F. ROBERTS.

PRINTING PRESS ATTACHMENT.

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1,033,940. **Patented July 30, 1912.**

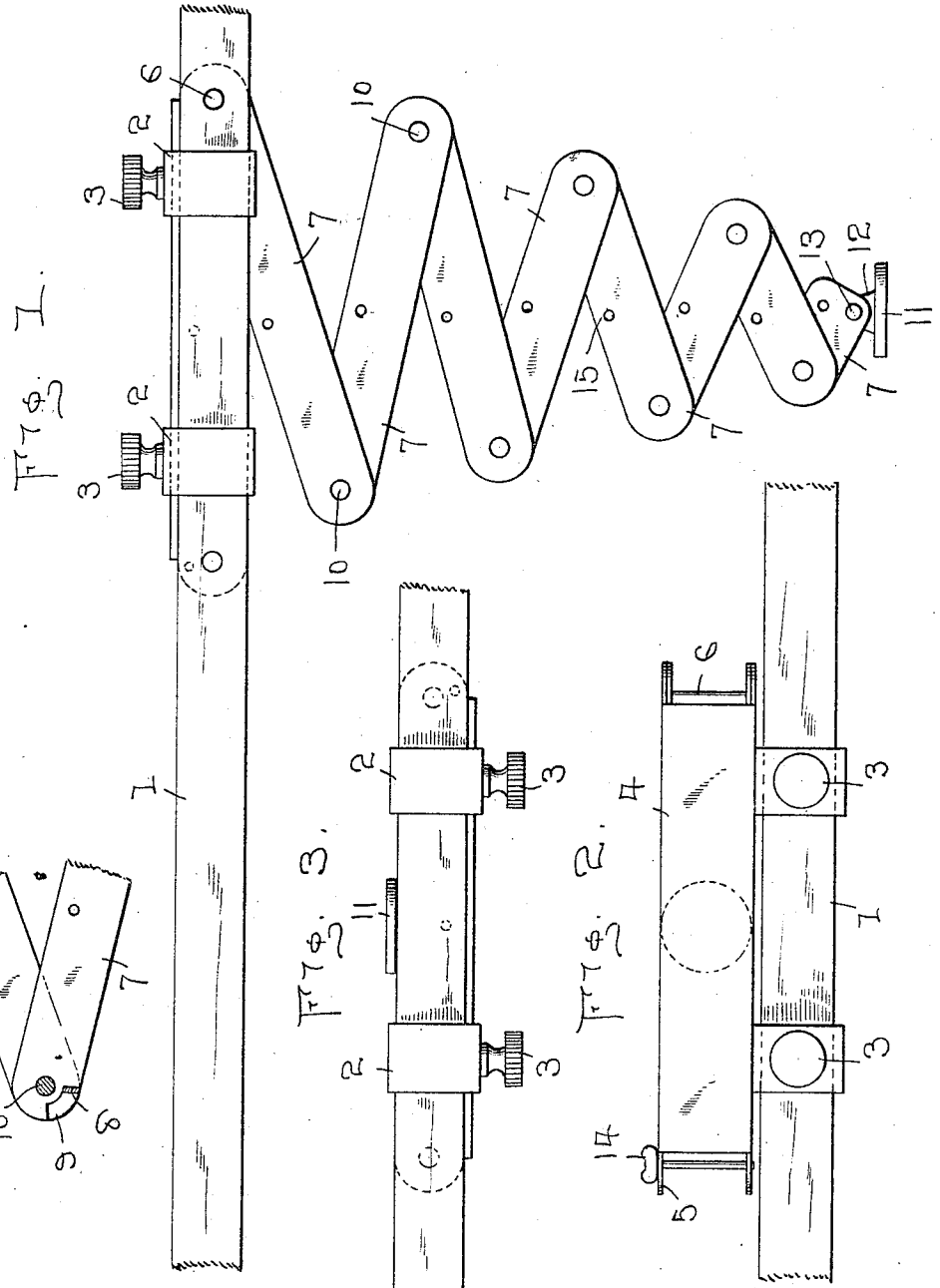

Fig. 1.

Fig. 4.

Fig. 3.

Fig. 2.

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PRINTING-PRESS ATTACHMENT.

1,033,940. Specification of Letters Patent. Patented July 30, 1912.

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To all whom it may concern:

Be it known that I, FRANK ROBERTS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Printing-Press Attachments; 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.

This invention relates to printing press attachments and more particularly to an attachment for the fly fingers of a printing press.

An object of the invention is to provide an attachment for the fly fingers which will not only assist in depositing the printed sheets upon the fly board but will prevent said sheets from rising as the fly fingers swing upwardly to return to their initial position to receive the next sheet.

Another object is to provide an attachment of this character which may be applied to printing presses of various characters and which will save time, labor and expense by preventing the printed sheets from moving after being deposited upon the fly board and also prevent the corners of the sheets from becoming bent or otherwise injured.

Other objects and advantages will be hereinafter set forth in the specification and claims.

Referring to the drawings which are made a part of this application, Figure 1 is a fragmentary side view of an ordinary fly finger of a printing press with my attachment secured thereto, showing the latter in open position. Fig. 2 is a plan view at right angles to Fig. 1, the opposite ends of the fly finger being broken away. Fig. 3 is a view looking at the opposite side of the bar to that shown in Fig. 1, the attachment being in closed position, and, Fig. 4 is a detail view of one of the joints of the attachment.

Referring more particularly to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 represents an ordinary fly stick of a printing press, to which stick my attachment is secured by the collars 2 fitting around the stick 1 and held in an adjusted position upon the stick by means of the set screws 3 carried by the collars and adapted for engagement against the bar 1.

The collars 2 are carried by the channel bar 4 and are secured to the side of the latter to hold said channel bar to one side of, and parallel with the stick 1. The parallel sides 5 of the channel bar 4 are connected at their opposite ends by the pins 6 and the ends of said sides preferably project beyond the ends of the bottom portion of the channel bar 4, and are rounded as will be clearly understood.

Pivoted to one of the pins 6 is the link 7 which is adapted to swing upon the pins 6 for a limited distance, movement of said link being limited by a stop 8 having its opposite ends secured to the parallel sides 5, above the pins 6 and extending transversely of the channel bar 4, said stop 8 being received in the cutaway portions 9 of the end of said link. The opposite end of the link 7 carries a rivet or pin 10 upon which is also mounted one end of a second link 7, said end being also provided with cutaway portions 9 to accommodate the movement limiting stop 8 carried in the outer ends of the first link 7. It will be understood that the second link 7 is slightly shorter than the first link 7 and is adapted to rest within the first link when the attachment is in closed position, as will be later more clearly understood.

A number of links 7 are provided, each link having its inner end mounted upon the rivet carried by the outer end of the link by which the outer link is carried, each succeeding link being slightly shorter than the link before the same and adapted to rest within the longer link by which it is carried. The movement of each link 7 is limited by providing the stop 8 and cutaway portions 9 as previously described.

Pivoted to the free ends of the shortest or last link 7 is the paper engaging button 11 which is pivoted to the link 7 by means of a rigid ear 12, projecting from the back face of the button and pivoted in the outer end of said shorter link 7 by means of the rivet 13.

When the fly fingers are in position to receive the printed papers from the press cylinder, the links are in their normal position within the channel bar, each link fitting within the link by which it is carried and the button 11 resting on top of the links

and the sides 5 of the channel bar, as clearly shown in Fig. 3. After the printed paper has been received from the fly fingers 1 and upon the finger engaging button 11, the fly fingers 1 are swung forward to deposit the printed sheet upon the fly board. During the latter part of this movement of the fly fingers 1, the links 7 fly out of the channel bar 4, and the button 11 forces the paper upon the fly board and remains in engagement with the paper until after the fly fingers have started upon their return to their normal position, said button holding the printed sheet in position upon the fly board and preventing the same from returning with the fly fingers 1. During the latter part of the return movement of the finger bars 1, the button 11 raises from engagement with the paper upon the fly board and the links 7 return to their normal positions within the channel bar 4, the button 11 resting upon the links 7 and upon the sides 5 of the channel bar 4.

If it is desired to discontinue the use of the attachment, the same may be rendered inoperative by removing the thumb screw 14 from its position within the ends of the sides 5 and passing said screw through the openings 15 provided therefor through the links 7 and the sides 5, as will be clearly understood.

It will thus be seen that I have provided an attachment for a printing press which will prevent printed sheets from leaving the fly board after having once been placed thereon by the fly fingers 1 of the machine and which will also prevent bending and tearing of the corners of the sheets.

It will further be evident that the attachment may be applied to the fingers 1 so as to engage the paper in the margin and thus eliminate all danger of blurring the printed face of the paper.

It will further be evident that this attachment will save not only a large amount of time and labor but will also greatly diminish or decrease the loss of stock, ink, etc., heretofore experienced by printing establishments.

What I claim is:—

1. An attachment for a fly stick comprising a channel bar, means for securing the channel bar to the fly stick, links carried by the channel bar and adapted to normally rest within the latter and a paper engaging button carried by said links.

2. An attachment for a printing press comprising a channel bar, connected links, each link being carried by a longer link, means for limiting the movement of each link in relation to the link by which it is carried, the longest link being secured in the channel bar, said links being adapted to normally rest within the channel bar, and a paper engaging button carried by the shortest link.

3. An attachment for a printing press fly finger comprising a channel bar, collars carried by the channel bar for engagement around the fly finger, means for securing the collars in position around the fly finger, links connected to one another, one of said links being connected to the channel bar, said links being adapted to fit within one another and normally rest within the channel bar, a paper engaging member pivoted to one of the links, and means for locking the links in position within the channel bar.

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

FRANK ROBERTS.

Witnesses:
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