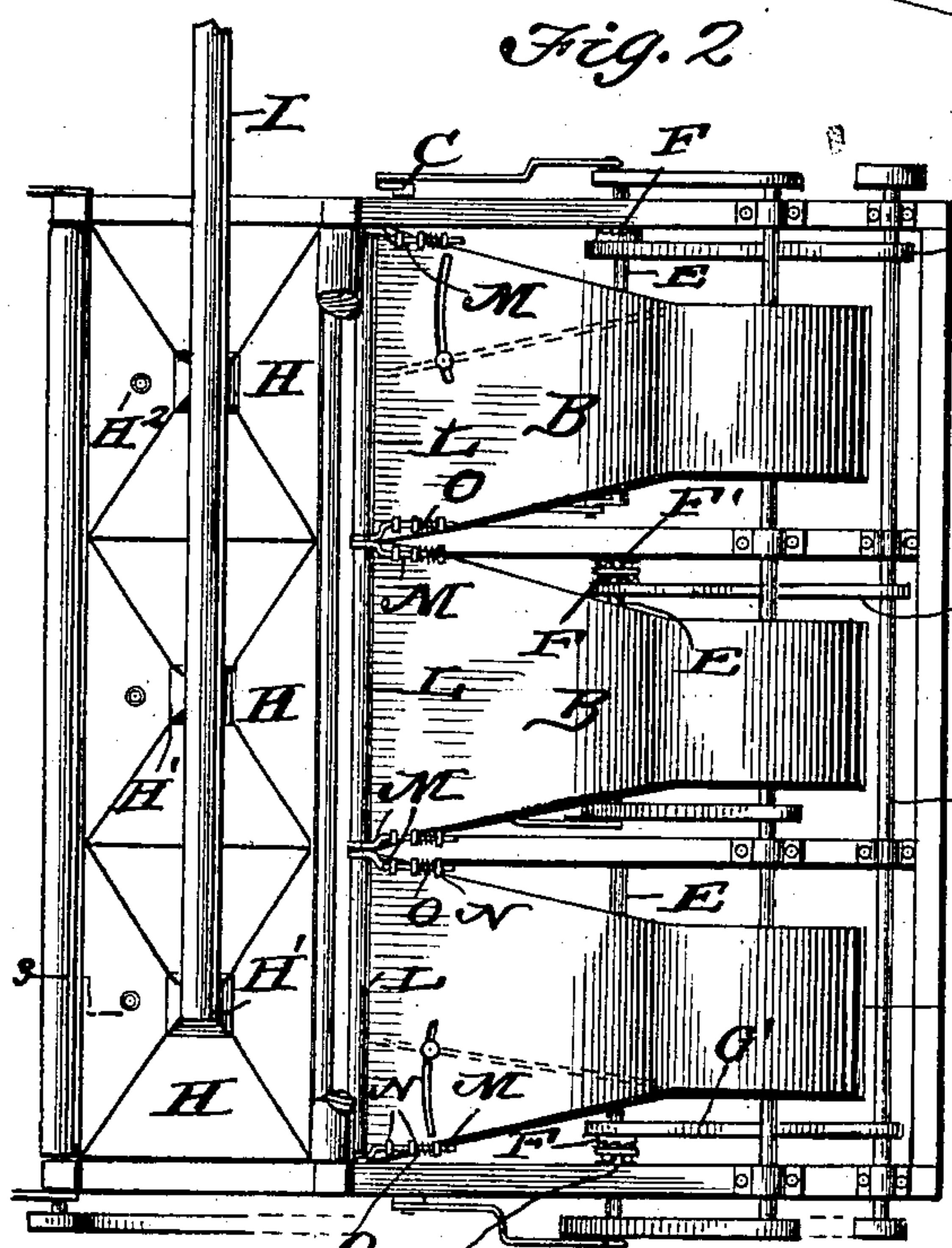
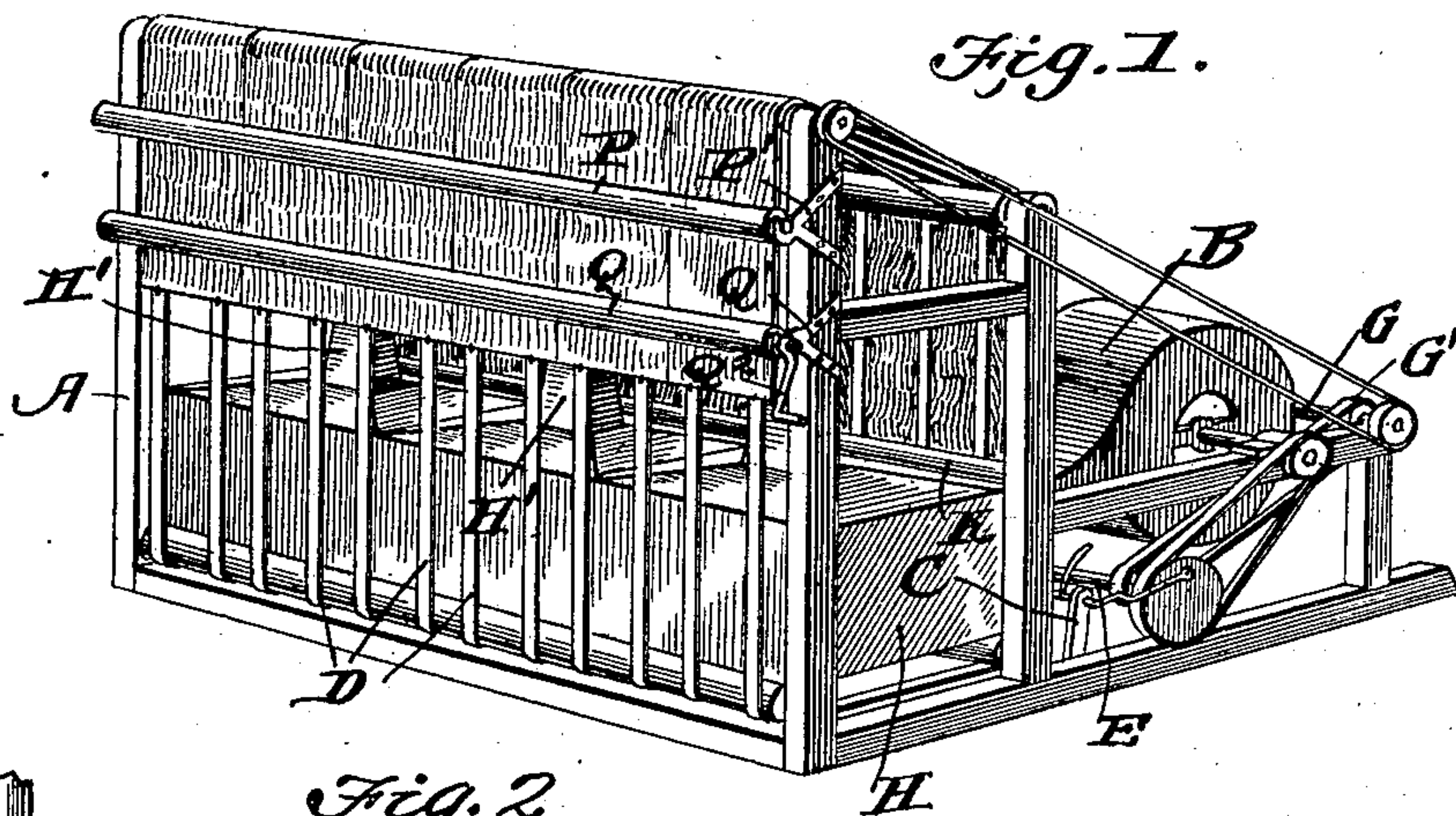
No. 724,442.

PATENTED APR. 7, 1903


G. A. COWGILL.  
CARPET CLEANER.

APPLICATION FILED APR. 24, 1902.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## CARPET-CLEANER.

SPECIFICATION forming part of Letters Patent No. 724,442, dated April 7, 1903.

Application filed April 24, 1902. Serial No. 104,483. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE A. COWGILL, a citizen of the United States, residing at Euphemia, in the county of Preble and State of Ohio, have invented a new and useful Carpet-Cleaner, of which the following is a specification.

This invention relates generally to carpet-cleaners, and more particularly to an improved construction of cleaner which is an improvement upon Patent No. 676,460, granted to me June 18, 1901, and also an improvement upon the carpet-cleaner for which I have also filed application for patent July 13, 1901, No. 68,209.

The object of the present invention is to provide a carpet-cleaner by means of which a number of widths of carpet can be cleaned at one time, thereby avoiding the necessity of ripping the widths of carpet apart; and another object is to provide a carpet-cleaner by means of which rugs of considerable width can be quickly and easily cleaned.

A still further object is to provide a carpet-cleaner in which a carpet of extraordinary length can be cleaned; and a still further object is to provide means whereby the carpet is held tight at the mouth of the fan-blast, thereby utilizing the full force of the said blast for the purpose of cleaning the carpet.

The invention consists in the novel features of construction, combination, and arrangement of parts, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view illustrating my improved carpet-cleaner. Fig. 2 is a top plan view, the belts and certain portions of the rollers being omitted for the sake of clearness of illustration. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Fig. 4 is an enlarged detail view illustrating the rollers for holding the carpet tight at the mouth of the fan-blast. Fig. 5 is a detail perspective view illustrating the rollers for holding and winding the carpet, and Fig. 6 is a detail view illustrating the clutch mechanism.

In carrying out my invention I employ a

main frame A, which is constructed substantially the same as the main frame in the application before referred to. This main frame, however, is made considerably wider, the width of said frame being determined by the size of the cleaner it is desired to make. This main frame A has a series of fan-blowers B arranged thereon, said fan-blowers being independent of each other and operated as heretofore. The beaters C and belts D are also constructed to operate in the same manner as heretofore described; but in order to render each fan-blower independent of the others and also the beaters I employ a separate shaft E in connection with each fan-blower and beater, each shaft having a clutch F connected therewith and operated by a lever F', so that the said shaft can be thrown into or out of operation, as desired, said shafts being connected to the rear cross-shaft G by means of belts G'. A separate dust box or chamber H is arranged opposite each fan-blower, and in the present construction I have shown three dust boxes or chambers, each one being provided with a spout or chute H', extending from the top thereof, and each connects to a discharge-pipe I, connecting all spouts or chutes and carrying the dust off to a point beyond the cleaner. Each dust-box is provided with an air-inlet tube H<sup>2</sup>, which extends from the top of the dust box or chamber to a point adjacent to the bottom for the purpose of creating a draft and generating currents by means of which the dust is forced out through the spout or chute H' and pipe I.

The endless belts D travel around the rollers upon the main frame and carry the carpet in front or past the mouth of the series of fan-blowers, and in order to hold the carpet tight as it passes the mouth of the fan-blower, and thereby prevent the air-blast forcing the carpet in toward the dust-box, I employ the rollers K, which are journaled in the main frame directly opposite the mouth of the fan-blower, and directly opposite each roller K is a spring-actuated or spring-pressed roller L, said rollers being journaled between the arms M, arranged upon the top and bottom sides of the mouth of the fan-blower and sliding in the guide-lugs N, coiled spring O



being arranged upon the said arms and adapted to normally project them toward the rollers K.

5 The belts carrying a carpet pass between the rollers K and L, as most clearly shown in Figs. 3 and 4, and inasmuch as the rollers L are spring-pressed it is obvious that the carpet will be stretched tight at the mouth of the fan-blower, and the entire force of the air is 10 then utilized in forcing the dirt or dust from the carpet and all tendency of the carpet to be forced toward the dust-box is avoided. The rollers L being spring-actuated or spring-pressed will yield to an irregularity in the 15 carpet, and thereby avoid a stoppage in the machine. In order to clean a carpet of considerable length, I employ two rollers P and Q, which are journaled upon the outside of the main frame in brackets P' and Q', re- 20 spectively.

The carpet of considerable length which is to be cleaned is first wound upon the roller P and one end connected to the belts D. The machine is then operated until the end of 25 the carpet is brought around to the starting-point. The said end is then detached from the belts and connected to the roller Q. The machine is then again started, and the carpet is wound upon the roller Q by means of the 30 crank Q<sup>2</sup> until the entire carpet has been cleaned.

By means of a machine constructed as herein shown and described I am enabled to clean carpets without separating the widths 35 and I am also able to clean thoroughly a carpet of considerable length. Furthermore, it will be noted that as the shaft from which the beater and blower are operated is pro-

vided with a clutch I am enabled to throw any fan and beater into or out of operation 40 at any time.

While I have illustrated a machine comprising three fan-blowers, beaters, and dust-boxes, it will of course be understood that any desired number may be employed and 45 still be within the scope of my invention.

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

1. In a carpet-cleaner of the kind described, 50 the combination with the main frame, fan-blower, dust-box, and carpet-carrying belts, of the rollers arranged opposite the fan-blower upon the inner side of the belts and the spring-actuated rollers carried by the 55 fan-blower and arranged opposite the first-mentioned rollers, substantially as specified.

2. In a carpet-cleaner, the combination with carpet-carrying belts, of the rollers arranged upon the inner sides of the belts, a second 60 series of rollers arranged opposite the first-named rollers, and the spring-actuated arms carrying the second series of rollers, substantially as specified.

3. In a carpet-cleaner of the kind described, 65 the combination with the main frame, of a series of fan-blowers, dust-boxes, and beaters, a shaft E journaled in the main frame adjacent to each fan-blower, and a clutch arranged upon said shaft whereby the said 70 blower and beater can be thrown into or out of operation, substantially as specified.

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