

(No Model.)

2 Sheets—Sheet 1.

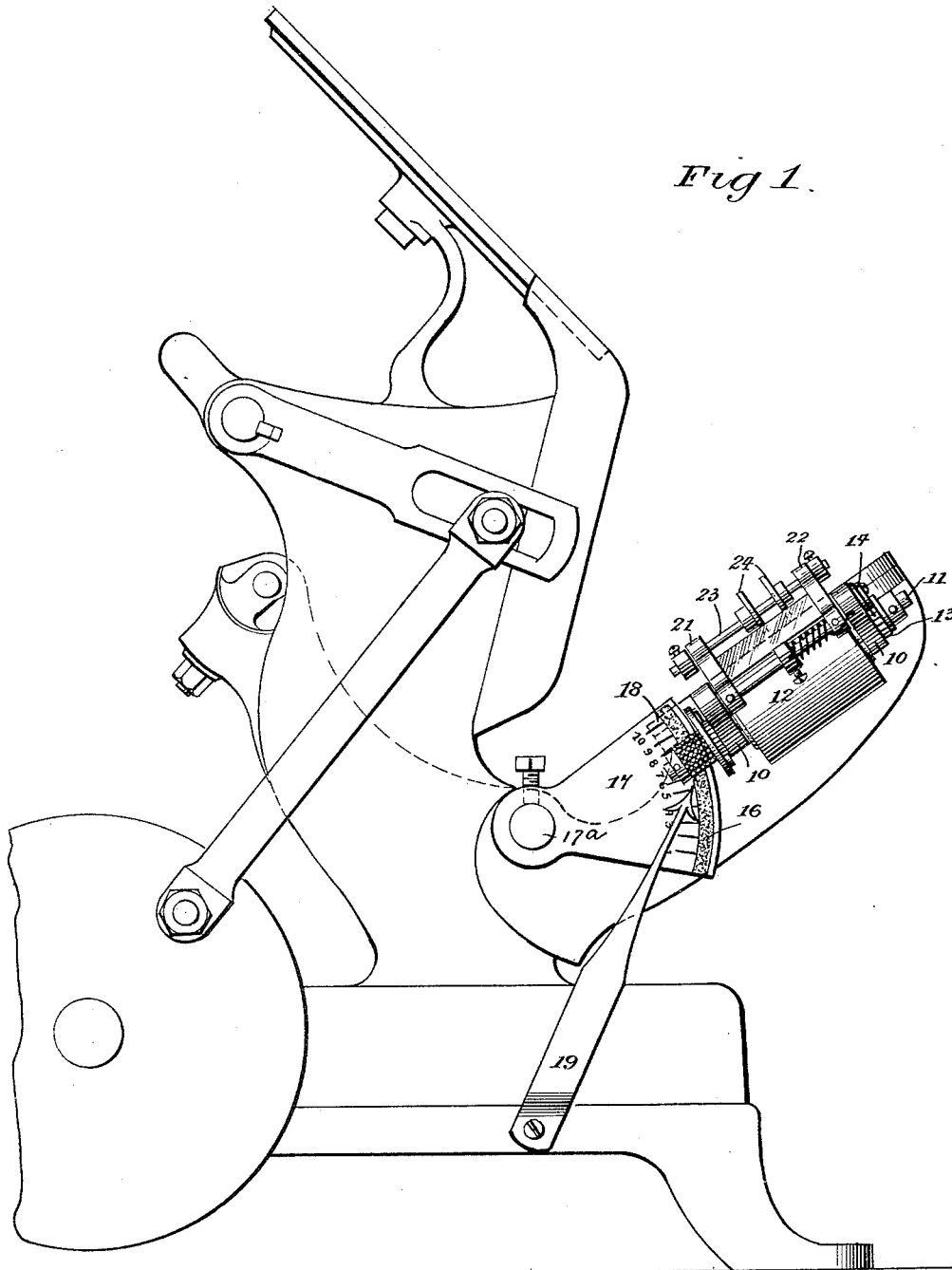
M. JACOBS.

AUTOMATIC FEED ATTACHMENT FOR PRESSES.

No. 458,904.

Patented Sept. 1, 1891.

Fig 1.



WITNESSES:

Paul J. Hobbs
E. M. Clark

INVENTOR:

Mark Jacobs
BY *Munn & Co*
ATTORNEYS

2 Sheets—Sheet 2.

AUTOMATIC FEED ATTACHMENT FOR PRESSES.

Patented Sept. 1, 1891.

Fig. 2.

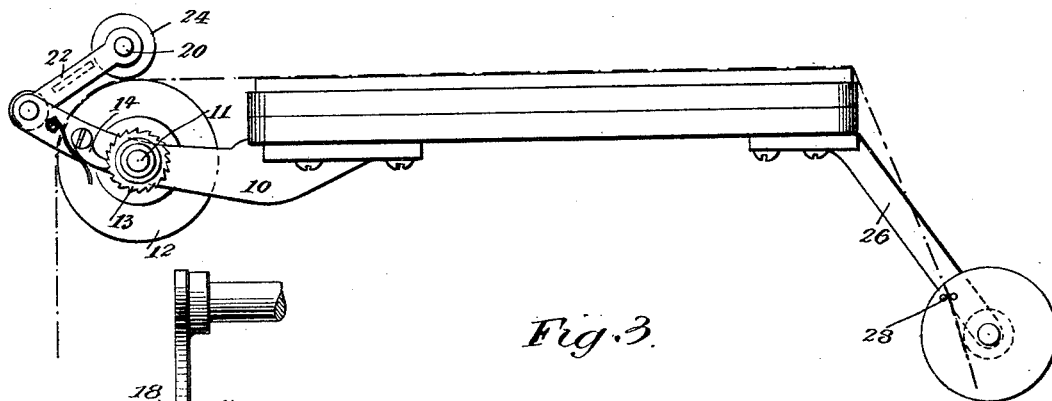


Fig. 3.

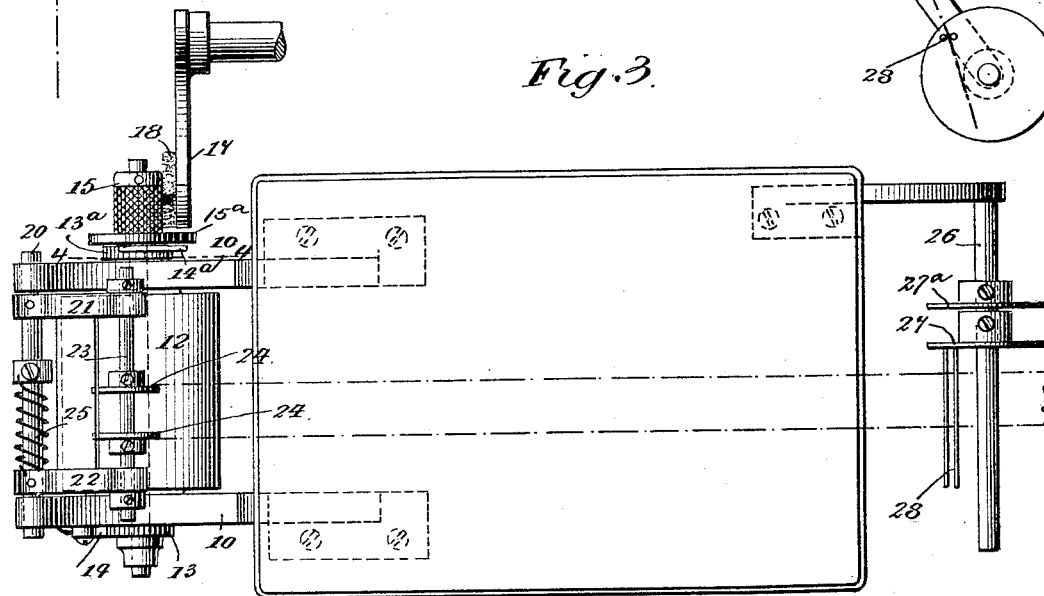
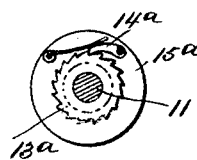


Fig. 4.



Paul John
E. M. Clark

Mark Jacobs

BY *Munn & Co*
ATTORNEYS

UNITED STATES PATENT OFFICE.

MARK JACOBS, OF NEW YORK, N. Y.

AUTOMATIC FEED ATTACHMENT FOR PRESSES.

SPECIFICATION forming part of Letters Patent No. 458,904, dated September 1, 1891.

Application filed December 30, 1890. Serial No. 376,222. (No model.)

To all whom it may concern:

Be it known that I, MARK JACOBS, of New York city, in the county and State of New York, have invented a new and useful Automatic Feed Attachment for Presses, of which the following is a full, clear, and exact description.

My invention relates to an automatic feed attachment for printing-presses, and has for its object to provide a device especially adapted for use in connection with the printing of tapes or ribbons of paper, silk, or fabric, which device is of exceedingly simple and durable construction and is capable of application to the platen of any press.

A further object of the invention is to so construct the device that the spacing of the printed matter upon the ribbon will be automatically performed.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is an end view of a press having the attachment applied thereto. Fig. 2 is a side elevation of the platen, and Fig. 3 is a plan view thereof. Fig. 4 is a section taken practically on the line 4 4 of Fig. 1.

Two arms 10 are attached to one end of the platen, preferably to the back thereof, and extend outward and slightly upward almost to a level with the face of the platen. One of the arms is located near each side of the platen, and in the arms, at or near their centers, a spindle 11 is journaled, upon which spindle, between the arms, a drum 12 is secured.

Upon one extremity of the spindle a ratchet-wheel 13 is secured, and a spring-pressed pawl, pivoted to one of the arms 10, engages with said ratchet-wheel. The opposite extremity of the spindle has loosely mounted thereon a friction-wheel 15, the face whereof is preferably toothed, serrated, or otherwise roughened. The inner end of the wheel is firmly secured to a disk 15^a, also loosely mounted upon the spindle, and in front of the disk, outside of the arm 10, a ratchet-wheel 13^a

is secured upon the spindle, engaged by a dog 14^a, pivoted upon the disk-section of the friction-wheel 15. The friction-wheel 15 rotates the drum by engagement with the roughened or rack surface 16, produced upon the outer face of a segment 17, which segment is pivotally secured upon a shaft 17^a at one end of the platen, and may be locked in any suitable or approved manner—as, for instance, by a setscrew passed through the segment to an engagement with the shaft, as shown in Fig. 1. The movement of the friction-wheel is communicated to the drum-spindle by the engagement of the dog 14^a with the spindle ratchet-wheel 13^a. Thus the shaft is rotated through the medium of the friction-wheel, the ratchet-wheel and dog located at one end, and is prevented from moving in any but one direction through the medium of the pawl 14 and ratchet-wheel 13, located at the opposite end of the spindle. The segment 17 at its roughened surface has a scale 18 produced thereon, and a pointer 19 is secured to the base of the press and extends over the scale, as is also best shown in Fig. 1.

In the outer ends of the arms 10 a shaft 20 is loosely fitted, and upon the said shaft two arms 21 and 22 are secured, which arms extend upward over the drum and have a spindle 23 journaled in their inner ends.

Upon the spindle 23 two friction-wheels 24 are secured, adapted to press against the ribbon, and the said friction-wheels 24 may be adjusted to or from each other upon the spindle. The friction-wheels are normally held in engagement with the drum 12 by means of a spring 25, which is secured at one end to a shaft 20 and at its other end to one of the arms, either 21 or 22.

At the end of the platen opposite to that to which the device is attached a downwardly-extending angle-arm 26 is secured, the lower member of which arm is circular and is parallel with the end of the platen, although located some distance below it, as illustrated in Figs. 2 and 3.

Upon the circular member of the angle-arm 26 a bobbin or reel of any approved construction is held to loosely turn, said bobbin or reel being adapted to contain the paper, silk, or fabric tape to be printed, and ordinarily, in connection with the bobbin or reel, a disk

27 is secured upon said member, provided with two spaced rods 28, located at a right angle to the outer face of the disk, which rods extend longitudinally over the reel or 5 bobbin and serve as a guide, the ribbon passing between them. A disk 27^a may also be placed upon the arm 26 to be used as a back-stop for a bobbin when no guide is required, and although both disks are shown in the 10 drawings upon the arm the disk 27^a is not used when the disk 27 is employed, and the disk 27 must be removed before the disk 27^a can be used.

In operation, the ribbon is drawn from the 15 reel through the guide 28 and is passed between the drum 12 and the friction-wheels 24, bearing thereon. The segment 17 is then adjusted so that the pointer, for instance, will be at the center of the scale, whereupon, if 20 the width of the segment at its larger end is five inches the spacing between the matter printed upon the tape will be two and a half inches. The moment that the platen is carried upward in direction of the body of the 25 press the friction-roller 15, traveling over the roughened surface of the segment, revolves the drum 12 sufficiently to cause the tape to change its position longitudinally the desired distance, so that when the tape is brought 30 into engagement with the type the matter will be printed upon the former at the desired place. When the platen is carried downward, the pawl 14 prevents the drum from revolving. Upon the next upward move- 35 ment of the platen the drum is also revolved a sufficient distance to properly present another unprinted surface to the type, and when the device has once been set the operation of

printing may be carried on continuously and the spacing between each impression will be 40 automatically and evenly accomplished.

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

1. In a press, the combination, with a platen 45 and a reel, of a feed attachment secured to the platen, consisting of a shaft provided with a driving friction-wheel, a drum mounted upon the shaft, a spring-pressed shaft located 50 above the drum, friction-wheels adjustable upon the spring-pressed shaft, a stationary segment provided with a friction-surface with which the driving friction-wheel engages, and a pawl or detent limiting the movement of the drum to one direction, substantially as 55 and for the purpose specified.

2. The combination, with the platen of a press, a reeling device attached thereto, and a segment pivoted to the press, having a scale 60 produced thereon and a roughened surface contiguous to the scale, of a feed device attached to the platen, consisting of a shaft having a drum affixed thereto and a friction-wheel located at one extremity adapted for 65 engagement with the roughened surface of the segment, a spring-pressed shaft located above the drum, friction-wheels adjustable upon the shaft and adapted for engagement with the drum, and a pawl-and-ratchet mechanism preventing the movement of the drum 70 in any but one direction, substantially as described.

MARK JACOBS.

Witnesses:

J. FRED. ACKER,
C. SEDGWICK.