To all whom it may concern:

Be it known that I, James Walker Parsons, a citizen of the United States of America, residing at Pleasant Green, in the county of Cooper and State of Missouri, have invented certain new and useful Improvements in Dry-Goods-Measuring Machines, of which the following is a specification.

The object of my invention is to provide a simple and efficient machine for measuring ribbons, laces, embroidery and other rolled dry-goods.

In carrying out my invention I provide a machine comprising a frame, a supporting roller mounted to revolve therein and a spring supported pressure roller mounted to bear on the upper side of the supporting roller to one side of a vertical plane passing through the axis of the supporting roller. The springs which support the pressure roller are hinged to the frame so that said roller may be withdrawn from the supporting roller and brackets are provided for holding the pressure roller when it is thus withdrawn. The supporting roller is connected with counting or registering mechanism which records the number of yards or fractions thereof passing between the rollers. Rotary clamping devices are provided for holding the roll or bolt of goods to be measured and similar devices are provided for holding the stick or board on which the goods, after being measured, are wound. One clamping device of each pair is adjustably mounted in the frame so that the different lengths of bolts and receiving boards and sticks may be accommodated. The clamps may be applied directly to the boards or sticks on which the goods are wound, or they may be applied to disks armed with pins which engage the board or stick.

In the accompanying drawings:—Figure 1 is a perspective view of a dry-goods measuring machine embodying my improvements. Fig. 2 is a detail view in elevation of one of the clamping devices. Fig. 3 is a front elevation of one of the disks armed with pins adapted to be held by the clamping device shown in Fig. 2. Fig. 4 is a plan view thereof.

The main frame may be of any construction suitable to support the operating parts of the machine. It is provided with standards for supporting the rotary clamping devices and the rollers between which the goods is led. The supporting roller, A, is mounted in bearings at the upper ends of standards, a, and it is geared in any suitable way with counting or registering mechanism, B, of any suitable kind. The tension roller or pressure roller, C, is carried by strap springs, D, which are hinged at d to the standards, a, below the roller, A. The springs extend across the axis of the supporting roller and hold the pressure roller in contact with the supporting roller but on one side of a vertical plane passing through the axis of the supporting roller. The effect is to apply suitable tension or pressure to the goods as they pass between the rollers and inasmuch as the roller, C, is on that side of the axis of the supporting roller which is opposite to the side on which the springs, D, are hinged, the supporting roller will maintain its position and permit the springs to properly operate to apply the required tension. Nevertheless, when so desired, the springs may be turned on their hinges in such manner as to withdraw the pressure roller from the supporting roller. In order to support the springs when the pressure roller is thus withdrawn, brackets, E, are provided with which the springs engage.

Threaded stub shafts, F, are mounted in bearings at the upper ends of the standards of the main frame. Two of these standards, G and H, are adjustable in suitable ways, I, in the frame and they may be clamped in their adjusted position in any suitable way. As shown, the standard, G, is provided with a base piece, g, sliding in the ways, I, and associated with this base piece is a clamping block, g', to which a vertical rod, J, is connected. This rod passes through an opening in the base, g, and is pivoted to a lever, K, pivoted at k to a block, L, attached to the base, g. The opposite end of the lever is connected with a vertical threaded rod, M, carrying a thumb-nut N. By adjusting this nut the clamping block g' may be tightened or loosened and thus the standard may be adjusted in its ways and then held in any desired position. The standard, H, is provided with similar clamping devices.

Each stub shaft carries on its threaded portion an adjustable cone, O, which engages clamping levers, P, pivotally connected to the shaft, F. By adjusting the cones, O, the levers, P, may be made to engage the sticks or boards on which the goods are wound. By properly operating the cones this engagement may be loosened and the boards withdrawn. One of the stub shafts, F, on the receiving end of the machine is provided with a crank handle, Q. By turning this handle the board or stick on which the goods are wound may be rotated, corresponding rotation being given to the stub shaft in line with it and as the goods are drawn over the supporting roller, the stub shafts at the opposite end of the machine carrying the goods to be measured will be correspondingly rotated.

It is sometimes inconvenient to apply the clamps to the boards on which the goods are wound and I have provided disks, R, carrying pins, r, which may be driven into the ends of the boards to thus securely fasten the boards to the disks. Each disk is provided with a rib, r', adapted to be secured to the clamping arms, P, in the manner illustrated.

By means of my improvements both the delivering and the receiving boards may be quickly attached to the machine and held in proper position relatively to each other. The goods pass over the supporting roller...
in such manner as to lie perfectly straight, the tension
or pressure roller insuring this, and thus a uniform
movement may be given to the supporting roller to
which the counting mechanism is connected.

I claim as my invention:—

1. The combination of the main frame, the supporting
roller mounted to revolve therein, counting mechanism
connected with said supporting roller, a pressure roller
mounted above the supporting roller and to one side of a
vertical plane passing through the axis of the latter, strap
springs hinged to the frame and supporting and applying
pressure to the pressure roller, means for holding a roll of
goods to be measured on one side of the rollers, and means
on the opposite side of the rollers for receiving the goods.

2. The combination of the supporting and pressure roll-
ers, a frame in which they are mounted, standards rising
from the base of the frame, screw threaded stub shafts
mounted to revolve in bearings at the upper ends of the
standards, clamping levers pivoted to the stub shafts and
cones mounted on the threaded portions of the shafts and
engaging the levers.

3. The combination of the supporting and pressure roll-
ers, a frame in which they are mounted, standards rising
from the base of the frame, screw threaded stub shafts
mounted to revolve in bearings at the upper ends of said
standards, clamping levers pivoted to the stub shafts, cones
mounted on the threaded portions of the shafts and engag-
ing the clamping levers, and pin-carrying disks provided
with ribs with which the clamping levers engage.

In testimony whereof, I have signed my name to this
specification in the presence of two subscribing witnesses.

JAMES WALKER PARSONS.

Witnesses.
A. L. SHORTRIDGE,
V. E. THATCHER.