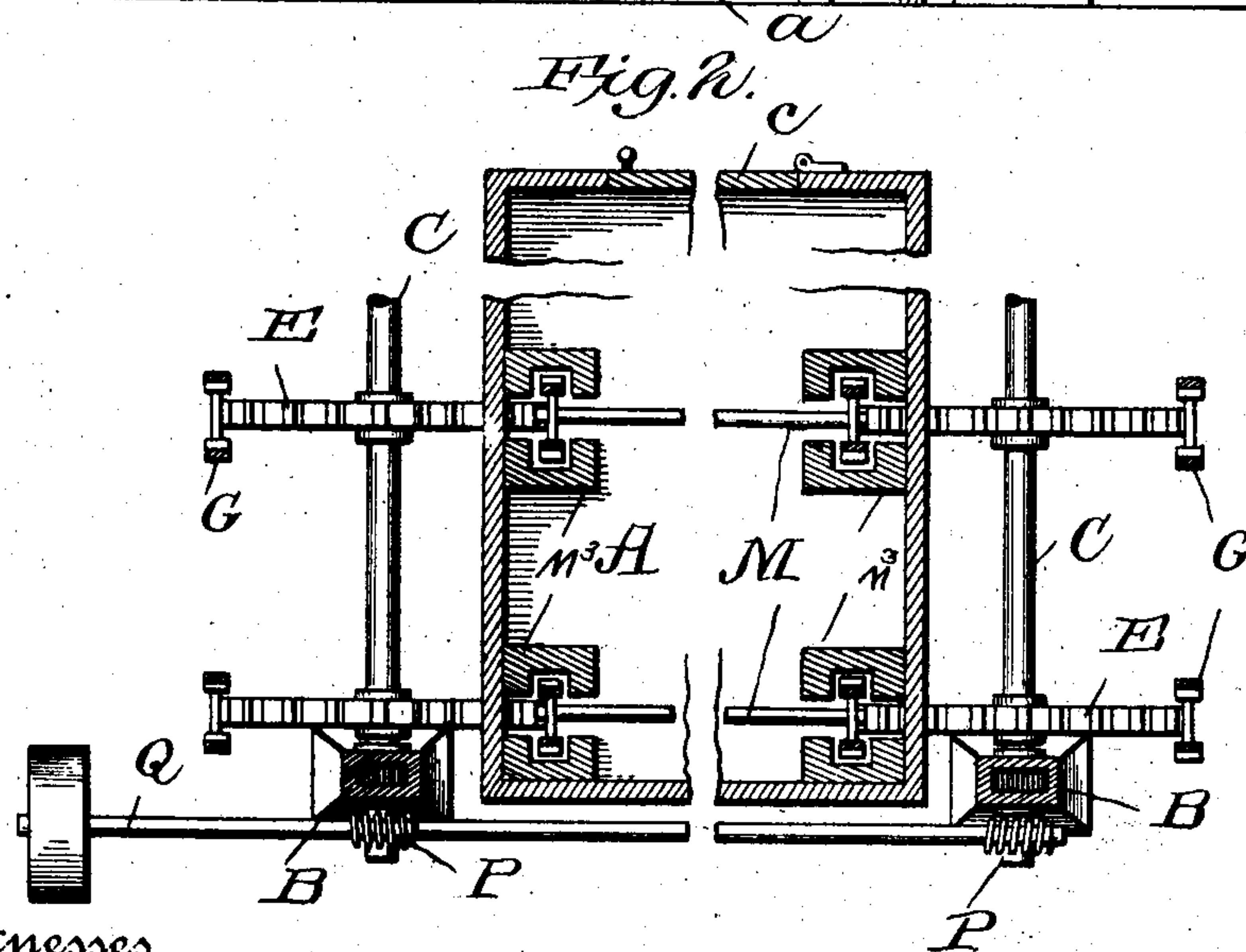
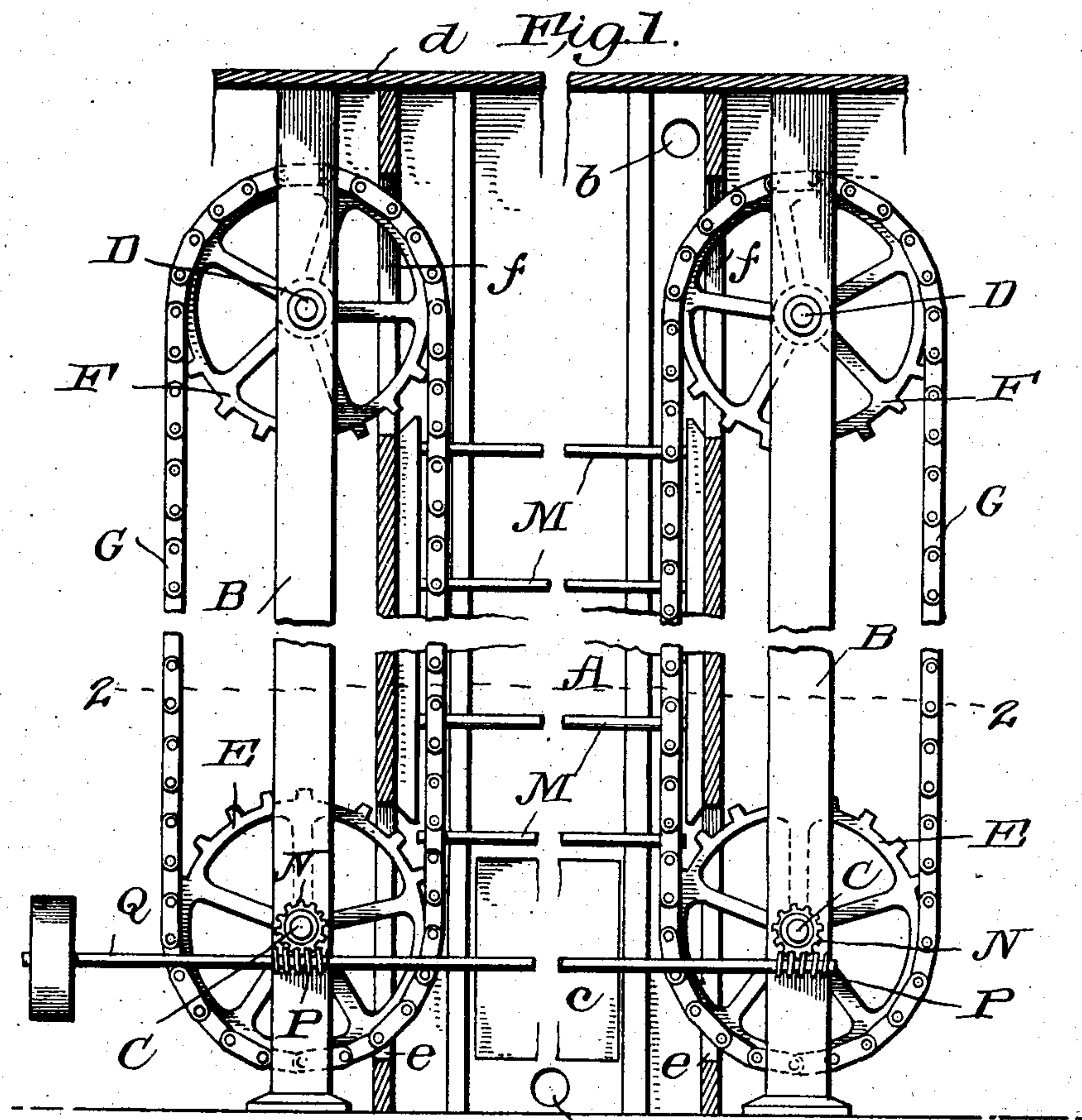


No. 835,096.

PATENTED NOV. 6, 1906.

F. E. BURLINGAME.  
DRYING MACHINE.  
APPLICATION FILED MAR. 31, 1906.



Witnesses  
*Geo. T. Byrne.*  
*W. C. Dealy*

Inventor  
*F. E. Burlingame*  
by *James J. Shulby*  
Attorney



# UNITED STATES PATENT OFFICE.

FRED E. BURLINGAME, OF WRENTHAM, MASSACHUSETTS.

## DRYING-MACHINE.

No. 835,096.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed March 31, 1906. Serial No. 309,128.

*To all whom it may concern:*

Be it known that I, FRED E. BURLINGAME, a citizen of the United States, residing at Wrentham, in the county of Norfolk and State of Massachusetts, have invented new and useful Improvements in Drying-Machines, of which the following is a specification.

My invention pertains to machines for drying cloth, yarn, and analogous material; and it has for its object to provide a simple and inexpensive drying-machine possessed of high capacity and constructed with a view of being loaded and unloaded as well as operated with quickness and ease.

The invention will be fully understood from the following description and claim, when the same are read, in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of the machine constituting the present and preferred embodiment of my invention. Fig. 2 is a horizontal section taken in the plane indicated by the line 2 2 of Fig. 1 looking downwardly.

Similar letters designate corresponding parts in both views of the drawings, referring to which—

A is a chamber which may be a tower, as shown, a room, or a flue, and is preferably of rectangular form in cross-section. The said chamber is provided adjacent to its lower end with an inlet *a*, for hot air, and adjacent to its upper end with an exit *b* for such air, and it is also provided in one of its walls at a point adjacent to its lower end with a door *c*, the latter for the passage of the person employed in loading and unloading the machine, in the manner hereinafter described.

B B are upright stands or frames fixed at opposite sides of the chamber A and extending from the ground or any other suitable base to the top *d* of the chamber.

C C are lower shafts journaled in the said stands or frames and arranged at opposite sides of the chamber; D D, upper shafts similarly journaled in the stands or frames at opposite sides of the chamber; E E, wheels, preferably sprocket-wheels, as shown, fixed on the shafts C and arranged to play through or turn in vertical slots *e* in opposite walls of the chamber; F F, wheels, preferably sprocket-wheels, as shown, fixed on the upper shafts D and arranged to play or turn in vertical slots *f* in the said walls of the chamber; G G, endless chains, preferably sprocket-chains,

as shown, mounted on the lower and upper wheels and having stretches disposed within and without the chamber, respectively, as shown, the inner stretches being arranged in upright guides M<sup>3</sup>; and M M, rods removably arranged in horizontally-alined links in opposed inner stretches of the chains G and designed to carry the cloth, yarn, or other material to be dried. In addition to the sprocket-wheels E the lower shafts C are equipped with worm-wheels N. These worm-wheels are intermeshed with oppositely-disposed worms P on a shaft Q, and hence it will be apparent that when the said shaft Q is turned by hand or by a suitable motor (not shown) the chains at the left of the chamber A will be moved, as will also the chains at the right of the chamber, this in order to carry the inner stretches of the belts upward or downward according to the direction in which said shaft Q is turned.

In the practical use of my novel machine an employee enters the chamber A through the door *c* and places rods M, bearing the cloth or analogous material to be dried, in horizontally-opposed open links in the inner stretches of opposed chains. Subsequent to the placing of each rod with its load of cloth or yarn the chains are moved to carry the inner stretches thereof upward, when another rod is placed in position. This operation is repeated until the chamber is occupied from its lower end to its upper end with rods M bearing cloth or yarn, when the employee leaves the chamber through the door *c*, and then supplies hot air to the chamber through the inlet *a*. After the cloth, yarn, or other material to be dried has been left in the chamber sufficiently long for the purpose, the movement of the chains G in the opposite direction to that first mentioned is effected, and the rods M are removed one by one from the chamber and the inner stretches of the chains, the lower rod M being removed first, and the other rods being removed in regular sequence when they reach the lower portion of the chamber.

It will be gathered from the foregoing that my improved machine is adapted to be loaded and unloaded with facility and with but a minimum amount of effort on the part of the operator, and it will also be gathered that by virtue of the chains having stretches arranged within and without the chamber, respectively, the capacity of the chamber for holding goods is materially increased. In other



words, the arrangement of but one stretch of each chain in the chamber and adjacent to a wall thereof renders it feasible to employ long rods M, each of which is adapted to carry a considerable quantity of cloth or yarn.

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

10 A cloth-drying machine comprising a chamber, upright guides M<sup>3</sup> arranged in the chamber adjacent to opposite walls thereof and having contracted openings in their opposed sides, opposite upright endless chains of open links having inner stretches movable  
15 vertically in the guides M<sup>3</sup> and also having the openings of their links horizontally op-

posed to one another, and rods adapted to bear cloth, arranged in the chamber with their ends extending through the contracted openings in the opposed or inner sides of the guides M<sup>3</sup> and removably arranged directly in horizontally-opposed open links in the opposed inner stretches of the chains and extending between the said stretches.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRED E. BURLINGAME.

Witnesses:

GEO. W. SPAULDING,  
EDGAR L. SPAULDING.