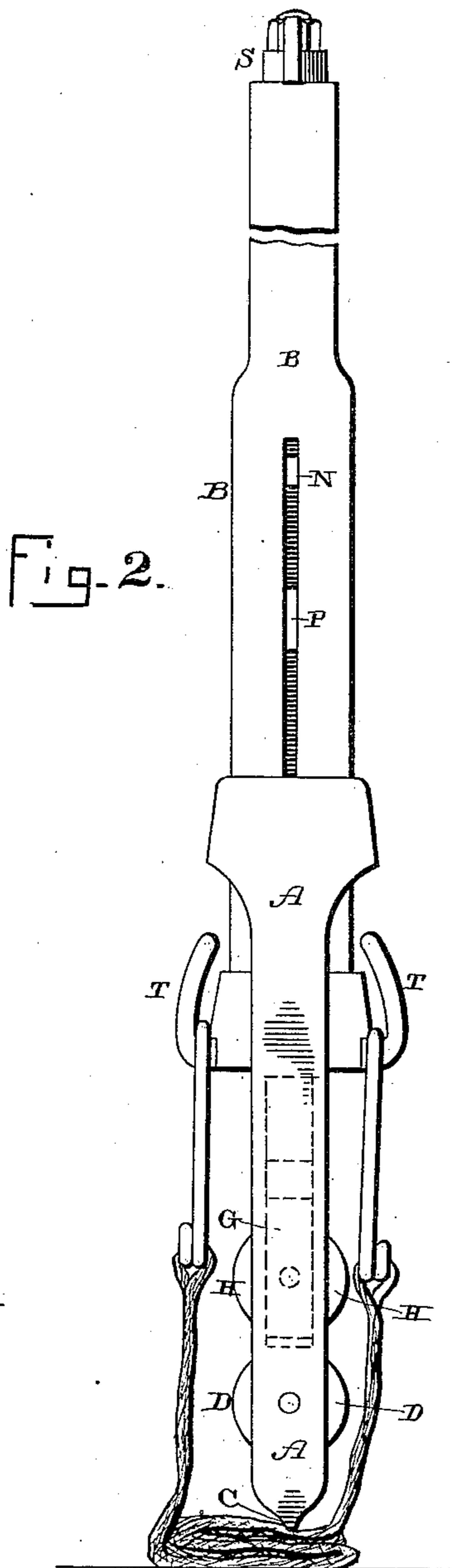
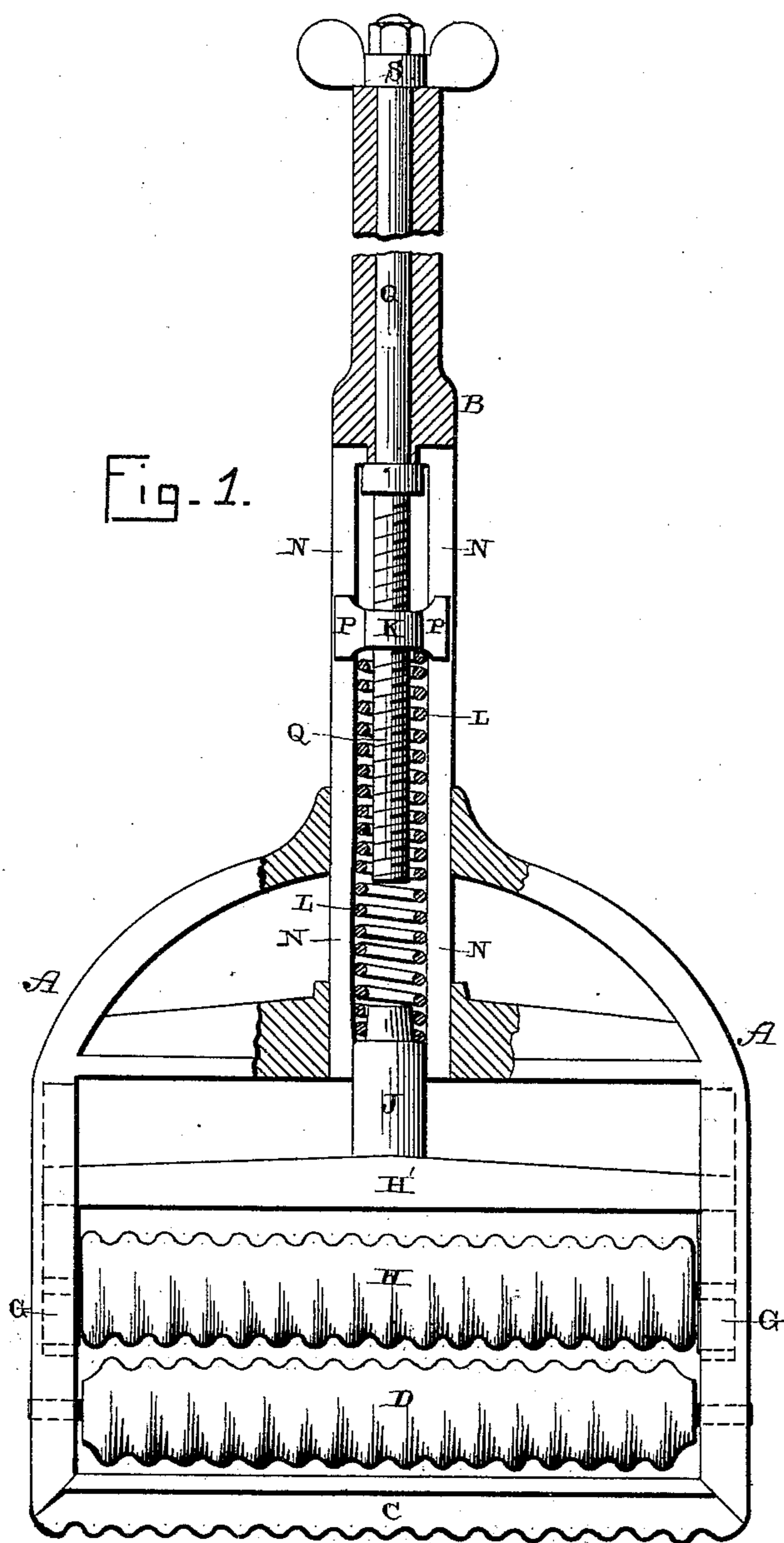


(No Model.)

W. J. McDONNEL.
MOP HEAD.

No. 429,048.

Patented May 27, 1890.



Witnesses:

E. P. Ellis,
Allen S. Pattison

Inventor:

Wm. J. McDonnell,
per

J. A. Lehmann
att'y

UNITED STATES PATENT OFFICE.

WILLIAM JOHN McDONNEL, OF SALT LAKE CITY, UTAH TERRITORY.

MOP-HEAD.

SPECIFICATION forming part of Letters Patent No. 429,048, dated May 27, 1890.

Application filed September 27, 1889. Serial No. 325,297. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JOHN McDONNEL, of Salt Lake City, in the county of Salt Lake and Territory of Utah, have invented certain new and useful Improvements in Mop-Heads; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in mop-heads; and it consists in the particular arrangement and combination of parts, which will be more fully described hereinafter, and particularly pointed out in the claims.

The object of my invention is to provide a mop-head which will engage with the cloth, so as to cause it to move positively with it, and to provide a means for regulating the pressure of the rollers upon the cloth.

Figure 1 is a side elevation of a mop-head which embodies my invention, shown partly in section. Fig. 2 is an edge view of the same.

A represents a mop-frame, which is secured in any suitable manner to the handle B, and which has its lower edge C serrated or roughened, so that this edge will positively engage with the cloth when it is pressed down upon it, and thus cause the cloth to always move with the mop-frame in any desired direction. Where this lower edge is made smooth, the frame is always liable to slip back and forth over the cloth, and thus cause the operator to exert a greater pressure than is necessary. Journaled in the lower portion of this frame is the grooved roller D, which has no other than a revolving motion. Above this roller the sides of the frame are grooved, as shown in dotted lines, so that the boxes G of the upper sliding roller H can move freely back and forth therein. These two rollers are grooved, as shown, so that when forced tightly together the water will be forced from the cloth as it is pulled back and forth between them. Also placed inside of this frame, and having its ends to catch in the grooves made in the inner sides of the frame, is the cross-head H', which has a suitable projection J formed at the center of its upper edge, so as to enter the opening which is made in the lower end of the

handle. The lower end of the handle is enlarged, as shown, and hollowed out, so as to receive the screw-follower K and the spring L, and has grooves N formed in opposite sides for the guiding-wings P of the follower to move in. Passing through the handle and through the screw-follower is the screw-threaded end of the operating-rod Q, which is provided with a handle or other suitable device S at its upper end for turning the rod. The spiral spring is placed between the follower and the projection on the cross-head, so that the operator by simply turning the rod can increase or decrease the tension of the spring, and thereby increase or decrease the pressure of the rollers upon the cloth which is placed between them, as shown. By having the rod extend through the mop-handle the operator need never stoop down or lift the wet cloth from the floor for the purpose of adjusting the pressure of the rollers upon it.

Formed as an integral part of the mop-frame upon opposite sides are the two hooks T, in which the bails upon opposite ends of the cloth catch. Whenever it is desired to wring the cloth, it is only necessary to catch hold of the bail at one end of the cloth and draw the cloth through between the rollers, when the water will be pressed out of the cloth in proportion to the amount of tension upon the spring. The rollers are grooved, as shown, so that the cloth when drawn through between them will not pull sidewise and become doubled and wrinkled. By means of the construction here shown the operator has only to regulate the pressure of the rollers upon the cloth by turning the operating-rod, and then when he wishes to wring the cloth it is only necessary to unfasten the bail at one end of the cloth from its hook and pull the cloth through between the rollers as far as the bail at the other end will permit, when the mop is again ready for use.

Having thus described my invention, I claim—

1. In a mop-head, the combination, with the rectangular frame provided with longitudinal grooves in the inner surfaces of its sides, its lower end pointed and provided with serrations for engaging the cloth, and the hooks T, formed integral therewith for the reception of the mop-cloth bails, of the handle, a station-

ary roller journaled in the frame near its lower end, a movable roller sliding in the said longitudinal grooves, and a spring for depressing the said movable roller, substantially as shown.

2. The combination of the mop-head, the two rollers placed therein, the cross-head which bears against the boxes of one of the rollers, the handle having a longitudinal opening, a spiral spring placed in the lower end of said opening and engaging the cross-head, a follower, and an operating-rod which passes longitudinally through the handle and engages the said follower, whereby the tension of the spring is regulated, substantially as described.

3. The combination of the mop-head having longitudinal grooves in its inner sides, a

grooved roller which is journaled in the frame, a second roller, boxes placed in the said grooves in which the second roller is journaled, a cross-head which moves in the grooves and engages the said boxes, and which is provided with a projection at its center which enters the opening in the handle, a hollow handle, a spiral spring placed therein and engaging the upper end of said spring, and a screw-threaded operating-rod which passes through the follower and handle, substantially as specified.

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

WILLIAM JOHN McDONNEL.

Witnesses:

JOHN POWELL,
HENRY EWER.