C. Q. SMITH.

Cloth Measuring and Rolling Machine.

No. 202,288. Patented April 9, 1878.

Fig. 1.

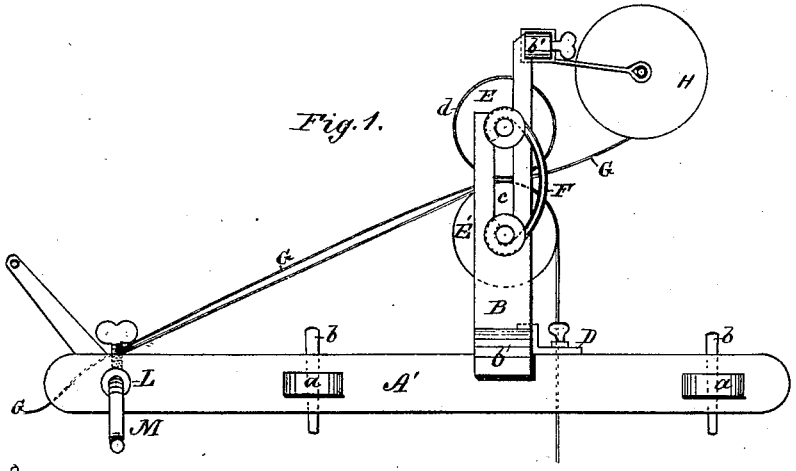
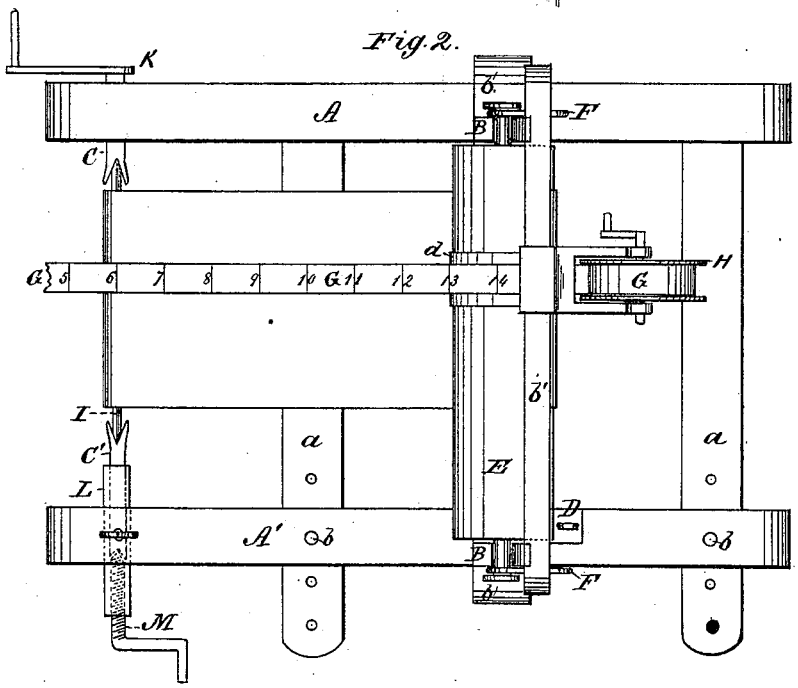


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES Q. SMITH, OF MARYVILLE, MISSOURI.

IMPROVEMENT IN CLOTH MEASURING AND ROLLING MACHINES.

Specification forming part of Letters Patent No. **202,288**, dated April 9, 1878; application filed February 21, 1878.

To all whom it may concern:

Be it known that I, CHARLES Q. SMITH, of Maryville, in the county of Nodaway and State of Missouri, have invented a new and Improved Cloth Rolling and Measuring Machine; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention is an improvement in the class of machines in which cloth or other fabric is drawn between rolls for measuring and pressing or stretching it.

The invention relates to the construction and arrangement of parts, as hereinafter described and claimed.

It also relates to the employment of a tape-line and reel for the same, the reel being attached to the machine in such manner that the tape-line will unwind and measure the cloth as the latter is rewound upon the bolt-board.

In the accompanying drawing, forming part of this specification, Figure 1 is a side elevation, and Fig. 2 a plan view, of my improved machine.

The frame of the machine consists of horizontal and upright portions. The horizontal or base portion is formed of parallel side bars A and A′ and connecting cross-bars *a*. The bar A′ is made adjustable toward and from the bar A, and is secured in any adjustment by pins *b*. This construction enables various lengths of bolts or bolt-boards to be secured between the revolving heads C C′.

The vertical portion of the frame consists of slotted uprights B and connecting or cross bars *b′ b′*. The lower cross-bar *b′* is permanently attached to the side bar A, but has an adjustable connection with the other side bar, A′—that is to say, it slides in a slot formed in the cross-bar A′, and is held down or prevented from being raised out of the slot by means of a clip or guard, D.

The journals of the rolls E E′, between which the cloth is drawn to be measured, project through the slots *c* of uprights B, and are connected by wire springs F, which serve to hold the rolls pressed together more or less tightly.

The graduated tape-line G, employed for measuring the length of cloth passed between the rolls E E′, is wound upon a flanged reel, H, which is suitably attached to the upper cross-bar *b′*, and a rubber band, *d*, is applied to the upper roll E, for the purpose of preventing the tape-line from slipping as it is drawn between the rolls together with the cloth.

The board I, upon which the cloth or fabric is wound, is clamped between heads C C′, one of which, C, is rigidly connected with a crank-shaft, K, having its bearings in side bar A. The other head, C′, revolves freely in a bearing consisting of an adjustable tube, L, which passes through the side bar A′.

The head C′ may be adjusted toward or from the head C by means of a screw, M, which enters the outer end of the tube L. The said screw M has a crank attachment, to enable it to be turned easily and quickly for adjusting the head C′, according to the length of the bolt.

In practical operation, the first step is to clamp between heads C C′ the board I, upon which to wind the cloth or fabric as it is measured, and the next step is to pass one end of the fabric between the rolls E E′ and secure it to the board I. A portion of the tape-line is then drawn off the reel, and likewise passed between the rolls. The operation of measuring the fabric then begins by rewinding it upon the board I by revolving the latter by means of the crank K, thus causing the fabric and tape-line to be drawn between the rolls E E′ simultaneously. The free end of the tape-line passes over the board or bolt onto the floor as it is drawn between the rolls. When all the fabric has been rewound on the board its length may be read off on the tape-line. The latter is then rewound on the reel, and the machine is again ready for operation.

It is apparent that, in addition to its function of accurately and quickly measuring cloth or fabric, the machine smoothes and stretches the same.

I do not claim the employment of measuring-rolls, nor of a tape-line and reel in connection therewith; but

What I claim is—

1. In a cloth-measuring machine, the combination, with the rolls, of the reel attached to the upright frame on the front side of the rolls, and the tape-line passing from the reel between the rolls, as shown and described, for the purpose specified.

2. In a cloth-measuring machine, in combination with one of the two measuring-rolls and the tape-line, the rubber band, applied as and for the purpose specified.

CHARLES QUARLES SMITH.

Witnesses:
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