

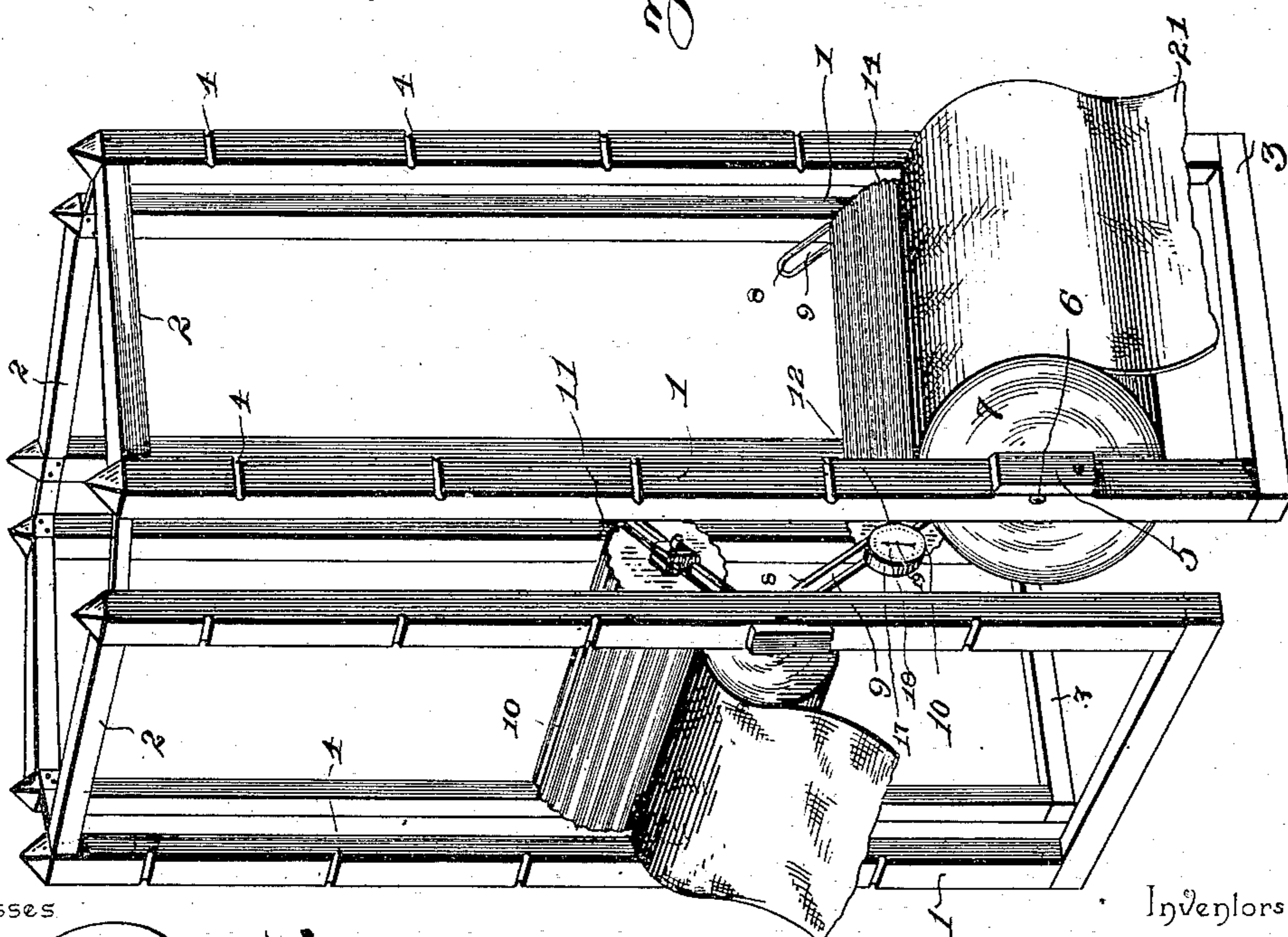
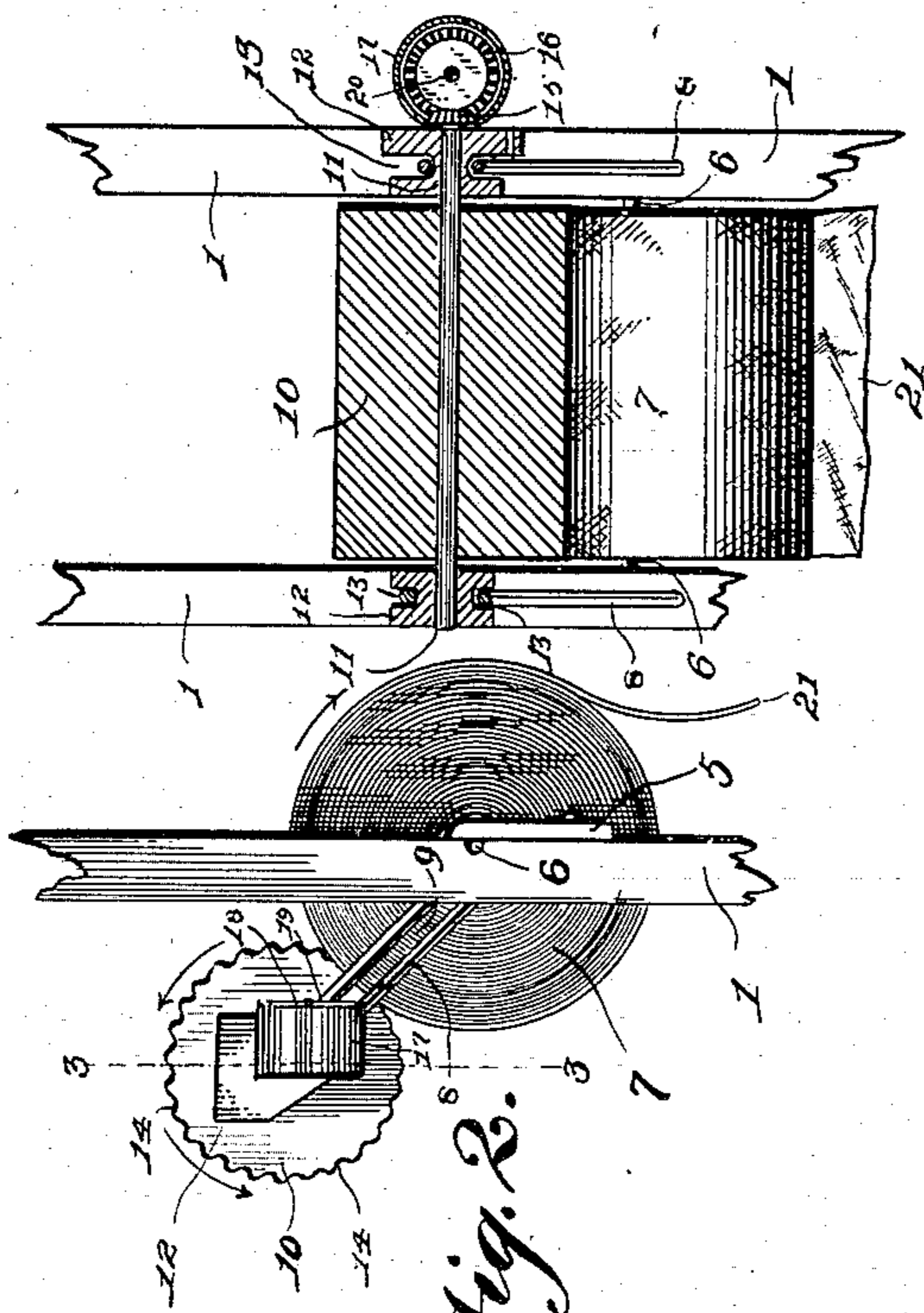
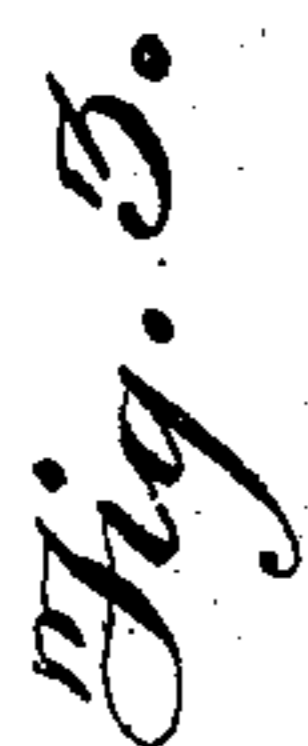
No. 651,891.

Patented June 19, 1900.

H. SAULS & G. S. COOK.
MEASURING DEVICE FOR ROLLED GOODS.

(Application filed Feb. 10, 1900.)

(No Model.)



Witnesses.

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Fig. 1.

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UNITED STATES PATENT OFFICE.

HENRY SAULS AND GEORGE S. COOK, OF MINERAL, TEXAS.

MEASURING DEVICE FOR ROLLED GOODS.

SPECIFICATION forming part of Letters Patent No. 651,891, dated June 19, 1900.

Application filed February 10, 1900. Serial No. 4,781. (No model.)

To all whom it may concern:

Be it known that we, HENRY SAULS and GEORGE S. COOK, citizens of the United States, residing at Mineral, in the county of Bee and State of Texas, have invented a new and useful Measuring Device for Rolled Goods, of which the following is a specification.

This invention relates to measuring devices, and has for its object to provide improved means for measuring rolled goods while the material is being unrolled and also to indicate the amount of material remaining in the roll. It is furthermore designed to mount the device for convenient inspection and to provide means for insuring a positive action of the indicating device as the material is removed and the roll becomes smaller, and, finally, to mount the indicating device independently of the roll of goods, so that the latter may be removed without interfering with the former, which latter is always in position for coöperation with a roll of material.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view showing a frame supporting a plurality of the present devices in operative relation to rolls of cloth. Fig. 2 is a detail end elevation of one of the devices. Fig. 3 is a vertical sectional view taken on the line 3 3 of Fig. 2.

Corresponding parts in the several figures of the drawings are designated by like characters of reference.

In carrying out the present invention there is provided a supporting-frame which comprises opposite uprights or posts 1, which are connected by means of the upper and lower cross-bars 2 and 3, respectively. Provided in the corresponding outer faces of the posts or uprights is a plurality of notches 4, which

are arranged in transversely-alined pairs, and each notch is normally closed by means of a pivotally-mounted button 5. These pairs of notches are designed to receive and form bearings for the opposite ends of a shaft or rod 6 upon which the goods 7 are rolled. It will now be apparent that the turn-buttons 5 are designed to facilitate the mounting of the rod 6 and at the same time are designed to prevent accidental displacement of said rod.

Inclined upwardly and rearwardly from the rear faces of the uprights 1 are the oppositely-alined bearing-brackets 8, each of which is provided with a longitudinal slot 9. Mounted upon these brackets is the measuring-roller 10, having the opposite journals 11, which are slidably received within the longitudinal slots of the respective brackets 8. Each journal is provided with a bearing-block 12, which has its upper and lower faces provided with substantially-parallel longitudinal slots 13 for the reception of the respective edges of the slot in the adjacent bracket 8, so that the bearing-blocks are slidable longitudinally upon the bearing-brackets in order that the measuring-roller may be adjusted toward and away from the frame, according to the size of the roll of goods. It will now be understood that the bearing-brackets 8 are inclined downwardly and forwardly, so that the roller 10 may gravitate toward the roll of goods, and said measuring-roller is also provided with peripheral longitudinal corrugations 14 or otherwise roughened, so as to increase the frictional engagement between the roller and the roll of material.

From the foregoing description it will be apparent that the measuring-roller 10 is revolved through frictional contact with the roll of material when the latter is being unrolled, and to indicate the number of revolutions of the measuring-roller one of the journals thereof has been extended beyond the outer side of the adjacent bearing-block and provided with a suitable gear-wheel 15. In mesh with this gear-wheel is a larger gear 16, which is mounted upon the bearing-block, and the two gears are inclosed within a suitable case 17, having a dial-face 18. A suitable indicating pointer or hand 19 is carried

by the outer end of the journal 20 for the larger gear-wheel 16 and is designed to cooperate with the dial-face 18.

In the operation of the device the free end 5 21 of the material to be measured is pulled outwardly from the roll, so as to turn the latter in the direction indicated by the arrow in Fig. 2 of the drawings, which will result in the turning of the measuring-roller in the opposite direction and through the gears 15 and 16 the pointer or hand 19 is turned, so as to indicate upon the dial the number of yards of material which have been removed from the roll. It will of course be understood that 15 the length of the circumference of the measuring-roll is known, and the intermeshing gears are arranged to turn the hand one degree upon the dial-face for every yard or other preferred unit of measure which is removed 20 from the roll of material.

It is preferable to have the pointer or hand originally set to the highest number upon the dial-face and to turn the pointer in a reverse direction—i. e., from the highest degree to 25 ward the lowest degree—so that should ten yards of material be removed the pointer will be turned backwardly ten degrees—as, for instance, to seventy degrees—as indicated by the dotted position of the pointer in Fig. 2 of 30 the drawings, thereby indicating that ten yards of the material have been removed and that seventy yards yet remain in the roll.

In Fig. 1 of the drawings there have been illustrated four frames, which are arranged 35 to form the respective sides of a single rectangular frame, each individual frame being spaced a suitable distance from the adjacent opposite frames, so that the indicating devices may be readily seen through the spaces 40 between said individual frames. In practice it is preferred to inclose the supporting-frame within a glass case, so as to protect the goods from dust and damage and at the same time to conveniently display the different materials contained in the several rolls, although 45 such protecting-case has not been shown in the drawings.

Although but a single measuring device has been shown upon the supporting-frame, it 50 will of course be understood that it is designed to provide a measuring device for each pair of notches 4, so that the frame may be filled with rolls and each roll may have its individual measuring device. Moreover, the 55 device is designed for use in connection with rolls of cloth, ribbon, wall-paper, and any other similar material which is normally held in the form of a roll.

Having described the invention, we claim—

60 1. In a measuring device for rolled goods, the combination with a frame, having a roll of goods mounted thereon, of a measuring-roller in frictional engagement with the roll of goods, and bearing-brackets carried by the 65 frame and inclined downwardly toward the roll of goods, the journals of the measuring-

roller being freely slidable upon the respective brackets, and an indicator for the roller.

2. The combination with a supporting-frame, having a roll of goods mounted thereon, of opposite bearing-brackets carried by 70 the frame, located above the roll of goods, inclined downwardly toward the same, and provided with longitudinal slots, a gravity measuring-roller in frictional engagement with the 75 roll of goods, the journals of the roller being slidably mounted in the slots of the respective brackets, and an indicator in operative relation to the roller.

3. In a measuring device for rolled goods, 80 the combination with a frame, having means for supporting a roll of material, of a measuring-roller for frictional engagement with the roll, bearings inclined downwardly toward the roll of material, and provided with 85 longitudinal slots, slidable bearing-blocks for the roller, each block having opposite grooves to slidably receive the respective opposite edges of the slot in its bearing, and an indicator carried by one of the bearing-blocks and 90 in operative relation to the measuring-roller.

4. In a measuring device for rolled goods, the combination with a frame, having means for supporting a roll of goods, of downwardly-inclined bearing-brackets, having longitudinal 95 slots, a measuring-roller for frictional engagement with the roll of goods, opposite bearing-blocks for the roller and slidably mounted in the slots of the brackets, and an indicator carried by one of the bearing-blocks 100 and in operative relation to the measuring-roller.

5. In a measuring device for rolled goods, the combination with a frame, having means for supporting a roll of goods, bearing-brackets 105 inclined downwardly toward said roll, a measuring-roller for frictional engagement with the roll, opposite bearing-blocks for the roller and slidably mounted upon the respective bearing-brackets, and an indicator carried 110 by one of the bearing-blocks and in operative relation to the measuring-roller.

6. In a measuring device for rolled goods, the combination with a frame, having means for supporting a roll of material, of a measuring-roller for frictional engagement with the 115 roll opposite bearing-brackets, bearing-blocks for the opposite journals of the measuring-roller, and slidably adjustable upon the brackets toward and away from the roll of material, 120 and an indicator carried by one of the bearing-blocks and in operative relation to the measuring-roller.

7. In a measuring device for rolled goods, the combination with a frame, comprising opposite uprights, having bearings upon the 125 corresponding outer faces thereof, and for supporting a roll of material, of downwardly and forwardly inclined bearing-brackets carried by the rear faces of the uprights, a measuring-roller for frictional engagement with 130 the rearside of the roll of material, and freely

slidable upon the bearing-brackets, and an indicator in operative relation to the measuring-roller.

8. In a measuring device for rolled goods,
5 the combination with a frame, having means for supporting a roll of material, of bearing-brackets which are inclined downwardly toward the roll, a measuring-roller for frictional engagement with the roll of material,
10 opposite journals for the measuring-roller, bearing-blocks for the respective journals, and slidably mounted upon the respective brackets, a gear-wheel carried by one of the

journals, another gear-wheel in mesh with the former and carried by the adjacent bearing- 15 block, a casing inclosing the gears, and provided with a dial-face, and a pointer or hand operated by the last-mentioned gear.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures 20 in the presence of two witnesses.

HENRY SAULS.

GEORGE S. COOK.

Witnesses:

ALEX. S. ARCHER,

JAMES WOLF.