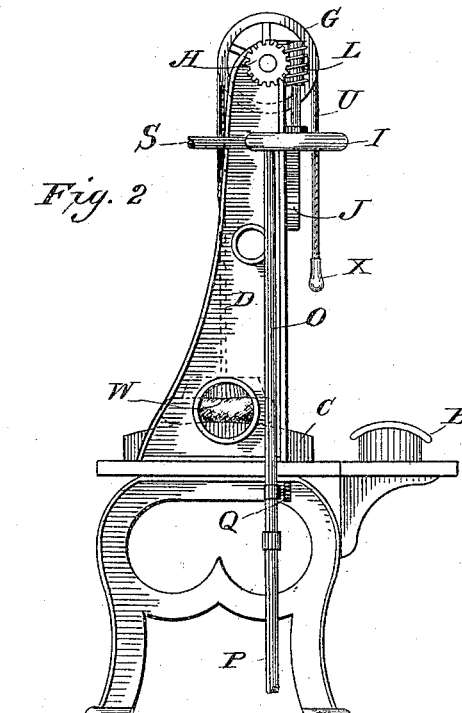
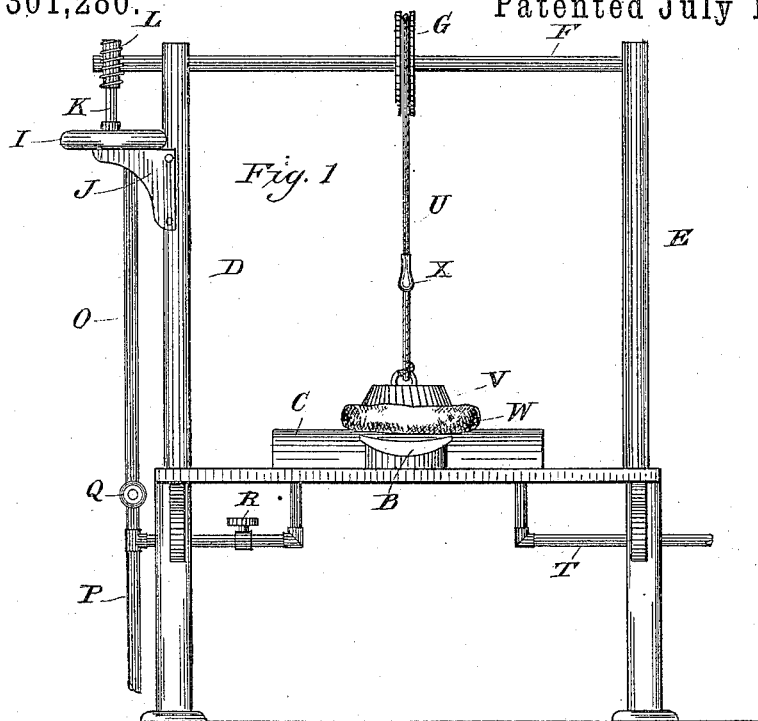


C. H. REID.

DEVICE FOR SHAPING THE BRIMS OF FELT HATS.

No. 301,280.

Patented July 1, 1884.



Witnesses
S. Williamson
W. J. Harland

Inventor
Charles H. Reid
By *Smith & Hubbard*
Atlys.

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Fig. 3

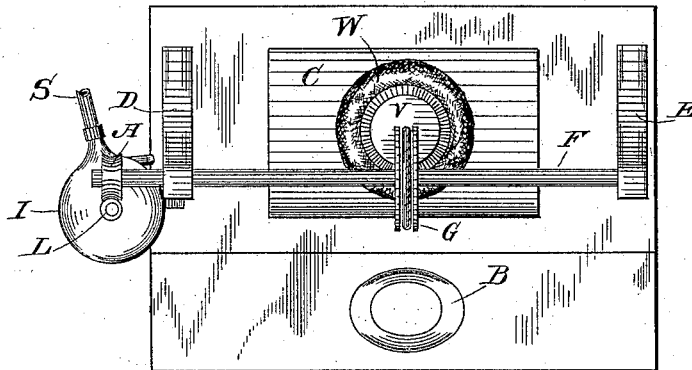
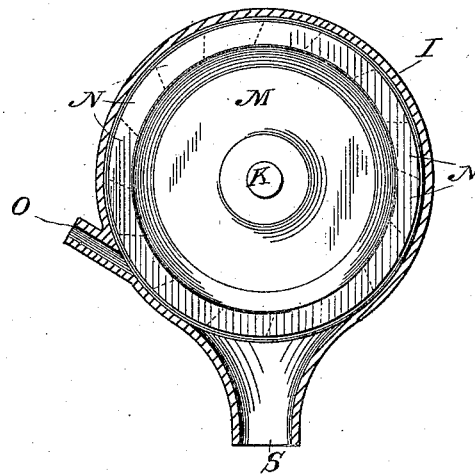


Fig. 4



Witnesses
S. D. Williamson
W. J. Haviland

Inventor
Charles H. Reid
By *Smith & Hubbard*
Attys.

UNITED STATES PATENT OFFICE.

CHARLES H. REID, OF DANBURY, CONNECTICUT.

DEVICE FOR SHAPING THE BRIMS OF FELT HATS.

SPECIFICATION forming part of Letters Patent No. 301,280, dated July 1, 1884.

Application filed February 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. REID, a citizen of the United States, residing at Danbury, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Devices for Shaping the Brims of Felt Hats; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain novel and useful improvements in the construction and operation of devices for shaping the brims of felt hats, and has for its object to provide means for actuating the shaft which runs over the machine exceedingly simple and readily manipulated, and also to greatly simplify and improve the present method of operating the sand-bag; and with these ends in view my invention consists in the details of construction and combination of elements hereinafter fully and in detail described, and then specifically designated by the claim.

In order that those skilled in the art to which my invention appertains may more fully understand the same, I will proceed to describe its construction and operation, referring by letters to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a front elevation of my improvement; Fig. 2, a side elevation; Fig. 3, a plan view, and Fig. 4 a detail section and view of the motor.

Similar letters denote like parts in the several figures of the drawings.

A is the table, and B C the hat-block and heater, respectively, secured on said table.

D E are standards projecting upward from the table and bolted thereto.

F is the shaft journaled within the standards, and having mounted thereon a grooved pulley, G, and spirally-toothed pinion H.

I is a casing supported by brackets J, bolted to the standard D. Within this casing is journaled an upright short shaft, K, having at its upper portion a worm, L, adapted to gear with the spirally-toothed pinion H. The lower extremity of this shaft projects within the casing I, and has secured thereto in any

suitable manner a wheel, M, provided at its periphery with buckets N.

O is a steam-inlet pipe communicating with the casing and connected with the main steam-pipe P. The latter extends underneath the table A up into the heater C.

Q is a valve by means of which the supply of steam to the motor may be regulated, and R is a valve which controls the steam which passes into the heater.

S is a pipe through which the steam may be led from the casing to the hat-sizing tanks.

T is a pipe which carries away the waters of condensation from the interior of the heater.

U is a rope passed over the pulley G, and having one end secured to the core V of the sand-bag W, the other end being provided with any suitable handle, X.

The operation of my improvement is as follows: Steam is introduced within the motor, and the shaft F will be revolved by the action of the worm L on the spiral pinion H. The operator grasps the handle X and pulls downward on the rope, and the sand-bag is thereby readily lifted off from the heater or the block, as the case may be, the action of the shaft serving as an auxiliary in this operation.

By the use of my improvement a compact and simple machine is afforded, which is a great advantage in factories where there is no power, and also there is a great saving of labor in manipulating the sand-bag.

The great advantage resulting from my improved construction is that the speed of the shaft may be regulated, thereby determining the swing of the sand-bag when it is raised from the hat, because the greater the centrifugal force the farther away will that portion of the rope which is attached to the sand-bag be carried from its normal position, and the location of the heater being immediately behind the hat-block, the sand-bag may be raised from the latter and deposited on the former without any manipulation on the part of the operator, save the mere pulling downward on the rope.

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

The short shaft K, journaled within the casing, I, and having on one extremity a worm,

the other end being extended within said casing, and having secured thereto a wheel provided with buckets, in combination with the shaft F, carrying spiral pinion H and grooved pulley G, rope U, passed over said pulley and
5 attached at one end to a sand-bag, the other extremity being provided with any suitable handle, means for introducing a head of steam within said casing, and means for regulating

the flow of said steam, substantially as described.

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

CHARLES H. REID.

Witnesses:

GEO. WAKEMAN,
JAMES E. WALSH.