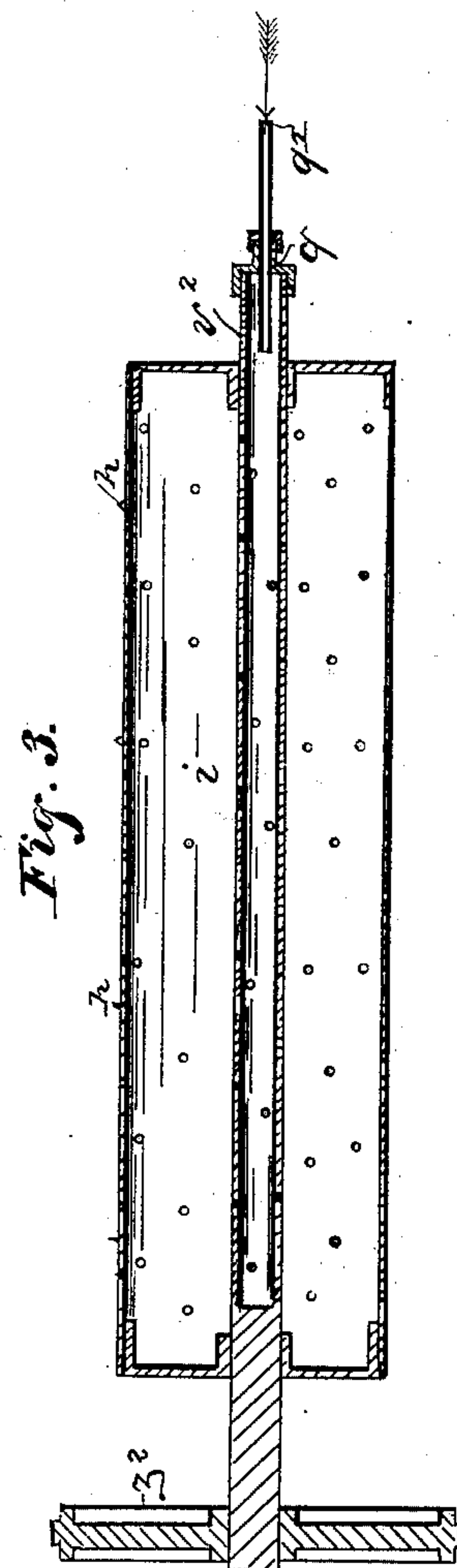
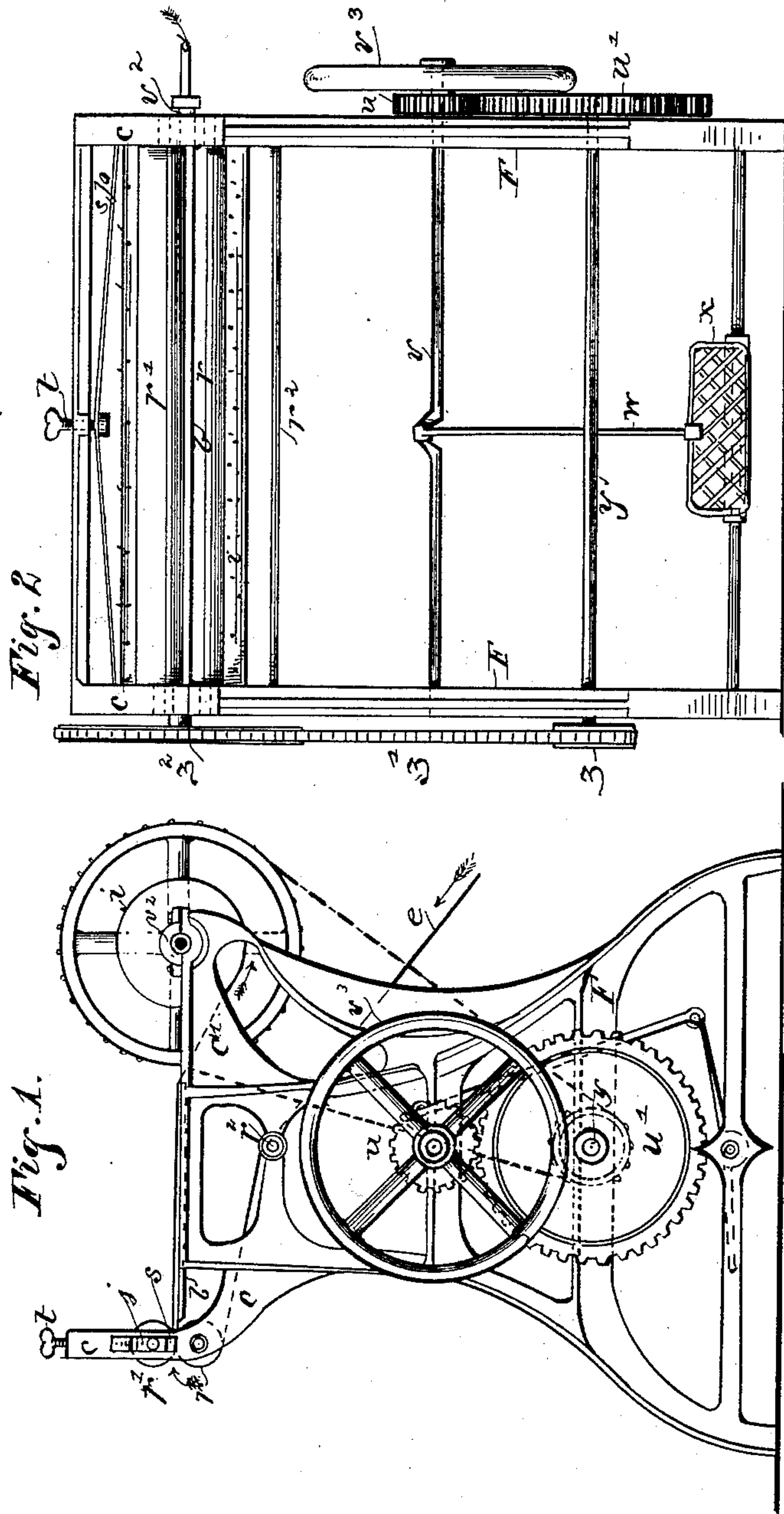


(No Model.)

R. SCHMITT.
MACHINE FOR SPONGING CLOTH.

No. 336,752.

Patented Feb. 23, 1886.



WITNESSES.

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UNITED STATES PATENT OFFICE.

ROBERT SCHMITT, OF INDIANAPOLIS, INDIANA.

MACHINE FOR SPONGING CLOTH.

SPECIFICATION forming part of Letters Patent No. 336,752, dated February 23, 1886.

Application filed October 6, 1884. Serial No. 144,789. (No model.)

To all whom it may concern:

Be it known that I, ROBERT SCHMITT, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Machines for Sponging Cloth, of which the following is a specification.

The object of my said invention is to provide a means for sponging cloth and at the same time keeping it smooth and free from wrinkles; and it consists in the machine constructed and operating as hereinafter described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is an end elevation of a machine embodying my said invention; Fig. 2, a front elevation of the same, and Fig. 3 a central section of the perforated steam-cylinder upon which the cloth is wound separately.

The frame F of said machine is of a convenient shape and size to carry the sponging-roll and other mechanism, and is preferably of cast-iron. It has in its upper portion a bed-plate, *b*, over which the cloth passes on its way to the sponging-roll. In brackets *c*, on this frame are mounted the smoothing-rolls *r* and *r'*, the former of which rests in solid bearings in said brackets, and the latter in sliding bearings *j*, mounted in slots *s* therein, as shown. (See particularly Fig. 1.) A spring, *sp*, rests on these bearings *j*, and a tension-screw, *t*, engages with and regulates the pressure of said spring, and thus the pressure of the rolls upon the cloth passing between them. The roll or rod *r*² is simply a friction roll or rod for the cloth to pass over. The sponging-roll *i* is a hollow perforated cylinder, mounted upon a hollow shaft, *v*². Upon one end of this shaft is the chain-wheel *z*², and to the other is connected the steam-pipe *q'*, through the stuffing-box *q*. The roll is also provided with projecting pins or hooks *h*, by which the end of the cloth may be attached thereto. The wheel *z*² is connected by a chain belt, *z'*, to a similar wheel, *z*, on a shaft, *y*, which is connected by gears *u'* and *u* to a crank-shaft, *v*, which is in turn connected by a rod, *w*, to a treadle, *x*, and the sponging-roll *i* can thus be driven by power applied to said treadle.

The operation is as follows: One end of the bolt of cloth is passed over the friction-roll

*r*², between the pressure-rollers *r* and *r'*, over the bed-plate *b* and around said roll, to which it is attached by means of projecting points or hooks *h* thereon. (See particularly Fig. 3.) The screw *t* is then adjusted until the desired pressure is attained, care being taken that the cloth is placed between said rollers smoothly and evenly, and the winding of the cloth by means of the aforementioned mechanism proceeds. A jet of steam being introduced through the pipe *q'* into the sponging-roll, said steam passes through the perforations and permeates the cloth and saturates it thoroughly and evenly, and under any desired degree of heat, thus causing the cloth to shrink the same as if it had been boiled, without either soiling or wrinkling it, and in any desired quantity at one time.

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

1. The combination of a perforated sponging-cylinder provided with teeth or hooks *h*, a horizontal bed-plate, *b*, pressure-rollers, and mechanism for revolving said sponging-cylinder, substantially as and for the purposes set forth.

2. The combination of a frame-work having a horizontal bed-plate, *b*, and brackets *c*, a sponging-cylinder, *i*, a roll, *r*, mounted in bearings in said brackets, a roll, *r'*, mounted in sliding bearings *j*, resting in slots in said bracket, a pressure spring, and tension-screw, substantially as shown and described.

3. The combination of a frame-work, a sponging-cylinder having teeth or hooks *h*, pressure rollers, a friction-roller, mechanism for driving said sponging-cylinder, a steam-pipe entering said sponging-cylinder, and a stuffing-box at the point of said entrance, substantially as set forth.

4. The combination of the frame-work, the bed-plate *b*, brackets *c*, rollers *r* *r'* *r*², hollow perforated sponging-cylinder *i*, a hollow perforated shaft, *v*, on which said cylinder is mounted, and steam-pipe *q'*, substantially as set forth.

In witness whereof I have hereunto set my hand, at Indianapolis, Indiana, this 2d day of October, A. D. one thousand eight hundred and eighty-four (1884.)

Witnesses: ROBERT SCHMITT.

Z. K. McCORMACK,
JACOB W. LOEPER.