J. BENGOUGH.

DELIVERY MECHANISM FOR PRINTING PRESSES.

APPLICATION FILED SEPT. 25, 1906.

992,330.

Patented May 16, 1911.

2 SHEETS—SHEET 1.

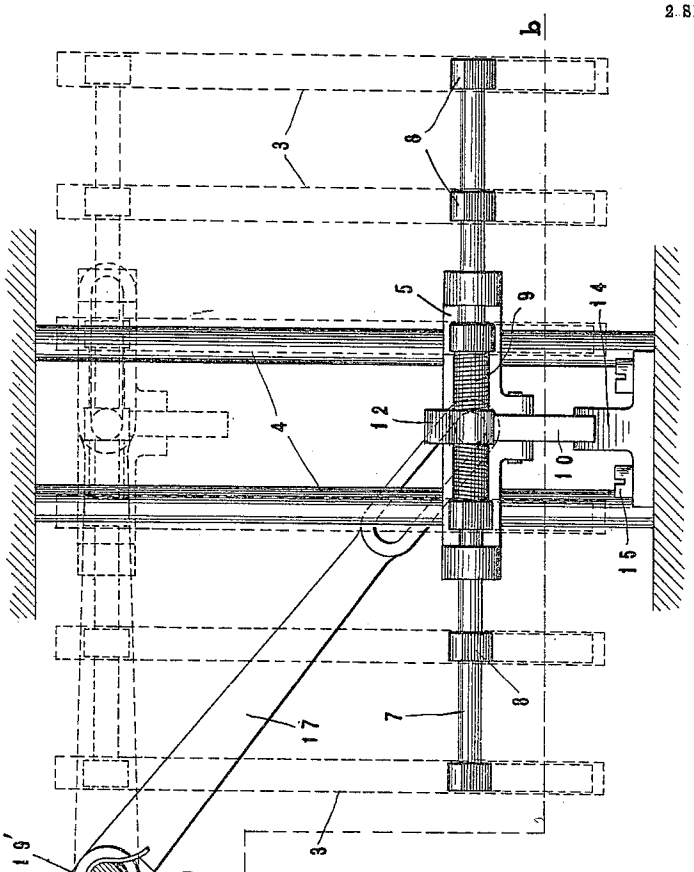
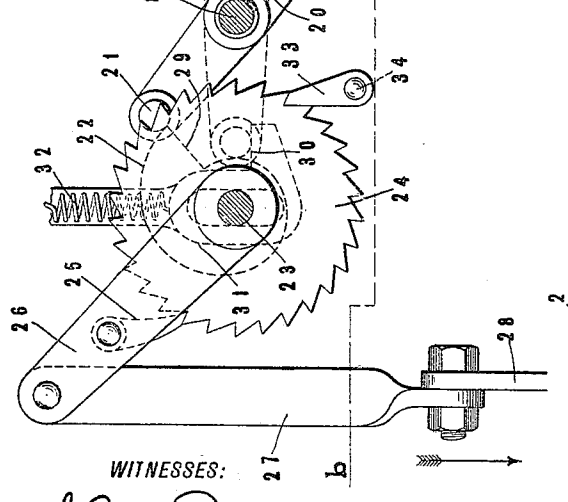


Fig. 1.



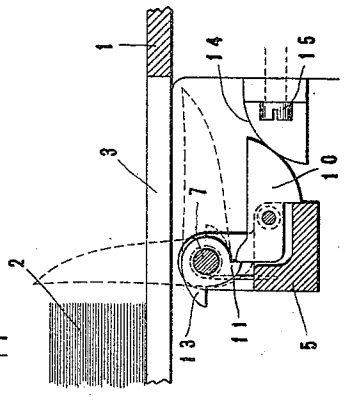


Fig. 3.

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2 SHEETS—SHEET 2.

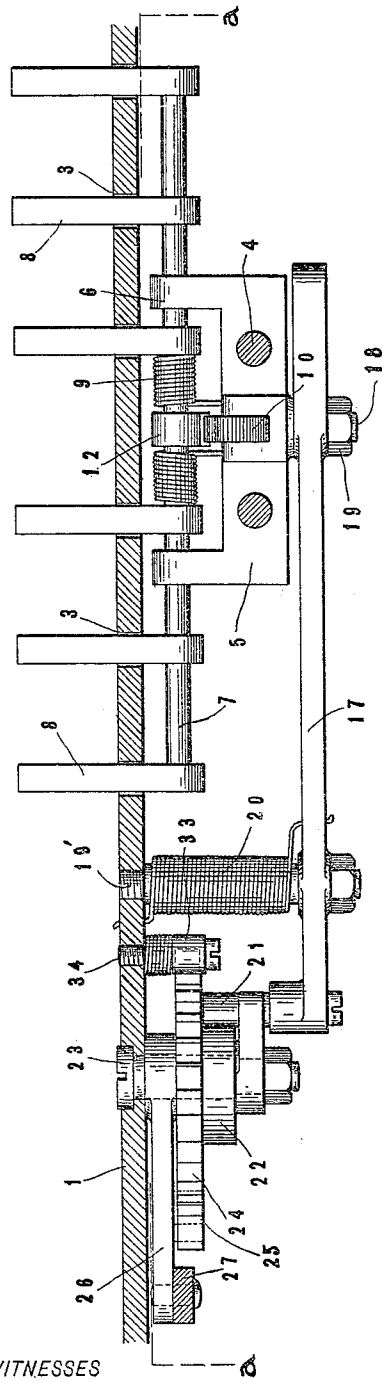

Fig. 2.

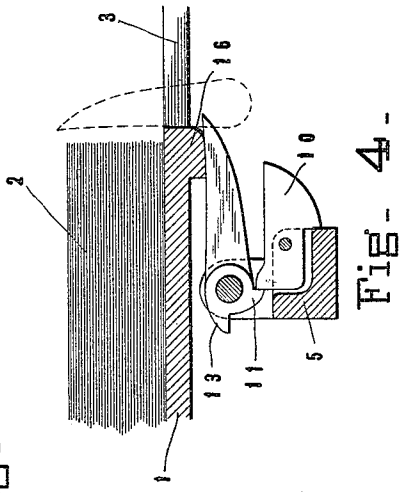

Fig. 4.

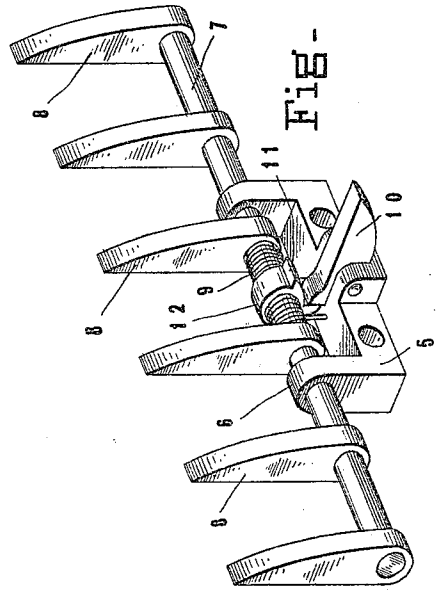

Fig. 5.

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DELIVERY MECHANISM FOR PRINTING-PRESSES.

992,330. Specification of Letters Patent. **Patented May 16, 1911.**

Application filed September 25, 1906. Serial No. 336,142.

To all whom it may concern:

Be it known that I, JAMES BENGOUGH, residing at Niagara Falls, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Delivery Mechanism for Printing-Presses, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to printing mechanism, and one of the objects thereof is to provide improved means for ejecting one or more sheets from the accumulating table of a printing press.

Another object of the invention is to provide mechanism of the above character adapted for use with plate presses, which will be simple in construction and entirely reliable in action.

A further object of the invention is to provide means whereby a predetermined number of printed sheets may be carried from the accumulating table of a printing press, of such construction as will in no wise interfere with the delivery of fresh sheets upon said table.

Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements and arrangement of parts which will be exemplified in the construction hereinafter described and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings, wherein is illustrated one of the various possible embodiments of my invention, Figure 1 is a top plan view thereof, the accumulating table being removed in order better to illustrate certain operative parts thereof, said view being taken substantially on line *a*—*a*, Fig. 2. In this figure the relative positions of the slots in the accumulating table through which the ejector fingers pass are indicated diagrammatically by dotted lines. Fig. 2 is a vertical sectional view taken substantially on line *b*—*b*, Fig. 1; Fig. 3 is a vertical sectional view taken through a portion of the delivery table and the carriage upon which the ejecting devices are mounted, showing the means for tripping the ejecting devices into position to engage with the sheets upon the table; Fig. 4 is a similar view, but showing the parts at the end of the forward movement of the carriage; Fig. 5 is a view in perspective of the traveling carriage and the ejecting means mounted thereon.

Similar reference characters refer to similar parts throughout the several views of the drawings.

Referring now to the drawings, wherein I have shown an embodiment of my invention arranged for use with a plate printing press, 1 indicates a platform or table upon which sheets 2 are delivered from the printing mechanism. Inasmuch as the printing mechanism forms no part of my present invention, the same has been omitted from the drawings, it being understood that the table 1 is relatively so located with respect thereto as to receive the sheets therefrom immediately after having been acted upon by the printing devices. The sheets are superposed one upon another upon the table, as shown in Figs. 3 and 4 of the drawings, and at this point it may be noted that the mechanism as disclosed herein is adapted to deliver the sheets in such superposed relation in order that they are readily fastened or bound together in book or tablet form. Table 1 is provided with a plurality of longitudinally extending slots 3 through which the ejecting means are projected at regular intervals into position to engage and carry the sheets therefrom, as will presently be described.

Upon a pair of rods 4 extending in parallel relation with slots 3 and suitably supported in the framework of the machine beneath table 1 is a carriage 5. This carriage is loosely mounted upon said rods and is adapted to slide forward and backward thereon. Journaled in upward extensions 6 of carriage 5 is a shaft 7 having affixed thereto at regular intervals a plurality of ejector fingers 8. One of these ejector fingers is arranged beneath each of the slots of the accumulating table and said fingers, when shaft 7 is rotated, are adapted to be projected through said slots into position to engage with the sheets thereon. The means for swinging said fingers through slots 3 comprise a pair of springs 9 which are coiled about shaft 7 and are attached at their outer ends thereto, said springs having their opposite ends fast in said carriage. These springs are tensioned so as constantly to

urge fingers 8 to an upright position, which fingers are normally held against the tension of said springs in inoperative position beneath the table by means of a trigger 10 pivotally mounted upon carriage 5 which engages a shoulder or ledge 11 of a collar 12 fixedly mounted upon shaft 7. Collar 12 is also provided with a second shoulder or ledge 13 which engages trigger 10, such engagement limiting the rotative movement of shaft 7 and holding fingers 8 in an upright position through slots 3 of table 1 in position to engage the sheets thereon.

A cam 14 is secured, as by means of screw 15, to the framework beneath the table in position to engage a cam surface provided upon trigger 10 when carriage 5 has been moved to initial position and thereby trip said trigger to release ejector fingers 8, and said ejector fingers are retracted through slots 3 into inoperative position beneath said table at the end of the forward movement of the carriage, by means of cam ledges 16 formed integral with said table and located underneath the same at the forward ends of slots 3. These ledges engage the fingers during the forward movement of the carriage and depress the same to such position as will enable trigger 10 to take behind ledge 11, as clearly shown in Fig. 4 of the drawings.

The carriage is slid forward and backward on rods 4 by means of a lever 17 provided at its outer end with an elongated slot the walls of which take about a stud 18 which extends downward from carriage 5, said stud being threaded at its end to receive a nut 19 which holds said lever in position thereon. Lever 17 is pivotally mounted upon a stud 19′ which extends downwardly from a lateral extension of table 1 and is normally urged to swing in one direction by means of a spring 20 which is coiled about said stud and has one end secured to said lever, the other end thereof being secured to the lateral extension of the table. The opposite end of lever 17 is provided with a stud 21 which is adapted to ride upon the periphery of a wiper-wheel 22 journaled upon a stud shaft 23 which projects downwardly from table 1. Secured to wiper-wheel 22 is a ratchet wheel 24 adapted to be engaged and rotated by a pawl or dog 25 pivoted upon a lever 26 journaled upon stud shaft 23, the outer end of said lever being pivotally connected to a link 27 which is, in turn, pivotally connected to a link 28 adapted to be reciprocated by any suitable mechanism driven from the printing mechanism. The cammed periphery of wiper-wheel 22 is provided with an abrupt step or shoulder, as at 29, so that when stud 21 of lever 17 has been traversed by the periphery of said cammed portion, the same will reach step 29 and be permitted to swing under the influence of spring 20 to the position shown in dotted lines in Fig. 1, and, as a means for arresting this movement of lever 17, I provide a shoulder 30 upon a link 31 resiliently suspended by means of a spring 32 in the framework of the machine, the lower end of said link being slotted to take about stud-shaft 23 upon which the wiper-wheel is journaled. This stud forms a guide for link 31 and prevents the same from relative lateral movement. A holding pawl 33 is mounted upon a stud 34 extending downwardly from the table which engages ratchet wheel 24 and prevents a reverse movement thereof.

Having described this embodiment of my invention, the operation thereof may now be understood. It may, however, first be noted that sheets which have been acted upon by the printing mechanism are deposited or piled one upon another on table 1 and that the number of teeth upon ratchet wheel 24 corresponds to the number of sheets which are to be collectively ejected from the table at a single operation, it being understood that the said ratchet wheel is rotated by means of its actuating mechanism through the space of one tooth at each printing operation of the press. The rotation of ratchet wheel 24 will, through wiper-wheel 22, cause a swinging movement of lever 17 against the tension of spring 20, which will move carriage 5 and the ejecting fingers carried thereon from the position shown in dotted lines in Fig. 1 to the position shown in full lines in said figure, and immediately preceding the end of this movement cam 14 will trip trigger 10, whereupon springs 9 will swing fingers 8 through the slots of table 1, as shown in Figs. 2 and 3. During this recovery movement of carriage 5 a predetermined number of sheets will have been deposited upon the table ready to be ejected therefrom, as shown in Fig. 3. At this point of the operation of the machine, stud 21 of lever 17 is about to escape step 29 and swing down against shoulder 30 of link 31, inasmuch as wiper-wheel 12 has been rotated to substantially the position shown in Fig. 1 of the drawings, and, when such swinging movement of lever 17 occurs, carriage 5 will be projected forward rapidly and fingers 8 which are in engagement with the pile of sheets upon said table will carry the same therefrom, leaving the table free to receive fresh sheets from the printing mechanism. The engagement of ledges 16 of table 1 with fingers 8, as above described, will depress them to the position shown in Fig. 4, whereupon trigger 10 will again engage the shoulder 13 of collar 12 and hold said trigger in inoperative position beneath the table during the recovery movement of the carriage.

The above-described operation takes place automatically during the operation of the press and at each forward movement of

the carriage a predetermined number of sheets are ejected from the accumulating table, fresh sheets being deposited upon said table during the backward or recovery movement thereof.

It will thus be seen that I have provided mechanism well adapted to attain the ends and objects of my invention and that the same, while of simple construction, is characterized by accuracy of action.

While I have shown my invention as applied to a press of the plate type, it will be understood that it may be adapted to other forms of presses, although the same is of peculiar value in the relation shown.

As many changes could be made in the above construction and many apparently widely different embodiments of my invention could be made without departing from the scope thereof, I intend that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense. I desire it also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, and a pivotally mounted spring actuated means normally lying beneath the table out of contact with said sheets and adapted to be projected through said table at intervals to engage the edges of the sheets and then be moved in a direction to eject the sheets from said table.

2. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, sheet engaging means normally held in restrained position beneath said table and mechanism for releasing said means whereby it is projected through said table to a position to engage said sheets for removing the same from the table.

3. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, a carrier reciprocating in a horizontal plane, and spring actuated means mounted on said carrier adapted to be held out of contact with said sheets and to be projected to a position to engage the sheets and then be moved with said carrier to eject the sheets from the table.

4. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, means for ejecting said sheets normally held out of contact therewith, a carrier upon which said ejecting means are movably mounted, means for moving said ejecting means through said table and into engagement with a pile of sheets upon said table, and means for moving said carrier whereby said ejecting means are caused to carry said sheets from said table.

5. In delivery mechanism for printing presses, the combination with a table upon which printed sheets are delivered, of a reciprocating carrier, ejecting means mounted to swing upon said carrier and normally held out of contact with said sheets, means for causing said ejecting means to swing through said table, and into engagement with one or more sheets upon said table, and means for moving said carrier bodily whereby said sheets are ejected from said table.

6. In delivery mechanism for printing presses, in combination, a table upon which printed sheets are delivered from the printing mechanism, a reciprocating carrier, ejecting means mounted to swing upon said carrier, means for causing said ejecting means to swing through said table to a position where the same will engage with one or more sheets upon said table, means for moving said carrier whereby said sheets are ejected therefrom, and means for causing a recovery movement of said carrier.

7. In delivery mechanism for printing presses, in combination, a table upon which printed sheets are delivered from the printing mechanism, a reciprocating carrier, ejecting means mounted to swing upon said carrier and normally held out of contact with said sheets, means for causing said ejecting means to swing through said table into engagement with one or more sheets upon said table, means for moving said carrier whereby said ejecting means will be caused to carry said sheets from said table, and means for moving said carrier to such a position that said ejecting means will be in position to be swung into position to engage with a fresh pile of sheets upon said table.

8. In delivery mechanism for printing presses, in combination, a slotted table adapted to support sheets delivered from the printing mechanism, a carrier mounted to reciprocate in a single plane substantially parallel with said table and beneath the same, ejecting means carried by said carrier and normally held out of contact with said sheets, means adapted to project said ejecting means through said table into position to engage the sheets thereon, and means for advancing said carrier whereby said ejecting means engages said sheets and carries the same from said table.

9. In delivery mechanism for printing presses, in combination, a slotted table adapted to support sheets delivered from the printing mechanism, a carrier mounted to reciprocate in a plane substantially parallel with said table and beneath the same, pivotally mounted ejecting means carried

by said carrier, means for projecting said ejecting means through said table into position to engage the sheets thereon, means for advancing said carrier whereby said ejecting means engages said sheets and carries the same from said table, and means for causing a recovery movement of said carrier to carry the ejecting means into position to be moved into position to engage said sheets supported on said table.

10. In delivery mechanism for printing presses, in combination, a table upon which printed sheets are delivered from the printing mechanism, a reciprocating carrier, ejecting means mounted to swing upon said carrier, means for causing said ejecting means to swing into engagement with one or more sheets upon said table, means for advancing said carrier whereby said sheets are carried from said table, and means for moving said ejecting means into inoperative position at the end of the advancing movement of said carrier.

11. In delivery mechanism for printing presses, in combination, a slotted table to receive printed sheets, a carrier adapted to travel beneath said table, ejecting means movably mounted upon said carrier and constantly urged to an upright position whereby the same will extend through the slots of said table, means for advancing said carrier when the ejecting means are extending through said slots and are in position to engage the sheets upon the table, means for forcing said ejecting means to inoperative position beneath said table at the end of said advancing movement, means for holding said ejecting means in said inoperative position, means for causing a recovery movement of said carrier to bring said ejecting means into position to be moved into position to engage a fresh pile of sheets, and means for tripping said holding means whereby said ejecting means are permitted again to assume an upright position.

12. In delivery mechanism for printing presses, in combination, a slotted table adapted to support sheets delivered from the printing mechanism, a carrier mounted to reciprocate beneath said table, ejecting means journaled upon said carrier, means for projecting said ejecting means through said table into position to engage the sheets thereon, means for advancing said carrier whereby said ejecting means engage said sheets and carry the same from said table, and means for moving said ejecting means into inoperative position at the end of the advancing movement of said carrier.

13. In delivery mechanism for printing presses, in combination, a slotted table adapted to support sheets delivered from the printing mechanism, a carrier mounted to reciprocate beneath said table, ejecting means journaled upon said carrier, means for swinging said ejecting means through said table into position to engage the sheets thereon, means for advancing said carrier whereby said ejecting means will engage said sheets and carry the same from said table, means for swinging said ejecting means into inoperative position at the end of the advancing movement of said carrier, means for causing a recovery movement of said carrier, and means for holding said ejecting means in inoperative position during said recovery movement.

14. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, ejecting means adapted to reciprocate with respect to said table, means for causing said ejecting means to advance while the same are in engagement with one or more sheets on said table whereby the sheets are ejected therefrom, means for engaging said ejecting means and moving the same into inoperative position at the conclusion of such advancing movement, means for causing a recovery movement of said ejecting means while fresh sheets are being delivered to the said table, and means for moving said ejecting means into position to engage said sheets at the end of the recovery movement.

15. In delivery mechanism for printing presses, in combination, a slotted table adapted to receive sheets from printing mechanism, a carriage arranged for reciprocation beneath said table, a plurality of ejector-fingers journaled in said carriage, said fingers being constantly spring-pressed toward an upright position through the slots of said table, means adapted to reciprocate said carriage with respect to said table, trip mechanism adapted to hold said fingers in inoperative position beneath said table during one of the reciprocal movements of said carriage, means adapted to release said trip mechanism at the end of such movement whereby such fingers assume upright positions through the slots of said table and are maintained in such upright positions during the other of the reciprocal movements of said carriage whereby they are carried into engagement with the sheets upon said table and eject the same therefrom, and means for depressing said fingers into inoperative position at the end of such last-mentioned movement of said carriage, said trip mechanism again operating to hold said fingers in inoperative position.

16. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, a plurality of ejector fingers, spring means adapted to swing said fingers into position to engage one or more sheets upon said table, means for moving said fingers bodily while in engagement with said sheets whereby said sheets are carried from said table, means for returning said fingers

to initial position, and trip mechanism adapted to hold said fingers in inoperative position during the latter movement.

17. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, a plurality of ejector fingers, spring means for swinging said ejector fingers into position to engage one or more sheets upon said table, means for moving said fingers bodily while in engagement with said sheets whereby they are ejected from said table, means for swinging said fingers into inoperative position when they have been moved to eject said sheets, and a trigger adapted to hold said fingers in such inoperative position.

18. In delivery mechanism for printing presses, in combination, a table upon which the printed sheets are delivered from the printing mechanism, a reciprocating carrier, ejecting means adapted to swing upon said carrier, means for causing said ejecting means to swing to a position where the same will engage with one or more sheets upon said table, spring means for moving said carrier whereby said sheets are ejected from said table, and cam means for causing a recovering movement of said carrier.

19. In delivery mechanism for printing presses, in combination, a table upon which printed sheets are delivered from the printing mechanism, a reciprocating carrier, ejecting means adapted to swing upon said carrier, means for causing said ejecting means to swing into engagement with one or more sheets upon said table, spring-impelled means for moving said carrier whereby said ejecting means will be caused to carry said sheets from said table, and cam-controlled means for moving said carrier to such a position that such ejecting means will be in position to be swung into position to engage with a fresh pile of sheets upon said table.

20. In delivery mechanism for printing presses, in combination, a table upon which printed sheets are delivered from the printing mechanism, a reciprocating carrier, ejecting means adapted to swing upon said carrier, means for causing said ejecting means to swing into engagement with one or more sheets upon said table, spring-impelled means for moving said carrier whereby said ejecting means will be caused to carry said sheets from said table, cam-controlled means for moving said carrier to such a position that such ejecting means will be in position to be swung into position to engage with a fresh pile of sheets upon said table, and pawl and ratchet mechanism for driving said cam.

21. In delivery mechanism for printing presses, in combination, a slotted table adapted to support sheets delivered from the printing mechanism, a carrier mounted to reciprocate beneath said table, ejecting means carried by said carrier, spring means for projecting said ejecting means through said table in a position to engage the sheets thereon, a spring-impelled lever for advancing said carrier whereby said ejecting means engage said sheets and carry the same from said table, and a cam operating upon said lever adapted to return the carriage to initial position to carry said ejecting means into position to be moved through said table to engage fresh sheets supported thereon.

22. In delivery mechanism for printing presses, in combination, a table adapted to receive sheets from the printing mechanism, a carriage mounted to travel forward and backward beneath said table, ejecting means carried by said carriage operative to engage one or more sheets upon said table and carry the same therefrom during the forward travel of said carriage and be forced and held in inoperative position during the backward travel thereof, a spring-actuated lever for moving said carriage in its forward direction, and a wiper wheel acting upon said lever adapted to move said carriage in a backward direction.

23. In delivery mechanism for printing presses, in combination, a table adapted to receive sheets from the printing mechanism, a carriage adapted to travel forward and backward therebeneath, ejector means movably mounted upon said carriage, said ejector means being operative to engage one or more sheets upon said table and carry the same therefrom during the forward travel of said carriage and to be forced and held in inoperative position during the backward travel thereof, a spring-actuated lever for moving said carriage in its forward direction, a wiper wheel acting upon said lever adapted to move said carriage in a backward direction, said wiper wheel when the same reaches a predetermined position being adapted to release said lever, whereby the same under the influence of its propelling spring will cause a quick forward movement of said carriage, and means for driving said wiper wheel step by step.

24. In delivery mechanism for printing presses, in combination, a table adapted to receive sheets from the printing mechanism, a carriage mounted to travel forward and backward therebeneath, ejector means carried by said carriage operative to be projected therethrough into position to engage one or more sheets thereon and carry the same therefrom during the forward travel of said carriage and to be forced and held in inoperative position beneath the same during the backward travel thereof, a spring-actuated lever for moving said carriage in its forward direction, a wiper wheel acting upon said lever adapted to move said carriage in a backward direction, said wiper wheel when it reaches a predetermined position being adapted to release said lever,

whereby the same under the influence of its propelling spring will cause a quick forward movement of said carriage whereby said sheets are ejected, means for driving said wiper wheel step by step, and cushioning means for arresting said lever when the same is released by said wiper wheel.

25. In delivery mechanism for printing presses, the combination with a slotted table upon which printed sheets are deliverd from the printing mechanism, of a carriage mounted to slide forward and backward beneath said table, a plurality of ejector fingers journaled upon said carriage, said ejector fingers being adapted to be projected upward through the slots of said table and into engagement with one or more of the printed sheets supported thereon and to carry the same therefrom during the forward travel of said carriage and to be forced and held in inoperative position beneath said table during the backward travel thereof, a spring-actuated lever for moving said carrier in its forward direction, a wiper wheel acting through said lever adapted to move said carriage in a backward direction, and pawl and ratchet mechanism for driving said wiper wheel step by step.

26. In delivery mechanism for printing presses, the combination of a slotted table adapted to receive printed sheets delivered from the printing mechanism, a carriage slidably mounted beneath said table and adapted to travel forward and backward with respect thereto, a plurality of ejector fingers carried by said carriage, a spring-actuated lever for moving said carriage in its forward direction, a wiper wheel acting through said lever adapted to move the same in a backward direction, means adapted to project said ejector fingers through said slots into position to engage one or more sheets upon said table at the end of the backward travel of said carriage, and means adapted to retract said fingers beneath said table at the end of the forward movement of said carriage and to hold the same in inoperative position during the backward movement thereof.

27. In delivery mechanism for printing presses, the combination with a slotted table adapted to receive sheets from the printing mechanism, of a carriage supported to slide forward and backward beneath the same, a spring-actuated lever for moving said carriage in its forward direction, a wiper wheel acting through said lever adapted to move said carriage in a backward direction, a plurality of ejector fingers journaled upon said carriage, spring means for urging said ejector fingers through said slots into position to engage one or more sheets upon said table, a trigger adapted to hold said fingers in inoperative position beneath said table during the backward movement of said carrier, and means for operating said trigger to release said fingers at the end of the backward movement of said carriage.

28. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, pivotally mounted means normally restrained beneath said table and adapted to be swung therethrough into position to engage the edges of an upright pile of said sheets, and mechanism for moving said means bodily to simultaneously eject all of said sheets from said table.

29. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, paper engaging means held in restrained position beneath said table, mechanism for releasing said means whereby it projects up through said table, and means for moving said first mentioned means bodily into engagement with the pile of sheets for removing the same from said table.

30. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, pivotally mounted means normally held out of contact with said sheets and adapted to be swung up through said table to engage the sheets thereon, mechanism for moving said means into engagement with a pile of sheets, and means for causing a different movement of said first mentioned means whereby the sheets are ejected.

31. In delivery mechanism for printing presses, in combination, a table for receiving the printed sheets, a plurality of pivotally mounted fingers normally held out of contact with said sheets and adapted to be swung up through said table into position to engage a pile of sheets thereon, and means for moving the said fingers bodily while in engagement with said pile of sheets whereby said sheets are ejected.

32. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, a plurality of pivotally mounted fingers normally held in restrained position adapted to be swung up through said table and into position to engage a pile of sheets thereon, means for releasing said fingers from restrained position whereby the same may swing up through said table, and means for moving said fingers bodily while in engagement with said sheets whereby said sheets are ejected from said table.

33. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, means normally held in restrained position adapted to be moved into position to engage a pile of sheets upon said table, means for releasing said first mentioned means, mechanism for moving said first mentioned means while in engagement with said sheets whereby said sheets are ejected from said table, and mechanism for

returning said first mentioned means to a restrained position after said sheets have been ejected from the table.

34. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, a plurality of fingers normally held in a restrained position adapted to be moved into engagement with a pile of sheets upon said table, means for releasing said fingers from restrained position whereby the same may engage the sheets, means for bodily moving said fingers for removing the sheets in engagement therewith from the table, means for returning said fingers to restrained position, and mechanism for returning said fingers to a position to be moved to engage a fresh pile of sheets.

35. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, a finger adapted to engage said sheets normally held in restrained position, a reciprocating carrier upon which said finger is pivotally mounted and means for releasing said finger from restrained position when said carrier reaches one end of its path of travel whereby said sheets may be engaged by said finger and removed from the table when said carrier moves in the opposite direction.

36. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, a pivotally mounted finger, a spring for moving said finger, means for holding said finger in restrained position, a reciprocating carrier upon which said finger is mounted, and means for releasing said finger from restrained position when said carrier reaches one end of its path of travel whereby said sheets may be engaged by said finger and removed from the table when said carrier moves in the opposite direction.

37. In delivery mechanism for printing presses, in combination, a table for receiving printed sheets, a reciprocating carrier, means for reciprocating said carrier, a pivotally mounted finger mounted on said carrier adapted to engage a pile of sheets for ejecting the same from the table as the carrier moves in one direction, means for releasing said finger whereby the same may engage said sheets at one end of the path of reciprocation of said carriage, and means for returning said fingers to restrained position at the opposite end of said path of travel.

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

JAMES BENGOUGH.

Witnesses:
T. D. SUTHERLAND,
E. K. BOTTLE.