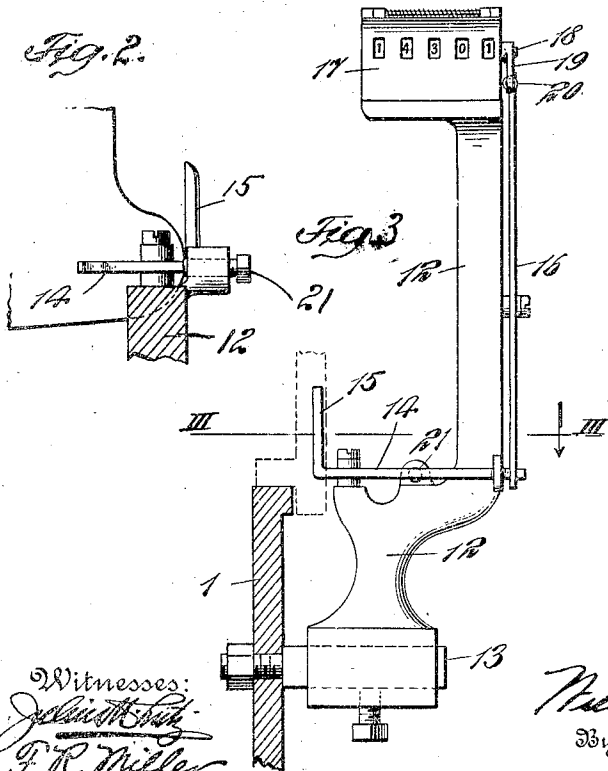
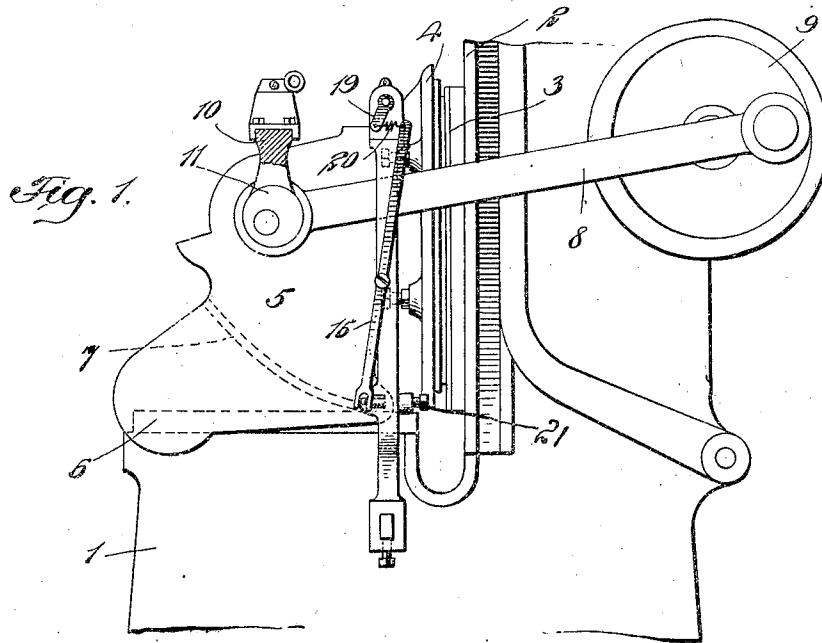


W. J. RAMSAIER.
COUNTING ATTACHMENT FOR PRINTING PRESSES.
APPLICATION FILED JAN. 14, 1911.

992,249.

Patented May 16, 1911.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM J. RAMSAIER, OF NEW YORK, N. Y.

COUNTING ATTACHMENT FOR PRINTING-PRESSES.

992,249.

Specification of Letters Patent.

Patented May 16, 1911.

Application filed January 14, 1911. Serial No. 602,610.

To all whom it may concern:

Be it known that I, WILLIAM J. RAMSAIER, a citizen of the United States, and resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Counting Attachments for Printing-Presses, of which the following is a specification.

This invention relates to the combination of a printing press and a counting device designed particularly for counting the number of impressions made by a platen printing press.

The main object of the invention is to provide a simple, compact and accurately operating device so constructed that it may be secured to a printing press in proper position for operation and with the numbers of the counter in such position that they may be at all times observed by the press operator as he feeds paper to the press.

Another object of the invention is to construct the device with an independent supporting frame or standard carrying all of the operating parts of the device, and which may be connected to a stationary part of the press frame by a single attaching bolt.

Another object of the invention is to so place the counting attachment that it will be operated by the platen carrying means when said platen reaches the printing point, whereby the reciprocation of the platen without printing will not operate the counter.

Other important objects and advantages of the invention will appear hereinafter.

In the drawings, Figure 1 is a side elevation of a portion of a platen printing press known as "Colt's Armory" press, with my counting attachment applied thereto; Fig. 2 an enlarged detail of a portion of the counting attachment, the parts being in the position shown in Fig. 1 with the platen at the printing point; Fig. 3 a side elevation of the counting attachment, the supporting frame of the printing press being shown in vertical section; and Fig. 4 a plan view of the operating lever, the supporting standard being shown in horizontal sectional view.

Referring to the various parts by numerals 1 designates the supporting frame of the press; 2 the stationary bed, and 3 the type form supported by the bed. The printing platen 4 is carried by a bridge 5 which rocks upon ways or tracks 6 on the frame, the bridge being provided with curved rockers

which work on said ways. The bridge is rocked by means of a pair of pitmen or connecting rods 8, (only one of which is shown in the drawings,) and said rods receive motion from a crank disk 9, said disk being rotated in any suitable manner. The bridge is adjusted toward and from the bed by means of a throw-off bar 10 connected to eccentric sleeves 11 which enter the sides of the bridge, so that by throwing the said throw-off bar rearwardly the bridge will be moved rearwardly sufficiently to prevent the platen engaging the type form so that upon the forward movement of the bridge no impression will be made. All of these features are old and well-known in the aforesaid "Colt's Armory" universal printing press and form no part of my invention.

My counting attachment is designed to be operated by the forward movement of the bridge, and the operating lever of the attachment is designed to be so placed that it will be engaged and moved by the forward edge of the bridge just as the platen is making an impression, and the said lever is so adjusted and positioned that it will not be operated when the throw-off bar is moved rearwardly to prevent the platen making an impression, as will be fully hereinafter described.

The operating parts of the counter are supported on a standard 12 which standard is adjustably supported on a stud 13 secured in the side of the press frame below the forward end of one of the tracks or ways 6. These presses as they are now manufactured are provided with an aperture in the frame at this point and the standard is so designed that the supporting stud 13 may be secured in this aperture, thereby avoiding the necessity of forming a special aperture for the reception of this stud. On the standard is pivoted a horizontally swinging operating lever 14, having its shorter arm extending inwardly toward the machine frame and in the line of travel of the adjoining side of the bridge. This lever is so positioned with respect to the travel of the bridge that it will be engaged by and swung inwardly toward the printing form and type bed just as the bridge completes its inward swinging movement. The inner end of this lever terminates short of the side of the press and has an upwardly turned arm 15 so that said arm will be engaged by the side of the bridge should there be a variation in the height of

the lever caused by variations in the vertical position of the stud 13. By this means I am enabled to use the aperture in the press frame even should said aperture vary in its vertical position, provided, however, said variation does not exceed the length of the arm 15. The outer end of the longer arm of the lever 14 engages the lower end of a vertical counter-actuating lever 16 which is pivoted on the side of the standard. On the upper end of the lever, and substantially on a level with the upper surface of the bridge is mounted a counter 17 of any suitable form. This counter is operated through a shaft 18 on the outer end of which is secured an operating arm 19. The upper end of the lever 16, is connected to the lower free end of the counter-operating arm 19 by means of a spring 20 to provide a yielding connection between said lever and arm. As the counter-operating arm has a fixed limit of movement and the counter-actuating lever may vary slightly in its length of movement, the spring will yield to compensate for this differential movement.

In order to adjust the operating lever accurately and to bring its inner end into proper position to be engaged by the forward or inner edge of the bridge at the proper instant, an adjusting screw 21 is mounted on the standard and engages the rear edge of said lever. By means of this screw the lever may be turned on its pivot and accurately adjusted to secure the proper operation of the counting device.

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

1. The combination of a printing press provided with a rocking bridge carrying a printing platen, a horizontal stud mounted in the side of the press frame, a vertical standard adjustably mounted on said stud, a horizontal operating lever carried by said standard, one end of said lever being in position to be engaged by the rocking bridge as said bridge completes the printing movement, a vertically disposed arm at the inner end of said lever, a counter-actuating lever pivotally mounted on the standard and connected to the operating lever, a counter carried by the standard, and yielding means connecting the actuating lever to the said counter whereby as the bridge completes the printing movement the counter will be actuated.

2. A counting attachment for printing

presses comprising a standard, a horizontal operating lever carried by said standard, a vertical actuating lever pivoted to said standard and operatively connected with the operating lever, a counter, a counter-operating arm connected thereto, and a spring device connecting the counter arm to the upper end of the actuating lever.

3. A counting attachment for printing presses comprising a standard, a horizontal operating lever carried by said standard, a vertical actuating lever pivoted to said standard and operatively connected with the operating lever, a counter, a counter-operating arm connected thereto, a spring device connecting the counter arm to the upper end of the actuating lever, and means for adjusting the operating lever on its pivot to properly position said lever with respect to the printing press operating parts.

4. A counting attachment for printing presses comprising a standard, a horizontal stud adapted to be supported in the side of the press frame, means for adjustably securing the standard on said stud, whereby said standard may be adjusted toward or from the side of the press, a horizontal operating lever carried by said standard, the inner end of said lever being extended in a vertical plane, a vertical actuating lever pivoted to said standard and operatively connected with the operating lever, a counter fixed to the top of the standard above the horizontal operating lever, a counter operating arm connected to the counter, and means connecting the upper end of the actuating lever with the counter arm.

5. A counting attachment for printing presses comprising a standard, a horizontal operating lever carried by said standard, a vertical actuating lever pivoted to said standard, and operatively connected with the operating lever, a counter, a counter operating arm connected thereto, means connecting the end of the counter arm to the upper end of the actuating lever, and means for adjusting the operating lever on its pivot to properly position said lever with respect to the printing press operating parts.

In testimony whereof I hereunto affix my signature in the presence of two witnesses this 7th day of January 1911.

WILLIAM J. RAMSAIER.

Witnesses:

WM. R. DAVIS,
F. R. MILLER.