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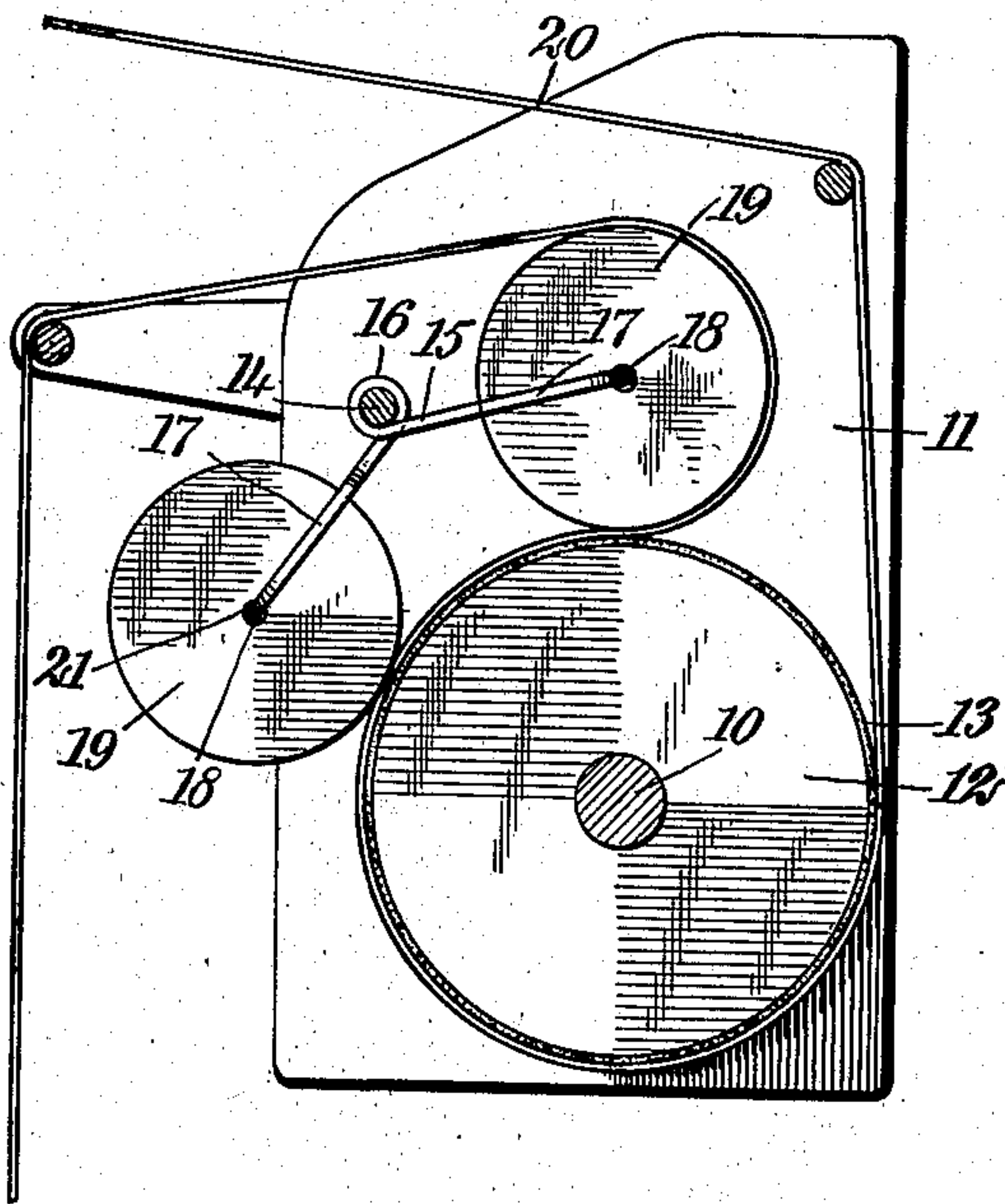
TAKE-UP FOR LOOMS.

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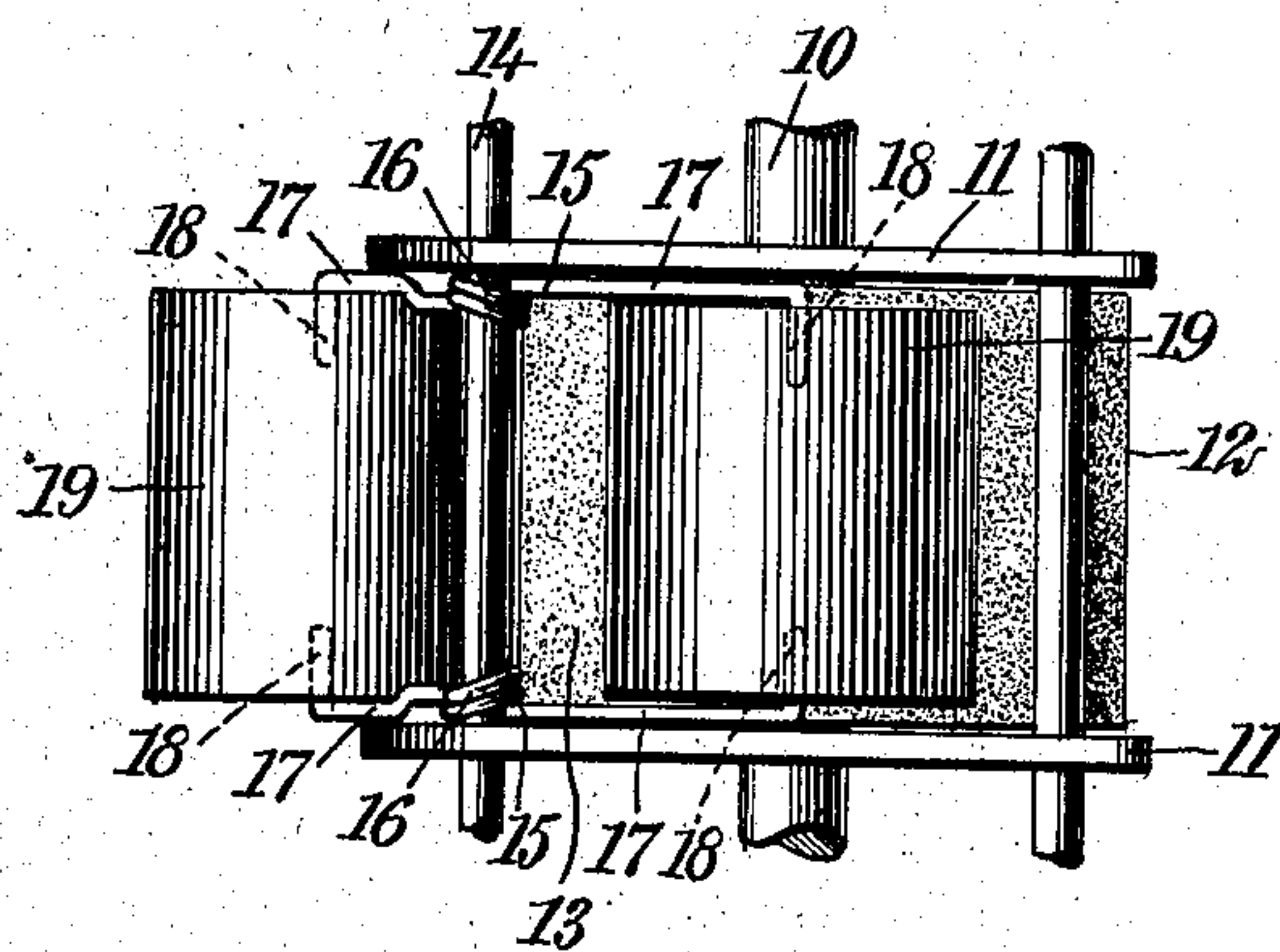
899,931.

Patented Sept. 29, 1908.

*Fig. 1.*



*Fig. 2.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

BENJAMIN WEHRLLEN AND FLOYD C. MATTHEWS, OF POMPTON LAKES, NEW JERSEY.

## TAKE-UP FOR LOOMS.

No. 899,931.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed February 10, 1908. Serial No. 415,097.

*To all whom it may concern:*

Be it known that we, BENJAMIN WEHRLLEN and FLOYD C. MATTHEWS, citizens of the United States, and both residents of Pompton Lakes, in the county of Passaic and State of New Jersey, have invented a new and Improved Take-Up for Looms, of which the following is a full, clear, and exact description.

This invention relates to take-ups for looms, and more especially to devices of this kind which include drums for drawing the fabric from the looms, and rollers which serve to hold the fabric in engagement with the drums, and which are so connected that a movement of one roller to separate it from its drum causes another roller to be forced more strongly against the drum.

The object of the invention is to provide a take-up for looms which is simple, strong and durable in construction, which serves to draw fabric such as a ribbon, from the loom, and from which it is practically impossible to release the fabric, whereby the possibility of slackening the warp with the danger of interfering with the operation of weaving, is obviated. Furthermore, the take-up leaves the front of the loom entirely free and unobstructed, and does away with the cumbersome wooden frame usually employed.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the views, and in which

Figure 1 is a transverse section showing a part of a loom having our invention applied thereto; and Fig. 2 is a plan view showing our take-up as applied to a loom.

Before proceeding to a more detailed explanation of our invention, it should be understood that while it is particularly useful in connection with ribbon looms, it can also be advantageously employed with similar mechanism used in the manufacture of other fabrics. In the manufacture of textile fabrics by means of looms, mechanism is provided which draws or otherwise removes the fabric from the looms as the fabric is woven. In order to maintain the warp threads which are incorporated in the fabric, at the proper tension for weaving, it is necessary that the drawing out or take-up mechanism shall op-

erate positively, and that it shall act upon the fabric with a uniform tension and without the danger of the fabric slipping. It will be easily seen that if the take-up suddenly releases the fabric, the warp threads will be slackened thereby, and the shuttles will strike the warp thread and serious danger to the fabric being woven will result.

In our invention we employ a drum for drawing the fabric from the loom, and, as is customary in apparatus of this kind, we prefer to provide the drum with a facing of sand paper or other rough material, which tends to permit a firm engagement of the fabric and the drum. The fabric is held in engagement with the drum by a plurality of rollers, which are so connected that if by accident one of the rollers is forced away from the drum the other is forced against it, so that there is absolutely no danger of the fabric being released and causing a slackening of the warp threads.

Referring more particularly to the drawings, 10 represents a shaft of a loom, suitably journaled in certain parts 11 of the loom. Upon the shaft is rigidly mounted the take-up drum 12, having a surface of sand paper 13 or any other material adapted to the purpose. It will be understood that the shaft 10 may be of any suitable length and may have mounted thereupon any number of drums, depending upon the size and character of the loom and the number of pieces of fabric which the loom can deliver at one time.

Adjacent and parallel to the shaft 10 is provided a second shaft 14, similarly carried by the loom parts 11. Adjacent to the drum 12, the shaft 14 has mounted thereupon a pair of spring yokes 15, fashioned from suitable resilient material such as spring wire, and provided at the center with one or more coils 16, which constitute helical springs. The yokes are mounted upon the shaft 14 by means of the coils 16, and have arms 17 extending in opposite directions. At the ends, the arms are formed into laterally disposed toes 18. Rollers 19, which may be of any suitable material, are used to hold the fabric 20 in engagement with the drum. The rollers, at the ends, have recesses 21-formed to receive the toes 18 of the yokes whereby the rollers are pivotally mounted in position and held in engagement with the drum.

The arrangement is such that the spring



coils 16 force the rollers against the drum by means of the arms 17. Consequently, if one of the rollers is forced away from the drum, the connecting yokes effect a firmer engagement of the other roller with the drum. The fabric 20 passes from the loom around the drum and between the same and the rollers, and subsequently around one of the rollers. If by accident a foreign body, such as a nail or a piece of wood, passes between the drum and one of the rollers, separating the same, the fabric would not be released thereby but would still be held in engagement with the drum by means of the other roller; it would in fact, be all the more firmly held by the drum, owing to the displacing of the first roller.

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

20 1. A take-up, comprising a drum for drawing the fabric from a loom, spring yokes pivoted at points adjacent to said drum and

each having arms extending in opposite directions, and rollers pivoted between the corresponding arms of said yokes and held against said drum thereby, whereby said rollers control each other. 25

2. A take-up, comprising a drum for drawing the fabric from a loom, a shaft, spring yokes each having oppositely extending arms and coils between said arms, said coils serving pivotally to mount said yokes upon said shafts, and rollers carried by said yokes between corresponding arms, said yokes resiliently holding said rollers in engagement with said drums. 30 35

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

BENJAMIN WEHRLLEN.  
FLOYD C. MATTHEWS.

Witnesses:

LOUIS A. WEHRLLEN,  
CHARLES W. WILLIARD.