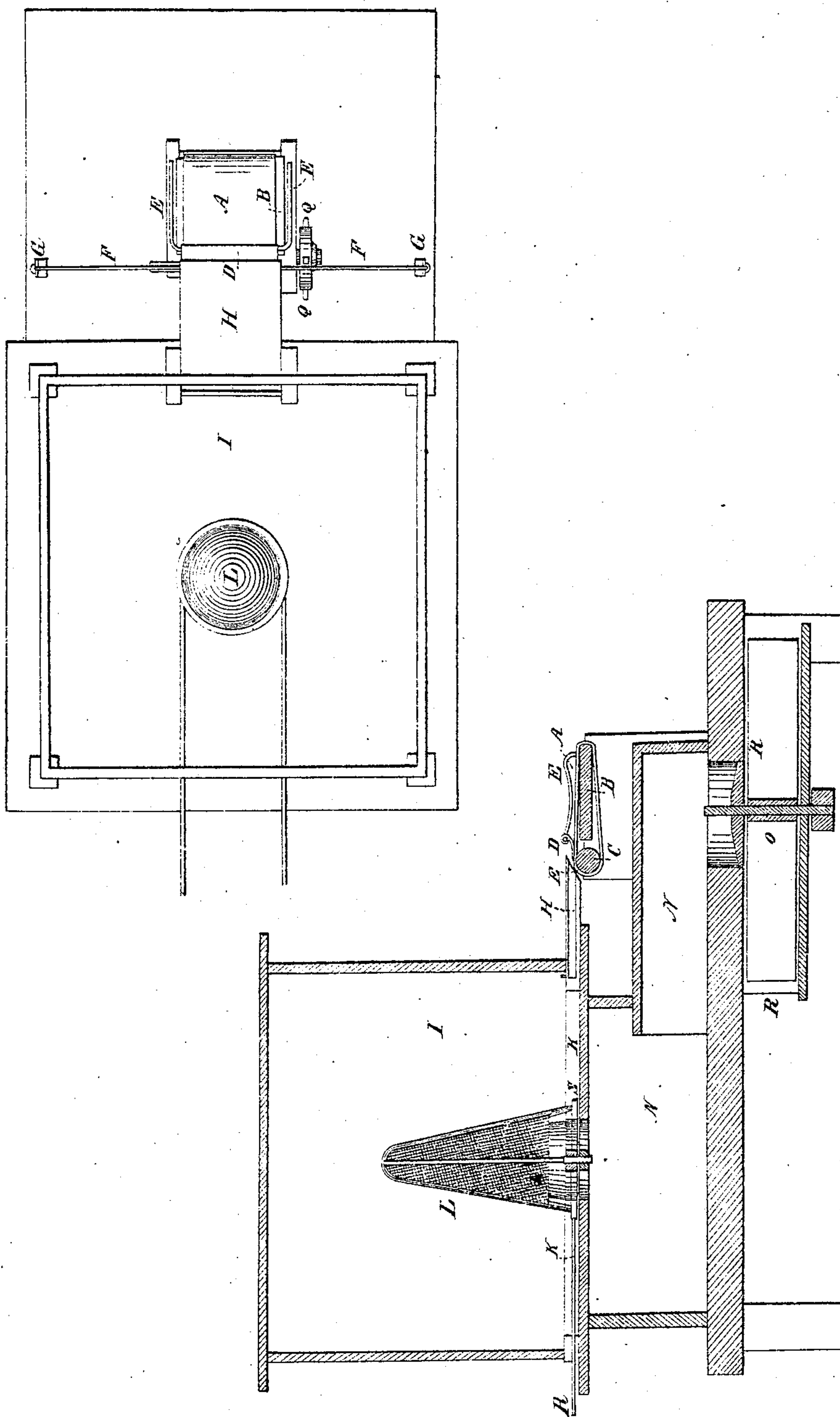


Patented Jan. 23, 1846.



UNITED STATES PATENT OFFICE.

WM. FOSKET, OF WARE, MASSACHUSETTS.

MACHINERY FOR MAKING HAT-BODIES.

Specification forming part of Letters Patent No. 4,363, dated January 23, 1846; Reissued March 23, 1858, No. 538.

To all whom it may concern:

Be it known that I, WILLIAM FOSKET, of Ware, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Machinery for Manufacturing Hat Bodies, and that the following specification of the same, taken in connection with the accompanying drawings, fully sets forth the nature and principles thereof by which it may be distinguished from other inventions of like character.

Figure 1 of the drawings above mentioned represents a top view of my machine in which the cover of the wind case is supposed to be removed in order to exhibit the position of the conical apparatus upon which the hat body is formed. Fig. 2 is a vertical central and longitudinal section of the mechanism.

The fibrous material or wool of which the felt is to be fabricated is placed in sufficient quantities as the same may be required upon an endless feeding cloth or apron A, Figs. 1, 2, which rests and moves upon or over the upper surface of a suitable table B and is revolved by passing around a roller C which is arranged in front of the table and operated by any proper means. Just above that portion of the feeding cloth which rests upon the upper surface of the roller C a spring guide plate D is so arranged as to rest in contact, or nearly so, with the feeding cloth, the said guide plate being supported in position by suitable springs E, E, or other contrivances of like nature, which permit it to rise above the cloth to the degree required to permit the passage of the wool into the machine and at the same time to hold it to allow the proper action of a bow string F, stretched in front of the guide plate and upon the tops of spring posts G, G.

A suitable passage or tube H leads from the vicinity of the bow string to what may be termed as the forming or wind chamber I, this latter being a square or circular box of convenient dimensions around and through the lower part of each of the sides of which various elongated orifices K are cut to permit the external atmosphere to have access to the interior of the chamber. Upon the central part of the bottom of the chamber a conical frame L of wire is raised, the same being of the size necessary for the formation of the hat body. This frame is

covered on the outside with muslin or fine wire gauze or other suitable material of similar character and while in operation it should have a continued slow rotary movement in a horizontal direction imparted to it by a band R operating around a pulley S applied to the said frame as seen in Fig. 2. By giving to the conical gauze frame a rotary motion the planking operation will be more evenly performed upon it than it would if it were stationary. That part of the bottom of the wind chamber situated within the gauze frame opens by one or more suitable passages M, Fig. 2, into a box or pipe or chamber N which leads to a fan blower or wind wheel O placed in any convenient position and revolved by any proper mechanism applied to it. The bow string is operated by means of a wheel P, arranged under the same and having a series of teeth Q Q, extending from its circumference and which come in contact with the string as the wheel is revolved and produces the whipping or bow string operation upon the wool, similar to that usually effected by hand process in felting.

The machinery being put in motion the fan blower or wheel draws a powerful current of air through the orifices K, and tube H, and into the wind chamber from whence it rushes through the meshes of the conical guide frame and is received into the case R, surrounding the fan wheel O, and finally discharged therefrom by the action of the said fan wheel. The filaments of wool separated from each other by the bow string are drawn by the current of air, which enters through the tube H, into the wind chamber and toward the gauze frame, upon which they pile or overlay each other and upon which they are to be pressed and upon each other by revolving conical rollers or other proper contrivances. The process is thus carried on until a sufficient quantity of the fibrous material to form the hat body is deposited upon the conical gauze frame, which is afterward to be removed therefrom and felted or treated in the usual manner.

Having thus explained my invention I claim—

The combination with the wind chamber surrounding the conical frame of gauze, of the apparatus which feeds the fibrous material into the chamber and whips or prepares it previous to its reception therein, the

said apparatus consisting of the feeding apron with its spring plate and bow string, the whole being arranged and operating substantially in the manner as above specified and described.

In testimony that the above is a correct specification of my invention I have hereto

set my signature this 25 day of April A. D. 1843.

WM. FOSKET.

Witnesses:

NORMAN NORTON,
MATHER V. KELLOGG.

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