

No. 726,372.

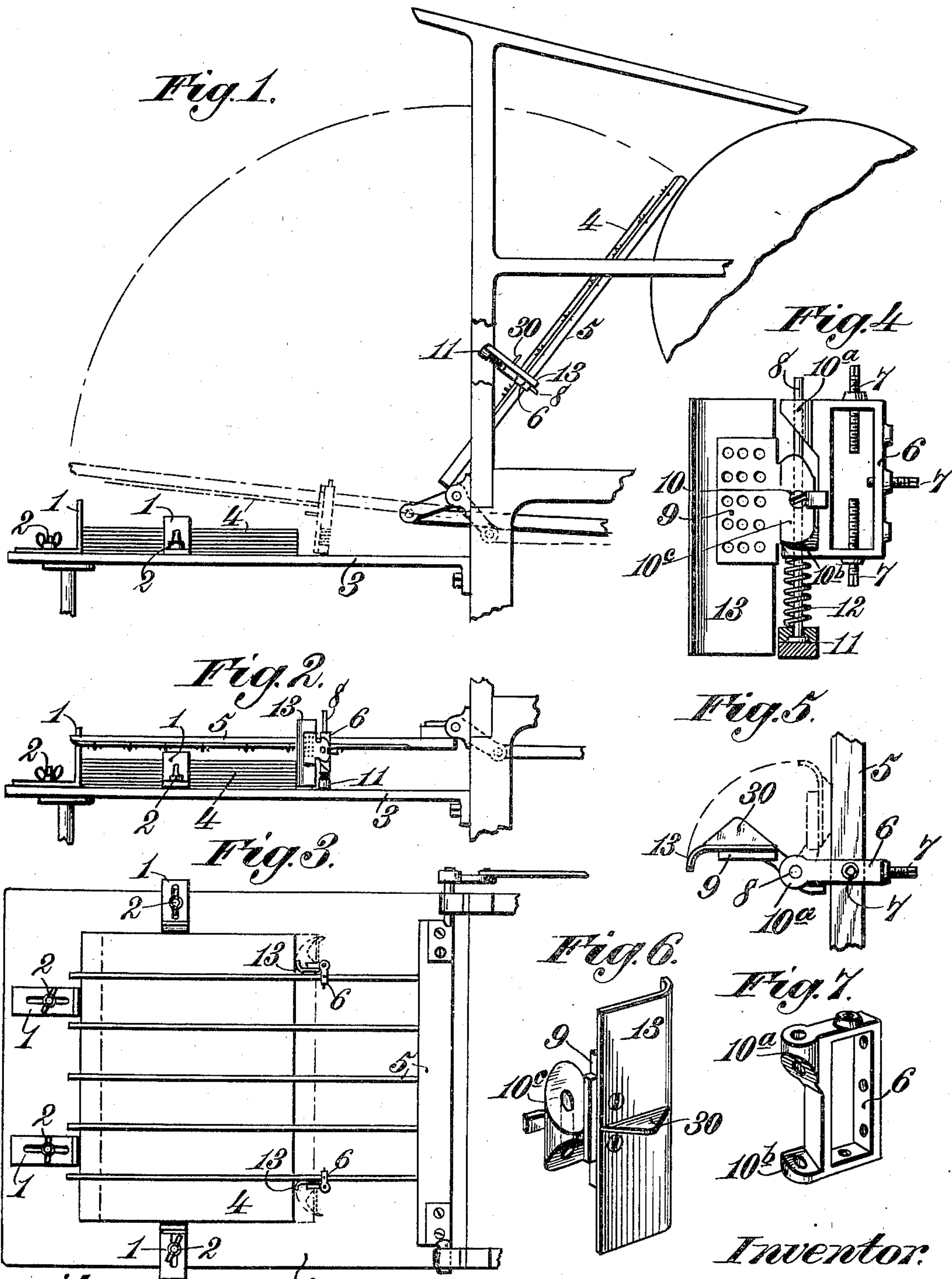
PATENTED APR. 28, 1903.

L. B. TAYLOR.  
PAPER JOGGER.

APPLICATION FILED SEPT. 3, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses.  
Robert Emmett.  
J. E. Hutchinson.

Inventor.  
Lewis B. Taylor

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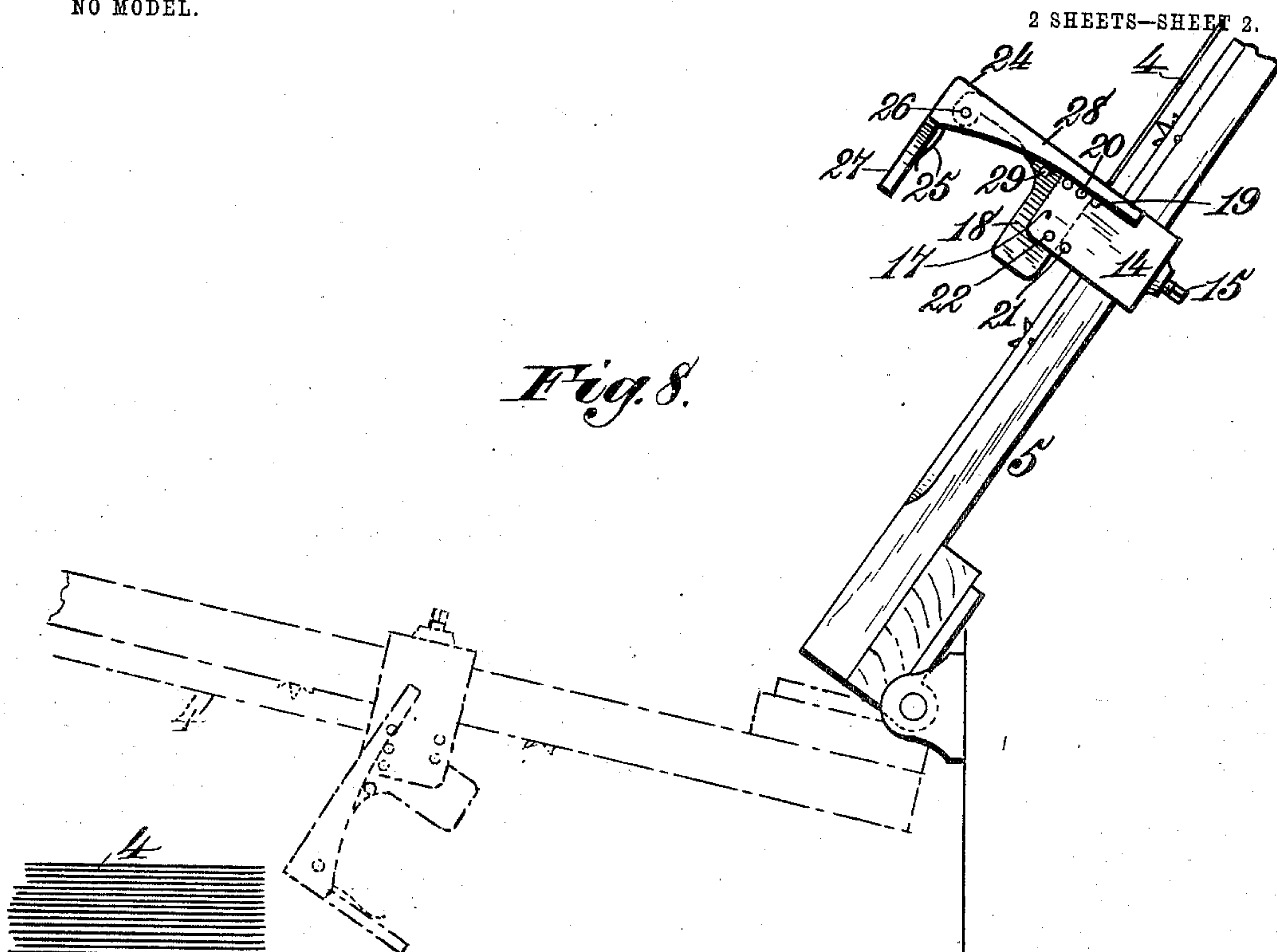
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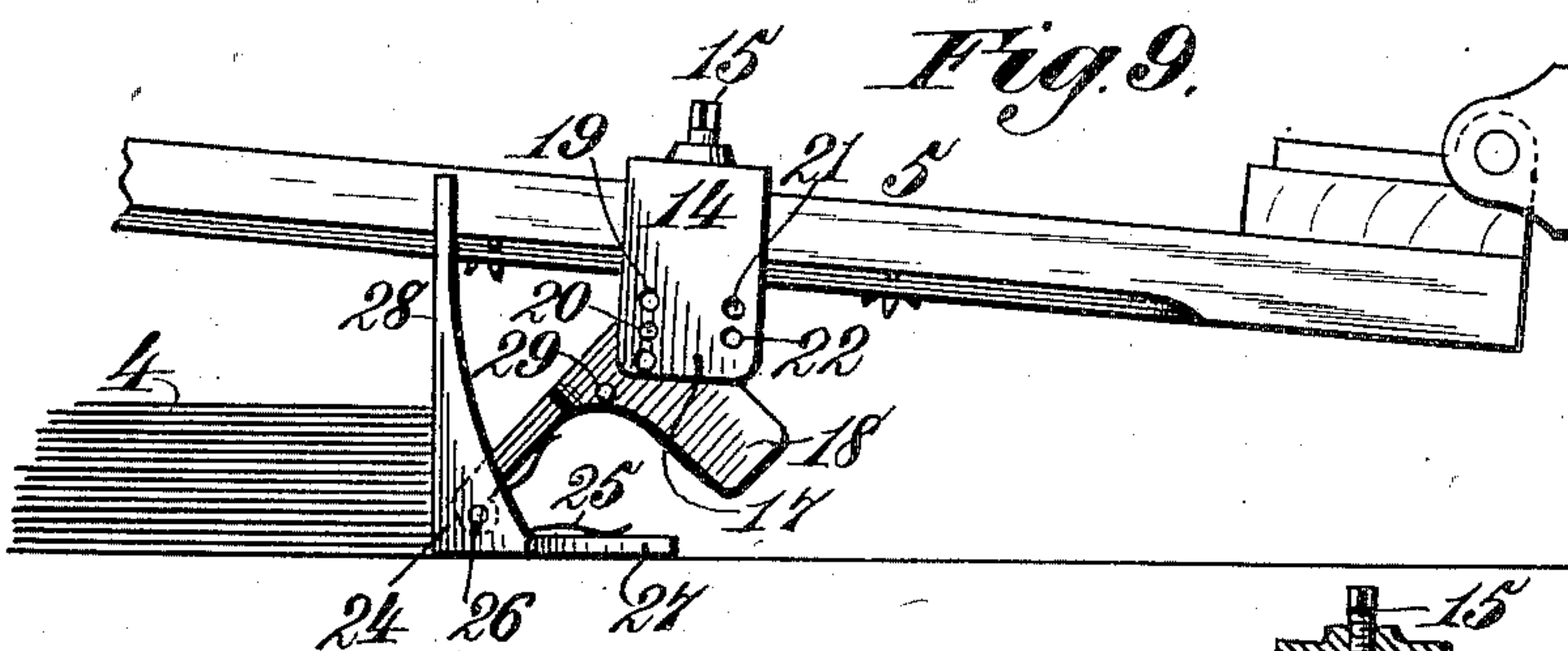
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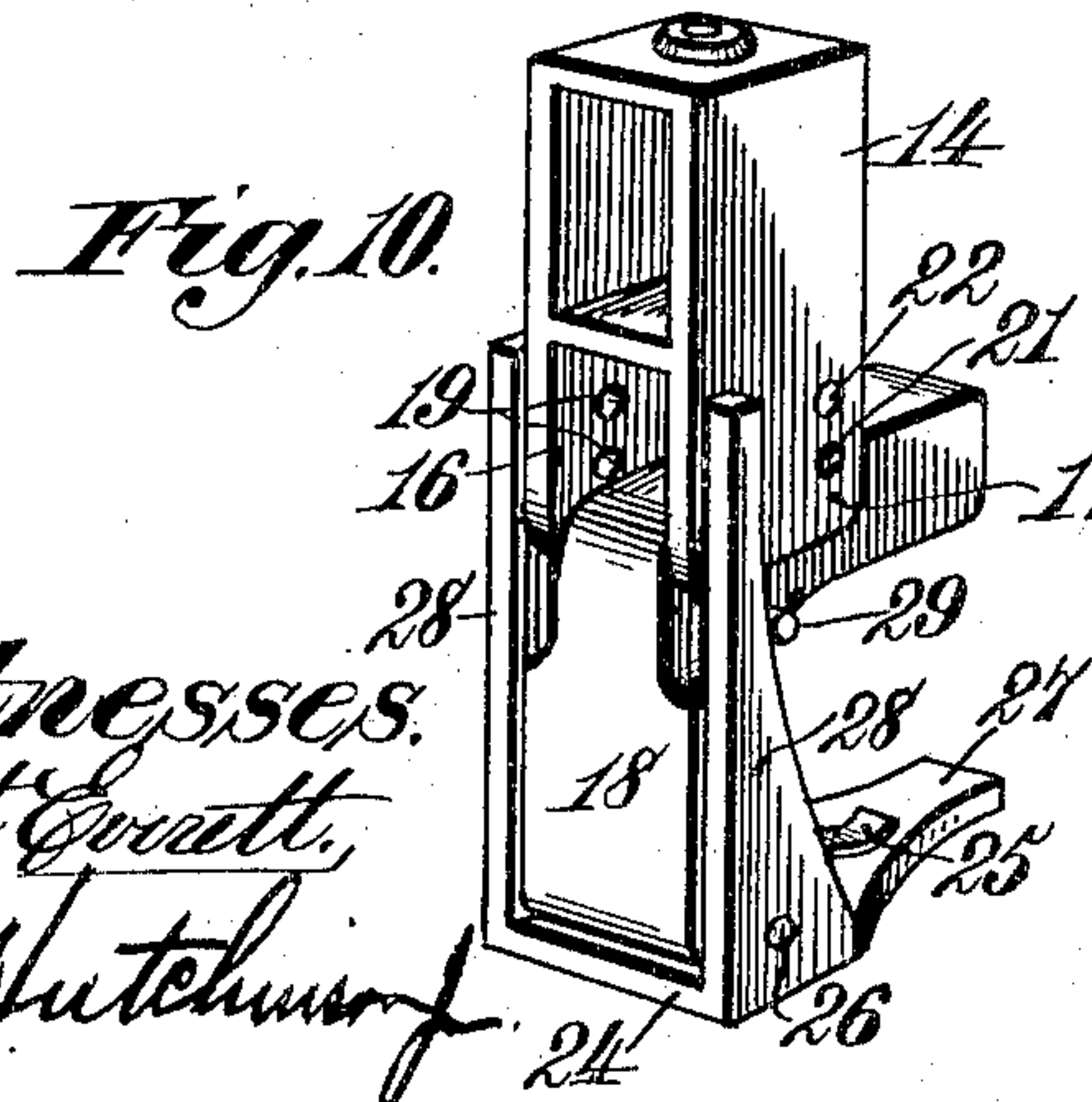
2 SHEETS—SHEET 2.



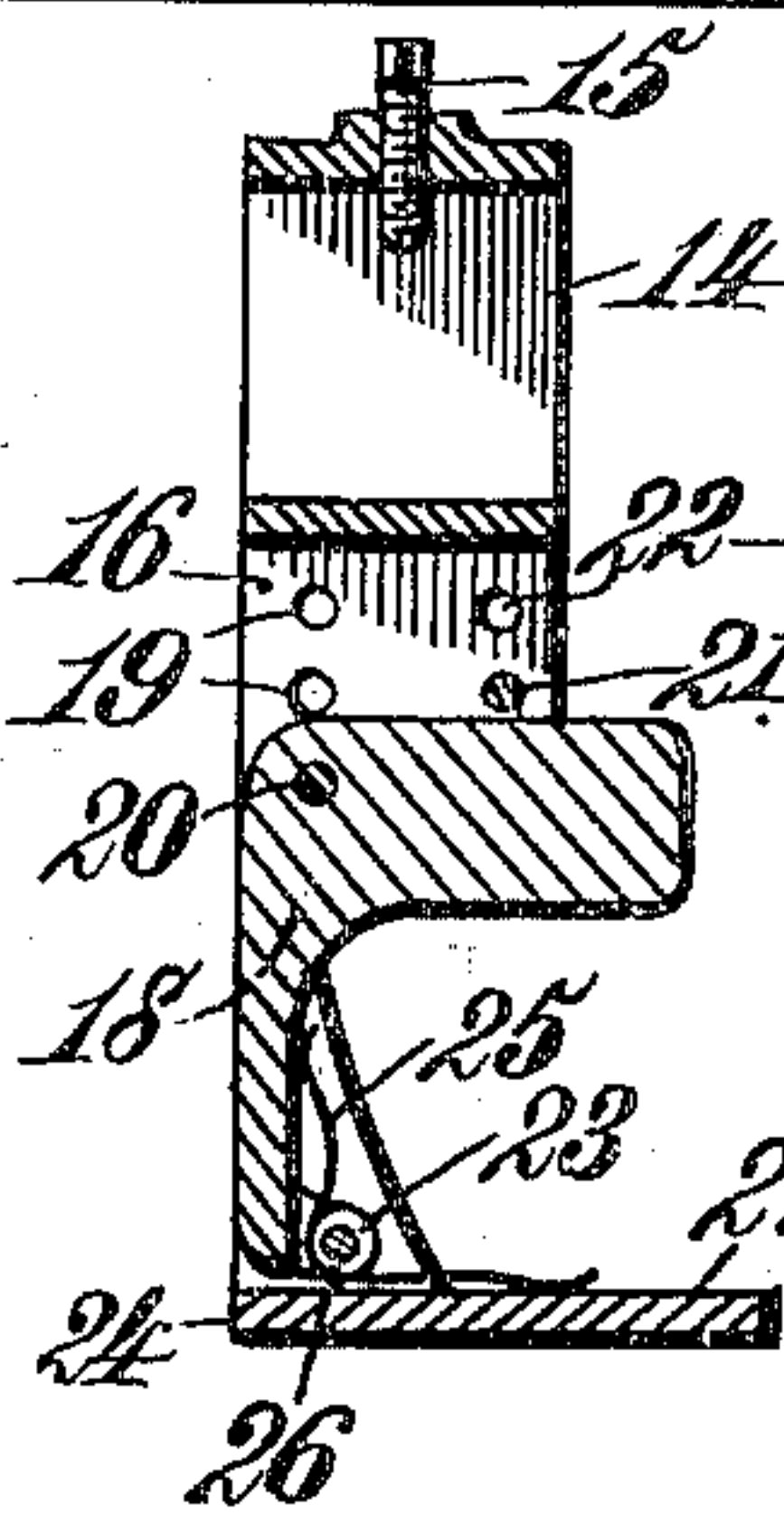
*Fig. 8.*



*Fig. 9.*



*Fig. 10.*



*Fig. 11.*

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# UNITED STATES PATENT OFFICE.

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

## PAPER-JOGGER.

SPECIFICATION forming part of Letters Patent No. 726,372, dated April 28, 1903.

Application filed September 3, 1902. Serial No. 121,943. (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 city, District of Columbia, have invented certain new and useful Improvements in Paper-Joggers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

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 simplify the construction of such devices and at the same time render them more efficient in operation, cheapen the cost of their production, make them less liable to get out of repair, and so construct them that they can be easily and conveniently attached to and adjusted in place upon the fly of a printing-press.

My invention consists in providing joggers of this description of such form and so related to the fly and fly board or table that when the jogger's progress is stopped by engagement with the fly-board as the sheet is in the act of being deposited between the gages on said fly-board the continued movement of the fly will operate to force the jogger in contact with the forward edge of the sheet of paper or that edge thereof extending toward the fly and "jog" or move the sheet into position against the gages. Thus it will be seen that the joggers operate automatically and instantaneously on the sheet, so that the instant the fly arrives at its lowermost position the sheet has been straightened and evened and is in position upon the pile of paper on the table, thereby avoiding any unnecessary or lost motion or any interference occasioned by moisture or from electricity frequently generated between the sheets.

Referring to the 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 full lines in position to receive the printed sheet and in dotted lines delivering the sheet upon the table. Fig. 2 is a like view showing

the fly in its lowermost position, the joggers pressed against the edges of the sheets. Fig. 3 is a plan view of the fly and fly-board, showing the joggers attached to the fly and projecting so as to engage the edge of the sheets, also showing in dotted lines the joggers in their open position. Fig. 4 is an enlarged view of the jogger and its frame detached from the fly, showing the jogger in its open position. Fig. 5 is a plan view of the jogger and its frame, the jogger being shown in full lines in open position and in dotted lines in closed position. Figs. 6 and 7 are detail views of the jogger and its frame. Fig. 8 is a side elevation of a fly showing a modification of my invention attached thereto. Fig. 9 is a like view of the modification in its lowermost position. Fig. 10 is a perspective view of the same, and Fig. 11 is a vertical sectional view of the modification.

In carrying out my invention I construct a series of gages consisting of angular pieces of metal 1, which are provided with slots adapted to receive therethrough the shank of bolts or screws 2, adapted to be screwed into the fly board or table 3, by which means said gages may be moved to and fixed in position on said table against or in close proximity to the edges of sheets of paper 4 of varying sizes.

5 represents 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 dotted lines the position of the fly at the moment of laying a sheet on the table, while the full 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 a printing-press, the frame 6 of which is provided with thumb-screws 7 for the purpose of adjustably and detachably securing the said frame to a finger of the fly. Hinged to the frame 6 by means of a pivot-bolt 8 is a leaf 9, which is adjustably fastened to the said bolt by means of a screw 10, the purpose of which will be hereinafter described. This bolt passes through perforated ears 10<sup>a</sup> and 10<sup>b</sup> on the frame and the ear 10<sup>c</sup> on the jogger-leaf and projects a suitable distance below the frame, so as to engage the fly-board when



the fly nears the completion of its downstroke, so that the jogger 13 may be automatically shifted to a position to engage the sheet being deposited by the fly.

5 The lower end of the bolt, or that end which engages the fly-board when in its lowermost position, is provided with a head 11, between which and the lower ear of the frame is interposed a spring 12, which tends to normally  
10 hold the jogger in its open position ready to receive the printed sheet and jog the same as the sheet is deposited upon the fly-board. The jogger 13 is riveted or otherwise fastened to the jogger-leaf and is made of any suit-  
15 able material, but preferably leather or the like, said jogger being so adjusted relative to the bolt 8 that the lower edge of the same will not engage the fly-board at any time, but will be free to turn upon its axis and operate  
20 upon the sheet being delivered with as little friction as possible.

As will be clearly understood from the foregoing description, the head of the pivot-bolt engages the fly-board as the fly is nearing the  
25 end of its downstroke, and as the fly continues its progress the said jogger will be partly rotated on its axis simultaneously with the completion of this downstroke of the fly and free of engagement with the table. This ro-  
30 tation of the jogger is accomplished by reason of the corresponding beveled contacting surfaces formed upon the upper face of the ear 10<sup>c</sup> on the jogger-leaf and the lower face of the upper ear 10<sup>a</sup> of the frame 6, the same  
35 being brought into contacting relation one with the other as the jogger is lifted against the tension of the spring 12 when the bolt 8 engages the table on the downstroke of the fly. As the fly begins to return to its position  
40 ready to receive another sheet the jogger is also returned to its normal position by means of the spring 12 forcing another set of beveled contacting surfaces together, one of said beveled surfaces being located upon the lower  
45 face of the jogger-leaf ear 10<sup>c</sup> and the other upon the upper face of the lower ear 10<sup>b</sup> of the frame 6. The jogger is retained in this position until the return of the fly to its lowermost position and is held in such position  
50 by means of the spring 12.

The above-described mechanism is much the preferred form, although I have shown in Figs. 8, 9, 10, and 11 a modification of the device involving the same principles and per-  
55 forming the same functions as in this preferred form. In this modification 14 denotes a frame adjustably secured to finger of the fly by means of the thumb-screw 15. This frame is preferably of rectangular form and  
60 provided with downwardly-extending ears 16 and 17, to which is hinged the angle-plate 18, the said plate adapted to swing upon its pivot as the fly is nearing the end of its downstroke. The ears 16 and 17 are provided with a num-  
65 ber of perforations 19 for the purpose of providing for the adjustment of the angle-plate

18 relative to the fly-board. This plate is hinged to the ears 16 and 17 by means of a pivot-pin 20, which may be inserted within any of the perforations 19, so that the right  
70 adjustment may be obtained. A stop-pin 21 is provided for the purpose of preventing the lower end of the angle-plate from dropping too far down when the fly is in its upper po-  
75 sition, said stop-pin being also adapted for adjustment within any of the perforations 22, so that it may be placed to correspond with the adjustment of the angle-plate. The lower end of the angle-plate 18 is formed with ears  
80 23, to which is hinged the jogger 24, preferably made of an angular piece of metal, as clearly shown in the drawings. A spring 25 is coiled about the pivot-pin 26, one end of which bears against the portion 27 of the jog-  
85 ger and the other end bearing against the angular plate 18, thus tending to force the said portion 25 to a position as shown in Fig. 11. To prevent the portion 27 of the jogger from projecting beyond the position as shown in  
90 Fig. 11, the upwardly-extending portions 28 28 are made to engage the stop-pins 29, which extend outward from the sides of the plate 18.

It will be clearly understood from the foregoing that as the fly nears the end of its downstroke the portion 27 of the jogger-plate  
95 will engage the fly-board, and as the fly continues to the end of said stroke the jogger will be rocked upon its pivot, thereby forcing the upwardly-extending portions 28 28 against the edge of the sheet being delivered, and  
100 thus straightening the same upon the pile of paper on the table. When the angle-plate reaches a position as shown in Fig. 9, the sheet has been straightened and is in position. Upon the return of the fly the spring 25 re-  
105 turns the jogger to its normal position ready to receive another sheet and operate upon it, as hereinbefore stated.

In the practice of my invention it is found that as the printed sheet is delivered upon  
110 the fly and the edge of the same drops upon the face of the jogger the sheet has a tendency to slide upon said face and leap over the said jogger onto the table. To remedy this difficulty, I provide a stop 30, formed upon  
115 the face of the jogger, which will hold the edge of the sheet upon the jogger and allow the said sheet to be delivered in the usual way. A series of these stops may be formed along the face of the jogger in the shape of  
120 corrugations, so that the sheet may be caught no matter what the adjustment of the jogger and its frame should be upon the fly.

It is apparent that in carrying out my invention some changes from the combinations  
125 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  
130 to make such changes and alterations as fairly fall within the spirit and scope of my inven-  
tion.



Having described my invention, what I claim is—

1. An attachment for the fly of a printing-press, comprising a frame adapted to be secured to the fly and carrying a hinged jogger, which latter is actuated by engagement with the fly-board, whereby when the fly is approaching the end of its downstroke, the jogger is automatically shifted to a position to engage the sheet being deposited by the fly.

2. An attachment for the fly of a printing-press, comprising a frame adapted to be secured to the fly, a jogger hinged to the frame and projecting below the latter so as to be engaged and turned by the fly-board as the fly is approaching the end of its downstroke, and a spring for normally holding the jogger in its open position.

3. An attachment for the fly of a printing-press, comprising a frame, a jogger hinged to the frame and projecting beyond the working face of the fly, means for turning the jogger on its axis when the jogger engages the fly-board, and means for normally holding the jogger in its open position.

4. An attachment for the fly of a printing-press, comprising a frame adapted to be secured to the fly, a jogger hinged to the frame and projecting beyond the working face of the fly, the connecting members of the jogger and frame being so constructed that when the jogger's progress is stopped by engagement with the fly-board, the continued movement of the frame operates to partly rotate the jogger.

5. An attachment for the fly of a printing-press, comprising a frame, a jogger hinged to the frame and projecting at one side beyond the same, the connecting members of the frame and jogger having beveled contacting faces whereby when the progress of the jogger is stopped by engagement with the fly-

board, the beveled faces operate to partly rotate the jogger.

6. An attachment for the fly of a printing-press, comprising a frame adapted to be adjustably secured to said fly, a leaf hinged to said frame, a flexible jogger secured to the leaf, and means for partly rotating the jogger on its axis simultaneously with the completion of the downstroke of the fly.

7. An attachment for the fly of a printing-press, comprising a frame having means for its attachment to said fly, a jogger, a pivot-bolt passing through the frame and jogger and secured to the latter, the said pivot-bolt projecting at one side of the frame so as to engage the fly-board as the fly nears the completion of its downstroke, and means whereby the said jogger is partly rotated by the continued movement of the frame after the pivot-bolt has engaged the fly-board.

8. An attachment for the fly of a printing-press, comprising a frame adapted to be secured to the fly, a jogger hinged to the frame and provided on its front face with a stop for engaging the edge of the sheet as the latter is deposited on the fly, and means for partly rotating the jogger simultaneously with the completion of the downstroke of the fly.

9. In a printing-press, the combination with a fly and fly-board, of a jogger carried by one of said parts and adapted to be engaged by the other part, whereby when the fly is approaching the end of its downstroke, the jogger will be automatically shifted to a position to engage the sheet being deposited by the fly.

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

LEWIS B. TAYLOR.

Witnesses:

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