

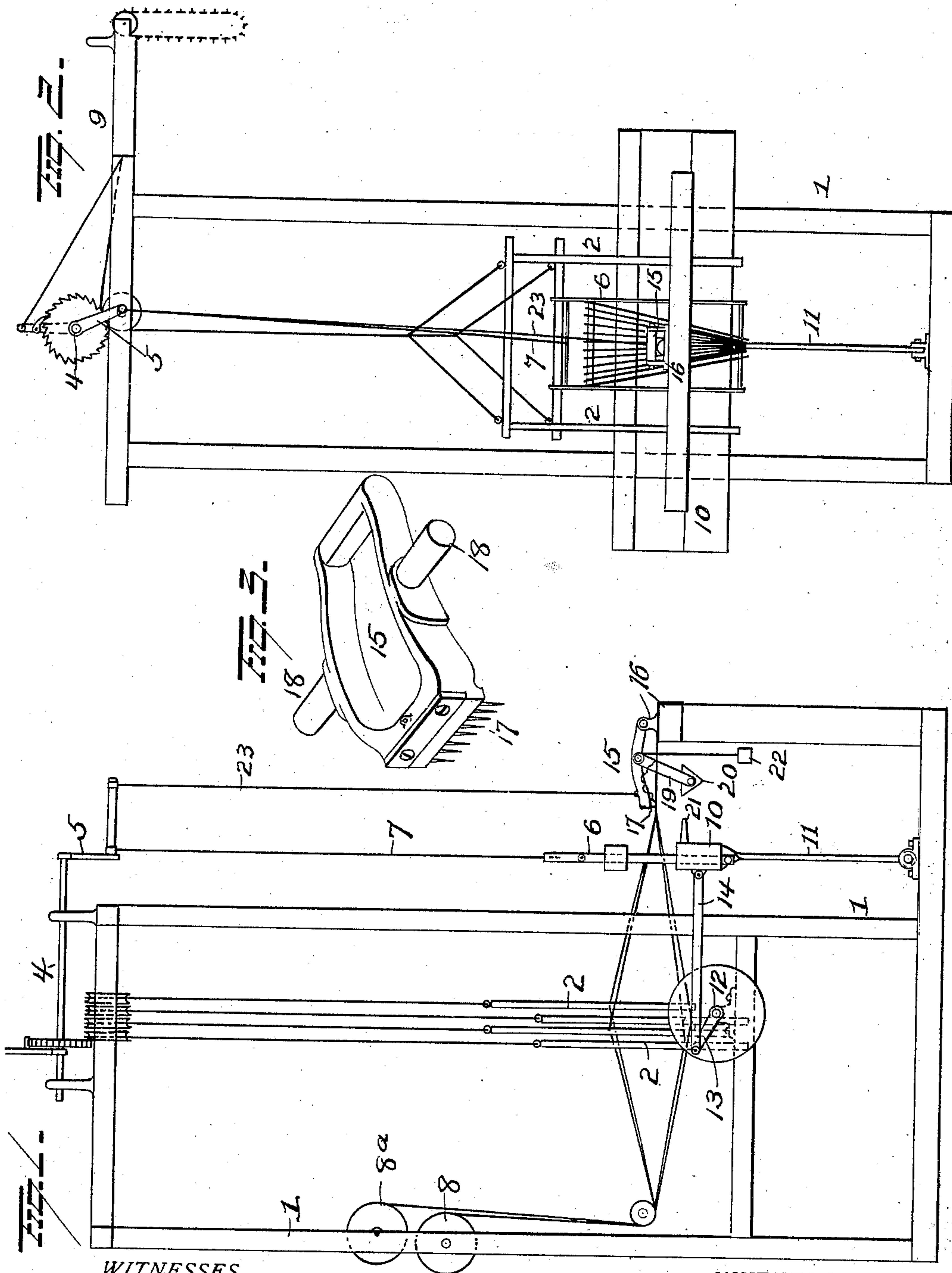
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W. C. FISHER.
LOOM FOR WEAVING CARTRIDGE BELT FABRICS.

APPLICATION FILED JULY 16, 1903.

NO MODEL.



WITNESSES

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LOOM FOR WEAVING CARTRIDGE-BELT FABRICS.

SPECIFICATION forming part of Letters Patent No. 757,102, dated April 12, 1904.

Application filed July 16, 1903. Serial No. 165,851. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. FISHER, a resident of Middletown, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Looms for Weaving Cartridge-Belt Fabrics; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in looms, and more particularly to means especially adapted for making cartridge-belts, the object of the invention being to provide in a single machine means for weaving a diverging integral web connecting the wide or body portion of the belt with the narrow or strap portion thereof and means for collecting the woven stock and securing the same to the wide or body portion of the belt by weaving to form cartridge-receptacles.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a loom embodying my improvements. Fig. 2 is an end view of the same, and Fig. 3 is a detail view of the collecting device.

1 represents the framework of the loom, and 2 the harness. A shaft 4 is mounted upon the framework and provided at one end with a crank-arm 5, with which the reed 6 is connected by a rod or wire 7. The members of the reed are made divergent from the lower to the upper end thereof, as shown in Fig. 2, for the purpose of increasing or diminishing the width of the woven belt. The threads pass from suitable rolls 8 8^a through the harness and reed in the usual way, and said harness and reed are manipulated by any desired pattern mechanism, located at 9. The lay 10 is secured to the reed in any preferred manner, and said lay (which may be of any preferred form of construction) is provided with

a depending leg 11, pivotally supported at its lower end to the base of the framework. 50

A shaft 12 is mounted in suitable bearings in the lower portion of the framework and provided with any desired number of crank-arms 13. A pitman 14 is pivotally connected at one end to each crank-arm 13 and at the other end to the lay 10 for operating the latter and the reed. A collecting device 15 is pivotally supported on a post 16 of the framework, and comprises a frame provided at its free end with a series of depending teeth 17, adapted to engage the woven fabric and collect the same for the purpose of forming a pocket or receptacle for cartridges, as will be hereinafter more fully explained. The collector 15 is provided at a point between its ends with laterally-projecting pins 18, from which fixed arms 19 depend, and these arms have secured thereto at their lower ends a cam-block 20, which when the lay moves forwardly is engaged by a pin 21 on said lay for the purpose of raising the collector 15. Thus it will be seen that each time the lay moves forwardly during the weaving of the pockets of the belt the collector will be raised while the lay is beating up the weft and that when the lay recedes the collector will drop and cause its teeth to engage the fabric and hold it. The downward movement of the collector can be conveniently insured by means of a weight 22, attached thereto. The collector is also connected with the crank-arm 5 by means of a rod or wire 23, so that when the reed is raised by the operation of the pattern mechanism to effect the weaving of the narrow or strap portion of the belt the collector will also be raised and rendered inactive while the narrow portion of the belt is being woven, the operation of the collector taking place only during the weaving of the wide or body portion of the belt, on which the pockets or receptacles are made. 80

In operating the machine to make a cartridge-belt the reed may be first adjusted in its raised position to effect the weaving of the narrow or strap portion of the belt, at which time the collector will be out of action, as be- 95

fore explained. At the conclusion of the weaving of the narrow or strap portion of the belt the reed will be gradually lowered, and during this descending movement of the reed the diverging web which is to connect the narrow with the wider or body portion of the belt will be woven. When the reed shall have descended sufficiently to cause the weaving of the body of the belt of the desired width, the collector will be brought into action, and as said collector oscillates it will act to collect or hold the fabric as it is woven, during which operation the regular take-up of the machine will be at rest. When sufficient slack fabric has been woven to make a pocket of the desired size, the regular take-up will be again started, and the body portion of the belt forming the bottom of the pocket will be woven under the said top of the pocket, and when a proper amount of the body of the belt has been woven the free end of the slack fabric will be secured to the body by weaving and then all the warp-threads will be woven into the belt to form a section of the body of the belt, after which another pocket and another body portion of the belt will be woven and secured in the same manner, and so on, until the full length of the body portion of the belt and its pockets shall have been completed. The reed will then be gradually raised to effect the weaving of the diverging connecting-web between the body of the belt and the strap portion at the other end of the belt, and, finally, the last-mentioned strap portion will be woven. It will be observed that the regular take-up of the machine operates only when the bottom

of a pocket-section or the body of the belt between pockets and the strap portions of the belt are being woven, and that the operation of the take-up is suspended while the top or slack portion of a pocket is being woven.

From the above description it is apparent that the belt will comprise a wide body portion having pockets and narrow strap portions united with the wider body portion by integral tapering portions.

Various changes might be made in the details of construction of the machine without departing from the spirit of my invention or limiting its scope, and hence I do not wish to limit myself to the precise details herein set forth.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a loom for weaving cartridge-belts, the combination of means for producing a body portion of varying width and slack portions for pockets, with means for collecting the slack portions and forming receptacles on the belt, both of said means coöperating to produce a wide body portion provided with pockets and narrow strap portions united with the wide body portion by integral tapering portions.

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

WILLIAM C. FISHER.

Witnesses:

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