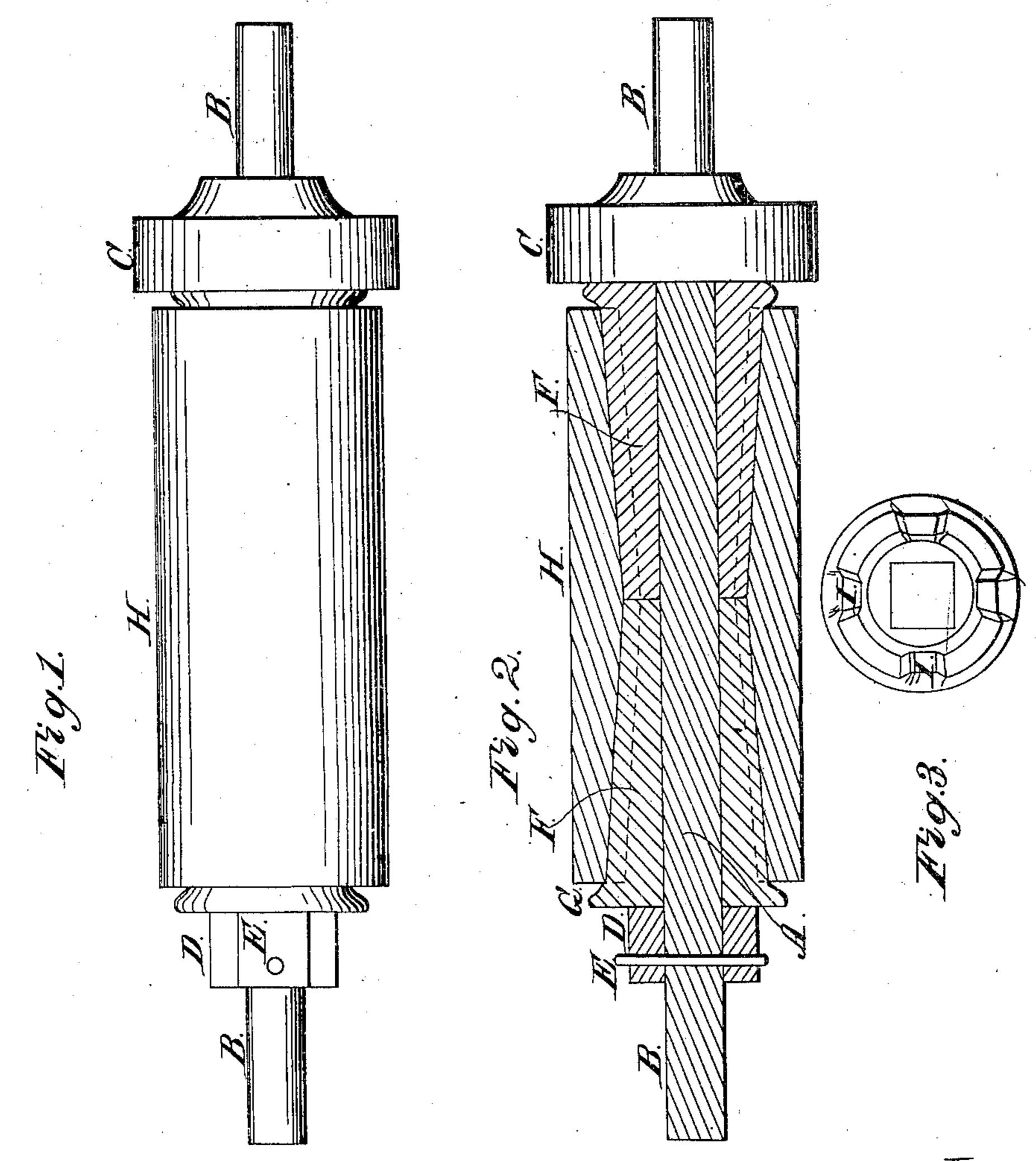
J. ALLENDER. WRINGING MACHINE,



Mitnesses.

Inventor. Sohn Allender Bish's Atty

UNITED STATES PATENT OFFICE.

JOHN ALLENDER, OF NEW LONDON, CONNECTICUT.

WRINGING-MACHINE.

Specification of Letters Patent No. 32,954, dated July 30, 1861.

To all whom it may concern:

Be it known that I, John Allender, of the city and county of New London and State of Connecticut, have invented a new, useful, and Improved Elastic or Yielding Roller for Squeezing Water from Cloth, Clothes, and for other Purposes; and I do hereby declare that the same is described and represented in the following specifica-

10 tion and accompanying drawings.

The nature of my improvement in elastic yielding rollers consists in making the core smaller in the middle between the ends than it is toward or at the ends; and making the elastic or yielding covering thicker in the middle, between the ends than it is at or toward the ends; so that the roller will yield most where the greatest thickness of cloth or clothes passes when squeezed. Also in making grooves in the core and ribs on the inside of the elastic or yielding covering to prevent the covering from turning on the core.

To enable others skilled in the art to make and use my improved roller, I will proceed to describe its construction, and the mode of using it, referring to the drawings in which the same letters indicate the same parts in each of the figures.

Figure 1, is an elevation of my improved roller. Fig. 2, is a central section of said roller. Fig. 3, is an end view of one half of the core as seen from the middle or cen-

tral end.

In these drawings A, is a square metal shaft, with journals B, B, at the ends, on which it turns and it may be provided with

a crank or gear to turn it by.

C, is a pinion fastened to the shaft A, to mesh into the pinion on the roller used in connection with the roller shown to compel the surfaces of both rollers to move with the same velocity. The core or center of the roller is made of two conical pieces F, F, 45 shown in section in Fig. 2, and an end view in Fig. 3, they are provided with a flange G, at the large end and there are four grooves I, I, extending from the small end to the flange which grooves are made flaring or wider at the surface of the roller than at the bottom of the groove.

The covering H, of india rubber or other elastic or flexible material, is made to fit

the core F, F, and provided with ribs on the inside, to fit the grooves in the cores, to 55 prevent the core from slipping, and turning without carrying the covering H. This covering is made much thicker at and near the middle between the ends, than it is toward and at the ends, as shown in Fig. 2, so as to 60 make the roller straight or uniform in size from end to end on the outside or it may be made largest in the middle if preferred that way. By making the covering thicker in the middle it yields more readily where the thick 65 portion of the cloth or clothes passes over or under the roller, than it does toward the ends, where the thinner portion of the cloth or clothes pass. Thus the cloth or clothes are pressed more uniformly, than they would 70 be if the elastic covering was of equal thickness from end to end. In which case it would press or squeeze the thick portions of the clothes too much, and the thin portions not enough. After the core F, F, is put into the 75 covering H, it is put onto the shaft A, and the nut D, put on and fastened by the pin E. When the elastic covering of rollers is made of a uniform thickness from end to end, it is a great advantage to groove the 80 core and make ribs on the inside of the covering, so as to insure the covering to turn with the core when in use.

I believe I have described my improved elastic or yielding roller, so as to enable any 85 person skilled in the art to make and use it. I will now state what I desire to secure by

Letters Patent to wit.

What I claim as my improvement in elastic or yielding rollers for squeezing water 90 from clothes and other purposes, is—

1. Making the core smaller in the middle than at the ends, and the elastic or yielding covering thicker at and near the middle between the ends, than it is at or near the ends, 95 substantially as described.

2. The grooves in the core in combination with the ribs on the inside of the rubber or yielding covering substantially as described to prevent the covering from slipping on the 100 core

JOHN ALLENDER.

Witnesses:

James W. Allender, John Groves.