No. 726,435. PATENTED APR. 28, 1903.

J. KAUP.

JOGGER FOR PRINTING PRESS FLIES.

APPLICATION FILED DEC. 1, 1902.

NO MODEL.

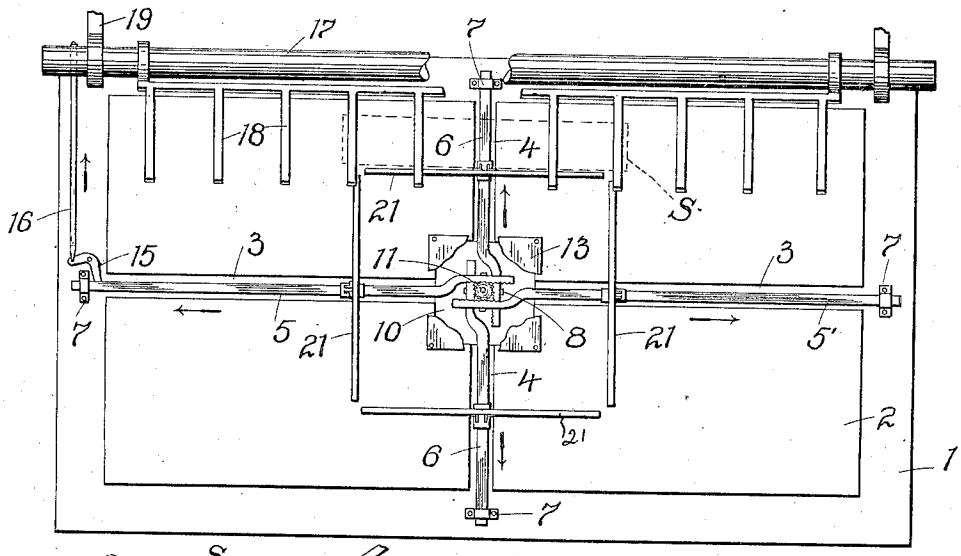


Fig. 1.

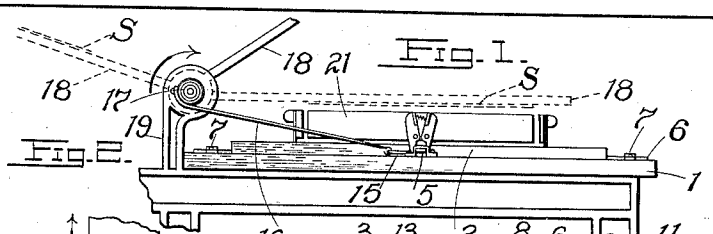


Fig. 2.

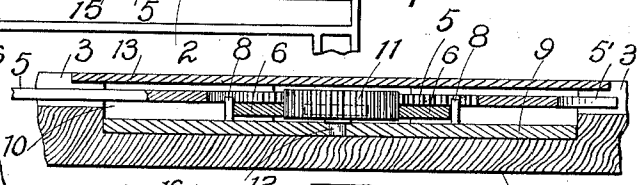


Fig. 4.

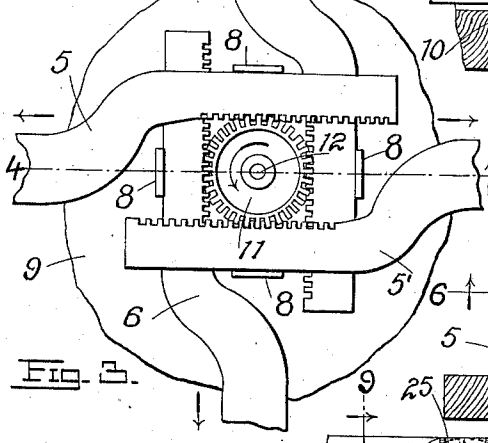


Fig. 3.

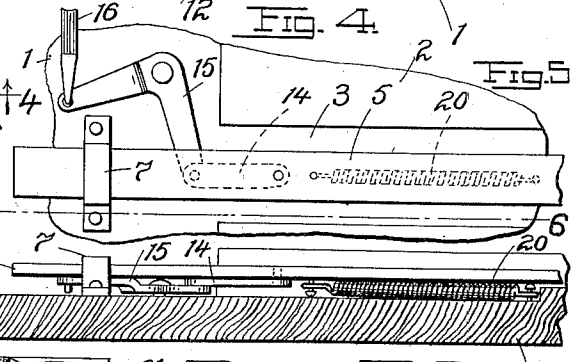


Fig. 5.

Fig. 6.

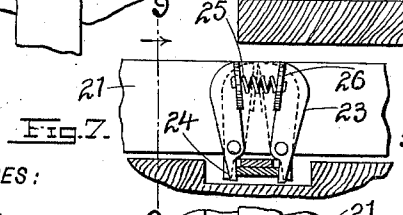


Fig. 7.

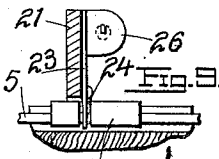


Fig. 9.

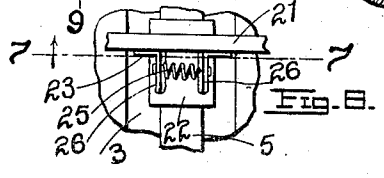


Fig. 8.

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JOGGER FOR PRINTING-PRESS FLIES.

SPECIFICATION forming part of Letters Patent No. 726,435, dated April 28, 1903.

Application filed December 1, 1902. Serial No. 133,389. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH KAUP, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Joggers for Printing-Press Flies, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in joggers for printing-press flies; and it consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a top plan of a fly-bed, showing my invention applied thereto. Fig. 2 is an end elevation thereof. Fig. 3 is a top plan of the meeting ends of the reciprocating bars shown on an enlarged scale. Fig. 4 is a vertical section on line 4 4 of Fig. 3. Fig. 5 is a detail in top plan of one end of the reciprocating bar coupled to the fly-shaft. Fig. 6 is a vertical section on line 6 6 of Fig. 5. Fig. 7 is a face view of the middle of one of the adjustable joggers and a section on line 7 7 of Fig. 8. Fig. 8 is a top plan of Fig. 7, and Fig. 9 is a vertical section on line 9 9 of Fig. 7.

The object of my invention is to construct a jogger for the fly of a printing-press whose position can be readily adjusted to accommodate sheets of variable dimensions, the adjustment being effected with a minimum loss of time and labor.

A further object is to construct a jogger which shall be simple, cheap, and durable. In detail the invention may be described as follows:

Referring to the drawings, 1 represents the fly-table, and 2 the several sections of the sheet-depositing plate, said sections being separated by the intersecting grooves or ways 3 4, designed for the reception of the reciprocating bars 5 5′ 6 6. The outer ends of the several bars are guided within suitable straps 7, secured to the table, the inner ends being guided by lugs 8, projecting from a plate 9 at the bottom of a central depression 10, formed in the table, Fig. 4. The adjacent inner edges of the several bars are toothed, said toothed portions meshing simultaneously with a pinion 11, whose stud or spindle 12 is mounted in the plate 9, the several operating parts being protected by a cover-plate 13, Figs. 1 and 4. The outer end of the bar 5 is provided with a link 14, to one end of which is pivotally secured one arm of a bell-crank lever 15, mounted on the table, the opposite arm of said bell-crank being pivotally connected to one end of a flexible band 16, the opposite end of the latter freely winding around the oscillating fly-shaft 17, by which the fly 18 is actuated and to which it is secured. The shaft 17 is mounted in bearings 19, projecting from the table. Interior to the link 14 there is coupled to the bar 5 a spring 20, whose opposite end is secured to the table at the bottom of the groove 3.

The joggers—that is, the devices which come in contact with the several edges of the sheets as the latter are deposited by the fly, so as to insure perfect alinement of the sheets as they are piled up—are composed of plates 21, coupled to the bars 5 5′ 6 6 by mechanism as follows: To the lower edge of each plate 21 is secured a saddle or channel 22, embracing the reciprocating bar 5 5′ 6 6 and along which it may freely slide, such saddle serving as a support for the jogger-plate. To the outer face of each plate 21 are pivoted the levers or jaws 23, the short arms of the jaws being freely received by suitable recesses 24, formed in the walls of the saddle, whereby the said jaws can firmly grip the bar on which the saddle is mounted under the expansive force of a spring 25, interposed between the terminal wings 26, deflected from the inner edges of the long arms of the gripping-levers 23. By pressing the levers 23 together (a matter accomplished by forcing the wings 26 together and compressing the spring 25, as seen by the dotted position of the parts in Fig. 7) the jaws release their grip on the bar and the jogger may be shifted and adjusted along the bar to any desirable position.

The operation is as follows: The fly-shaft is oscillated from the printing-press. (Not shown.) As it oscillates in the direction shown by the arrow, Fig. 2, the fly will deposit the sheet S, previously delivered thereto, the bars 5 5′ 6 6 (while the sheet is being deposited) being simultaneously forced out-

wardly, as clearly obvious from Fig. 2, it being apparent that with the downward oscillation of the fly the band 16 will be wound upon the shaft, thereby drawing on the lever 15 and tilting the same so as to pull the bar 5 outwardly. The latter imparts rotation to the pinion 11, as indicated in Fig. 3, when all the bars will be forced outwardly. When the fly oscillates in the opposite direction, the several bars will be retracted to their original position by the spring 20. With the reciprocation of the bars 5 5′ 6 6 the several joggers are reciprocated back and forth, and with each inner movement thereof they bear against the adjacent edges of the sheets previously deposited, thereby preserving a constant alinement for the edges of the sheets constituting the pile. Should the dimensions of the sheets operated on be varied, the initial positions of the joggers can be readily adjusted along the bars, as previously indicated.

I do not of course wish to be limited to the precise details here shown, as they may in a measure be departed from without affecting the nature or spirit of my invention. It may be stated in passing that by "fly" I mean any mechanism which takes the sheets from the press and deposits them at any convenient place, and it is to be understood that the present jogger may be used in connection with presses not provided with the specific fly here referred to.

Having described my invention, what I claim is—

1. In a press attachment, a fly, a series of reciprocating bars, a jogger mounted on each bar, a channel or saddle secured to each jogger, a pair of gripping-levers pivoted to each jogger, the walls of the saddle being suitably recessed and the jaws of the gripping-levers operating through said recesses and engaging the bars, and springs for forcing the jaws into engagement with the bars, substantially as set forth.

2. In a press attachment, a fly-shaft, a depositing-table, a series of reciprocating bars mounted on said table, means for guiding said bars, a central rotatable pinion, teeth formed on the adjacent edges of the meeting ends of the bars and meshing with said pinion, a flexible band having one end secured to the shaft, a bell-crank coupled respectively to the opposite end of the band and to one of the reciprocating bars, and joggers secured to said bars, the parts operating substantially as and for the purpose set forth.

3. A jogger comprising a plate, a channel or saddle secured to the lower edge thereof, a pair of levers pivoted to one face of the plate, recesses formed in the walls of the saddle for the free passage therethrough of the short arms of the levers, wings deflected from the long arms of the levers, and a spring interposed between the wings, substantially as set forth.

4. A jogger comprising a plate, a saddle secured to the same, a pair of jaws pivoted adjacent to the saddle, and springs for forcing the gripping-arms of the jaws together, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH KAUP.

Witnesses:
EMIL STAREK,
F. J. BAUMGARTNER.