

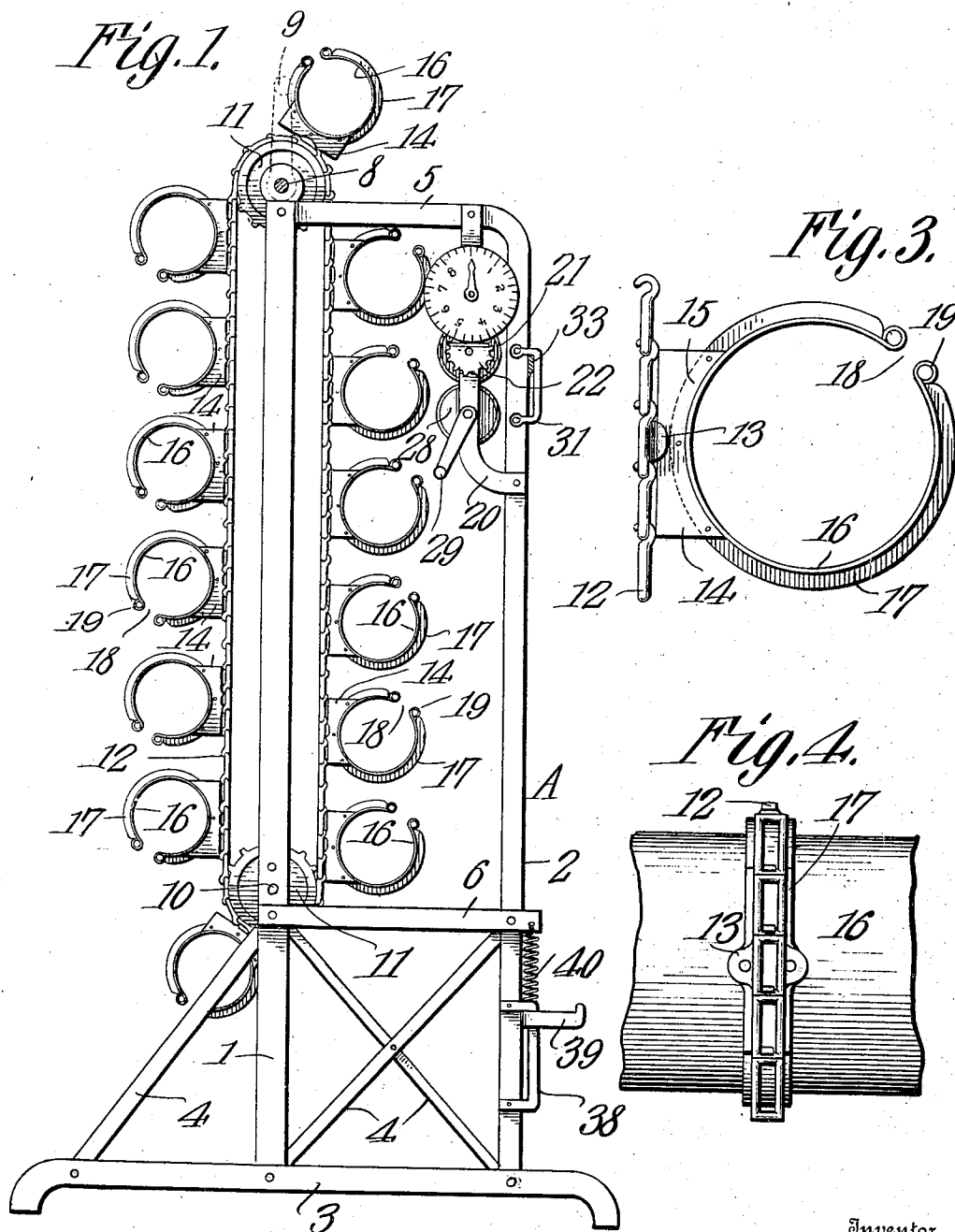
No. 896,251.

PATENTED AUG. 18, 1908.

J. T. SAPPENFIELD.
RACK FOR HOLDING ROLLS OF WIRE FABRICS.

APPLICATION FILED OCT. 28, 1907.

2 SHEETS—SHEET 1.



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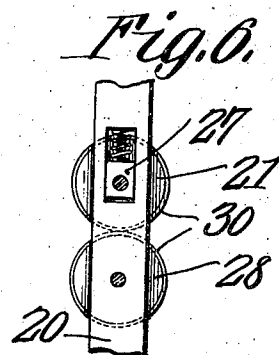
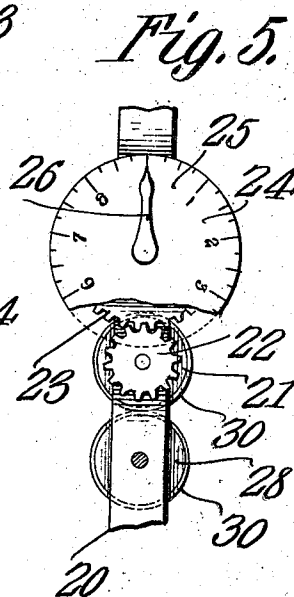
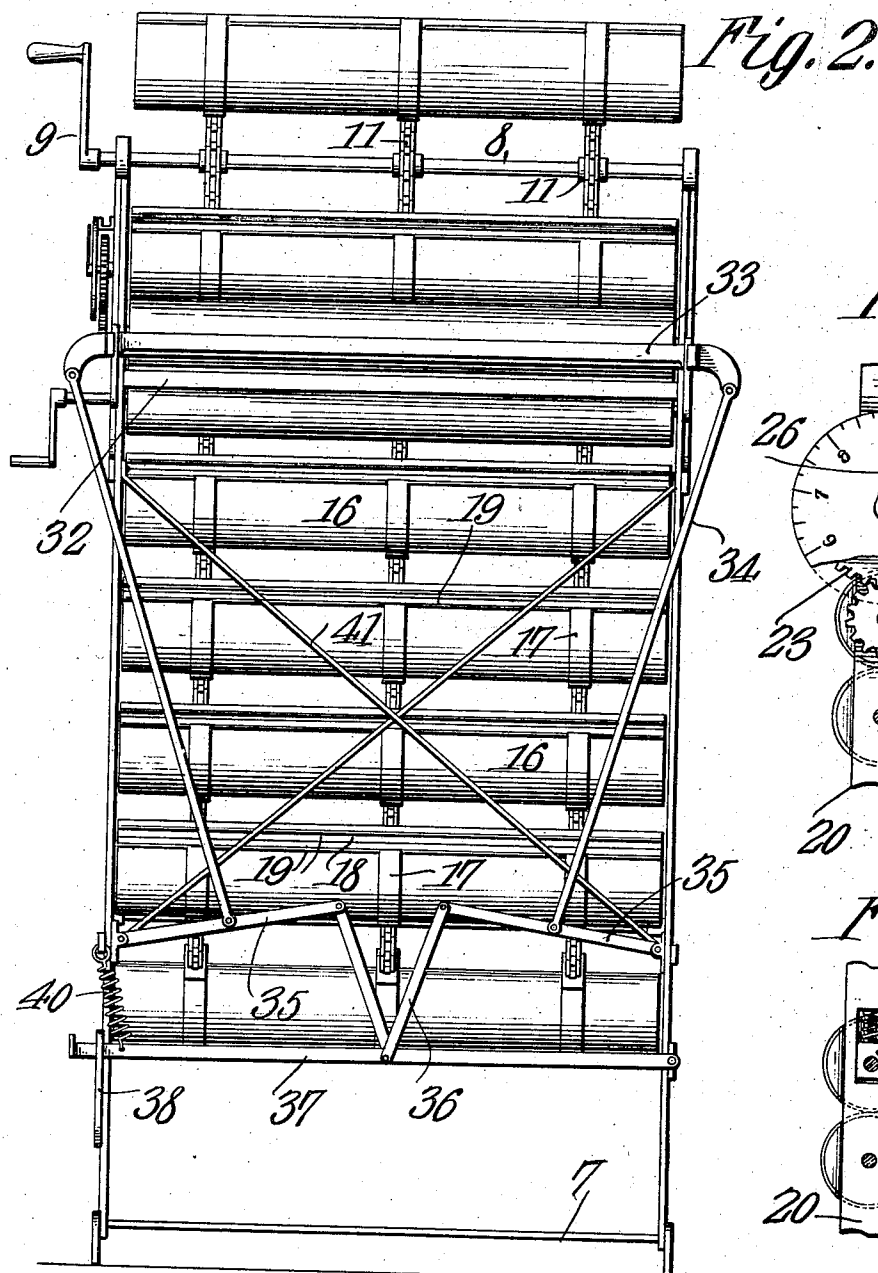
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

JESSE T. SAPPENFIELD, OF MILAN, KANSAS.

RACK FOR HOLDING ROLLS OF WIRE FABRICS.

No. 896,251.

Specification of Letters Patent.

Patented Aug. 18, 1908.

Application filed October 28, 1907. Serial No. 399,548.

To all whom it may concern:

Be it known that I, JESSE T. SAPPENFIELD, a citizen of the United States, residing at Milan, in the county of Sumner and State of Kansas, have invented new and useful Racks for Holding Rolls of Wire Fabrics, of which the following is a specification.

This invention relates to racks for holding rolls of wire fabrics and also for facilitating the measuring and cutting of the fabrics. As is well known fabrics of this character are placed upon the market in rolls of different lengths according to the width of the fabrics and these rolls are tied so as to be prevented from partly unwinding as a result of their springy nature. Heretofore the merchant has experienced considerable difficulty and annoyance in handling these rolls because when the ties of one of them are cut the roll promptly unwinds to a certain extent and occupies a considerable space. Moreover, in unwinding the fabric from the roll it is difficult to measure the proper lengths to be cut off.

The object of the present invention is to provide a compact form of rack designed to hold a number of rolls of this character in such a manner that the same will be held compact at all times and permit unwinding without danger of increasing the diameters of the rolls.

Another object is to provide measuring means whereby the lengths of the fabrics removed from the rolls can be quickly determined.

Another object is to provide a novel arrangement of roll holders any one of which can be readily brought into position adjacent the measuring apparatus so that it becomes easy to remove a length of fabric from any of the rolls upon the bracket.

A still further object is to provide means of a simple and durable nature whereby the fabric can be quickly cut after the desired quantity has been measured.

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

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a side elevation of a rack embodying the present improvements, the movable cutter bar being shown in section. Fig. 2 is a front elevation

thereof. Fig. 3 is an enlarged end view of one of the holders and showing its connection with the chain. Fig. 4 is a face view of the parts shown in Fig. 3. Fig. 5 is a view partly in elevation and partly in section of the means for transmitting motion from the feed rollers to the register. Fig. 6 is an end view of the feed rollers and showing one of the movable boxes of one of the rollers.

Referring to the figures by characters of reference, A designates a supporting frame made up of similar side structures each of which consists of parallel uprights 1 and 2 mounted upon a base 3 and provided with diagonal braces 4 suitably located to add the requisite strength to the frame. A cross strip 5 connects the upper ends of the two uprights of each side structure and this cross strip may if preferred be formed integral with one of the uprights. A cross brace 6 also preferably connects the lower portions of the uprights and rods 7 may if desired connect the side portions of the base 3. A shaft 8 is journaled upon the upper ends of the uprights 1 and is provided at one end with a crank 9 or other suitable means whereby the same may be conveniently rotated. Another shaft 10 is journaled in the uprights 1 close to the cross braces 6 and each of these shafts 8 and 10 has a series of preferably three sprockets 11 secured upon it and the corresponding sprockets of the two shafts being disposed in vertical alinement. Vertically extending conveyers or chains 12 are carried by the sprockets 11 and certain links of each chain are formed with laterally extending ears 13 to which are suitably secured connecting or spacing blocks 14. The connecting or spacing blocks of the respective chains are designed to aline and each has its outer or free end concaved as indicated at 15 so as to conform with the contour of and fit snugly against a substantially cylindrical housing or holder 16. Each holder is preferably formed of sheet metal and provided with reinforcing flanges or collars 17 which are riveted or otherwise secured to the blocks 14. Each holder is open at its ends and has a longitudinal slit 18 extending throughout the length thereof and at about forty-five degrees above the horizontal. These holders are provided along the edges of the slits 18 with beads 19 formed preferably by rolling the metal outwardly and these beads constitute rounded surfaces on which the fabric is designed to bear while being withdrawn from the holder.

Connected to each upright 2 and cross strip 5 is a supplemental supporting strip 20. A roller 21 is journaled within these supplemental strips and extends throughout the width of the frame A and secured to and revoluble with the roller is a gear 22 designed to mesh with a gear 23 constituting part of the mechanism of a register 24. This register may be of any desired construction and embodies a dial 25 and an index 26. The parts are so proportioned that the index will accurately indicate upon the dial the length of fabric drawn from under the roller 21. As shown in Fig. 6 the spring pressed boxes 27 are preferably utilized as bearings for the roller 21 so that said roller is held normally pressed against a roller 28 which is journaled in the strips 20, and has a crank 29 or other suitable means connected to it whereby the same can be readily rotated. Both of the rollers are preferably faced with rubber or other suitable soft material such as indicated at 30 whereby the rollers are prevented from slipping upon the material extending between them.

Extending forward from the uprights 2 are guides 31 and connecting the uprights close to these guides is a fixed cutter bar 32. A movable cutter bar 33 is mounted within the guides and is pivotally connected at its ends to the rods 34 which are in turn pivoted to levers 35 fulcrumed upon the uprights 2 close to the cross strips 6. These levers 35 extend toward each other and are connected by means of links 36 with a lever 37. This last mentioned lever is fulcrumed preferably upon one of the uprights 2 and is movably mounted adjacent its other end within a guide 38 outstanding from the other upright. A treadle 39 is preferably formed at the free end of lever 37 and a spring 40 serves to hold this lever and all of the parts connected to it normally raised. The movable cutter bar will therefore be held normally against the upper portions of guides 31 and the space between the two cutter bars is directly in front of the pass between the two rollers 21 and 28. As shown in Fig. 2 diagonal braces 41 may if desired be arranged in front of the frame A for the purpose of connecting the uprights 2 and rendering the frame rigid.

In using the device herein described the rolls of fabric as soon as received by the merchant are inserted longitudinally into the ends of the holders 16 after which the ties therearound are cut and the ends of the fabrics drawn through the slits 18. When it is desired to remove a portion of the fabric from any one of the rolls in the rack the crank 9 is rotated until the holder containing the desired roll is brought into position back of the pass between rollers 21 and 28. The end of the fabric is then pulled outward between the rollers and up to the cutter bars 32 and 33. Crank 29 is then

rotated and the rollers 21 and 28 will pull the fabric outward between them and the length of the fabric thus withdrawn will be accurately indicated by the register. When a desired quantity has been unrolled in this manner the operator pushes downward on treadle 39 and motion is transmitted therefrom through the links 36, levers 35, and rods 34, to the movable cutter bar which is brought down and efficiently cuts the fabric throughout its width at one operation. It is of course to be understood that the fabric roll will revolve in the holder while the fabric is being unwrapped therefrom. There is no danger, however, of the roll spreading to an objectionable extent as it is at all times confined by the holder. Although different fabrics come in rolls of different lengths all of the holders are preferably of the same length so that any roll desired can be placed in any one of the holders and the device will present a more attractive appearance. It will be seen that the entire rack occupies a comparatively small space and may be of great convenience to merchants handling wire fabrics of this character because of the ease with which the rolls, which are of considerable weight, can be handled and desired lengths cut from them.

Although the device has been described as primarily intended for handling wire fabrics it is to be understood that it can be used just as efficiently for holding rolls of other heavy materials such as oilcloths, paper, etc. and can even be efficiently used in handling rolls of dress goods and the like.

What is claimed is:

A device of the character described comprising a supporting frame, an endless flexible conveyer mounted thereon, said conveyer comprising spaced endless chains and means for supporting and actuating the same, a spacing block connected to one link of each chain and extending over and backed by the adjoining links of the chain, each of said blocks having a recessed face, a tubular roll receiving housing bearing upon the recessed faces of the blocks, said housing being slotted throughout its length, the ends of the slot being open, reinforcing flanges extending around the housing from one edge of the slot to the other edge thereof, said flanges being arranged between and secured to the spacing blocks, and outwardly rolled beads formed by the longitudinal edges of the housing and constituting the walls of the slot.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JESSE T. SAPPENFIELD.

Witnesses:

T. M. DERINGTON,
GEO. R. WAITE.