

No. 611,051.

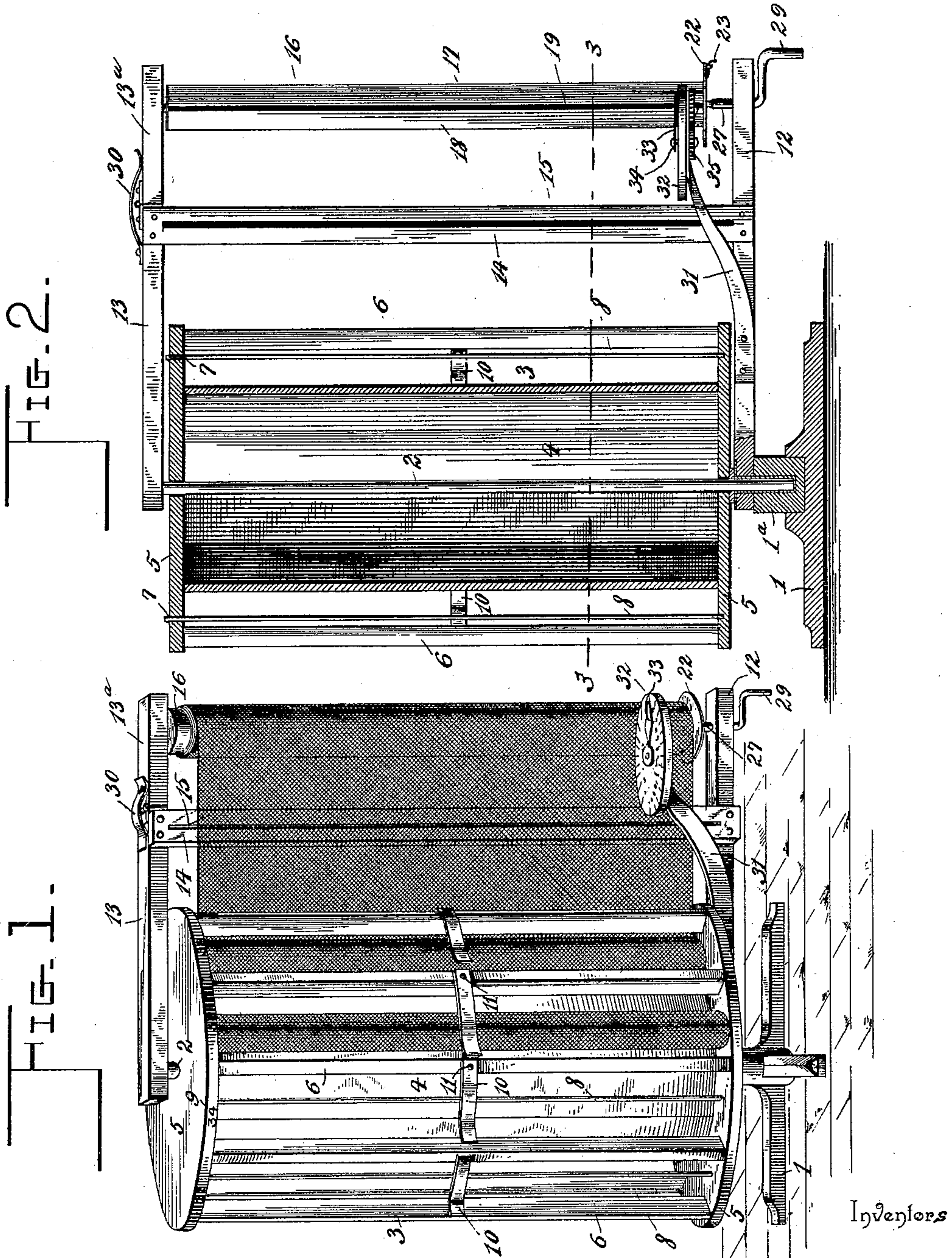
Patented Sept. 20, 1898.

D. W. BROOKS & W. J. VAN DYKE.  
WIRE CLOTH HOLDER AND MEASURER.

(Application filed Oct. 7, 1897.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

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H. J. Beuchkof

By their Attorneys,

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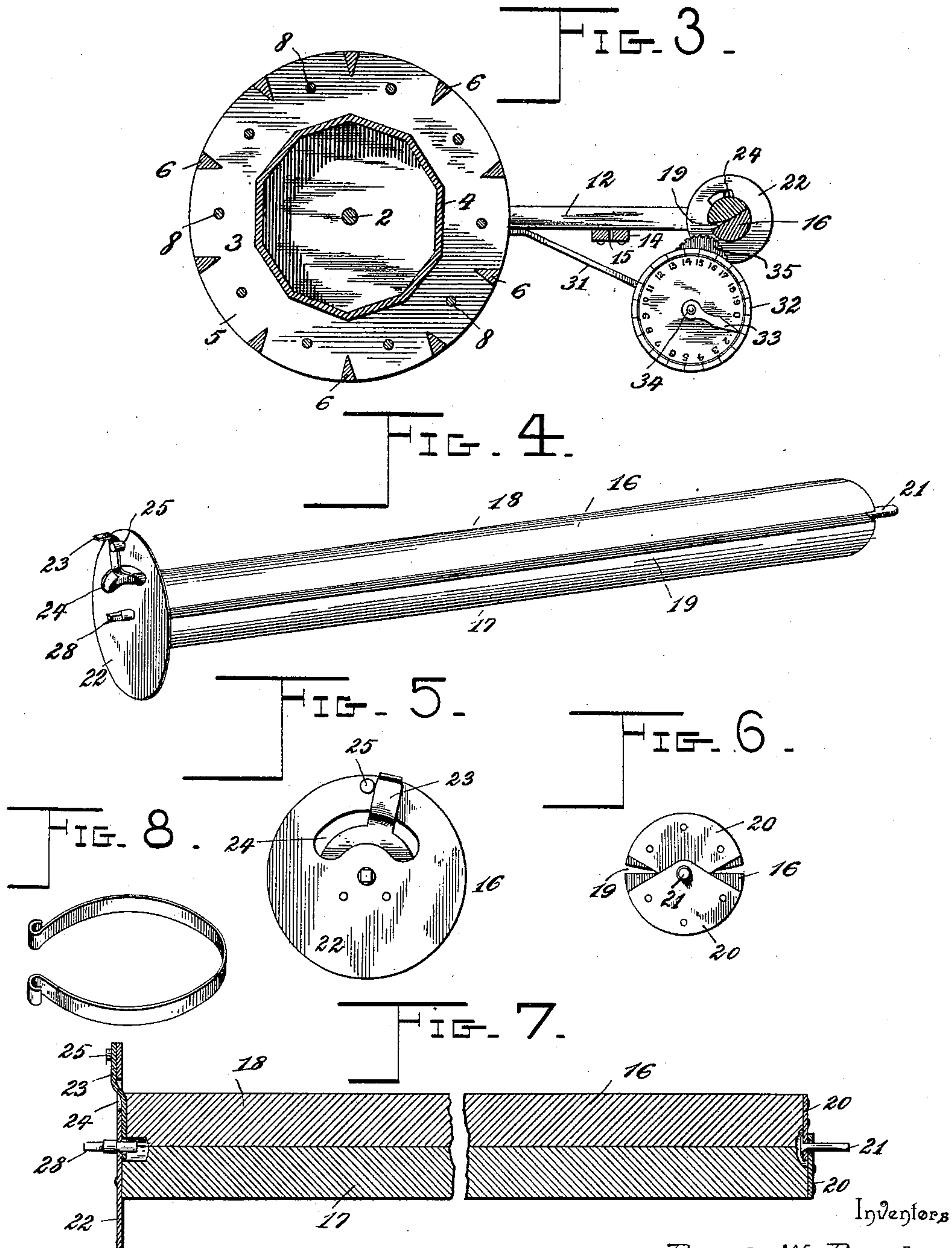
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# UNITED STATES PATENT OFFICE.

DAVID W. BROOKS AND WILLIAM J. VAN DYKE, OF FALLS CITY, NEBRASKA.

## WIRE-CLOTH HOLDER AND MEASURER.

SPECIFICATION forming part of Letters Patent No. 611,051, dated September 20, 1898.

Application filed October 7, 1897. Serial No. 654,436. (No model.)

*To all whom it may concern:*

Be it known that we, DAVID W. BROOKS and WILLIAM J. VAN DYKE, citizens of the United States, residing at Falls City, in the county of Richardson and State of Nebraska, have invented a new and useful Wire-Cloth Holder and Measurer, of which the following is a specification.

Our invention relates to improvements in means for holding, exhibiting, and measuring fabrics, especially designed for wire-cloth, although it may be used to contain other materials in rolls; and the primary object that we have in view is to provide a simple and inexpensive structure especially adapted to stand on a counter for exhibiting its contents and arranged to permit easy access to any one of a series of rolls sustained within the holder.

A further object of the invention is to provide means whereby the proper quantity of material may be drawn from either one of the rolls contained in the casing and the material removed from the machine after it shall have been measured and rolled into compact form.

A further object of the invention is to provide improved means whereby the fabric may be easily cut or severed after it has been wound on the delivery-roll and without necessitating the removal of the roll of material from the machine.

With these ends in view our invention consists in the novel construction and arrangements of parts, which will be hereinafter fully described and claimed.

To enable others to understand our invention, we have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of our improved machine for holding, measuring, and delivering fabrics, such as wire-cloth. Fig. 2 is a vertical sectional elevation taken in a plane at one side of the delivery-roll and the slotted guide for a knife to sever the fabric from the roll after the proper quantity of fabric has been wound on the delivery-roll. Fig. 3 is a transverse sectional view on the plane indicated by the dotted line 3 3 of Fig. 2. Fig. 4 is a detail perspective view of the delivery-roll detached from the machine.

Figs. 5 and 6 are end views of the delivery-roll. Fig. 7 is a longitudinal sectional view through the delivery-roll and Fig. 8 is a detail view of a clasp used to hold the rolled material while removing the same from winding-shaft. Like numerals of reference denote corresponding parts in all the figures of the drawings.

In the practical embodiment of our improved machine for holding, delivering, and measuring fabrics we provide a base 1 of any suitable construction. To this base is rigidly fastened an upright spindle 2, and on this spindle is loosely mounted a reel 3, which is adapted to turn freely on the spindle and is constructed to contain a number of rolls of material. We construct this reel in skeleton form; and it consists, preferably, of a central boxing or elongated hub 4, a pair of heads 5, and a series of longitudinal bars 6, all of which parts are rigidly united together in any approved manner. The longitudinal bars are arranged at or near the edges of the heads, and they are fastened to said heads equidistant from each other. The heads 5 of the reel are provided with vertically-alined openings or sockets situated at points about midway between the longitudinal bars, and through these openings or sockets 7 are passed the spindles or shafts 8, upon which the rolls of material are coiled or wound. If desired, the spindles or shafts 8 may fit in the sockets, to be held thereby against vertical displacement, or the shafts may be passed through the rolls of material after the latter have been placed in the reel. The longitudinal bars 6 of the reel practically divide the reel into a series of radial compartments, and each compartment is inscribed or provided with an indicator, as at 9, to denote the character or quality of the goods contained therein. For example, if the reel is used for containing wire-cloth, as we contemplate, the indicators may be numbered to refer to the number or size of the wire-cloth contained in said compartments of the reel. Each longitudinal bar 6 of the reel is provided with a suitable spring or catch plate 10, which is pivotally attached, as at 11, to the bar at or near the middle thereof. The spring or catch plate may be adjusted across the space between two adjacent bars for the purpose of keeping the free



edge of the rolled material from protruding through said space and beyond the reel, and said plate is also adapted to be turned on its pivot 11 for the purpose of having it lie along-  
 5 side of the bar 6 to permit easy withdrawal of the material without hindrance from the spring or catch plate.

To the hub 1<sup>a</sup> of the base 1 and to the upper end of the spindle 2 are attached the inner ends of a pair of bars or rods 12 13, which extend radially beyond the reel 3, and these bars are connected together at points intermediate of their length and outside of the reel by a vertical guide-bar 14, the ends of which are fastened to the bars 12 13 to hold the latter in fixed relation to each other. This vertical bar 14 is provided with a longitudinal slot 15, which serves as a guide for a knife which may be thrust through the slot and moved longitudinally of the bar 14 to be guided by the latter in the act of severing the material after it has been unwound from its roll in the case or reel and coiled on the delivery-roll 16. The delivery-roll 16 of our machine is constructed in a peculiar manner and mounted in the bars 12 13 by novel means for operatively supporting the roll in position and to provide for its convenient removal after the proper quantity of material has been coiled thereon. The delivery-roll 16 is constructed in longitudinal sections 17 18 by bisecting the roll longitudinally, and one or both members of the bisected roll are provided with beveled or inclined faces (indicated at 19) to permit the roll members to have a limited oscillating movement or play with respect to one another. The divided roll 16 has its members connected together at one end by a pair of plates 20 and a journal stud or pin 21. The plates are fastened to the ends of the roll members in a manner to have the inner edges of the plates overlap each other, and through these lapped edges of the plates is passed the journal stud or pin 21, the inner end of which is fastened to one of the roll members in any suitable way. The roll members are coupled together at their opposite ends by a single plate or disk 22, which is rigidly attached to one of the roll members and is operatively connected by a spring-catch 23 to the other roll member or section. This disk 22 is provided with an arc-shaped slot 24 and with a catch pin or lug 25. The spring-catch 23 is fastened to the roll member, which is free from direct connection with the slotted plate 22, and said spring is bent to enable it to pass through the slot and to engage with the catch-pin. This construction of the delivery-roll enables its members or sections to be opened or spread sufficiently for the insertion of the edge of the fabric or material, after which the spring may be engaged with the catch-pin to hold the members of the roll in engagement with the fabric. The roll may thus be used for winding the material thereon as it is uncoiled from the roll of material in the casing or reel,

and to enable the material to be removed from the delivery-roll we have mounted the latter detachably in the bars or arms 12 13 of the machine. To this end we make the upper bar 13 with a hinged or flexible outer section 13<sup>a</sup> and provide a socketed shaft 27 on the extremity of the arm or bar 12. This flexible section of the arm or bar 13 is provided with a journal-bearing to receive the journal-stud 21 at the upper end of the delivery-roll, and the disk 22 at the lower end of the delivery-roll is provided with a square or polygonal trunnion 28, which fits in the socket of the shaft 27. This short shaft 27 is provided at its lower extremity with a crank or handle 29, by which the shaft may be rotated to turn the delivery-roll. This roll may be detached by lifting the flexible section 13<sup>a</sup> of the arm or bar 13 to free it from the journal-pin 21 of the roll, after which the latter may be easily lifted out of the socketed shaft 27. If desired, we may employ a spring, as at 30, to hold the flexible end 13<sup>a</sup> of the arm or bar 13 in position; but the weight or gravity of this arm or bar may only be employed to hold the same in engagement with the delivery-roll.

In connection with our improved machine we have provided a meter or register to indicate the quantity of material as it is withdrawn from the roll contained in the reel or casing. This meter or register is carried by an arm 31, attached to one of the rigid arms or bars of the machine-frame, and on this arm is mounted a fixed dial-plate 32, the exposed face of which is inscribed with a dial to indicate the lineal measurement in feet or fractions thereof. Said dial is traversed by a pointer 33, which is carried by a shaft 34, and this shaft is rotated by means of a friction drive-wheel 35, which is arranged to ride upon the roll 16 or the material as it is coiled thereon, or said roller or friction-wheel 35 may be arranged to press and ride against the fabric as it travels from the material contained in the reel to and is coiled on the delivery shaft or roll 16.

This being the construction of our machine, the operation may be described as follows: The rolls of material having been placed in the reel or casing 3, the latter can be turned on the spindle 2 to bring the proper roll adjacent to the slotted knife-guide bar 14. The end of the fabric is withdrawn from the reel across the slotted bar 14 and is clamped to the sectional delivery-roll. The shaft 27 is now rotated to drive the roll 16 and coil the fabric thereon, and as the fabric travels from the roll of material in the reel and is coiled on the delivery-roll the indicator shows to the operator the quantity of material thus withdrawn. When the proper quantity has been coiled on the delivery-roll, the operator ceases to turn the shaft 27 and a knife is thrust through the slot in the guide-bar 14 and drawn across the fabric to sever the same from edge to edge. The delivery-roll can now be taken



from between the bars 12 13 and the spring-catch operated to release the material, after which the roll 16 can be withdrawn from the roll of material coiled on said shaft or roll, the material being thus delivered in a rolled condition to the purchaser.

We are aware that changes in the form and proportion of parts and in the details of construction of the devices herein shown and described as the preferred embodiment of our invention may be made by a skilled mechanic without departing from the spirit or sacrificing the advantages of our invention.

In Fig. 8 of the drawings we have shown a means for holding the material after it has been wound on the removable winding-shaft and to hold the material in its rolled condition during the act of removing it from the shaft. This means consists of a clasp or band 40, which is constructed, preferably, of elastic material, such as spring metal, and which is divided or split to enable the same to be readily applied or removed. One or more of these spring-bands may be employed, and they may be readily applied so as to securely hold the material in its rolled compact condition during the operation of cutting off the fabric and of removing it from the shaft.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a holder for rolled material, a deliv-

ery-roll constructed in movable sections or members which are connected together at one end by plates which are pivoted together, a disk fastened to one of the roll-sections and provided with a slot and a catch-pin, and a spring-catch fastened to the other roll-section and fitted in the slotted disk to engage with the catch-pin, as and for the purposes described.

2. In a holder for rolled material, a bisected clamping-roll having its members connected at one end by plates and a journal-pin, a disk fastened to the other end of one of the roll members, and a spring-catch carried by the other roll member and engaging with the disk, as and for the purposes described.

3. In a holder for rolled material, a reel consisting of the heads, the box-like hub, the longitudinal bars, the catches or springs pivoted to the bars and arranged to extend across the spaces between said bars or to be folded parallel therewith, and roll-holding shafts mounted in the heads of the reel, for the purposes described, substantially as set forth.

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

DAVID W. BROOKS.

WILLIAM J. VAN DYKE.

Witnesses:

BURT REASER,

GEO. E. DONINGTON.