E. J. CASEY.

PRINTING PRESS.

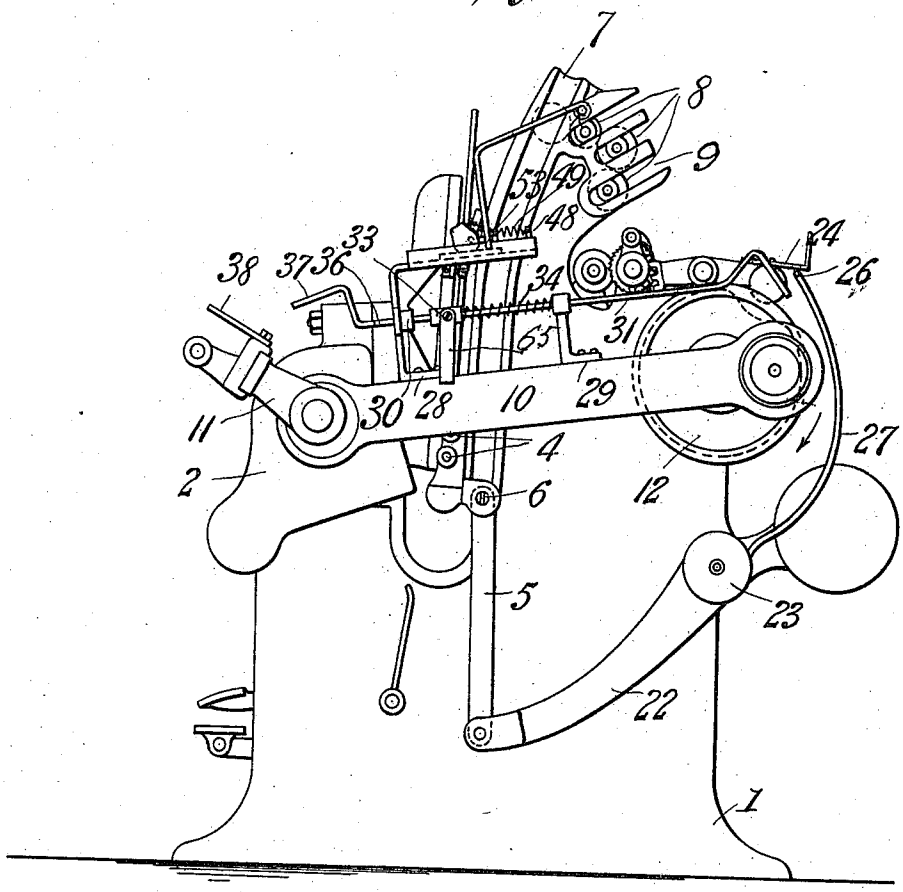
APPLICATION FILED FEB. 9, 1910.

989,334.

Patented Apr. 11, 1911.

2 SHEETS—SHEET 1.

Fig. 1.



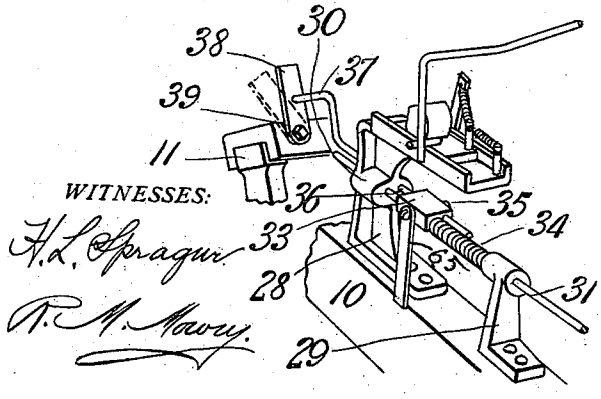


Fig. 4.

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2 SHEETS—SHEET 2.

Fig. 3.

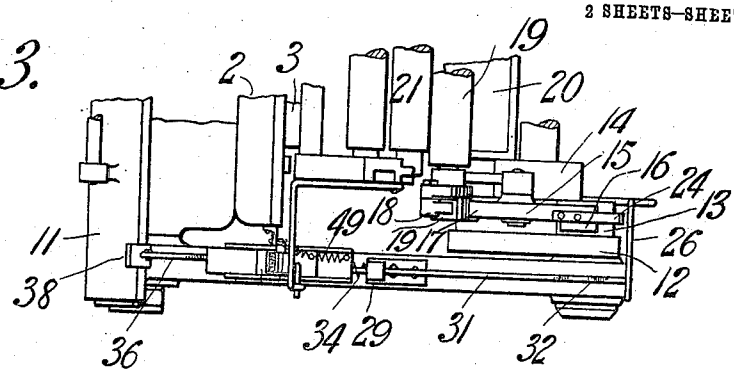
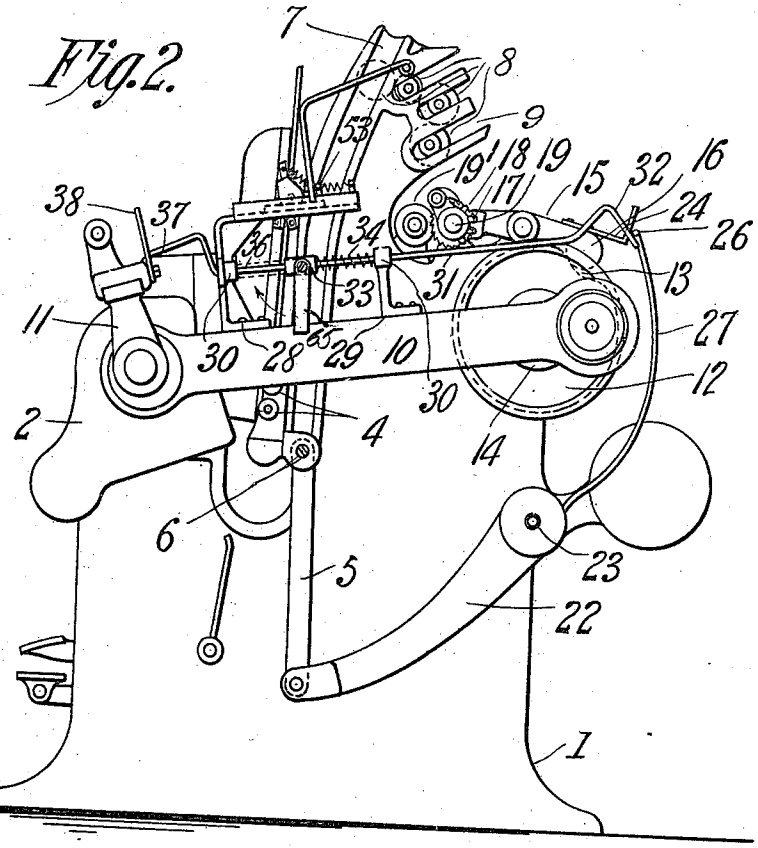


Fig. 2.



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UNITED STATES PATENT OFFICE.

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PRINTING-PRESS.

989,334. Specification of Letters Patent. Patented Apr. 11, 1911.

Application filed February 9, 1910. Serial No 542,919.

To all whom it may concern:

Be it known that I, EDWARD J. CASEY, a citizen of the United States of America, and resident of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Printing-Presses, of which the following is a full, clear, and exact description.

My invention relates to improvements in printing presses and has particular reference to an attachment to what are known as job printing presses, operated either by foot or other power; and the leading object of my invention is the provision of an attachment which will operate in conjunction with the ink distributing mechanism to stop the supply of ink when an impression is not desired, which will permit the constant and regular distribution of the ink, and which attachment can be applied at a very small expense to presses in use or upon the presses at the time of their manufacture.

Another object of my invention is the provision of an ink regulating attachment for printing presses which is entirely under the control of the press attendant or feeder, and which is thrown into or out of operation at will by the usual mechanism of the press; and which attachment comprises few working parts, insuring simplicity and durability of construction to withstand the hard usage to which the attachment is ordinarily subjected, and which is entirely efficient and practical in every particular.

With these objects in view, the invention consists in the combination with a printing press, of a counting and ink supply regulating mechanism embodying novel features of construction, combination and arrangement of parts for service substantially as disclosed herein.

I have illustrated in the accompanying drawings an embodiment of my improvements which disclose the best means I have at this time devised for the accomplishment of the objects and functions of this invention; and in said drawings:—

Figure 1 represents a view in elevation of one side of a job printing press equipped with my improvements, the parts being in the position they occupy when the ink supplying means are out of commission and rendered inoperative. Fig. 2 represents a similar view, the parts being in the position they assume when the press is making the regular and proper impressions, and the ink is being supplied in the natural and usual manner. Fig. 3 represents a top plan view of the attachment and the parts of the press which operate in conjunction with the attachment. Fig. 4 represents a perspective view of the main part of my attachment to more clearly illustrate details of construction.

Referring to the drawings, in which similar numerals designate corresponding parts in the several views, the numeral 1 denotes the outer side of the frame, 2 the reciprocating platen, 3 the type bed, 4 the inking rollers, 5 the lever connected at its upper end with the guide member 6 traveling in the guide way or groove 7 of the frame, 8 the series of distribution rollers mounted in the open bearings 9 of the frame, 10 the connecting rod having one end connected to the platen 2, 11 the shifting arm connected eccentrically with the platen and operating in the well known manner to bring the platen against the type in the bed 3 or to retain the platen a sufficient distance from the type bed to prevent impressions, 12 the disk to which the other end of the connection 10 is eccentrically connected, 13 the cam disk on the shaft 14, 15 the weighted lever whose outer weighted end 16 engages the cam 13 at regular intervals and operates the rack 17 turning the gear 18 on the shaft 19, which by means of a pawl and ratchet connection operates the supply roller 19′ which takes the ink directly from the font 20 and supplies a sufficient quantity to the roller 21 from which the ink is directly supplied to the series of rollers 8; and pivotally connected to the lower end of the attachment link or pitman 5 is the weighted or counterpoise lever 22, the shaft 23 of which is mounted in the frame 1.

The parts referred to are of the well known construction constituting the working mechanism of a type of what are known

as job presses, and a more definite description of their construction is not deemed necessary; and the operation will be readily understood.

It is evident that the stationary bed carries the type and that the platen is reciprocated to bring the paper against the type to receive impression therefrom, that the inking rollers may have back and forth movements over the face of the type to receive their supply from the series of distribution rollers which are fed from the supply rollers in a sufficient quantity directly from the ink supply font by the contact of the cam with the weighted lever which imparts a partial rotary movement to the ink supply roller located in the font; and it is in connection with the parts referred to that I will employ my attachment which I will now describe.

Upon the upper side of the weighted lever and adjacent the weight thereof I mount the strip or plate 24, the outer end of which is adapted to be retained when it is desired to discontinue the supply of ink in an elevated position upon the arm 26, formed on the rod 27, having its lower end connected to the shaft 23, as clearly shown in Fig. 1; and when in this position it will be observed that the weighted lever is retained out of operation and consequently the supply of ink is stopped.

Mounted in brackets 28 and 29 carried by the connection 10 and in bearings 30 of said brackets is the rod 31, one end of which is formed with an engaging hook 32 and upon which is mounted the block 33, said rod being controlled by the coil spring 34 bearing at one end against the bracket 29 and at the other end against the block 33; and the said block also has mounted therein parallel with the rod 31 the arm 36 secured therein by the screw 35, said arm being also mounted in bearings 30 of the bracket 28 and having the engaging portion 37 adapted to be brought in contact with the lug or strip 38 carried by the lever 11, said contact strip 38 being pivoted at 39 to permit its being swung into and out of operation as desired. This mechanism constitutes the ink regulating organization of my invention; and it will be seen that when the press is operating regularly and the ink is being supplied in the proper quantity, the impressions are being made continuously, the contact plate 38 at each impression caused by the movement of the platen is brought into engagement with the engaging portion 37 which moves the rod 31 and causes the hooked portion 32 of said rod to engage the bend 26 on the arm or rod 27 holding the rod in the position shown in Fig. 2, permitting the weighted lever to move the proper distance to supply the ink in regular order.

Now in the event that it is desired to stop the supply, the shifting mechanism 11 is operated, which moves the platen away from the die type bed and permits the bend 26 to remain beneath the contact plate 24 whereby the weighted end of the lever 16 is held in its elevated position and out of contact with the cam 13. The supply of ink is thus stopped as will be readily understood. The plates or strips 38 on the platen operating means and the plate 24 on the weighted lever are pivoted to permit them to be swung into or out of position as circumstances may require.

It is evident that my attachment can be supplied readily and at small expense, and that it provides an efficient and practical means for regulating the supply of ink insuring the saving of ink as well as the feeding of only the proper amount to give uniform impressions and that an accurate counting of the impressions is made.

The latch bar or member 65 is hung on the rod 31 so that when swung from its depending position to engage the part 30, the member 65 will hold the rod 31 back so that the inking rolls will ink the type uniformly.

I claim:—

1. In a printing press, the combination with a frame, of a rocking platen, a rotating cam, a connection between the cam and the platen, a rod carried by said connection and adapted to have its outer end engaged by the platen mechanism, an inking roller, an actuating member for said inking roller, said member being actuated by said cam, and means for holding said ink roller actuating member out of contact with said cam, the inner end of said rod being adapted to engage said means to move it out of engagement with said ink roller actuating member to permit said member to move into engagement with said cam.

2. In a printing press, the combination of the frame, the rocking platen, the shifting mechanism carried by the platen, the cam disk, the connection between the platen and cam disk, the weighted lever, engaging the cam disk, the ink supply operated thereby, the inking rollers, the mechanism for operating said rollers, the rod connected at one end with said mechanism and having its other end adjacent the weighted lever, a contact plate on the weighted lever, a sliding spring-controlled rod mounted on the connection between the platen and cam disk having one end adjacent the shifting mechanism and the other end adjacent the plate on the weighted lever and rod.

3. In a printing press, the combination of the frame, platen, ink supply and inking mechanism, means for actuating said mechanism, a connection between the platen and said means, a rod mounted on said connec-

tion consisting of two parts yieldingly connected, means carried by the platen for engaging one part of the rod, means for holding the ink-supply mechanism out of action, and means carried by said rod for moving said holding means out of engagement with the ink supply mechanism.

Signed by me at Springfield, Mass., in presence of two subscribing witnesses.

EDWARD J. CASEY.

Witnesses:
G. R. DRISCOLL,
WM. S. BELLOWS.