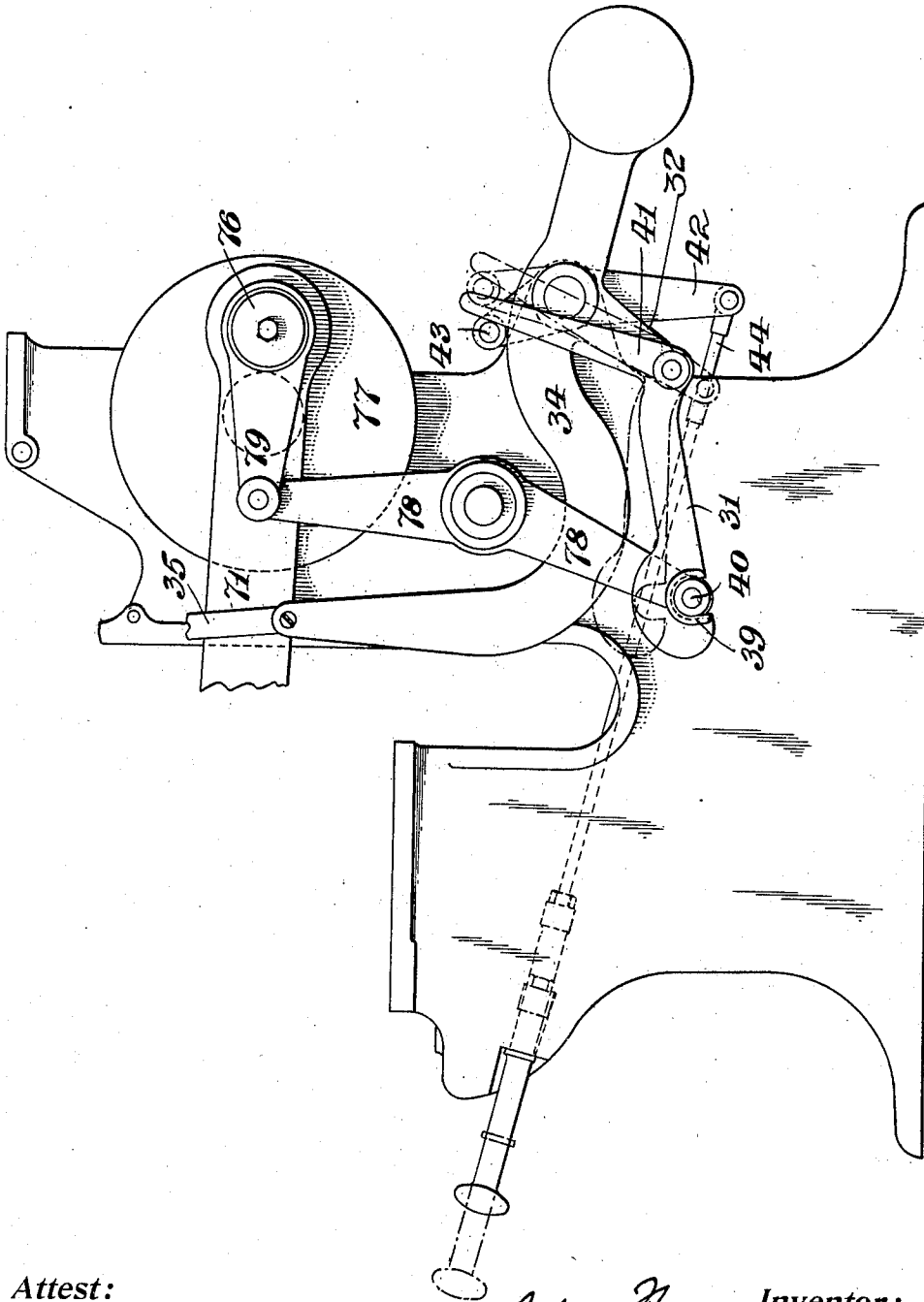


J. THOMSON.
PRINTING PRESS.

APPLICATION FILED AUG. 12, 1908.

980,453.

Patented Jan. 3, 1911.



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UNITED STATES PATENT OFFICE.

JOHN THOMSON, OF NEW YORK, N. Y., ASSIGNOR TO JOHN THOMSON PRESS COMPANY,
OF JERSEY CITY, NEW JERSEY, A CORPORATION OF NEW JERSEY.

PRINTING-PRESS.

980,453.

Specification of Letters Patent.

Patented Jan. 3, 1911.

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To all whom it may concern:

Be it known that I, JOHN THOMSON, a citizen of the United States, and a resident of the borough of Manhattan of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Printing-Presses, of which the following is a specification, reference being had to the accompanying drawing, forming a part hereof.

The invention relates more particularly to improvements in the mechanism for actuating the form-inking carriage of printing presses.

It is desirable to be able, at will, to leave the form-inking rollers and their carriage remaining upon the inking cylinders, or other ink distributing agent, while the rest of the machine continues in operation; and it is the object of this invention to improve upon the apparatus heretofore employed for this purpose, both as to compactness and simplicity of construction and as to ease and automaticity of operation.

For the purpose of illustrating the improvements, the single figure of the drawing shows, in side elevation, a sufficient portion of a printing press with the improvements embodied, to convey a complete understanding of the invention.

In said drawing, for the sake of simplicity, the form-inking carriage itself has been omitted as well as the inking cylinders or other ink distributing device, but inking cylinders will be readily understood to be located at the top of the press as usual and the carriage to move in a generally vertical direction from the cylinders above down to and across the form below and back again. In the position which the parts occupy as shown in the full lines of the drawing, the carriage is in its uppermost position and the form-rollers carried thereby are impinging upon the ink-distributing cylinders. The immediate connection between the carriage and its actuating mechanism is a link 35, (shown partly broken off) which is pivoted to one end of a lever 34, the other end of which is weighted to counter-balance the weight of the carriage and smooth the working of the parts. Through the medium of an arm 32 attached to this lever, it is connected to another lever 78, by a link 31. The upper end of the lever 78 is connected by means of an arm or link 79 to the crank

pin 76 upon the crank disk 77 which, through the medium of said crank and the connecting rod 71 (shown partly broken away) effects the movement of the platen (not shown).

From the drawing the link 31 will be seen to be formed at one end with a hook member 39 which normally embraces a pin 40 upon the lower end of the lever 78, and with an arm 41 secured to the other end and extended upwardly in front of the lever 34. Thus the link 31 becomes a lever, the upwardly extending arm 41 being adapted to be engaged by a trip in order to swing it upon its pivot and disengage its hooked end from the pin 40. For this purpose, another lever 42 may be provided, being preferably pivoted along the same line as and behind the lever 34, and having a stud 43 in its upper end long enough to engage the arm 41. The lower end of the lever 42 is connected to a rod 44 which extends to the front of the press and through which the position of this lever may be controlled by the pressman.

The operation of the device is as follows: Normally, the hook 39 is in engagement with the pin 40; and while this pin reciprocates on the end of the arm 78, the link 31 with its upwardly extending arm 41, swings from the position shown in the full lines toward the right and back again. Thus, while the stud 43 is in its full line position, it does not interfere with these swinging parts. When the pressman wishes to disconnect the link 31 from the pin 40, he pulls the rod 44 toward him which operation moves the stud 43 upon the upper end of the lever 42 out into the path of the swinging arm 41. The obvious result of this will be to check the return of the arm 41 to its full line position and thus to raise the hook 39 above the pin 40 just before the latter reaches its extreme left position. The lever 78 will continue its movement as before and the pin 40 will reciprocate underneath the link 31, and the latter will be held in the position shown in broken lines so long as the rod 44 remains in its extended position. The movement of the carriage will be checked always just as it has reached its uppermost position, without regard to the precise moment in the operating cycle when the pressman pulls out the rod 44. When it is desired to start the carriage in motion again, the pressman

simply pushes back the rod 44 to bring the stud 43 in its full line position, whereupon the link 31 of its own weight drops down upon the pin 40. The latter continues to move underneath the link 31 which rests upon the pin, until the pin has reached the hook 39 when, as is obvious, the hook and pin will again engage each other. The pin 40 may be provided with a roller as shown to reduce the friction and thus smooth the operation of these parts.

It will be understood that the improvements may be applied in presses in which there is a different arrangement of ink distributing devices and form-inking carriage than that contemplated in the present description and illustration where the ink distributing devices are located at the top of the machine. Moreover various changes, other than those to adapt the improvements for use in differently arranged presses, may be made without departing from the spirit of the invention.

I claim as my invention:

1. In a press, the combination with the form-inking carriage, of driving means for the press, a pin reciprocated by said means, a lever in operative connection with the car-

riage, a link having one end hooked and normally connecting said lever and pin, an arm on the other end of said link, and a second lever pivoted about the same center as the first lever to disengage the hook and pin.

2. In a press, the combination with the form-inking carriage, of a lever constituting a part of the actuating means for said carriage, a link pivoted to the lever and having a hooked end for engagement with another part of the actuating means and a second lever pivoted about the same center as the first to disengage the link from its actuating means.

3. In a press, the combination with the form-inking carriage, of actuating means therefor including a lever, a link pivoted upon said lever and having a hook member and an arm, and a second lever pivoted about the same center as the first lever to engage the arm as it swings and unhook the hook.

This specification signed and witnessed this 10th day of August, A. D. 1908.

JOHN THOMSON.

In the presence of—

H. C. CROSS,

E. E. KIRCHER.