(No Model.)

D. W. & F. W. GLENDINNING.

ATTACHMENT FOR JOB PRESSES.

No. 412,846. Patented Oct. 15, 1889.

Fig. 1.

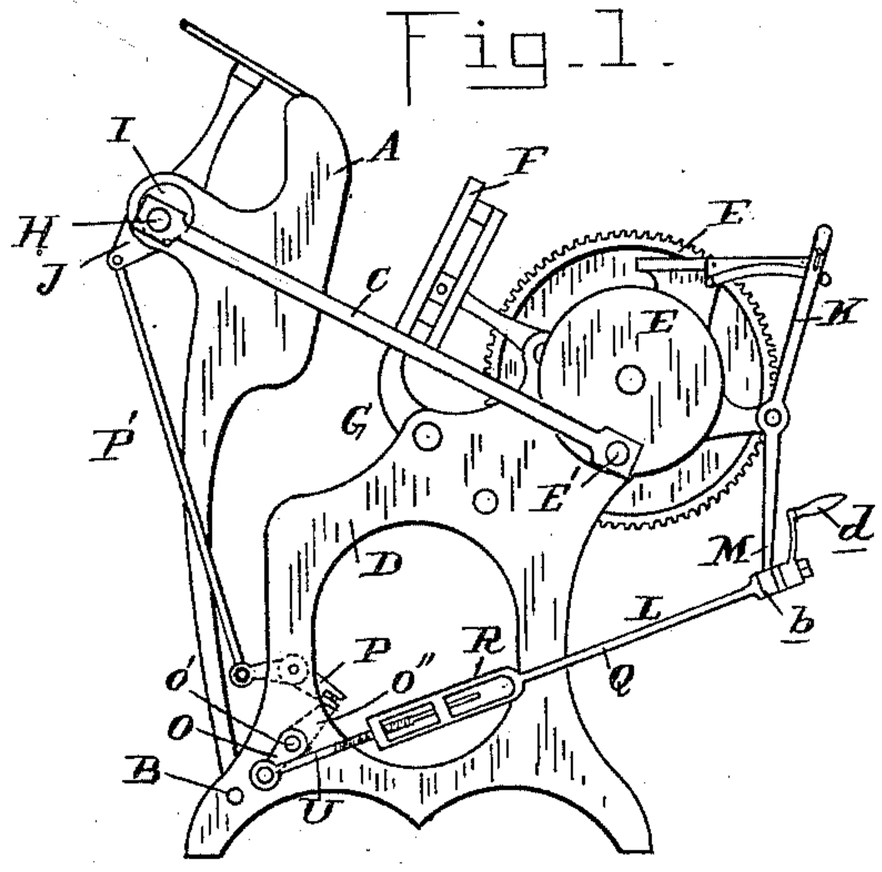


Fig 4

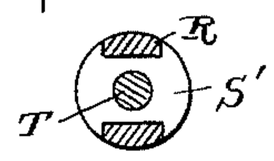


Fig. 2.

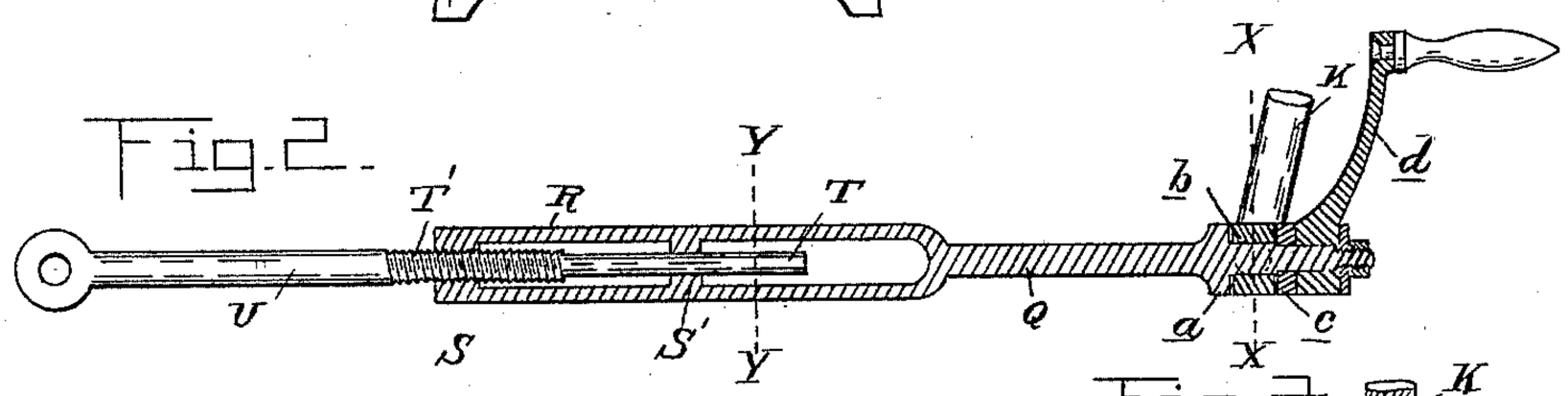
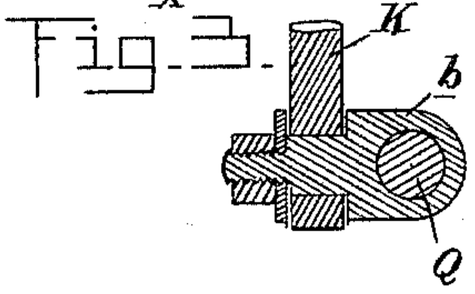


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

DAVID W. GLENDINNING AND FRANK W. GLENDINNING, OF LEAVENWORTH, KANSAS, ASSIGNORS TO SAID DAVID W. GLENDINNING AND PHINEAS N. FOY, OF SAME PLACE.

ATTACHMENT FOR JOB-PRESSES.

SPECIFICATION forming part of Letters Patent No. 412,846, dated October 15, 1889.

Application filed March 29, 1889. Serial No. 305,294. (No model.)

To all whom it may concern:

Be it known that we, DAVID W. GLENDINNING and FRANK W. GLENDINNING, citizens of the United States, residing at Leavenworth, in the county of Leavenworth and State of Kansas, have invented certain new and useful Improvements in Attachments for Job-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in attachments for printing-presses of that kind in which there is a throw-off operated by a lever placed in proximity to the operator and connected with the throw-off shaft by any form of intermediate gear, which includes one or more links or connecting-rods, as in the well-known Gordon job-press.

The invention consists in certain features of construction and combination of parts, substantially as illustrated, described, and specifically claimed.

Figure 1 is a type of the Gordon press with our improvement applied thereto. Fig. 2 is an enlarged longitudinal section of a connecting-rod in the throw-off mechanism, showing our improved construction in detail. Fig. 3 is a section thereof on line X X in Fig. 2. Fig. 4 is a section thereof on line Y Y in Fig. 2.

A is the bed carrying the chase and the type and rocked on the pivot B by the connecting-rod C.

D is the frame.

E are the combined cam and crank disks carrying crank-pins E′ on opposite sides of the press.

F is a platen rocking on the pivot G.

H are pins forming eccentric extensions of the revolving shaft I.

J is a crank-arm secured to the shaft I.

K is a throw-off lever operating the crank-arm J through suitable connections, which are of different constructions in different machines. In that type which we have selected, and shown in Fig. 1, the lower end M of the hand-lever K is pivotally secured to one end of a connecting-rod L, the other end of which rod is pivotally secured to an arm O of a rock-shaft O′, on which another arm O″ engages with a bell-crank P, which actuates the crank-arm J through the connecting-rod B′. To one of these connecting-rods, preferably that most convenient to the operator, our improvement is applied. To this end we construct it in two parts Q and U, the part Q being bifurcated to form the fork R, provided with the guide-bearings S S′, the former of which is screw-threaded to engage with a screw-threaded portion T′ of the part U, while the guide-bearing S′ slidingly engages with the stem T on the part U.

a is a collar or shoulder formed on the body Q, abutting against the swivel-block *b*, which is swiveled, as shown in Fig. 3, to the lower end of the lever K.

c is a collar secured to the body Q on the opposite side of the swivel-block to prevent any longitudinal movement of the body Q through the block *b*.

d is a handle or hand-wheel secured to the outer end of the body Q, by which the latter may be freely revolved in the swivel-blocks *b*.

In the ordinary use of the throw-off mechanism, as is well known, the lever K is shifted through a fixed arc to impart to the shaft I an eccentric motion on the bearings H, by means of which the bed A is moved to or from the platen F through a fixed distance—say one-fourth of an inch. This throws on or off the impression.

In practice our device is intended to act as an impression-regulator, in combination with the throw-off mechanism, as follows: The lever K being secured in position, as usual, by a spring-catch engaging with a notch in a quadrant, or other equivalent means, the impression may be increased or diminished to any desired degree of nicety by turning the adjusting handle or wheel *d*, which, being rigidly secured to the part Q, causes the part Q to turn on the part U, thus altering the length of the link L, and in doing so gives a slight eccentric motion to the shaft I, thus causing the bed to approach or recede from the platen, as in the act of throwing on or off the impression.

What we claim as our invention is—

1. The herein-described throw-off and im-

pression regulator for printing-presses, consisting of the throw-off lever, the two-part adjustable connecting-rod, the handle for adjusting said parts, the rock-shaft connected to one of said parts, and the bell-crank lever and eccentric arranged and operating substantially as and for the purpose described.

2. The combination, with the throw-off mechanism of a printing-press of the character described, of an impression-regulator consisting of the two-part connecting-rod Q U, screw-threaded together, as described, and provided with the swiveled block *b*, the throw-off lever connected to said block, and the regulating-handle for adjusting the rod Q U, substantially as and for the purpose described.

In testimony whereof we affix our signatures, in presence of two witnesses, this 7th day of February, 1889.

DAVID W. GLENDINNING.
FRANK W. GLENDINNING.

Witnesses:
FRANK L. ALIKE,
FRANK M. GUION.