

W. HEBDON.

MACHINE FOR STEAMING AND SHRINKING CLOTH.

No. 95,584.

Patented Oct. 5, 1869.

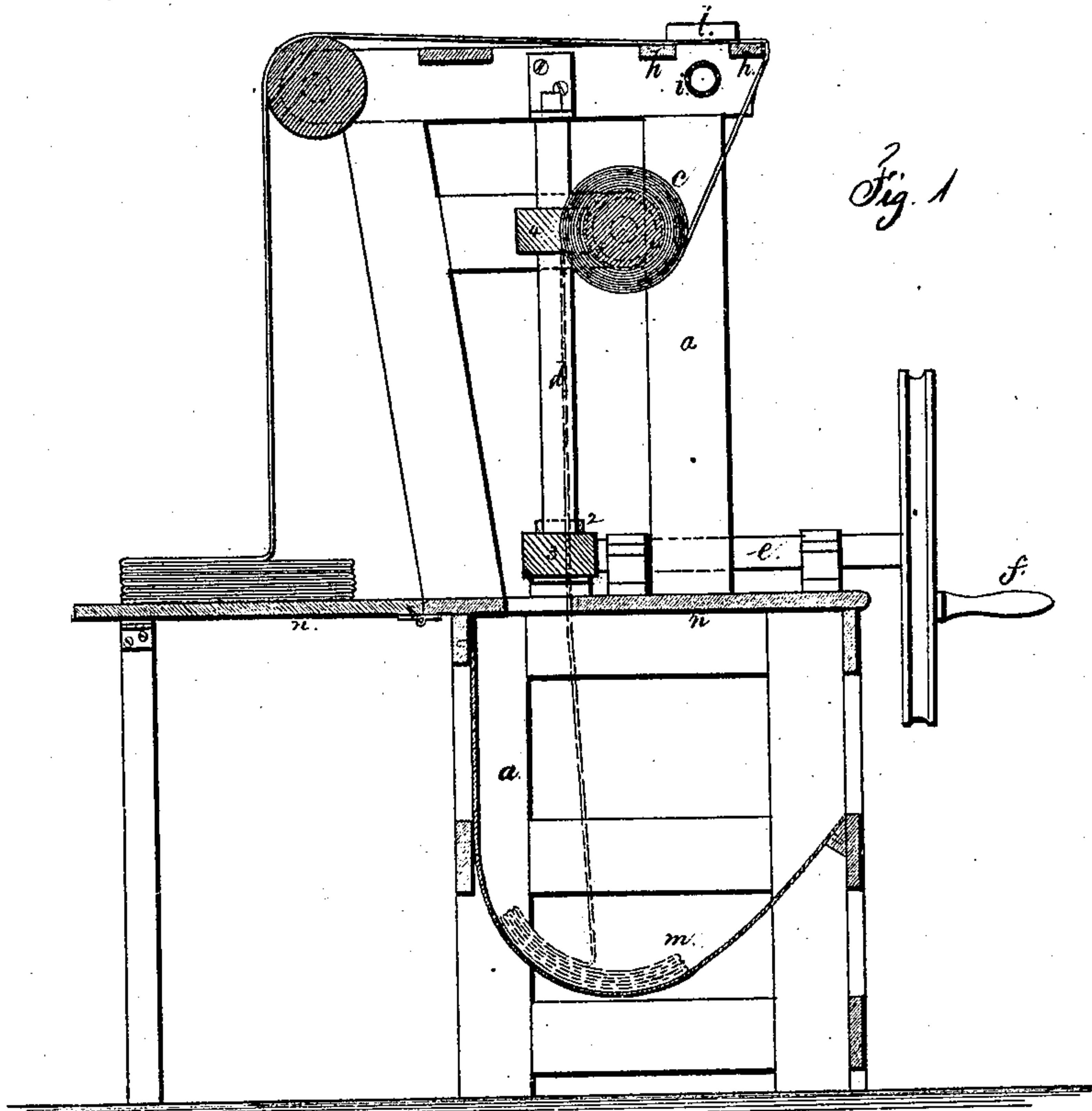


Fig. 1.

W. Heddon

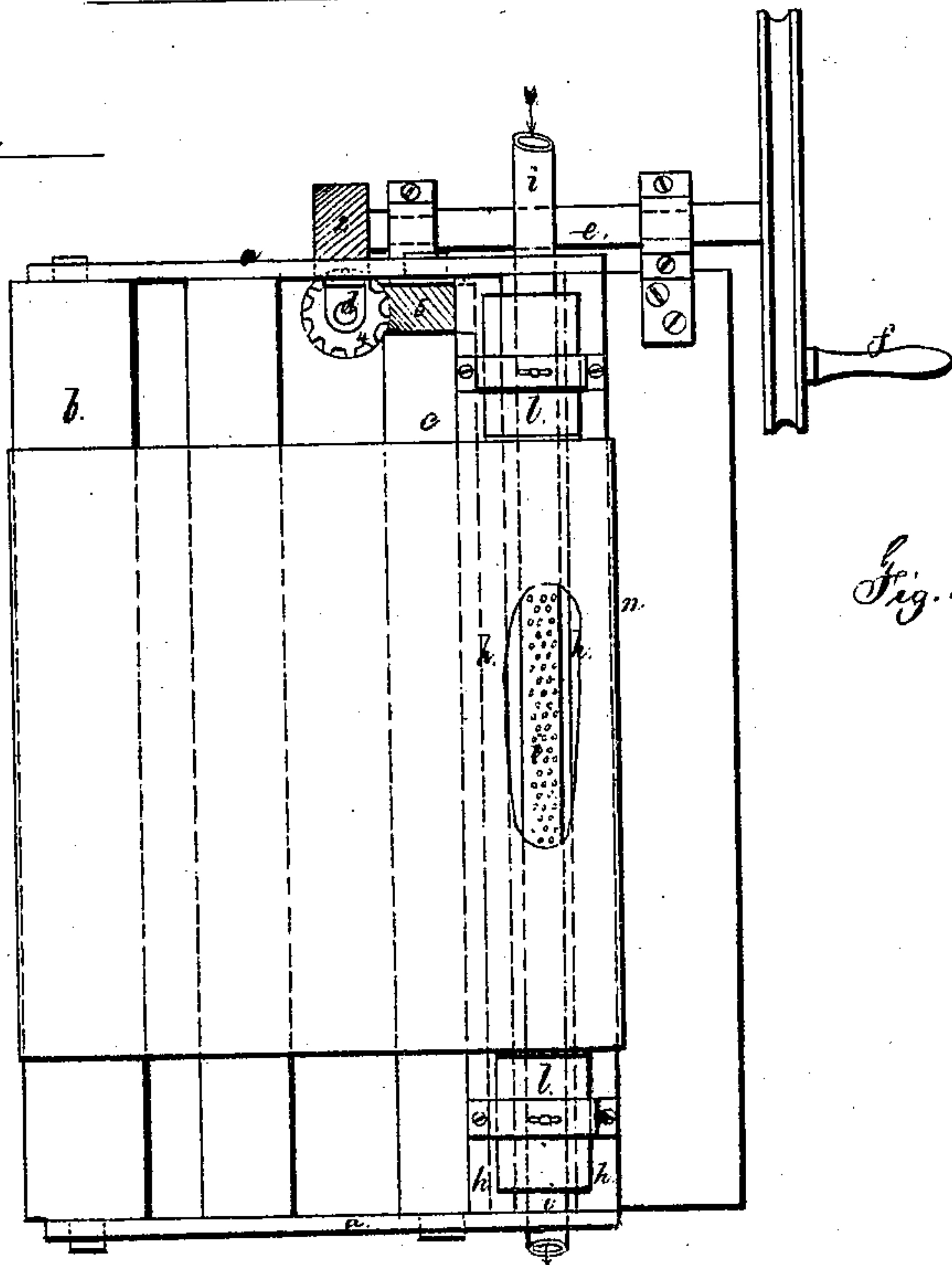


Fig. 2.

Witnesses
Chas. Smith
H. C. Penell

United States Patent Office.

WILLIAM HEBDON, OF NEW YORK, N. Y.

Letters Patent No. 95,584, dated October 5, 1869.

IMPROVEMENT IN MACHINES FOR STEAMING AND SHRINKING CLOTH.

The Schedule referred to in these Letters Patent and making part of the same.

all whom it may concern:

Be it known that I, WILLIAM HEBDON, of the County of New York, and State of New York, have invented and made a new and useful Improvement in Steaming, Shrinking, and Examining Cloth; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, to wit:—

Figure 1 is a vertical section transversely of the machine, and

Figure 2 is a plan of the machine.

Similar marks of reference denote the same parts. Cloth has heretofore been steamed by means of a perforated roller, upon which the cloth is wound, and in the steam is admitted within said roller, to pass through the perforations. In this manner the inner revolutions of the cloth are more thoroughly steamed than the outer portion.

My invention relates to a means for subjecting the cloth to a uniform steaming and shrinking-operation, while it is being drawn along and wound upon a roller, and as the cloth is unwound from said roller, it passes in such a position to the operator that it can be fully examined to detect any imperfections in its manufacture.

In the drawing—

a a are side frames, supporting the roller *b* and driving-roller *c*.

This roller *c* is driven by the inclined or screw-gears *d*, *e*, and shafts *f* and *g*, on the latter of which a crank-handle, *h*, or other means of rotation.

The gears being of a screw-form, or having inclined teeth, as shown, allow the winding or unwinding of cloth to be suspended, without the roller *c* being

turned by the weight of the hanging portion of the cloth.

At the upper portion of the frame, bars *h h* extend across from one frame to the other, and between them is a perforated steam-pipe, *i*.

The cloth, in being steamed, is drawn over the roller *b*, bars *h*, and steam-pipe *i*, in the direction shown in fig. 1, and is wound upon the roller *c* in the heated and moist state that results from the steam passing up through the same from the pipe *i*; and in order to guide the cloth at its edges, and confine the steam to the cloth, I make use of the sliding plates *l l*, that rest upon the bars *h*, and cover the portions of the pipe *i* that extend upon each side of the cloth.

When the cloth has remained wound upon the roller *c* the desired length of time, it is to be unwound and examined by transmitted light, as it descends from the roller *c* into the receptacle *m* below the table *n*, (as shown by dotted lines,) and this table *n* may also be employed in examining the surface or applying to the cloth some tag or mark whereby any defect may be designated.

By my machine the steaming, shrinking, and examining cloth can be done much more rapidly, perfectly, and reliably than heretofore, and at a less cost.

What I claim, and desire to secure by Letters Patent, is—

The arrangement of the steam-pipe *i*, plates *l*, rollers *b* and *c*, table *n*, and receptacle *m*, substantially as and for the purposes specified.

In witness whereof, I have hereunto set my signature, this 12th day of July, A. D. 1869.

Witnesses:

W. HEBDON.

CHAS. H. SMITH,

GEO. T. PINCKNEY.