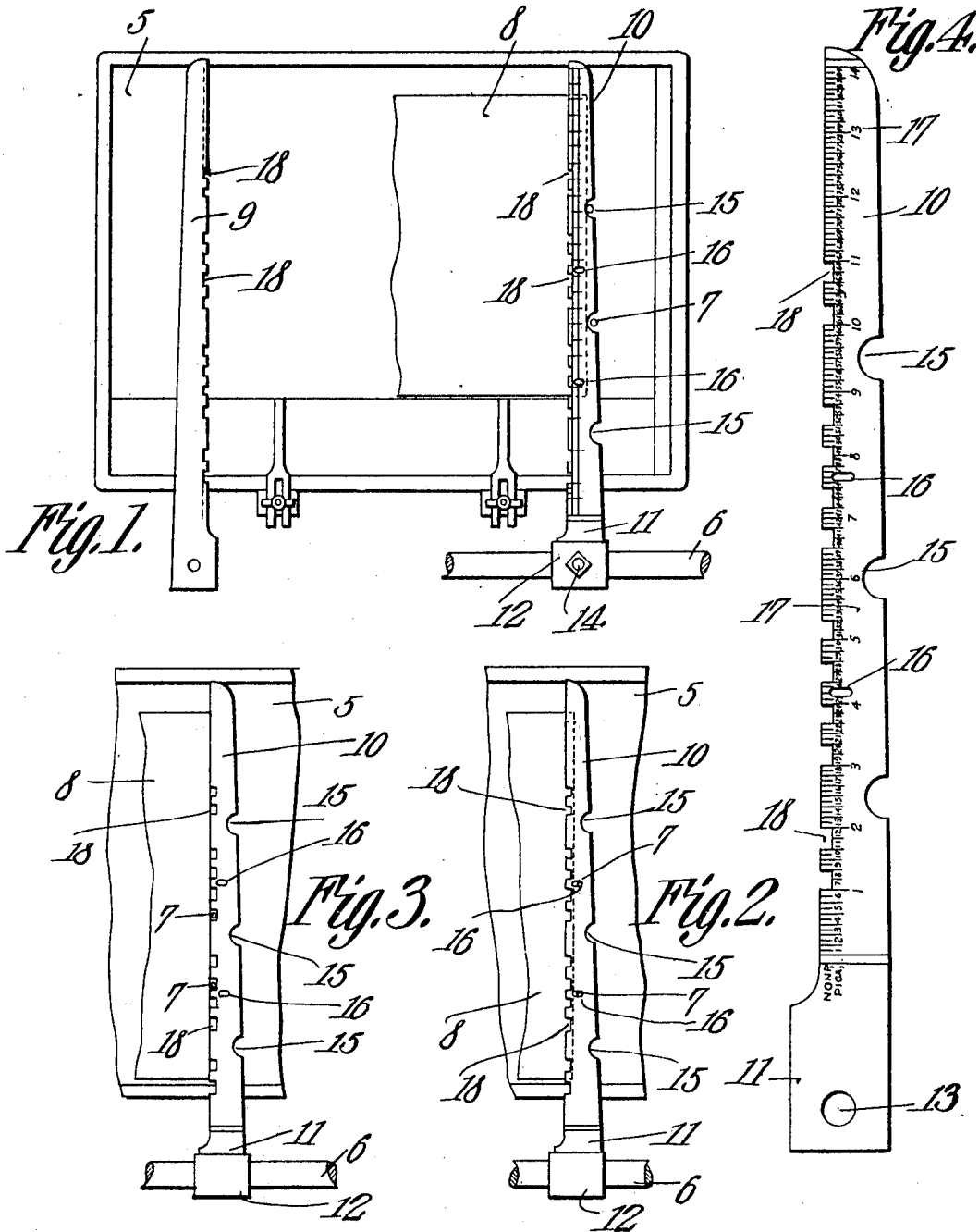


J. W. WILLIAMS.
GRIPPER FOR PRINTING PRESSES.
APPLICATION FILED MAR. 15, 1909.

947,365.

Patented Jan. 25, 1910.



Witnesses

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JOHN W. WILLIAMS, OF SAN ANGELO, TEXAS.

GRIPPER FOR PRINTING-PRESSES.

947,365.

Specification of Letters Patent. Patented Jan. 25, 1910.

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To all whom it may concern:

Be it known that I, JOHN W. WILLIAMS, a citizen of the United States, residing at San Angelo, in the county of Tom Green and State of Texas, have invented a new and useful Gripper for Printing-Presses, of which the following is a specification.

This invention relates to printing presses and more particularly to a gripper especially designed for use in connection with job presses.

Heretofore, in job printing presses, the left hand gripper has been more or less ineffective for retaining the printed sheets on the platen when printing said sheets with a margin less than one inch wide, owing to the fact that the gage pins extend in the path of movement of said gripper and thus prevent the latter from bearing against and holding the paper during the printing operation.

The object of the present invention is to overcome this defect and to provide a pair of grippers which will exert a uniform pressure on the paper and retain the latter in position on the platen when printing sheets with relatively narrow margins.

A further object is to construct the grippers in such a manner, as to permit the same to be used for extension printing, that is to say, for printing sheets in which the printed surface extends beyond the inside line of the grippers.

A further object is to provide a gripper having its outer face provided with graduations corresponding to pica and nonpareil type so that by pressing the gripper against the platen, the graduations will register with the type in the chase and thus permit the printer to justify the type, preparatory to printing, said graduations also forming a convenient standard of measurement, thereby to facilitate the division of the margins on the printed sheet.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification:—Figure 1 is a front elevation of a portion of a job printing press provided with an improved gripper constructed in accordance with my invention and showing the same set to accommodate

the gage pins when printing sheets with the usual one inch margin. Fig. 2 is a front elevation of the gripper showing the same set to permit printing of the sheets with a relatively narrow margin. Fig. 3 is a similar view showing the position of the gripper when the latter is employed for extension printing. Fig. 4 is an enlarged plan view of the gripper detached.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved gripper forming the subject matter of the present invention is principally designed for use in connection with job printing presses and by way of illustration is shown in connection with a job printing press of the ordinary construction in which 5 designates the platen, 6 the rock shaft and 7 the gage pins adapted to bear against the adjacent edge of the paper sheet, indicated at 8.

Co-acting with the platen 5 is the right hand gripper 9, looking from the rear of the press and spaced laterally from the gripper 9 is the mating gripper 10, the construction and surface markings of which form an important part of the present invention.

The gripper 10 consists of a flat elongated body portion formed of wood, metal or other suitable material, and having one end thereof enlarged at 11 for contact with a bearing block 12 secured to the rock shaft 6, there being an aperture 13 formed in the end of the gripper for the reception of a bolt or similar fastening device 14 by means of which said gripper is retained in position on the rock shaft. The outer longitudinal edge of the gripper 10 is provided with a series of spaced segmental notches or recesses adapted to receive and accommodate the gage pins 7 so that when printing sheets with the usual one inch margin, said gripper may be moved to operative position in contact with the paper and thus retain the sheet in position on the platen during the printing operation. Thus it will be seen that the gripper 10 will contact with the platen throughout its entire length so that an equal pressure is exerted on the printed sheet by both the right and left hand grippers.

Formed in the body of the gripper 10 are two or more transversely disposed slots adapted to receive the gage pins 7 when the latter are adjusted on the platen to permit

printing the sheets 8 with relatively narrow margins, the slots 16 serving to receive the pins and thus allow the gripper to bear firmly against the printed sheet throughout the entire length of said gripper in the same manner as when the pins are adjusted for printing with a relatively wide margin.

The outer face of the gripper 10 is provided with a series of surface markings 17, indicating inches, while the surface of the gripper adjacent the inner edge of the latter is divided into eighty-four equal parts, more or less, representing picas, the inner edge of the gripper being divided into 168 parts, more or less corresponding to nonpareil type. The surface markings are so arranged on the gripper that when the latter is pressed flat against the platen, said graduations will register with the type in the chase so as to permit the operator to justify the same and also to facilitate marginal divisions by providing a gage which will appear immediately over the face of the platen and consequently provide for an accurate setting of the gage-pin. The inner longitudinal edge of the gripper 10 at the nonpareil markings is formed with a series of recesses 18 to permit the gripper to be used for extension printing, there being similar recesses also preferably formed in the inner longitudinal edge of the gripper 9, as shown.

When the grippers are used for extension printing the gripper 10 will assume the position shown in Fig. 3 of the drawings, in which the gage pins 7 are shown seated in said recesses, thereby to permit the printed surface of the sheet to extend beyond the inner edge of the grippers.

By constructing a gripper in this manner, the same will effectually grip the sheet when printing either narrow or wide margins and will also hold the paper when the press is used for extension printing, thus preventing accidental displacement of the sheet during the printing operation. Thus it will be seen

that by forming the left hand gripper with the surface markings and recesses, and the right-hand gripper with recesses, said grippers may not only be used with equally good results for retaining the paper in position on the platen and for extension printing, but by reason of said surface markings, the grippers may also be used for justifying the type in the chase and facilitating marginal divisions.

Having thus described the invention what is claimed is:—

1. A gripper for printing presses having spaced recesses along its inner edge conforming in position and adapted to receive the inner ends of lines of type used in extension printing, those portions of the said inner edge of the gripper between the recesses serving to hold the corresponding edge of the surface being imprinted, said gripper being provided with slots reaching to the line of the closed ends of the recesses, for the reception of gage pins.

2. A gripper for printing presses having spaced recesses along its inner edge conforming in position and adapted to receive the ends of lines of type used in extension printing, those portions of the said inner edge of the gripper between the recesses serving to hold the corresponding edge of the surface being imprinted, the said gripper having slots in its body portion for receiving gage pins and extending to the line of the inner ends of the recesses, having notches formed in its outer edge, and having its outer face along the inner edge provided with graduations corresponding to pica and nonpareil type.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN W. WILLIAMS.

Witnesses:

S. E. TAYLOR,
D. T. AVERITT.