

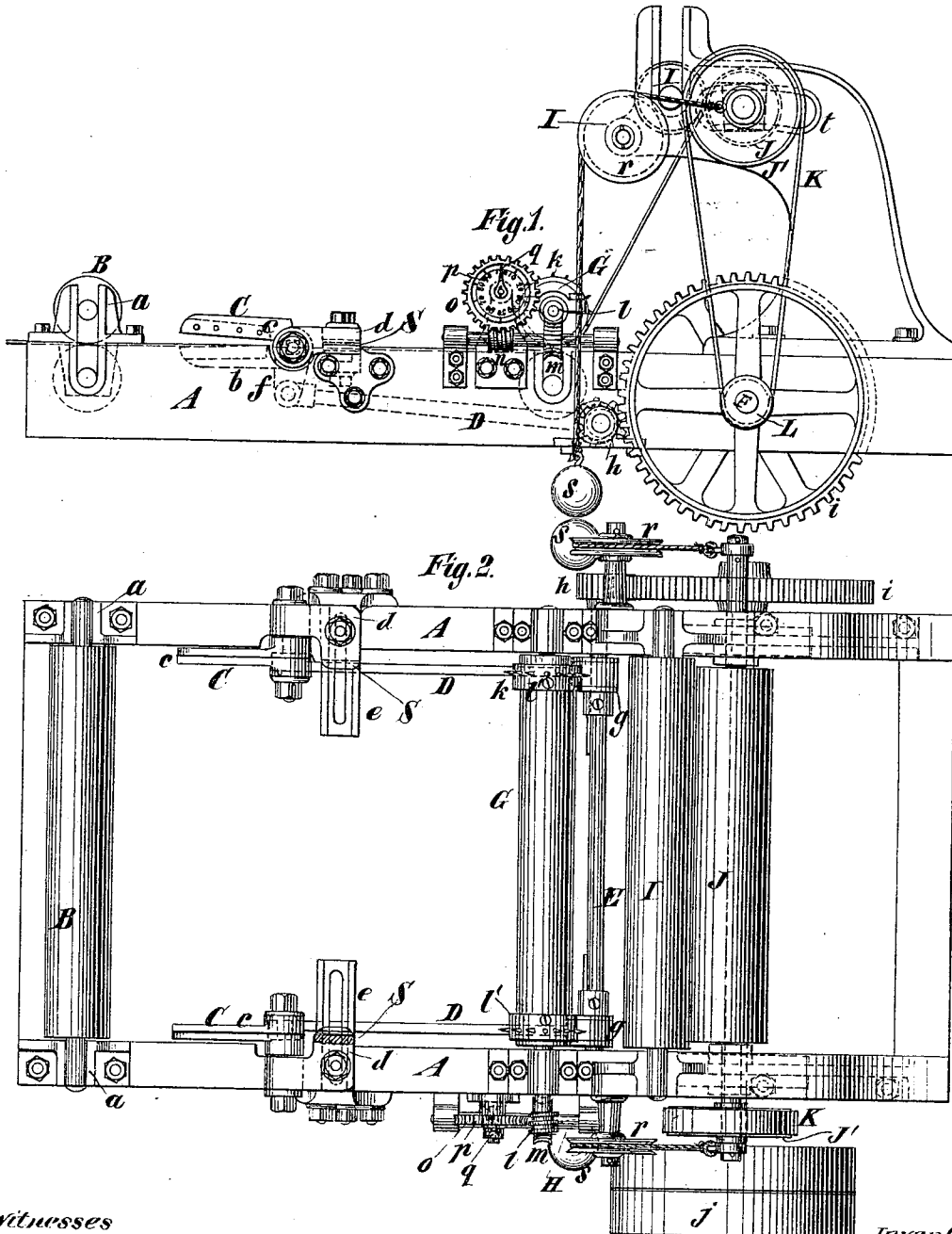
(No Model.)

L. SCHULTZ.

MACHINE FOR TRIMMING FABRICS.

No. 273,898.

Patented Mar. 13, 1883.



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# UNITED STATES PATENT OFFICE.

LOUIS SCHULTZ, OF NEW YORK, N. Y.

## MACHINE FOR TRIMMING FABRICS.

SPECIFICATION forming part of Letters Patent No. 273,893, dated March 13, 1883.

Application filed December 27, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS SCHULTZ, of New York, in the county and State of New York, have invented a certain new and useful Improvement in Machines for Trimming Fabrics, of which the following is a specification.

The object of this improvement is to produce a machine wherein fabrics may be trimmed along both or opposite edges simultaneously. Such a machine is particularly desirable for trimming quilted fabrics, and may advantageously be adapted to measure the fabrics as well as trim them.

In the accompanying drawings, Figure 1 is a side view of the machine embodying my improvement, and Fig. 2 is a plan of the same.

Similar letters of reference designate corresponding parts in both figures.

A designates the bed of the machine. It may be of any suitable material and of any approved construction.

B designates a pair of rollers between which the fabric to be trimmed is passed. The journals of the upper roller fit in slotted bearings or housings *a*, and this roller can therefore adapt its position to fabrics of different thicknesses.

C designates cutters arranged at opposite sides of the machine, and severally consisting of a fixed blade, *b*, and a movable blade, *c*, pivoted to the fixed blade. Each cutter resembles a pair of shears. The fixed blades of the cutters are provided with tail-pieces *d*, which are secured by bolts to arms *e*, extending from the frame of the machine. Provision is afforded by this means of connection for securing the cutters in different positions to suit fabrics of different widths. From the movable blades of these cutters extend arms *f*, which are connected by rods *D* with cranks or eccentrics *g* on a shaft, *E*. These eccentrics are adjustable along the shaft to correspond with the positions of the shears. This shaft derives motion through a pinion, *h*, with which it is provided, from a gear-wheel, *i*, on the driving-shaft *F* of the machine. Motion is imparted to this driving-shaft by means of a belt upon a pulley, *j*. The shaft is provided with a loose pulley or idler, upon which the belt may be slipped when the machine is not to be run.

The movable blades of the cutters vibrate and cut the edge portions of the fabric.

S designates guides for directing the fabric in its passage. They have concave ends, and are adjustable for fabrics of different widths. As here shown, they are attached to the tail-pieces *d* of the cutters, and hence they are adjustable with the cutters.

G designates a pair of rollers between which the fabric passes after leaving the knives. The upper roller has pins *k*, which engage with the fabric and enable the latter to transmit motion to the roller. Preferably these pins are arranged on collars *l*, which are clamped on the roller by set-screws or otherwise, and hence may be adjusted to different positions to suit fabrics of different widths. On one of the journals of this roller is a worm, *l*, which engages with a worm-wheel, *m*, on a counter-shaft, *H*. This counter-shaft is provided with a worm, *n*, which engages with a worm-wheel, *o*, on the periphery of a movable dial, *p*, which is marked with numbers indicative of numbers of yards. This dial operates in conjunction with a stationary index, *q*. By this mechanism the number of yards of the fabric are measured. After leaving the rollers *G* the fabric passes to a pair of rollers, *I*, on the upper of which it is wound up. One or both of the journals of the lower of these rollers *I* are provided with a pulley, *r*, over which passes a cord which at one end is attached to a weight, *s*, and at the other end is attached to a collar loosely fitting on one of the journals of a roller, *J*. The journals of this roller *J* are supported in bearings *t*, which are shaped like arcs of a circle concentric with the driving-shaft *F*. A belt, *K*, passes around a pulley, *J'*, on the roller *J*, and also around a pulley, *L*, on the driving-shaft. The weight *s* holds the roller *J* against the fabric wound upon the upper roller *I*, and thereby causes it to impart motion to this roller *I*. The roller *J* will move along the arc-shaped bearings as the size of the roll of fabric on this roller *I* increases.

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

1. The combination, with pairs of rollers whereby a fabric is passed along, of shears or cutters arranged so as to trim opposite sides

of the fabric simultaneously, substantially as specified.

2. The combination, with rollers whereby a fabric is passed along, of shears comprising vibrating blades arranged so that they will trim opposite sides of the fabric simultaneously, substantially as specified.

3. The combination, with rollers whereby a fabric is passed along, of shears arranged so that they will trim opposite sides of the fabric, and adapted to be adjusted to suit fabrics of different widths, substantially as specified.

4. The combination, with a pair of rollers between which a fabric is passed, of shears for trimming the sides, a roller around which the fabric passes and which will derive motion from the fabric, and a measuring apparatus deriving motion from this roller, substantially as specified.

5. The combination, with means whereby a fabric is passed along, of means for trimming its

edges and means for measuring it, substantially as specified.

6. The combination, with a pair of rollers between which a fabric is passed, of shears for trimming the sides, a roller provided with adjustable collars furnished with pins and deriving motion from the fabric, and a measuring apparatus deriving motion from this roller, substantially as specified.

7. The combination, with a pair of rollers between which a fabric is passed, of a take-up roller on which the fabric is wound, and a roller from which the take-up roller derives motion, supported so that it can accommodate itself to the diameter of the roll of fabric on the take-up roller, substantially as specified.

LOUIS SCHULTZ.

Witnesses:

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