

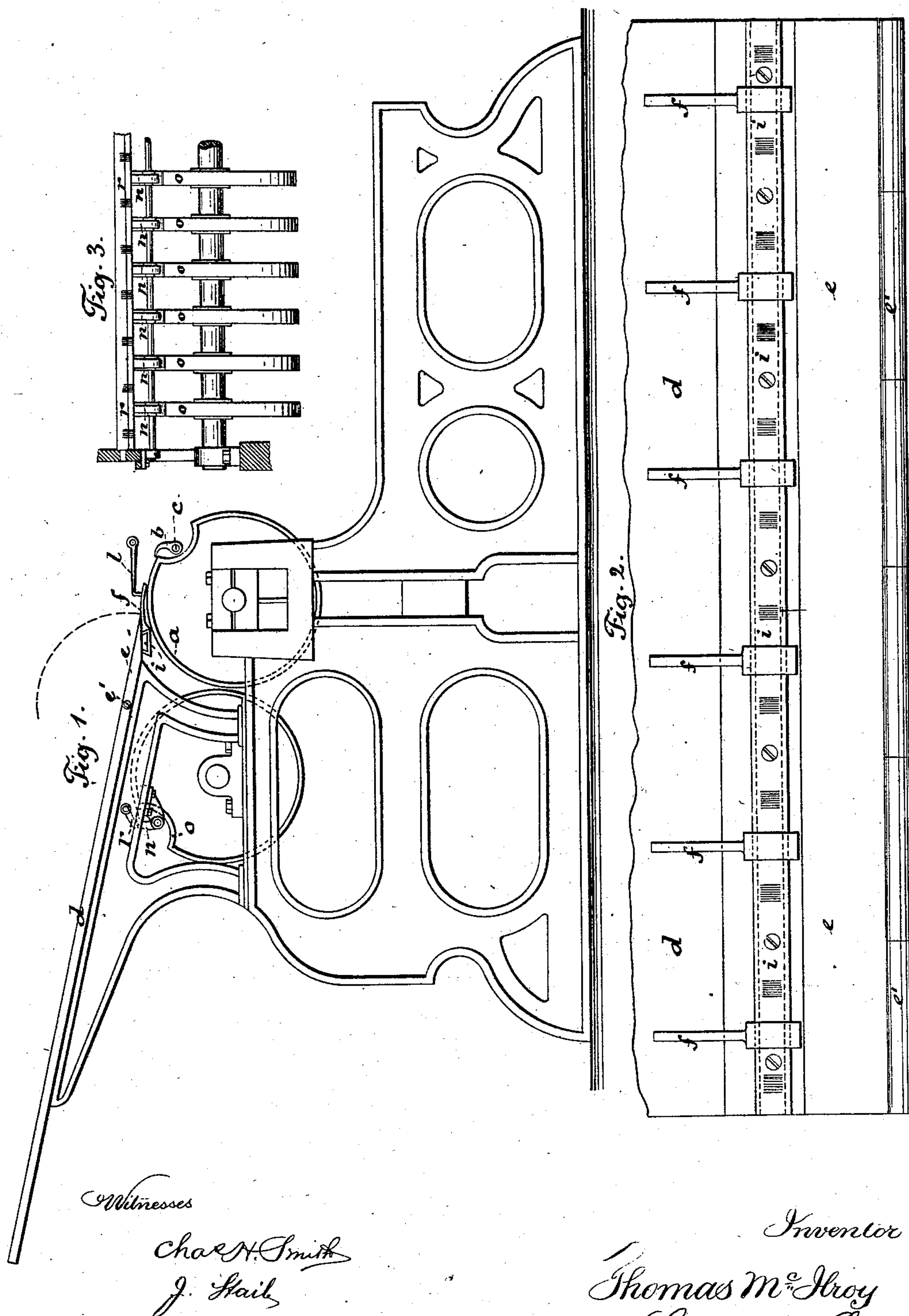
(No Model.)

T. McILROY.

# GRIPPER ATTACHMENT FOR PRINTING PRESSES.

No. 255,181.

Patented Mar. 21, 1882.



N. PETERS, Photo-Lithographer, Washington, D. C.



# UNITED STATES PATENT OFFICE.

THOMAS MCILROY, OF BROOKLYN, NEW YORK.

## GRIPER ATTACHMENT FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 255,181, dated March 21, 1882.

Application filed May 2, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS MCILROY, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Griper Attachments for Printing-Presses, of which the following is a specification.

In printing-presses the sheet is usually taken from the feed-board by gripers upon the impression cylinder. These grippers are comparatively close together, and hence are adapted to sheets of different sizes; but the fingers or tongues upon which the sheet rests when taken by the grippers have to be adjusted to suit the position of the sheet that is to be printed, and also the positions of the grippers, for they must not interfere with the grippers on the impression-cylinder as they fly around and catch the sheet. In transferring the sheet from the impression-cylinder to the delivery or fly cylinder a second set of grippers is employed on the second cylinder, and these have to be placed so as to grasp the sheet and remove it from the impression-cylinder, and these second grippers must be adapted to the size of sheet that is to be printed, so as to grasp the same firmly and take the sheet away; but these second grippers must not come into contact with the grippers on the impression-cylinder.

The object of my invention is to facilitate the adjustment of the second set of grippers to take the sheet from the grippers of the impression-cylinder, and to allow for the supporting tongues or fingers at the lower end of the feed-table being properly placed by the simple inspection of the under side of the feed-table, when the lower hinged portion thereof is turned back for that purpose, thereby lessening the amount of time and labor expended in placing the parts properly when there is a change in the printing that is done on the press.

In the drawings, Figure 1 is a side view of the printing-press as far as necessary to illustrate the special feature of my improvement. Fig. 2 shows part of the under side of the hinged feed-board; and Fig. 3 shows the indicator-bar that is employed in setting the grippers of the second or transfer cylinder.

The impression-cylinder *a* is provided with the row of grippers *b* upon the shaft *c*. These are of any usual character.

*d* is the feed-table, with the feed-board *e* across

its lower end, the same being hinged at *e'*, so that it may be turned back upon the feed-table for the adjustment of the sheet-supporting fingers or tongues *f*, that project over the impression-cylinder. Each finger has a block at its back end, that is notched to set over a dovetailed bar, *i*, and the said blocks can be moved laterally, so as to place the fingers in the required position for holding the lower edge of the sheet ready to be taken by the grippers, and each finger is retained in place by friction after it has been adjusted to position.

*l* is the gage for the lower edge of the sheet.

The parts thus far described are of the usual construction; but it is difficult to adjust the positions of the fingers or tongues *f* so that the sheet will be properly supported without the risk of the fingers being in the way of the grippers upon the impression-cylinder. To facilitate this I make use of indicator-marks upon the dovetailed bar *i*, or upon the under side of the feed-board, that denote the places where the griper-fingers are upon the impression-cylinder, so that when the feed-board is turned over and the fingers are being moved into the positions required for supporting the sheet it is only necessary to avoid placing the supporting-fingers at the places that correspond with the grippers. Hence when the feed-board is turned back to its place the fingers will be adapted to supporting the sheet, and also be out of the way of the grippers. Hence there is no time lost in turning the feed-board back and moving the fingers in one direction or the other, and then trying the parts to see if they are properly placed, and this adjustment of the fingers can be made without the necessity of turning the impression cylinder around so that the grippers are adjacent to the fingers. In placing the second set of grippers, *n*, which are upon the delivery or fly cylinder *o*, still more difficulty has been experienced, because the grippers of the delivery-cylinder are inaccessible when they are near the grippers of the impression-cylinder. In order, therefore, to enable the workman to know exactly where the grippers of the impression-cylinder are placed, I make use of an indicator-bar, *r*, upon which are marked the positions of the grippers on the impression-cylinder, and this bar *r* is firmly secured between the frames of the press near the under side of



the feed-table, and in the place where it is most convenient to obtain access to the grippers *n*. Hence in setting these grippers it is only required that a comparison be made of the grippers with the indicator-bar to enable the workman to set the grippers *n* so that they will entirely avoid the grippers *b* of the impression-cylinder as the sheet is taken from the impression-cylinder to the delivery or fly cylinder. By means of this indicator-bar the loss of time usually arising in setting the grippers of the delivery-cylinder is avoided.

I remark that I prefer and use separate pulleys, each one having a griper, *n*, and move the pulleys endwise of the shaft, so as to set the pulleys and grippers in the required places, instead of having a complete cylinder for said grippers.

The marks may be made upon the shaft of the delivery-cylinder, if desired, for indicating the position of the grippers on the impression-cylinder.

I claim as my invention—

1. The combination, with the impression-cylinder and its grippers, of a hinged feed-board, adjustable fingers, a bar carrying the same, and an indicator at the under side of such feed-board to denote the positions of the grippers, substantially as set forth.

2. The combination, in a printing-press, of the impression-cylinder and grippers, a delivery-cylinder and grippers, and an indicator having marks that denote the positions of the grippers on the impression-cylinder, substantially as set forth, whereby the grippers of the delivery-cylinder can be placed so as to avoid contact with the grippers on the impression-cylinder, substantially as specified.

Signed by me this 27th day of April, A. D. 1881.

THOMAS McILROY.

Witnesses:

GEO. T. PINCKNEY,  
WILLIAM G. MOTT.