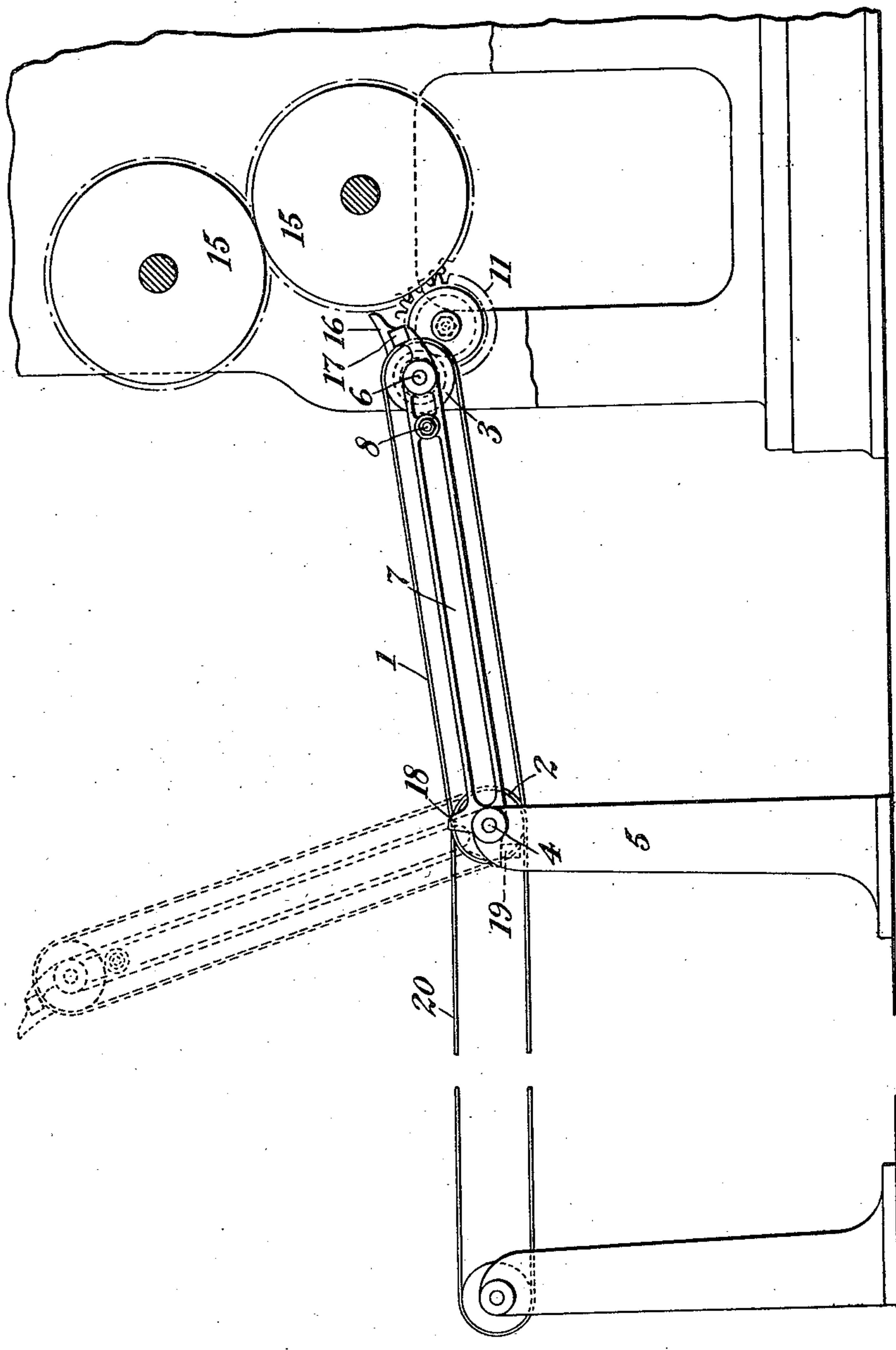


A. J. FORD.
DELIVERY MECHANISM.
APPLICATION FILED MAR. 23, 1908.

Patented Mar. 9, 1909.
2 SHEETS—SHEET 1.

914,561.

Fig. 1



Witnesses:

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Victor D. Borst

Inventor:

Albert J. Ford

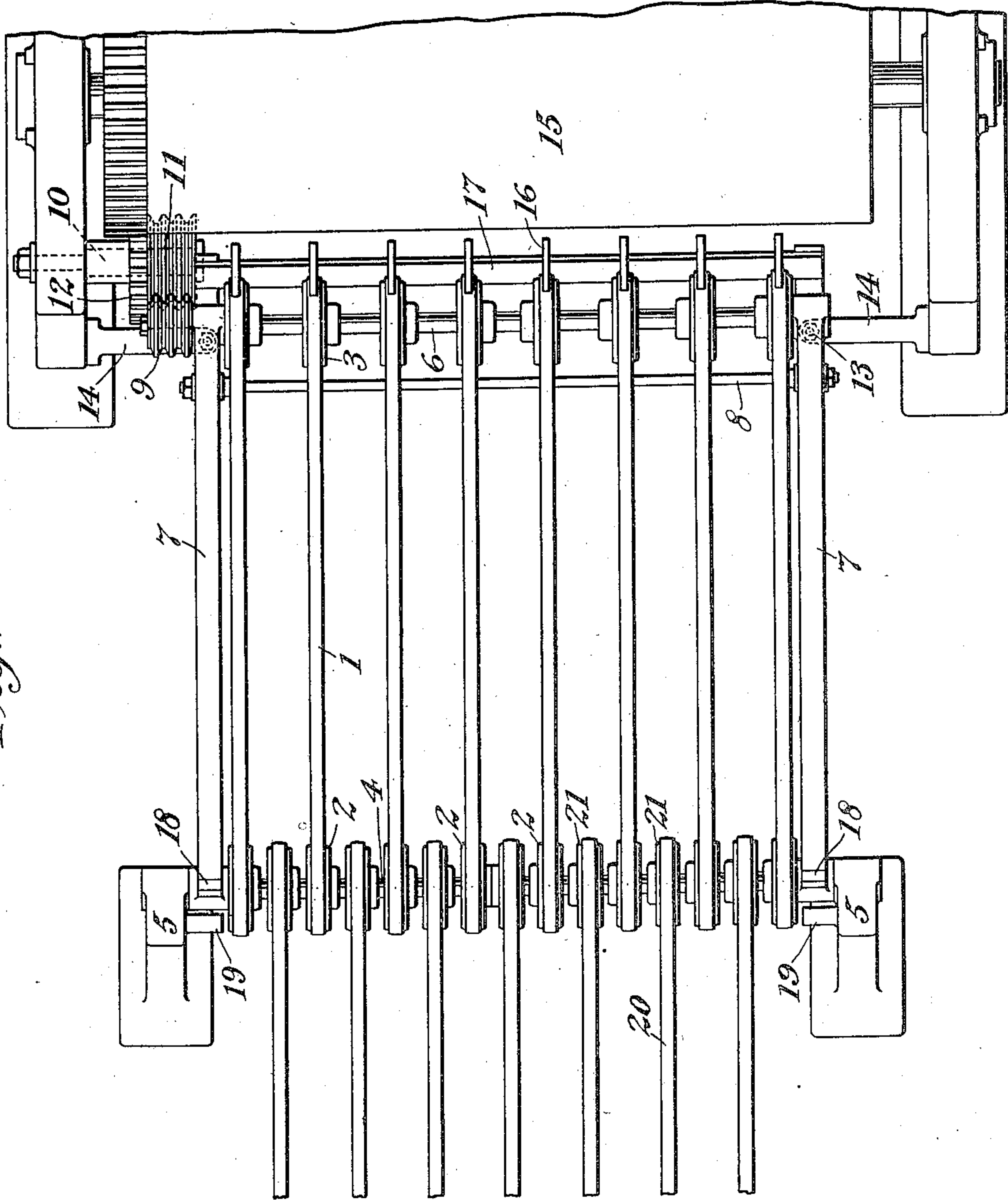
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A. J. FORD.
DELIVERY MECHANISM.
APPLICATION FILED MAR. 23, 1908.

914,561.

Patented Mar. 9, 1909.
2 SHEETS—SHEET 2.

Fig. 2



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UNITED STATES PATENT OFFICE.

ALBERT J. FORD, OF NEW YORK, N. Y., ASSIGNOR TO FUCHS AND LANG MANUFACTURING COMPANY, A CORPORATION OF NEW YORK.

DELIVERY MECHANISM.

No. 914,561.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed March 23, 1908. Serial No. 422,819.

To all whom it may concern:

Be it known that I, ALBERT J. FORD, a citizen of the United States, residing in the borough of Manhattan, city of New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Delivery Mechanism, of which the following is a specification, reference being had therein to the accompanying drawings, forming part thereof.

My invention relates to delivery mechanism for receiving and delivering sheets of printed material from a printing press, and it is particularly adapted for use in connection with presses for printing upon sheets of metal or other non-absorbent material, although it may be used in other connections.

In printing upon tin plate and other metallic or non-absorbent material it is necessary to lay the sheets, after printing, separately upon racks in order to prevent contact with the moist ink or colors, which do not strike in and dry quickly as in paper or other absorbent material, and for this reason it is convenient to use a delivery mechanism comprising a conveyer which receives the printed plates and from which they are taken by one or more operators and placed upon suitable racks. A mechanism of this character, however, if permanently connected with the printing press, prevents ready and convenient access to the printing couple and other parts of the machine, and interferes with adjustments and other operations which must be performed frequently on the machine.

The object of the present invention is to produce a delivery mechanism of the type above referred to, which, while involving no complications in its structure or in the mechanism for actuating it, may be removed at once from the printing press whenever convenient access to the printing couple is required, and may be at once replaced in working position, without the necessity of connecting and disconnecting any mechanism or changing any adjustment.

To the above end the invention comprises a delivery mechanism in the form of a conveyer, which is pivotally mounted at a point distant from the printing couple, so that it may be swung, about its pivotal support, away from the printing couple. In com-

bination with this arrangement is a mechanism for actuating the delivery mechanism by connection with a moving part of the press, this mechanism being automatically connected with and disconnected from the conveyer by the movement of the latter into and out of operative position.

I will now describe the embodiment of my invention illustrated in the accompanying drawings, and will thereafter point out my invention in claims.

In the drawings Figure 1 is a side elevation of a delivery mechanism embodying the present invention. Fig. 2 is a plan view of the delivery mechanism.

The printed sheets are delivered from the press upon a conveyer comprising endless tapes 1, which are supported upon pulleys 2 and 3. The pulleys 2 are mounted on a shaft 4 which is journaled in standards 5. The pulleys 3 are mounted on a shaft 6, which is journaled in the forward ends of two arms 7, which are pivoted, at their rear ends, on the shaft 4. The forward ends are connected by a tie rod 8.

The shaft 6 and pulleys 3 are rotated, when the mechanism is in operation, by means of a grooved friction driving wheel 9 fixed to the shaft 6. The wheel 9 rests normally in engagement with a correspondingly grooved wheel 11, which is journaled on a shaft 10 fixed to the frame of the printing press. A gear 12, fixed to the friction wheel 11, serves to drive the latter through suitable gearing connected with a moving part of the press.

In its normal operative position the conveyer is supported by stop screws 13 threaded into brackets 14 on the frame of the press, and the friction wheels are in operative engagement, so that the pulleys are rotated and the tapes move and sheets delivered upon them are carried away from the press.

In order to insure the proper delivery of the plates from the printing couple 15 upon the tapes, a series of guide fingers 16 is mounted upon a cross bar 17 fixed to the forward ends of the arms 7.

When convenient access to the printing press is required the conveyer may be at once disconnected from the press, and removed from the space at the rear thereof, by swing-

ing the arms 7 and the parts carried thereby upward to the position shown by broken lines in Fig. 1. In this position lugs 18 on the arms 7 engage cooperating lugs 19 on the standards 5, to prevent the conveyer falling over. In this position, while the conveyer is entirely out of the way, and the operation of the tapes and pulleys is interrupted by the removal of the driving wheel 9 from the wheel 10, the arrangement and adjustment of the mechanism is not in any way disturbed, and the conveyer may be at once thrown into operation again by merely lowering the arms 7 upon the stop screws 13, the friction wheels being, by the same movement, thrown into operative engagement.

In the illustrated embodiment of the invention a second set of tapes 20 is mounted on pulleys 21 fixed to and rotated by the shaft 4, to receive and carry away such plates as are not removed at once from the tapes 1 by the operator.

It is obvious that various modifications may be made in the construction and operation of the embodiment of my invention hereinbefore described and illustrated in the accompanying drawings, within the spirit and scope of the invention as defined in the following claims.

I claim:—

1. A delivery mechanism for printing presses comprising, in combination with a printing couple and its actuating mechanism, a conveyer arranged to receive printed sheets from the printing couple and pivoted horizontally at a point distant from the printing couple, and power mechanism connecting said actuating mechanism and the conveyer to actuate the latter, said power mechanism being thrown out of operation when the conveyer is swung vertically away

from the printing couple about its pivotal support.

2. A delivery mechanism for printing presses comprising, in combination with a printing couple and its actuating mechanism, a conveyer for receiving printed sheets from the printing couple and comprising a horizontal shaft journaled in fixed bearings at a point distant from the printing couple, pulleys on said shaft, a frame pivoted concentric with said shaft and carrying at its free extremity a driving shaft provided with pulleys, tapes connecting the pulleys on the two shafts, a driving wheel on the driving shaft, and a cooperating driving wheel connected with the actuating mechanism of the printing couple, said wheels being in operative engagement to drive the tapes when the conveyer is in its normal operative position and being disconnected when the frame is swung vertically about its pivotal support.

3. A delivery mechanism for printing presses comprising, in combination with a printing couple and its actuating mechanism, a conveyer arranged to receive printed sheets from the printing couple and pivoted horizontally at a point distant from the printing couple so that it may be swung vertically away from the latter, a friction driving wheel connected with the actuating mechanism of the printing couple, and a friction driving wheel connected with the conveyer, the friction driving wheels being maintained in engagement by the weight of the conveyer when it is in operative position.

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

ALBERT J. FORD.

Witnesses:

HENRY H. DAVIS,
JOSEPH KAUFMANN.