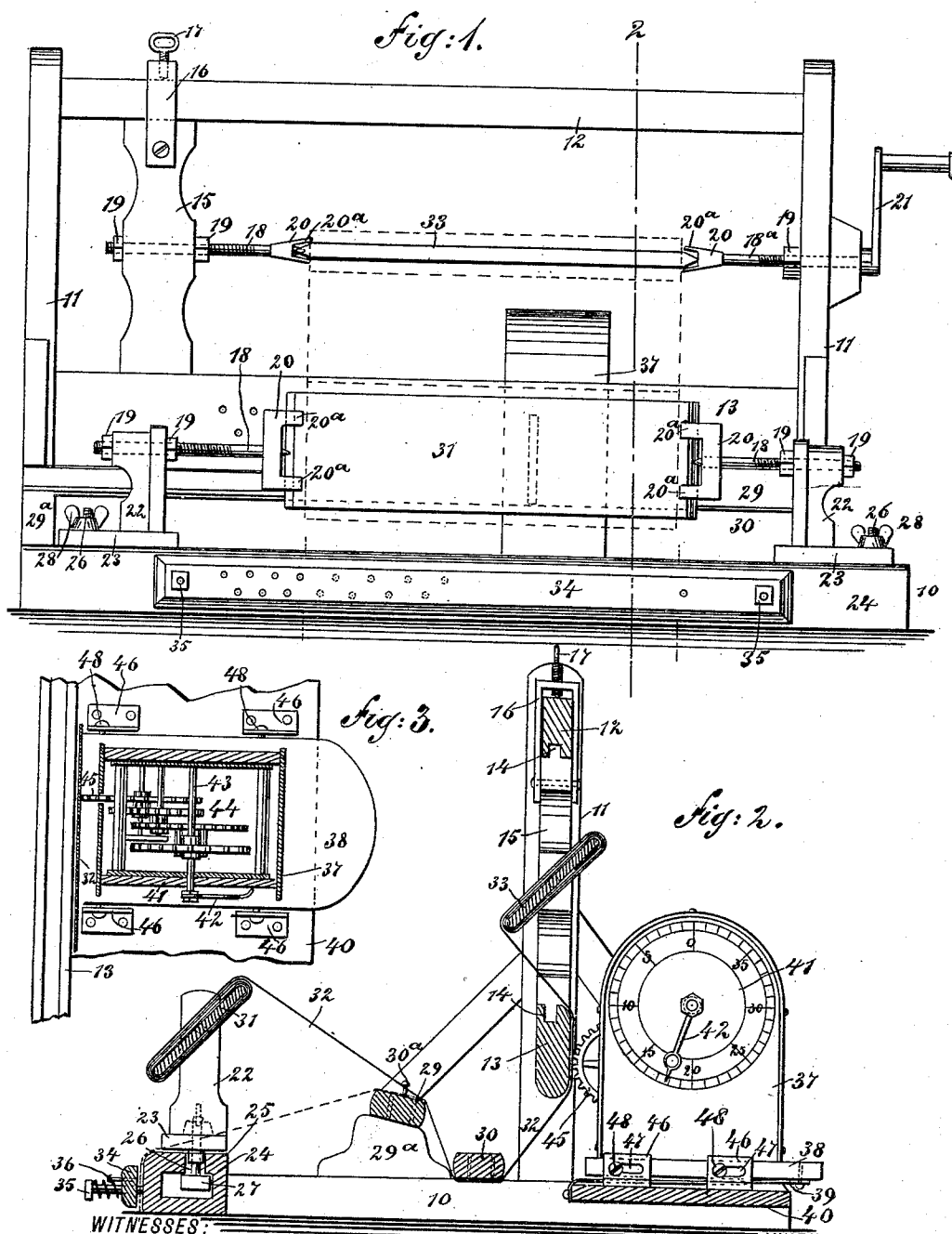


(No Model.)

H. HEBÉRT.
CLOTH MEASURING MACHINE.

No. 464,869.

Patented Dec. 8, 1891.



WITNESSES:
Chas. Nida
C. Sedgwick

INVENTOR
H. Hébert
BY
Munn & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

HUBERT HEBÉRT, OF LAKE LINDEN, MICHIGAN.

CLOTH-MEASURING MACHINE.

SPECIFICATION forming part of Letters Patent No. 464,869, dated December 8, 1891.

Application filed May 4, 1891. Serial No. 391,458. (No model.)

To all whom it may concern:

Be it known that I, HUBERT HEBÉRT, of Lake Linden, in the county of Houghton and State of Michigan, have invented a new and
5 Improved Cloth Rolling and Measuring Machine, of which the following is a full, clear, and exact description.

My invention relates to improvements in machines for rolling and measuring cloth; and the object of my invention is to produce
10 a simple and convenient machine by means of which loose cloth may be rapidly and nicely rolled into a web, or cloth may be rolled from one board upon another, and in either case
15 may be accurately measured.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

20 Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a rear elevation of the machine.
25 Fig. 2 is a cross-section on the line 2 2 of Fig. 1; and Fig. 3 is a broken sectional plan of the registering mechanism.

The machine has a base 10, from opposite sides of which, near the front end, project
30 posts 11, which are connected transversely by means of the vertically-aligning cross-bars 12 and 13, which cross-bars are provided with grooves 14, the grooves extending longitudinally on the under side of the upper cross-
35 bar and on the upper side of the lower cross-bar, and it will thus be seen that the cross-bars form a track for the upright 15. The upright 15 is long enough to extend between the cross-bars 12 and 13, and is provided at
40 each end with a tongue which slides in the grooves of the cross-bars. The upright 15 is also provided at its upper end with a yoke 16, which embraces the upper cross-bar 12, and which carries a thumb-screw 17, adapted to
45 impinge upon the cross-bar, and by tightening the thumb-screw the yoke and upright are held in a fixed position.

A screw-spindle 18 extends transversely through the upright 15 near the center, so as
50 to align with the cross-bars 12 and 13, the spindle being held in place by nuts 19, and

the spindle terminates at its inner end in a head 20, which has projecting fingers 20^a, adapted to clasp the boards upon which the cloth is wound. A similar spindle 18^a is
55 mounted in one of the posts 11, so as to align with the spindle 18, and this spindle is held to the post by a nut 19, and terminates at its inner end in a head 20, like that already described. The spindle 18^a is provided with a
60 crank 21, by means of which the spindle may be revolved.

On the rear end of the base 10 are posts 22, which are shorter than the posts 11, and which at their lower ends terminate in flat base-
65 pieces 23, which are adapted to slide upon the hollow cross-piece 24 of the base. This cross-piece has a slot 25, extending longitudinally through its upper portion, and a bolt 26 extends through each of the base-pieces 23 of
70 the posts and into the hollow cross-piece, the bolts terminating in heads 27, which are larger than the slots 25, and thus hold the posts in place.

The bolts 26 are provided at their upper
75 ends with thumb-nuts 28, and by tightening the nuts the base-pieces 23 are securely clamped to the cross-piece 24. It will thus be seen that the posts 22 may be adjusted so as to hold a desired length of board between
80 them, and it will be noticed that the upright 15 may be adjusted so that the distance between it and the post 11, which carries the spindle 18^a, will be the same as the distance between the posts 22. The posts 22 are pro-
85 vided with spindles 18, which carry heads 20, like those already described, and the spindles are held to the posts in the same manner that the spindle is secured to the upright 15.

Extending transversely across the frame of
90 the machine are slats 29 and 30, which are arranged at different heights and with one in advance of the other, and the object of these slats is to provide the requisite tension for the cloth which is passed over one and under
95 the other, as best shown in Fig. 2. The slat 29 is supported upon brackets 29^a, and is provided with a series of holes, (indicated by dotted lines in Fig. 2,) and in these are inserted guide-pins 30^a, which project from
100 the upper surface of the slat and which are adapted to hold the cloth between them.

When a web of cloth is to be rerolled and measured, the board 31, carrying the cloth, is clamped between the posts 22, the board being held in the heads 20, and the cloth 32 is made to extend over the slat 29, beneath the slat 30 and beneath the cross-bar 13, and it is wound upon a board 33, which is held between the adjustable upright 15 and one of the posts 11, the board 33 being held between the heads 20, and it will be noticed that these heads may be tightly clamped upon the boards 31 and 33 by adjusting the posts 22 and the upright 15, so as to force the spindles 18 and 18^a toward each other.

On the outer side of the cross-piece 24 is a strip 34, which is mounted upon pins 35 and is pressed inward by springs coiled around the pins, as best shown in Fig. 2, and this strip is provided with a series of perforations (shown in Fig. 1) which are adapted to receive guide-pins 36, which extend inward through the strip, and when loose cloth is to be rolled it is passed upward between the strip 34 and the cross-piece 24, and thence over the slat 29 and under the slat 30 to the winding-board in the manner already described.

To measure the cloth, the following mechanism is employed: A case 37, which is provided with a base 38, is arranged on the front end of the machine, the said base 38 of the case resting upon a yielding support 39, which is secured to a cross-strip 40 of the base 10. The case 37 is provided with a dial 41, on which are gage-marks indicating yards, and a hand 42 is held to revolve upon the face of the dial and to indicate the number of yards measured. This hand 42 is secured to a shaft 43, which extends transversely through the case 37 and which is driven by a clock-work mechanism 44, and the driving cog-wheel 45 of this mechanism projects through a slot in the rear portion of the case and impinges upon the cloth 32 and presses the cloth against the cross-bar 13. It will thus be seen that when the cloth is pulled upward it will turn the cog-wheel 45, and the cog-wheel will impart motion to the clock-work mechanism and to the hand 42, and the mechanism is timed so that when a yard of cloth is pulled between the cog-wheel and the cross-bar it will move the hands so as to indicate one yard on the face of the dial. The case 37 and base 38 are held between lugs 46 on the strip 40, and these lugs are slotted transversely, as shown at 47, and screws 48 extend through the slots and into the base 38. It will thus be seen that the case 37 may be adjusted so as to bring it the desired distance from the cross-bar 13, and it is obvious that this distance will depend upon the thickness of the cloth to be measured. As described, the machine is for

measuring cloth; but it is obvious that any fabric may be rolled and measured in it.

The operation of the machine is as follows: The winding-board 33 is clamped between the upright 15 and one of the posts 11 of the machine, and the cloth to be wound is made to extend over the slat 29 beneath the slat 30 and between the cross-bar 13 and the cog-wheel 45 of the clock-work mechanism to the winding-board 33, and, as previously described, the cloth may be either wound from a board or the loose cloth may be wound. The crank 21 is then turned, thus revolving the spindles 18^a and 18 and the winding-board 33, and the cloth will be evenly wound upon the board, as the slats 29 and 30 and the cross-bar 13 will give it the necessary tension. As the cloth is wound it will turn the cog-wheel 45 and the hand 42 connected therewith, so as to indicate the amount of cloth rolled. If desired, a friction-wheel may be substituted for the cog-wheel 45 with the same effect.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a machine of the character described, the combination, with a main frame having a pair of posts thereon, of cross-bars connecting the posts and provided with longitudinal grooves, an upright extending between the cross-bars and having a tongue to enter the grooves, a yoke secured to the upright and embracing one of the cross-bars, means for tightening the yoke upon the cross-bar, and screw-spindles mounted in the upright and in an opposite post, said spindles having their inner ends terminating in socketed heads and one of the spindles being provided with a crank, substantially as described.

2. The combination, with a main frame having winding mechanism therein, as described, of a spring-pressed strip mounted upon a cross-piece of the frame and provided with adjustable guide-pins, substantially as described.

3. In a machine of the character described, the combination, with the main frame and winding mechanism mounted thereon, of the fixed cross-bar 13, a register which is supported on horizontal slides and thus made adjustable toward and from said cross-bar, and the wheel 45, forming part of said register, which is arranged at right angles to the cross-bar and adapted to press the cloth against the face of the latter, so that it may be rotated by the traveling cloth, as shown and described.

HUBERT HEBÉRT.

Witnesses:

CAMILLE PLANTE,
PHILIAS CHAMPAGNE.