

L. B. TAYLOR.
PAPER JOGGER.

APPLICATION FILED APR. 27, 1903.

NO MODEL.

Fig. 2.

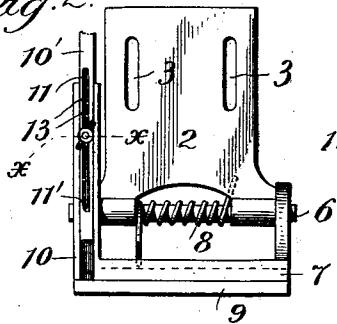


Fig. 3.

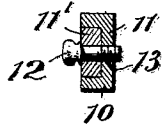


Fig. 1.

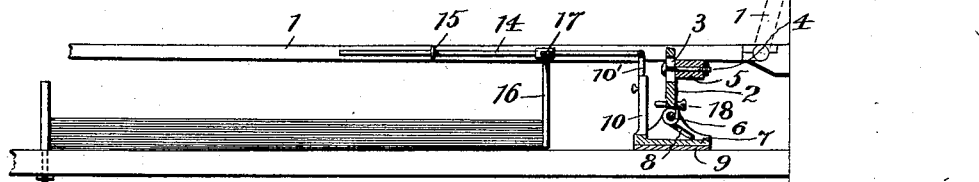


Fig. 4.

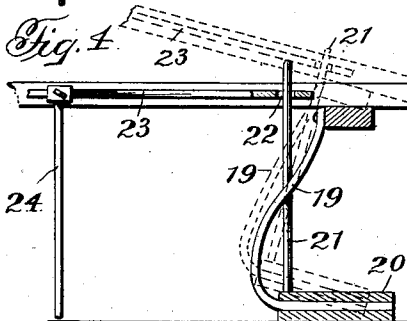


Fig. 5.

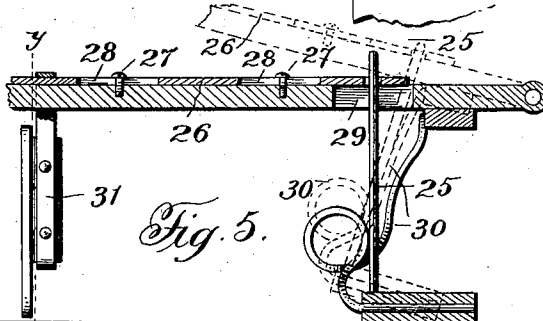


Fig. 7.

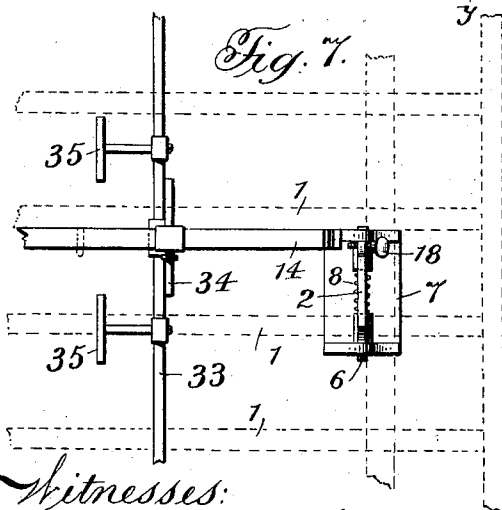
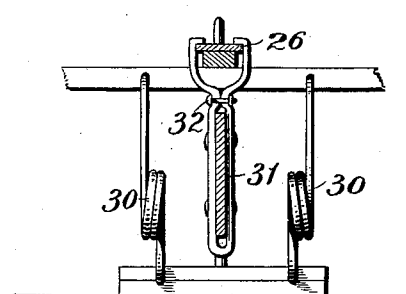


Fig. 6.



Witnesses:
Jesse Hutchinson
Ernest C. Thompson

Inventor:
Lewis B. Taylor

UNITED STATES PATENT OFFICE.

LEWIS B. TAYLOR, OF WASHINGTON, DISTRICT OF COLUMBIA.

PAPER-JOGGER.

SPECIFICATION forming part of Letters Patent No. 739,121, dated September 15, 1903.

Application filed April 27, 1903. Serial No. 154,484. (No model.)

To all whom it may concern:

Be it known that I, LEWIS B. TAYLOR, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Paper-Joggers, of which the following is a specification.

My invention relates to printing-presses, and more particularly to the devices connected therewith for automatically "jogging" or evening the sheets of paper as they are successively printed and delivered by the fly to the fly board or table.

It is the object of my invention to provide a device of this character involving, broadly, the principles disclosed in my Patent No. 726,372, dated April 28, 1903, but further to provide a jogger that will be better adapted for handling the sheets as they are received from the press and one that can be easily and conveniently attached to and adjusted in place upon the fly of a printing-press.

To the accomplishment of the general objects stated and others, which will more fully appear, the preferred embodiment of the invention consists in the construction and arrangement of parts to be described, illustrated in the accompanying drawings, and defined in the appended claims.

In said drawings, Figure 1 represents a side elevation of a portion of a printing-press, showing a fly having my improved jogger attached thereto, the fly being shown in dotted lines in position to receive the printed sheet and in full lines delivering the sheet upon the table. Fig. 2 is an enlarged front elevation of the depending support and its shoe. Fig. 3 is an enlarged cross-section through the standard, taken on the line *xx* of Fig. 2. Fig. 4 is a vertical sectional view of a portion of a fly with a modification of my attachment applied thereto, the full lines showing the position of the parts when the shoe is in engagement with the fly-board and the dotted showing the position of said parts free from engagement with said fly-board. Fig. 5 is a similar view of a still further modification, the longitudinally-movable lever being arranged upon the top of one of the fly-fingers. Fig. 6 is a cross-sectional view taken on the line *yy* of Fig. 5; and Fig. 7 is a plan view of a portion of the fly, showing the use of two

or more joggers operated by the one shifting mechanism.

Referring to the numerals of reference employed to designate corresponding parts in Figs. 1, 2, and 3, 1 denotes the fly of ordinary construction and adapted, as is well understood by those skilled in the art, to receive the printed sheets of paper from the press and deposit them one at a time on the fly board or table, Fig. 1 showing in full lines the position of the fly at the moment of laying a sheet on the table, while the dotted lines show it in position to receive a sheet from the press.

As hereinbefore stated, my improved attachment is adapted to be secured to the fly of the printing-press, the depending support 2 of which is provided with slots 3 3, through which pass the bolts 4 for the purpose of adjustably and detachably securing the said support to a cross-piece 5 on the fly. Pivoted to the lower end of the support 2, by means of a pivot-bolt 6, is a yielding shoe 7, which as the fly is approaching the end of its down-stroke will engage the fly-board and be rocked upon its pivot during the continued movement of said fly. A spring 8 is coiled about the pivot-bolt 6 and normally holds the shoe in a position substantially as shown in dotted lines in Fig. 1, the shoe being held in this position until its engagement with the fly-board, when the said spring will yield to allow the shoe to rock upon its pivot, as hereinbefore mentioned. The shoe may be of any preferred construction and preferably made of metal covered upon its under face with a piece of leather, felt, or other like material 9, which prevents unnecessary clattering of the shoe against the fly-board.

To the upper face of the shoe, and preferably made integral therewith, is secured an upwardly-extending standard, the same consisting of two members 10 and 10', the member 10 being grooved to receive the member 10' and the member 10' being slotted, as at 11, for the purpose of allowing for the extension of the standard in accommodating itself to the flies of various printing-presses. The two members 10 and 10' are adjustably and detachably secured together by means of a thumb-screw 12, which passes through the slot 11 and is screwed into any one of a series of

screw-threaded perforations 13, the said perforations allowing for the further extension of the standard, as will be readily understood.

Hinged to the upper end of the standard member 10' and adapted to remain at all times in a position approximately parallel to a finger of the fly is a lever 14, the same being held in this position by means of a staple 15, through which the lever is adapted to slide. This lever 14 is adapted to be moved longitudinally by the shoe 7 as the same is rocked upon its pivot, so that during such longitudinal movement the jogger 16 will be automatically shifted to jog the sheet being deposited by the fly. This jogger 16 is adjustably secured to the lever 14 by means of the thumb-screw 17, the said jogger adapted to be moved along and fixed in position on said lever at a point suited for the size of the sheets being printed. Mounted upon the shoe is an adjusting-screw 18, which is so related to the standard that upon the turning of the screw the position of the shoe may be adjusted with relation to the depending support 2 for the purpose of varying the stroke of the jogger 16.

As will be clearly understood from the foregoing description, the shoe will engage the fly-board as the fly is nearing the end of its downstroke, and as the fly continues its progress the said shoe will be rocked upon its pivot simultaneously with the completion of this downstroke of the fly. This rocking of the shoe throws forward the standard and together with it the longitudinally-movable lever 16, which carries the jogger, thus automatically forcing the jogger squarely against the edge of the sheet being deposited. It will thus be seen that the jogger operates upon the sheet at right angles thereto, which prevents the curling of the edge of the sheet, and thereby allowing the sheet to receive the full benefit of the stroke of the jogger.

Slight changes and modifications may be made without departing materially from the nature of the invention herein shown and described. For instance, as shown in Fig. 4, the depending support is in the form of a leaf-spring 19, said spring adapted to carry at its lower or free end a shoe 20, which is secured thereto in any preferred manner. A standard 21 is suitably secured to the shoe, the same extending upwardly and passing through a perforation 22 in one end of the lever 23, the said lever adapted to be moved longitudinally by the said standard as the shoe is rocked forward by its engagement with the fly-board, the depending support yielding sufficiently to permit of this rocking of the shoe and on the return of the fly for receiving another sheet adapted to take a position substantially as shown in dotted lines in Fig. 4, ready for repeating the operation. Owing to the loose connection between the standard 21 and the longitudinally-movable lever 23, said lever is adapted to remain at all times parallel to the finger of the fly, and thus it will be seen that the jogger 24, which is adjustably

secured to said lever, will engage the sheet at right angles thereto and force the same squarely into position upon the fly-board.

A still further modification is shown in Figs. 5 and 6, and in this form, as in the one shown in Fig. 4, the standard 25 is loosely connected to the longitudinally-movable lever 26; but in this instance the said lever is arranged upon the top of a finger of the fly and held in such position by means of the screws 27 27, which pass through slots 28 28 in the lever, thus providing for the longitudinal movement of the lever, as hereinbefore stated. In the arrangement of the lever upon the top of the fly-finger said finger is slotted, as at 29, to allow for the passage of the standard 25. It will also be noted that the shoe is suspended from the fly by means of two spring-wire supports 30 30, coiled as shown, one arranged on either side of the standard 25. In this form the jogger is suitably riveted to a U-shaped piece 31, which is adapted to be clamped in position upon the lever by means of a screw-bolt 32, substantially as shown in Figs. 5 and 6.

In the handling of the sheets as they come from the press one or more of these attachments may be used, as desired. It is found necessary in the handling of large sheets especially that two or more joggers are necessary for obtaining good results. In order to obviate the necessity of providing two or more of the complete attachments for such work, I provide for the use of two or more joggers being operated by only one shifting mechanism, substantially as shown in Fig. 7. To the accomplishment of the above I arrange a bar 33, substantially as shown in Fig. 7 of the drawings, the said bar being suitably fastened to a depending piece 34, adjustably secured in place upon the lever. Fastened to the bar are the joggers 35, which extend a suitable distance out from the face of the rod and are so arranged thereupon as to allow for their passage between the cords of the printing-press as the fly returns each time to receive a printed sheet.

It is apparent that in carrying out my invention other changes from the combinations herein shown and described may be made, and I would therefore have it understood that I do not limit myself to the precise details herein shown, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

What I claim is—

1. An attachment for the fly of a printing-press, comprising a support carrying a shoe, a lever connected to said shoe, and a jogger secured to said lever.

2. An attachment for the fly of a printing-press, comprising a depending support, a yielding shoe on the lower end of said support, a lever connected to said shoe and adapted to be moved longitudinally thereby, and a jogger secured to said lever.

3. An attachment for the fly of a printing-

press, comprising a depending support, a shoe pivoted thereto, a longitudinally-movable lever connected to said shoe, and a jogger adjustably secured to said lever.

5 4. An attachment for the fly of a printing-press, comprising a depending support, a shoe on the lower end thereof, a longitudinally-movable lever connected to and moved by said shoe, and a jogger adjustably secured to
10 said lever.

5 5. An attachment for the fly of a printing-press, comprising a depending support provided with means for its vertical adjustment, a tilting shoe on the lower end of said support, a longitudinally-movable lever connected to and actuated by said shoe, and a jogger secured to said lever.

20 6. An attachment for the fly of a printing-press, comprising a depending support, a spring-restrained shoe pivoted to said support, a longitudinally-movable lever connected to and actuated by said shoe, and a jogger removably secured to said lever.

25 7. An attachment for the fly of a printing-press, comprising a depending support, a tilting shoe on the lower end of said support, a standard secured to said shoe, a longitudinally-movable lever actuated by said standard, and a jogger carried by said lever.

30 8. An attachment for the fly of a printing-

press, comprising a depending support, a tilting shoe carried by the lower end of said support, an adjustable standard carried by the shoe, a longitudinally-movable lever actuated by said standard, and a jogger carried and
35 actuated by the lever.

9. An attachment for the fly of a printing-press, comprising a depending support, a spring-restrained shoe on the lower end thereof, means for adjusting the position of the
40 shoe with relation to the support, a longitudinally-movable lever connected to and actuated by said shoe, and a jogger carried by said lever.

10. An attachment for the fly of a printing-
45 press, comprising a support, a tilting shoe on the lower end of said support, a standard secured to said shoe, a longitudinally-movable lever connected to and actuated by said standard, and a jogger connected to said lever, the
50 said jogger consisting of a frame, and a series of jogger-leaves secured to said frame.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEWIS B. TAYLOR.

Witnesses:

GEORGE L. GORMAN,
ERNEST G. THOMPSON.