No. 868,618. PATENTED OCT. 15, 1907.

J. E. TUCKER.

PAPER SHEET FEEDING MECHANISM FOR PRINTING PRESSES.

APPLICATION FILED JUNE 19, 1906.

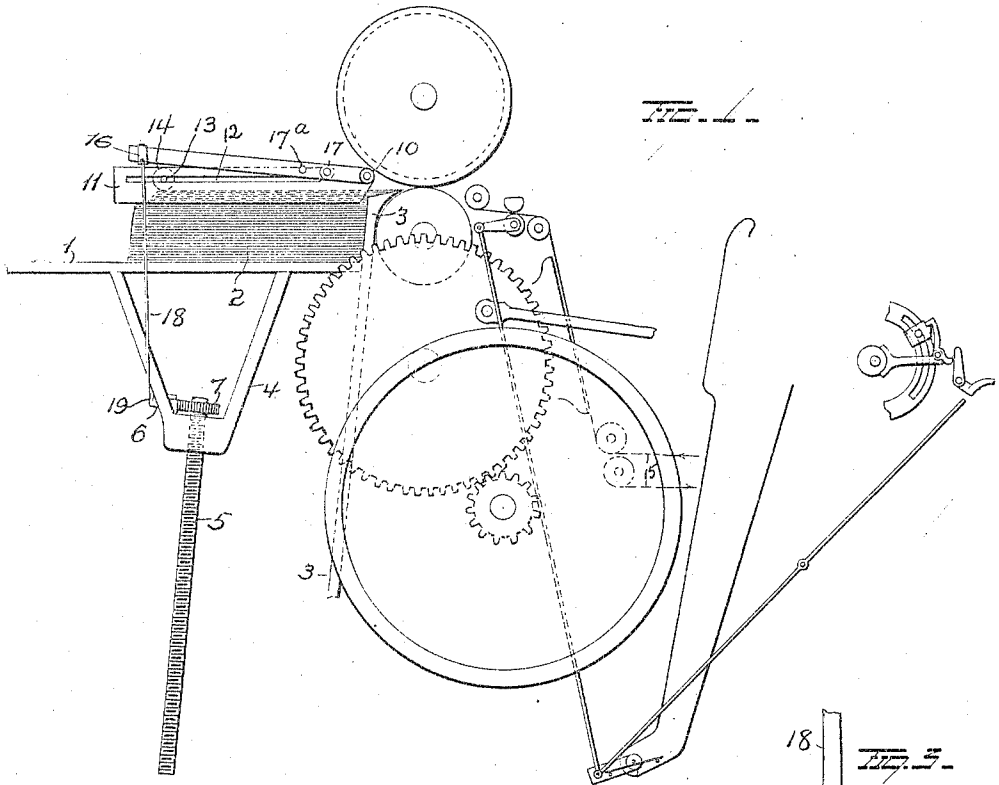


FIG. 1.

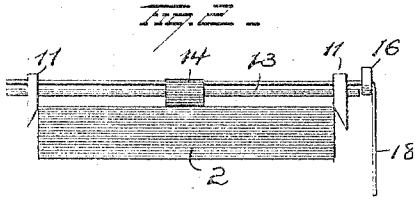


FIG. 2.

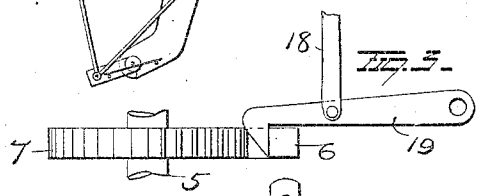


FIG. 3.

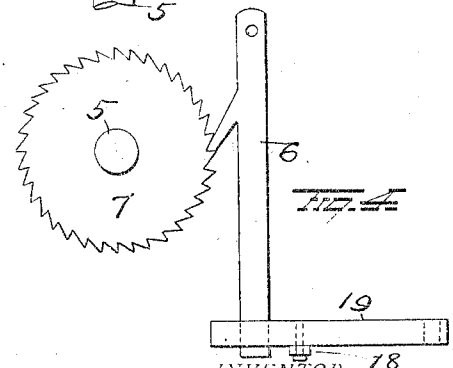


FIG. 4.

WITNESSES

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JUNIUS E. TUCKER, OF MEMPHIS, TENNESSEE, ASSIGNOR OF ONE-HALF TO WILLIAM S. BRIAN, OF MEMPHIS, TENNESSEE.

PAPER-SHEET-FEEDING MECHANISM FOR PRINTING-PRESSES.

No. 868,618. Specification of Letters Patent. Patented Oct. 15, 1907.

Original application filed December 14, 1905, Serial No. 291,745. Divided and this application filed June 19, 1906. Serial No. 322,426.

To all whom it may concern:

Be it known that I, JUNIUS E. TUCKER, a resident of Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Paper-Sheet-Feeding Mechanism for Printing-Presses; 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 paper sheet feeding mechanism for printing presses, the object of the invention being to provide improved automatic means for controlling the upward feed of the paper pile, and the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

This application is a division of my application filed Dec. 14th, 1905 (Serial No. 291,745).

In the accompanying drawings, Figure 1 is a fragmentary view in side elevation illustrating my improvements. Fig. 2 is an end view, and Figs. 3 and 4 are views of details of construction.

1 represents a movable platform support for the pile of paper sheets 2, their forward edges being supported against a guide-plate 3. Secured to the bottom of platform 1, is a bracket 4, having a screw threaded socket to receive a screw 5 which latter is turned by a ratchet dog 6 engaging a ratchet wheel 7 secured on the screw, and said dog is reciprocated by the movement of any suitable portion of the press operating mechanism.

The framework of the press (not shown) supports a rod 10 above the pile of sheets, and horizontally disposed guide plates 11, are pivoted at one end on the rod 10 and are made with elongated slots 12, to receive a rod 13, adjustable therein according to the length of the sheets. The rod 13 carries a roller 14, which rests on the top sheet of the pile, and supports this end of the guide plates. These plates have beveled lower edges to exactly position the top sheet before its passage to the feeding tapes 15, the operation of which will more fully hereinafter appear.

A lever 16 is pivoted at one end on rod 10 and comprises two sections hinged together as shown at 17, and fulcrumed between said hinge 17 and the long end of the lever, to a rod 17^a on plates 11. The long end of the lever 16 has a depending rod 18 connected at its lower end, to the outer end of a hinged catch 19 which latter is adapted when permitted to fall to engage the dog 6 and hold the same out of contact with the ratchet wheel, and thereby stop the upward movement of the pile of paper sheets until the dog is released.

The operation of my improvements above described is as follows:—As the pile of sheets is moved upwardly, the roller 14 on the top sheet will be elevated, and the guide plates 11 will be moved. If the sheets are fed off the top to compensate for the upward movement of the pile, there will be no appreciable change in the position of the guide plates, but should the pile be elevated too rapidly, the upward movement of the guide plates will cause the lever 16 to break at its hinge 17 and the long end to fall, permitting the catch 19 to engage dog 6 and prevent it from operating the ratchet wheel, thus stopping the upward feed of the pile, until a sufficient number of sheets have been fed off to allow the parts to assume their former normal positions.

A great many slight changes might be made in the general form and arrangement of the parts described without departing from my invention and hence I would have it understood that I do not restrict myself to the precise details set forth but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. In an apparatus of the character described, the combination with a platform or support for a pile of paper sheets, of a screw to feed the platform upward as sheets are removed from the top of the pile, a ratchet wheel on the screw, a dog for operating the ratchet wheel to turn the screw, a lever hinged between its ends, a catch connected to one end of the lever and adapted when depressed to engage the dog and prevent said dog from operating the ratchet wheel, and means supported on the pile of paper sheets and adapted to force the lever to bend at its hinge and the catch to hold the dog out of operative relation to the ratchet wheel, when the pile is elevated too rapidly.

2. In an apparatus of the character described, the combination with a platform or support for a pile of paper sheets and means for feeding the platform upward as sheets are removed from the top, of a cross rod above the pile of sheets, guide plates pivotally supported at one end on the rod, located beside the pile of sheets and having beveled inner faces to guide the upper sheets into proper position, a rod or shaft supported in slots in the guide plates, a roller on said rod or shaft resting on the top sheet of the pile, and means operated by said guide plates to stop the upward feed of the pile when said feed is too rapid.

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

JUNIUS E. TUCKER.

Witnesses:

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