(No Model.)

H. F. BOWERS.

JOGGING DEVICE FOR PRINTING PRESSES.

No. 457,248. Patented Aug. 4, 1891.

Fig. 1.

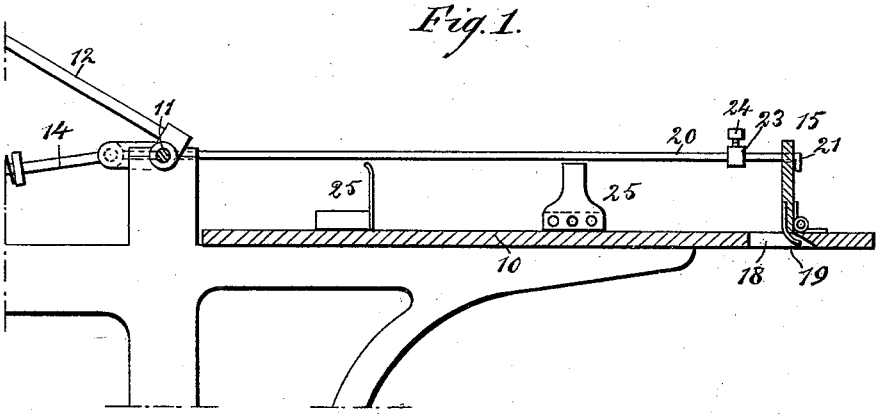

Fig. 2.

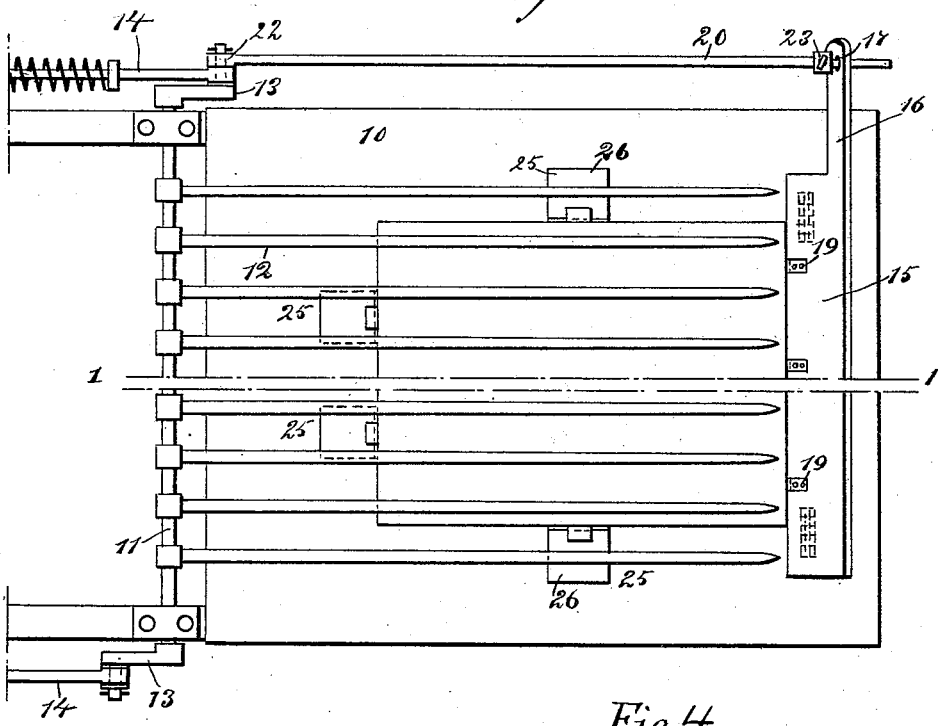

Fig. 3.

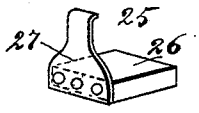

Fig. 4.

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HOWARD F. BOWERS, OF SOUTH FRAMINGHAM, MASSACHUSETTS.

JOGGING DEVICE FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 457,248, dated August 4, 1891.

Application filed March 20, 1891. Serial No. 385,785. (No model.)

To all whom it may concern:

Be it known that I, HOWARD F. BOWERS, of South Framingham, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Jogging Device for Printing-Presses, of which the following is a full, clear, and exact description.

My invention relates to improvements in jogging devices for evening the sheets which are delivered from the fly of a printing-press; and the object of my invention is to produce a simple and efficient device which is especially adapted for miscellaneous or job work, and which may be quickly and accurately adjusted to suit sheets of different sizes.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a broken vertical section showing the table of a printing-press provided with a jogging device embodying my invention, the fly being thrown forward and the jogging-board raised. Fig. 2 is a broken plan view of the same, but with the fly and jogging-board thrown back. Fig. 3 is a detail perspective view of one of the guides, and Fig. 4 is a broken detail view showing the hook connection between the fly-crank and the rod which moves the jogging-board.

In the drawings, 10 is the table, which is adapted to receive the sheets from a printing-press, and at one end of the table is the shaft 11, which carries a fly 12, and the shaft is provided with cranks 13 at each end, which are operated by rods 14 in connection with the press, so that the fly will swing backward and forward and deliver the printed sheets from the press upon the table 10. The above construction is of the usual form, and I do not claim it as a part of my invention.

On the rear end of the table 10 is hinged a board 15, the board being arranged at a point adjacent to the free end of the fly 12, and the board has at one end a projecting arm 16, which has a hole or eye near the outer end, as shown at 17. The board 15 swings on hinges on the table, and is provided on the front lower edges with flat spring-fingers 19, which project downward through the holes 18 in the table, and which, when the board is tipped back, cover the crack between the board and the table, so as to prevent sheets of paper from being thrust beneath the board. A rod 20 connects the arm 16 of the board 15 with one of the cranks 13 of the fly-shaft, and the rod has at one end a hook 21, which extends downward behind the arm 16, and at the opposite end a hook 22, which is secured upon the crank 13. A stop 23 is held to slide on the rod 20, and is maintained in a definite position by means of a set-screw 24, which extends through it and impinges on the rod. The stop 23 is adapted to press against the arm 16 and tip the board 15, and it will be noticed that by means of the connecting-rod 20 the fly 12 and board 15 will operate in unison.

To hold the sheets in position upon the table, the guides 25 are used, and each guide consists of a weighted metal base 26, which is adapted to rest flatwise upon the table, and a vertically-projecting portion 27, which is curved outward at the top, so that the sheets may readily pass downward by it. The guides 25 should be made heavy enough so that when placed in position upon the table they will remain stationary by their own weight.

The operation of the device is as follows: The stop 23 is adjusted so that during the back-stroke of the rod 20 it will tip back the board 15 the desired distance, and the guides 25 are disposed upon the table 10, as shown in Fig. 2, so that they will inclose the sheets which are delivered from the fly. Then as the fly swings back to deliver a sheet upon the table the stop 23 will strike the arm 16 and tip back the board 15, so that the sheets will not strike the board, and they will be delivered between the guides 25, and when the fly is swung forward to the press the hook 21 of the rod 20 will raise the board 15, and the board will strike the sheet and jog it forward between the guides, and it will be readily seen that, as a result, all the printed sheets will be delivered in a perfectly-even pile upon the table.

It will be noticed that when the jogging

device is not used the guides may be removed from the table, the connecting-rod 20 may be unhooked from the crank-shaft and from the arm 16 of the jogging-board, and the jogging-board may be tipped down flat upon the table, so that none of the parts will be at all in the way.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination with the table, the fly, and the crank-shaft for operating the fly, of a jogging-board hinged to the table opposite the free end of the fly, the jogging-board having depending fingers extending through holes in the table, a rod having one end hooked to the fly-crank and the opposite end extending loosely through the jogging-board, and an adjustable stop on the rod to engage the jogging-board, substantially as described.

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