

June 24, 1924.

1,499,254

A. ROCKLIN

CLOTH ROLLING MACHINE

Filed March 23, 1922

2 Sheets-Sheet 1

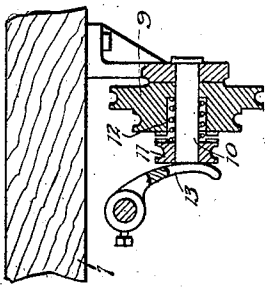


Fig. 6.

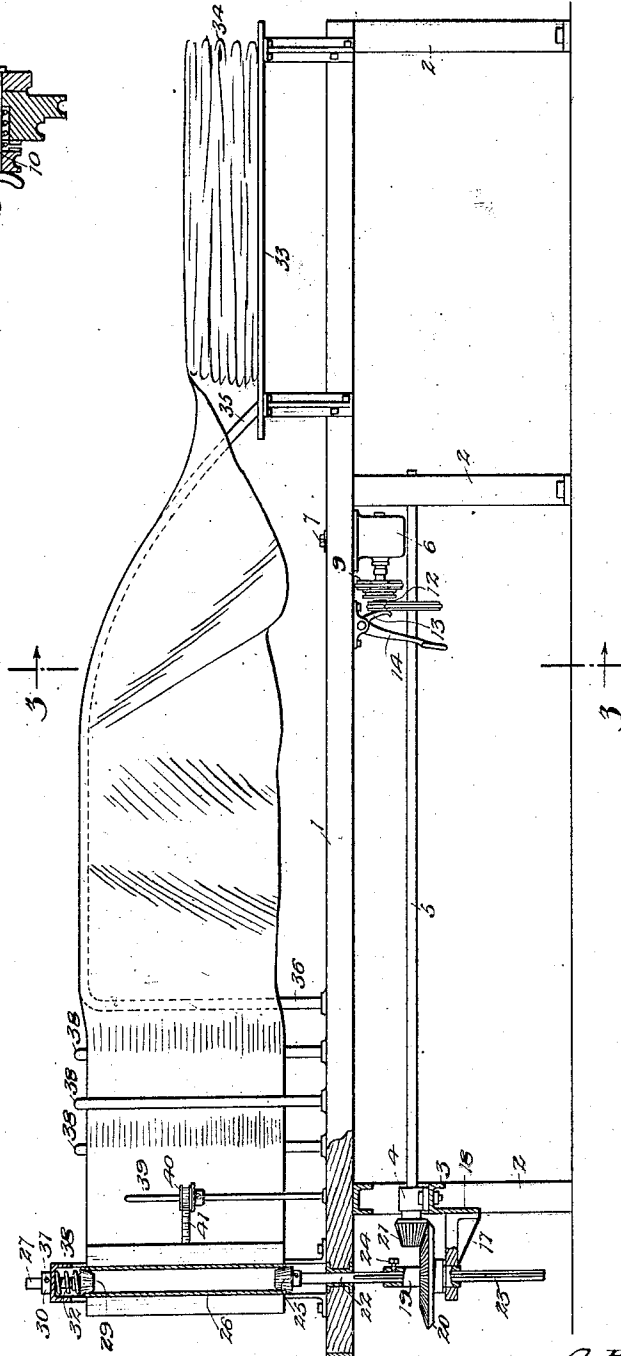


Fig. 1.

WITNESSES

*Thos. W. Libby*  
*F. J. Foster*

INVENTOR

*A. Rocklin*  
BY *Munn Co*  
ATTORNEYS

June 24, 1924.

A. ROCKLIN

1,499,254

CLOTH ROLLING MACHINE

Filed March 23, 1922

2 Sheets-Sheet 2

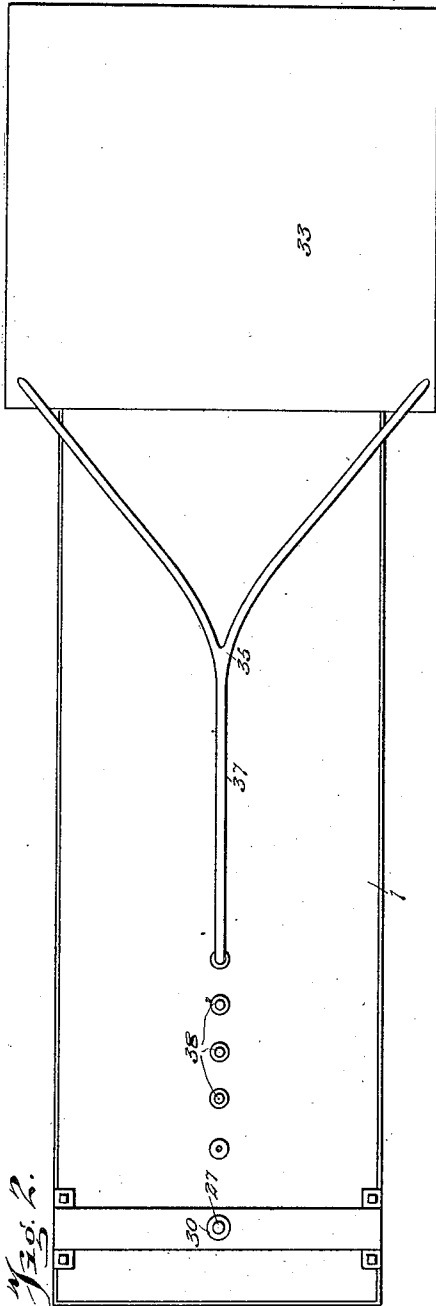


Fig. 2.

WITNESSES

*Chas. H. Feilman*  
*F. J. Foster*

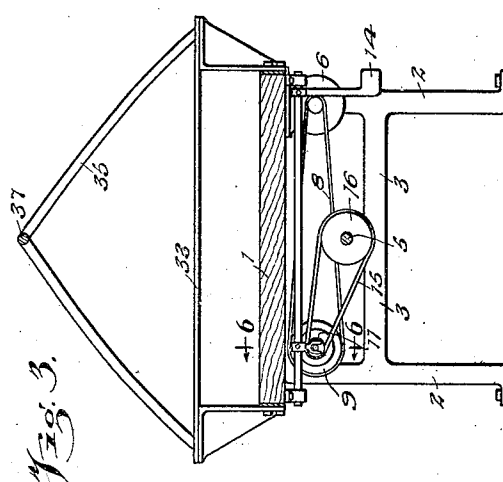


Fig. 3.

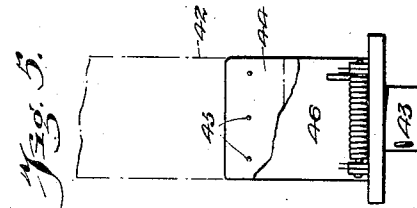


Fig. 4.

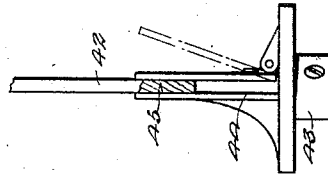


Fig. 5.

INVENTOR  
*A. Rocklin*  
BY *Mumford*  
ATTORNEYS

Patented June 24, 1924.

1,499,254

# UNITED STATES PATENT OFFICE.

ALBERT ROCKLIN, OF GLOVERSVILLE, NEW YORK.

## CLOTH-ROLLING MACHINE.

Application filed March 23, 1922. Serial No. 546,194.

*To all whom it may concern:*

Be it known that I, ALBERT ROCKLIN, a citizen of the United States, and a resident of Gloversville, in the county of Fulton and State of New York, have invented a new and Improved Cloth-Rolling Machine, of which the following is a full, clear, and exact description.

This invention relates to improvements in cloth rolling machines.

It has heretofore been generally customary to roll cloth by hand, the operation being a tedious one and taking the time of two workmen.

An object of this invention is to provide a machine which will do the same work in a great deal less time, and which will roll the cloth more neatly and accurately previous to the rolling operation.

A further object is to provide a machine which will fold and roll cloth, and at the same time measure the amount of cloth which is rolled so that it is possible at any time to determine just how much cloth is on the roll.

A still further object is to provide a machine of this character, which will be simple and practical in construction, strong and durable in use, and comparatively inexpensive to manufacture.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings:—

Figure 1 is a view in side elevation of my improved machine, parts being broken away and in section for clearness;

Figure 2 is a top plan view thereof;

Figure 3 is a view in transverse section on the line 3—3 of Figure 1;

Figure 4 is a fragmentary detail view in end elevation of the mechanism which is used for rolling bolts of cloth;

Figure 5 is a view in side elevation of Figure 4; and Figure 6 is a detail sectional view.

Referring in detail to Figures 1, 2 and 3 of the drawings, I have used the reference numeral 1 to designate a table supported upon legs 2. Cross pieces 3 connecting certain of the pairs of legs 2 provide mounting for bearing brackets 4, wherein a shaft 5 is journaled. Adjacent one end of the shaft

5, a motor 6 is secured to the under face of the table and is controlled by a switch 7. The drive shaft of the motor is connected by a power transmitting belt 8 to a pulley 9 mounted upon a countershaft 10. A smaller pulley 11 is idly mounted upon this countershaft and a spring 12 normally maintains the two pulleys separated. The adjacent faces of these pulleys may be provided with any suitable devices to facilitate their frictional engagement when the pulley 11 is forced into engagement with the pulley 9 by an operating arm 13 carried by a knee pedal 14 fulcrumed underneath the table.

The pulley 11 forms in effect a clutching member adapted to be forced into engagement with the pulley 9 when pressure is exerted upon the lever 14. A belt or other power transmitting device 15 is used to connect the pulley 11 with a driven pulley 16 mounted upon the shaft 5.

Under the end of the table a bracket 17 is secured to a depending extension 18 of one of the cross pieces 3. This bracket provides mounting for a short vertical hollow shaft 19 carrying a beveled gear 20. The gear 20 is driven by a beveled pinion 21 fixed to the end of the shaft 5.

A spindle 22 is keyed to the shaft 19, as indicated at 23, and may be selectively held against sliding movement relative to the shaft at any position of vertical adjustment by a set screw 24. The upper end of the spindle 22 carries a conical member 25 adapted to receive the lower end of a hollow core 26 upon which cloth is to be rolled.

A pin 27 mounted centrally in an inverted U shaped yoke 28 fixed to the table is in vertical alignment with the cone 25 and carries a cone 29 adapted to engage in the upper end of the hollow core 26, each of said cones 25 and 29 being provided with roughened surfaces to frictionally engage the core. A bushing 30 secured upon the top of the yoke 28 and a set screw 31 mounted in the bushing provide for locking the pin 27 at various positions of vertical adjustment. The cone 29 is slidable upon the pin and is normally urged downwardly by a coil spring 32 around the pin between the cone and the yoke.

A platform 33 is spaced above the opposite end of the table from the winding roller or core 26 and it is necessary to provide some means for feeding the ply 34 of cloth normally resting upon the platform to the

roller or core in longitudinally folded shape. To accomplish this result, I provide a longitudinally mounted frame 35 including a leg 36 rising from the table adjacent the roller 26, and an arm 37 extending toward the platform 33. This arm 37 is bifurcated and the two sections of the arm curve gradually outwardly and downwardly to the near corners of the platform 33. A series of upright posts 38 of substantially the same height as the leg 36 are arranged in alignment between the leg 36 and the roller 26. As the ply of cloth 34 is pulled toward the roller it will drape over the arm 37 of the frame 35 folding longitudinally along its median line. The cloth in this folded position is woven or interlaced between the uprights 38, these uprights serving to accentuate the fold or crease in the cloth before it is fed to the roller 26.

It has been heretofore stated that another object of the invention is to provide means for measuring the bolt of cloth as it was wound up, and to accomplish this object I provide a standard 39 upon the table between the posts 38 and the roller. A reel 40 is mounted upon the standard and a measuring tape 41 wound about the reel is normally held under tension in any approved manner to prevent its accidental unwinding.

When the end of the ply of cloth 34 has been passed over the frame 35 between the posts 38 and manually attached to the roller 26 in any approved manner, the end of the tape 41 may also be attached either to the roller or to the end of the cloth so that as turning of the roller serves to wind the longitudinally folded cloth, the measuring tape 41 will also be wound or rolled up with the cloth and it will be possible to tell just how much cloth is on the bolt or roll by glancing at the graduations upon the measuring tape. This tape is adapted to form a permanent part of the roll and will facilitate the measuring of the cloth for retail sales purposes after the bolt reaches the ultimate purchaser.

In Figures 4 and 5, I have illustrated a slight modification wherein means is substituted for the cone 25 for supporting a flat core in the form of a board or plate 42. In this form of the device I have shown a rotary socket member 43 adapted to be secured upon the upper end of the spindle 22 in any approved manner. A stationary plate 44 rising from this socket member is formed with integral spurs 45 adapted to dig into the soft wood of the flat core 42, said core being clamped in place against the plate 44 by a hinged spring held plate 46. The plate 46 coacts with the plate 44 to clamp the lower end of the core against accidental movement. When the member 43 is attached to the upper end of the spindle, turning of this member will serve to turn the core

42 and wind the cloth in the manner hereinbefore described.

It is not thought necessary to further describe in detail the operation of the machine, but it is to be noted that as the cloth is fed to the roller or core, the posts 38 serve to smooth the same so that there will be no wrinkles in the roll or bolt. The lever 14 is in convenient position to be engaged by the knee of an operator guiding the cloth over the frame so that the machine can be quickly and easily controlled through the medium of the clutch member 11, hereinbefore described.

Although I have illustrated certain of the preferred embodiments of my invention, it will be apparent that numerous slight changes and alterations might be made in the general form and arrangement of the parts described without departing from the invention, and hence I do not wish to limit myself to the precise details set forth, but shall consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of the appended claims.

I claim:

1. In a cloth rolling machine, a frame over which cloth is adapted to pass, means for drawing the cloth over the frame whereby a longitudinal folding of the cloth will be effected, said frame including an upright leg, and a curved substantially horizontal arm integral therewith and terminating in two outwardly and downwardly curved members, and a core upon which the folded cloth is wound.

2. In a cloth rolling machine, a frame over which cloth is adapted to pass and to be folded thereby means for drawing the cloth over the frame whereby a longitudinal folding of the cloth will be effected, an aligned series of upright posts adjacent one end of the said frame and between which the longitudinally folded cloth is adapted to be passed whereby to remove creases from the cloth, and a core upon which the folded cloth is wound.

3. In a cloth rolling machine, a table, a drive shaft mounted under the table, means for turning the drive shaft, a bracket secured under the table, a sleeve journaled in the bracket, a spindle fixed within the sleeve and extending upwardly through the table, an inverted U shaped frame on the table, means carried by the frame and spindle for holding a winding core in vertical position, and means whereby turning of the drive shaft rotates said spindle and said core supporting means.

4. In a cloth rolling machine, a table, a drive shaft mounted under the table, means for turning the drive shaft, a bracket secured under the table, a sleeve journaled in the bracket, a spindle fixed within the sleeve

- and extending upwardly through the table, an inverted U shaped frame on the table, means carried by the frame and spindle for holding a winding core in vertical position, 5 means whereby turning of the drive shaft rotates said spindle and said core supporting means, a gear around the sleeve, and a pinion on the drive shaft meshing with the gear.
- 10 5. In a cloth rolling machine, a table, a drive shaft mounted under the table, means for turning the drive shaft, a bracket secured under the table, a sleeve journaled in the bracket, a spindle fixed within the sleeve and extending upwardly through the table, 15 an inverted U shaped frame on the table, means carried by the frame and spindle for holding a winding core in vertical position, means whereby turning of the drive shaft rotates said spindle and said core supporting 20 means, a gear around the sleeve, a pinion on the drive shaft meshing with the gear, and pedal operated clutching means interposed between the drive shaft and its source of power to control the drive shaft.

ALBERT ROCKLIN.