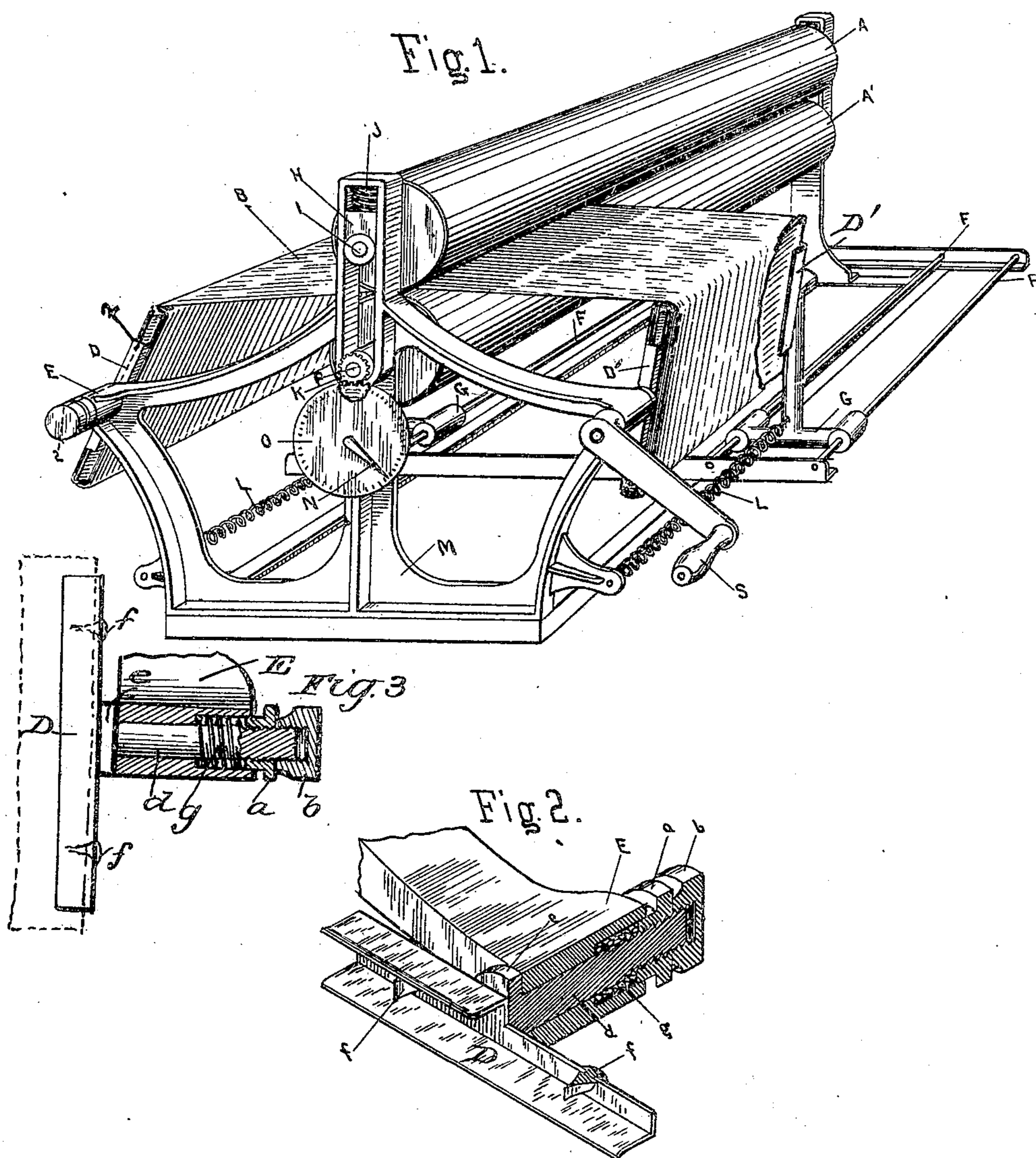


No. 812,910.

PATENTED FEB. 20, 1906.

J. Q. WIMER.
INVOICING MACHINE.
APPLICATION FILED AUG. 15, 1906.



WITNESSES:

Wm. Matthew
Wm. Leckie

INVENTOR

INVENTOR
Jacob L. Wiener

UNITED STATES PATENT OFFICE.

JACOB Q. WIMER, OF JOPLIN, MISSOURI.

INVOICING-MACHINE.

No. 812,910.

Specification of Letters Patent.

Patented Feb. 20, 1906.

Application filed August 15, 1905. Serial No. 274,271.

To all whom it may concern:

Be it known that I, JACOB Q. WIMER, of the city of Joplin, county of Jasper, and State of Missouri, have invented a new and Improved Invoicing-Machine, of which the following is a specification.

My invention relates to an apparatus for measuring the number of yards in a piece of cloth while it is being unwound from the board upon which the bolt is formed and re-wound upon a similar board.

The details of construction, arrangement, and operation of parts are as hereinafter described, and illustrated in the accompanying drawings.

Figure 1 of the drawings is a perspective of the machine, showing bolt of cloth in position. Fig. 2 is a sectional view of Fig. 1 on the line 2 2, showing means for retarding movement of the bolt of cloth being unwound. Fig. 3 is another partly-sectional view showing the friction-clamp for holding a bolt-board.

The invention includes a framework supporting two rolls between which the cloth passes, two clamps for holding one end of each board, and two slides upon which stand two frames which support the clamps holding the other ends of the boards. These frames work freely upon the slides, being drawn against the ends of the boards by springs, thus allowing different widths of cloth to be measured.

In Fig. 1 the letters A A' indicate the measuring-rolls; B, the cloth; CC', the boards upon which the cloth is wound; D D', the clamps which hold the boards, one of which is shown in detail in Fig. 2; E, the bearing in which revolves the shaft to which clamp D is fastened. (Also shown in Figs. 2 and 3.) F F are two rods which in this design form the slide for the frames G, which carry the clamps for the opposite ends of the boards. To the shaft of one of the clamps the crank S is fastened. L L are the two springs fastened to frame of the machine M and to G, thereby holding frame G in position. H is the journal-box, in which the shaft I of roll A revolves. This box slides within the framework and is pressed downward by a spring J. The journal-boxes H slide in vertical slots formed in the central portions of the frame. The shaft P of the roll A' carries a pinion K, which, through a train of gears, moves the pointer N. The disk or dial

O is fastened to the frame M and is so spaced as to show the yards and fractions of yards which pass between the rolls A A'.

In Figs. 2 and 3, E represents the bearing in frame M of Fig. 1. *a* and *b* are nuts which engage the threads upon shaft *d*. D is the clamp between whose sides the end of the board is placed, and *ff* are two wedge-shaped projections which are fastened to D and which penetrate the end of the board, thus keeping board from sliding out of clamp D. *g* is a coil-spring which by its pressure against the end of the bearing E and the nut *a* draws the flange or collar *e* upon shaft *d* against the opposite end of bearing E. The tension of the spring *g* may be varied by changing the position of the nuts *a* and *b*. It is apparent the latter serves as a jam-nut. By this means, especially by adjustment of nut *a*, the friction of head *e* with the bearing E may be varied at will, so that the tension of the cloth required to rotate clamp D is increased or lessened, as may be desired.

The rolls A A' may be made either plain or corrugated, but are to be preferably covered with soft rubber.

The operation of the device is as follows: The bolt of cloth to be measured is placed in the clamps (shown at left side of drawings Fig. 1) and the end of the cloth passed between the rolls A A'. The pointer N is then set at zero and the rolls revolved by hand until sufficient cloth has passed through to reach the board held by clamps D' D'. The cloth is then fastened to this board, and by turning the crank S the operation is continued until all of the cloth has been drawn off the original board between the rolls, where it is measured and at the same time subjected to sufficient pressure to kill any insect, such as a moth, which may be within the folds, and re-wound upon the second board.

What I claim is—

In a cloth-measuring machine, the combination, with a fixed frame and two rolls journaled therein one over the other, of two sets of rotatable clamps arranged on opposite sides of said frame for holding bolt-boards, the bearing and support of one of the clamps of each set being spring-actuated and adjustable toward and from the other, and the bearing of one of the clamps of each of the sets comprising, in addition to the clamp proper,

the rotatable screw-threaded shaft *d* having
a friction-head *e* that works in contact with a
portion E of said frame, and a nut *a* and
spring *g* applied to said shaft and arranged in
5 a socket in the part E, for regulating friction
and thereby the tension of the fabric while
being unwound, as shown and described.

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

JACOB Q. WIMER.

Witnesses:

O. W. MATTHEW,
W. M. LECKIE, Jr.