

(No Model.)

S. ODENHEIMER.
MACHINE FOR WINDING BAGGING.

No. 420,354.

Patented Jan. 28, 1890.

FIG. 1.

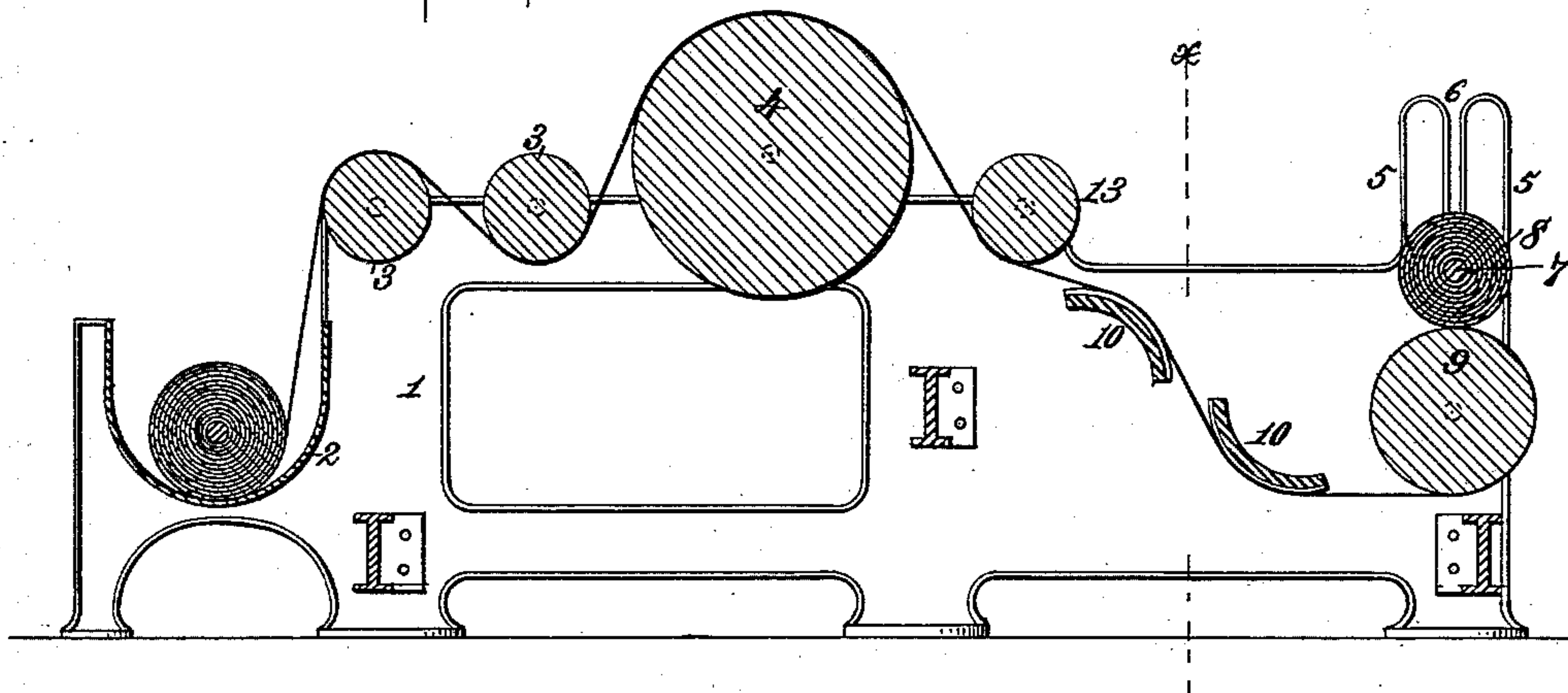
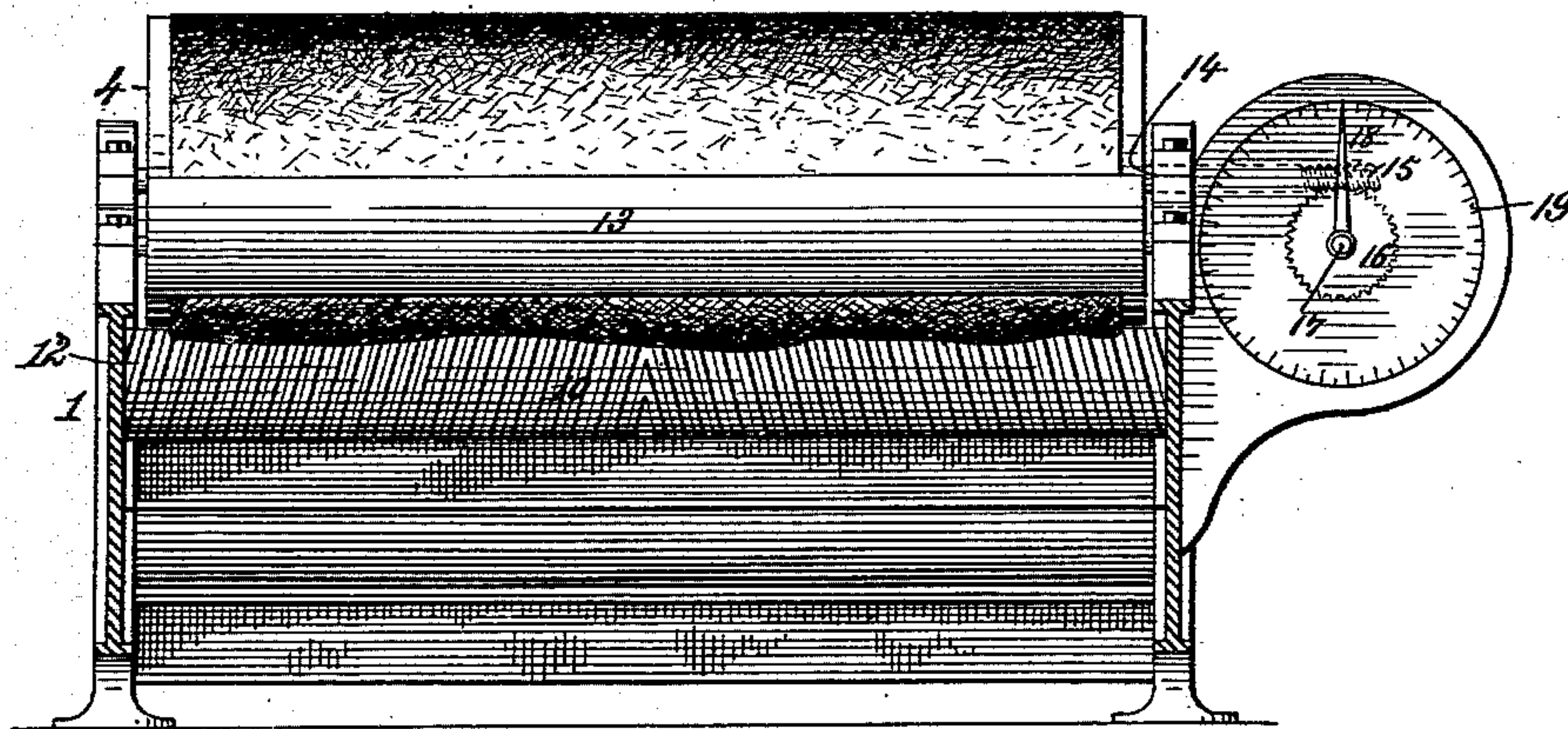


FIG. 2.



Witnesses.

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MACHINE FOR WINDING BAGGING.

SPECIFICATION forming part of Letters Patent No. 420,354, dated January 28, 1890.

Application filed October 16, 1888. Renewed November 6, 1889. Serial No. 329,405. (No model.)

To all whom it may concern:

Be it known that I, SIGMUND ODENHEIMER, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Machines for Winding Bagging, of which the following is a specification.

My invention relates to the class of machines used in mills for manufacturing textile fabrics for rolling or measuring and rolling cloth.

It is the purpose of my present invention to provide simple and efficient mechanism for rolling and measuring the cotton bagging manufactured by me, and forming the subject of an application for Letters Patent filed October 2, 1888, Serial No. 287,026.

The peculiar character of this fabric, it being loosely woven from hard-twisted yarn and with an open mesh, gives such a degree of elasticity to the web that it is exceedingly liable to draw up or curl to such a degree as to diminish its width and present a rough coarse appearance. Moreover, any ordinary method of measuring the web is subjected to inaccuracy, since the elasticity of the yarn causes the fabric to yield considerably under a comparatively light strain, thereby giving an excessive measurement, while anything less than the proper degree of tension results in a similar but opposite inaccuracy. The characteristics mentioned also render it difficult to roll the cloth evenly, the contraction of the hard-twisted yarn causing the web to curl or gather in places, and this feature renders it almost impossible to roll the bagging with the mechanism now in use.

It is the purpose of my invention to remove these difficulties by providing a simple mechanism whereby this and other fabrics may be smoothly and rapidly rolled and the contents of the web measured with practical accuracy.

It is my purpose, also, to provide a measuring apparatus adapted for use upon all machines of this class, the same consisting of a small number of parts having simple arrangement and extremely accurate in operation.

The invention consists in the several novel features of construction and new combinations of parts hereinafter fully set forth, and then specifically pointed out and defined in the claims following this specification.

Referring to the accompanying drawings, Figure 1 is a vertical longitudinal section illustrating my invention. Fig. 2 is an elevation and a vertical cross-section in the plane x , Fig. 1.

In the said drawings, the reference-numeral 1 designates any suitable frame-work, in which the working parts are supported, and forming a part of said frame-work is a trough or cradle 2, in which the roll is placed as it comes from the loom.

Journaled in the frame 1 are two tension-rolls 3, separated by a slight space, over and under which the web is led to the measuring-roll 4. This roll, like the two tension-rolls 3, is revolved entirely by the contact of the fabric, and the measuring-roll is exactly thirty-six inches in circumference, whereby every revolution thereof by contact with the web under proper tension gives a measurement of one yard.

At the end of the frame 1 opposite that at which the cradle 2 is placed are arranged standards 5, having vertical slots 6, within which lie the journals 7 of the take-up roll 8, which rests upon a power-roll 9 below. Between the latter and the measuring-roll 4 are arranged two spreaders 10, each consisting of a plate having a convex acting surface, upon which are formed ribs or projections 12, which diverge from the central transverse line of the plate. These spreaders are so placed that the web in passing from the measuring-roll to the take-up roll is drawn over these plates, one of the latter acting upon one side or surface, the other plate upon the opposite surface of the web, as shown in Fig. 1. A third tension-roll 13 is so arranged as to hold the fabric in close contact with the first spreader, the power-roll 9 being so arranged as to carry it over and in contact with the second.

Power is applied to the roll 9, which is provided with a tight and loose pulley for the purpose; but all the remaining rolls save the take-up roll are actuated by the frictional contact of the fabric only. The web is carried over the top of the measuring-roll, under the tension-roll 13, between the spreaders, and under and partly around the power-roll 9, and is then attached to the take-up roll 8, which is turned by contact with the roll 9.

As the fabric accumulates on said roll the journals of the latter rise in the slots 6. The ribs 12 on the spreading-plates tend to draw the fabric and spread it from its central longitudinal line laterally in both directions, so that when it arrives at the take-up roll it is smooth and of uniform width in all parts.

The shaft 14 of the measuring-roll 4 is extended, as shown in Fig. 2, and provided with a worm 15, with which a gear 16 meshes. This gear is mounted upon a shaft 17, which carries a pointer or index 18, traveling over a graduated dial or similar surface 19, having a suitable scale and numerals to indicate the divisions of the same.

By this mechanism I provide a simple automatic mechanism for rolling and measuring cloth, which, although specially adapted to operate upon the cotton bagging described, will also give excellent results with other fabrics.

What I claim is—

1. In a cloth rolling and measuring machine, the combination, with a measuring-roll over which the cloth passes, of tension-rolls upon both sides thereof, a power-roll around which the cloth passes to a take-up roll resting on the power-roll and having journals lying in vertical guiding-slots in the frame, a shaft carrying a pointer or index traveling over a graduated dial-plate mounted on a

bracket on the machine-frame, and a worm engaging a wheel on the shaft of and driving the index, said worm being carried by an extension of the shaft of the measuring-roll, substantially as described.

2. In a cloth rolling and measuring machine, the combination, with a tension-roll and a measuring-roll over which the web passes, of a power-roll for supporting and driving a take-up roll and spreader-plates each having a convex surface provided with diverging ribs or projections and acting upon opposite sides of the web, substantially as described.

3. In a cloth rolling and measuring machine, the combination, with the tension-rolls, of a measuring-roll having a worm on its shaft, a power-roll for supporting and driving a take-up roll, spreader-plates having convex surfaces provided with ribs or projections diverging from the central transverse line, a graduated dial-plate, a worm-gear engaging the worm on the measuring-roll shaft, and a pointer for the dial, substantially as described.

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

SIGMUND ODENHEIMER.

Witnesses:

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