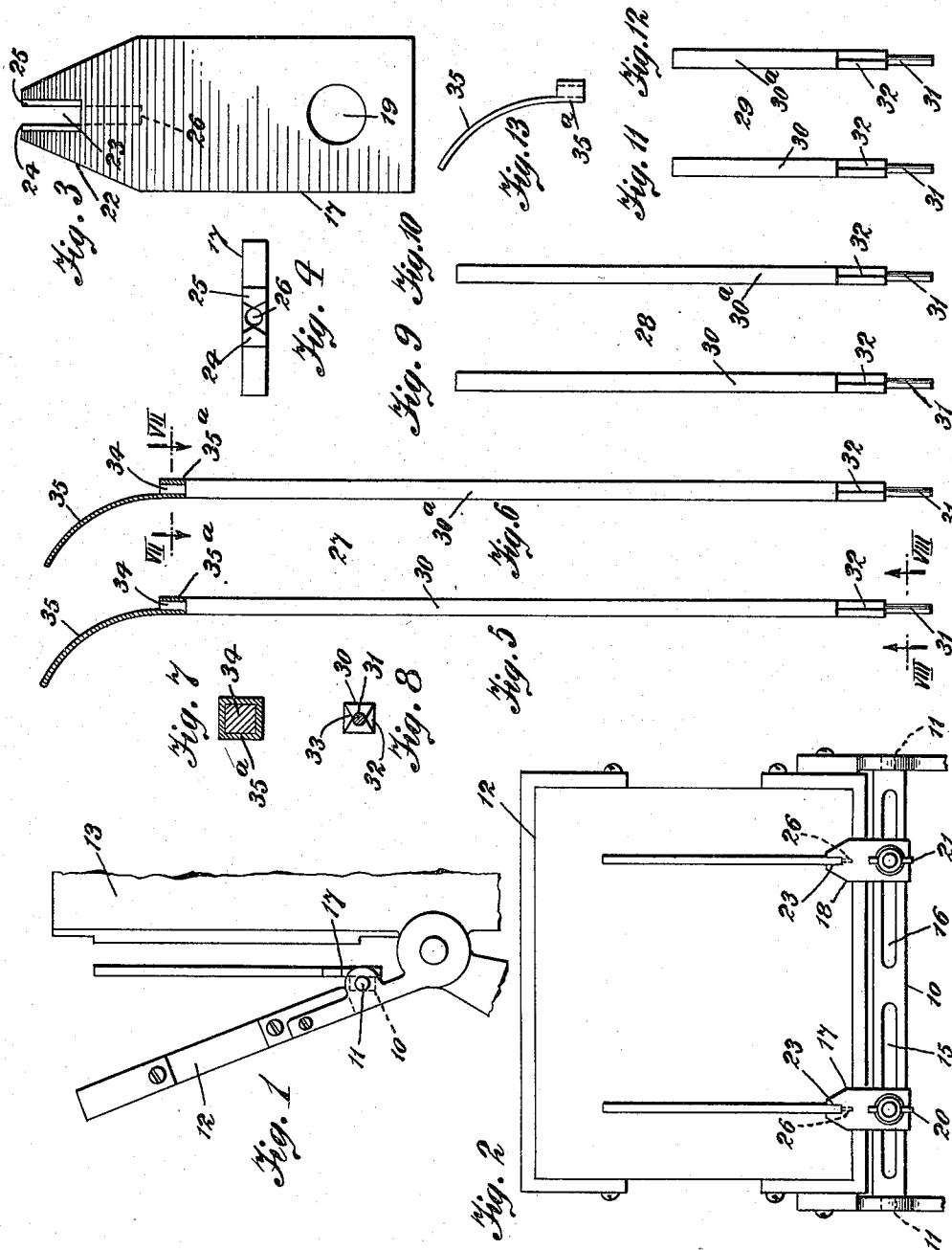


B. W. CONTESSA.
GRIPPER DEVICE FOR PRINTING PRESSES.
APPLICATION FILED JULY 20, 1915.

1,176,433.

Patented Mar. 21, 1916.



WITNESSES:

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GRIPPER DEVICE FOR PRINTING-PRESSES.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BENIAMINO W. CONTESSA, a citizen of the United States, and a resident of New York, borough of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Gripper Devices for Printing-Presses, of which the following is a full, clear, and exact specification.

This invention relates to a class of devices adapted to be used especially with job printing presses.

My invention has for its object primarily to provide a form of gripper device designed to be employed in conjunction with job printing presses whereby paper and the like when fed on the platen thereof for being printed will be smoothly and evenly held to receive the impression of the type matter in the press as well as serving to overcome the tendency of the paper to adhere to the type following the impression, and which contemplates the employment of gripper members of different forms to be interchangeably used so that paper of various sizes may be conveniently and properly printed. This is accomplished mainly by providing a support, or bar adjacent to the platen of the press, and on the supporting bar may be one, or a number of carrier members, or plates arranged between the platen and the bed of the press so as to be adjusted toward and from each other. In order to permit paper to be properly held when fed on the platen for being printed, to each of the carrier plates may be interchangeably applied one of a plurality of pairs of gripper members, or arms each pair being of different lengths so that grippers of like sizes, or grippers of different sizes may be used at one time as occasion requires.

Another object of the invention is to provide on a number of the gripper arms removable fingers to increase the lengths of the fingers, and each finger is curved so as to extend over the edge of the platen which is opposite to the supporting bar for permitting sheets of paper when larger than the platen to be evenly held during the printing process; and a further object of the invention is to provide a gripper device of a simple, efficient, and durable form.

A practical embodiment of the invention is represented in the accompanying drawing forming a part of this specification in

which similar characters of reference indicate corresponding parts in all the views, the said invention being more fully described hereinafter, and then pointed out in the claims at the end of the description.

In the drawing, Figure 1 is a fragmentary view showing one side of the platen and bed of a job printing press with one form of gripper device embodying my invention applied thereto. Fig. 2 is a front view of the platen of the press showing the manner of using the device in conjunction therewith. Fig. 3 is an enlarged elevation of one of the carrier plates used in the device. Fig. 4 is a top view of the carrier plate. Fig. 5 is an enlarged elevation, partly in section, of one of the gripper members of the device. Fig. 6 is an enlarged elevation, partly in section, of a similar gripper member used in the device. Fig. 7 is an enlarged section taken on the line VII—VII of Fig. 6. Fig. 8 is an enlarged section taken on the line VIII—VIII of Fig. 5. Fig. 9 is an enlarged elevation of another form of gripper member. Fig. 10 is an enlarged elevation of a similar gripper member shown in Fig. 9. Fig. 11 is an enlarged elevation of still another form of gripper member. Fig. 12 is an enlarged elevation of a like gripper member shown in Fig. 11, and Fig. 13 is a side view of one of the removable fingers used in conjunction with the gripper members shown in Figs. 5 and 6.

The gripper device has a support, or bar adapted to be pivoted, as at 11, or otherwise applied to the lower part of the platen 12 of the ordinary, or preferred type of job printing presses, the platen being arranged so as to be moved toward and from the bed 13 of the press in the manner common to the operation of this class of printing machines when paper and the like is fed to the press for being printed upon. The supporting bar 10 is preferably of a form provided with two slots 15 and 16 extending lengthwise of the bar from parts adjacent to its ends toward the center thereof.

On the supporting bar 10, and projecting upwardly with relation to the face of the platen so as to be disposed between the platen and the bed of the press, are one, or more carrier members, or plates 17 and 18. The carrier plates 17 and 18 are preferably similar in formation, each having in prox-

imity to one of its ends an opening 19 adapted to be registered with one of the slots in the supporting bar 10. When the carrier plates 17 and 18 are arranged on the supporting bar 10 so that the openings 19 are in register with the slots of the bar, set screws, as 20 and 21, are passed therethrough for permitting the carrier plates to be adjusted toward and from each other on the supporting bar longitudinally of the platen. The opposite end of each of the carrier plates may be tapered, at 22, and in the apex of the tapered end of each plate is a recess 23 extending toward the opening 19. Projecting inwardly of the opening toward each other from each of the carrier plates are two ribs, as 24 and 25, and also in each plate at the bottom of its recess is a socket 26 communicating with the recess. The recess 23 of each of the carrier plates 17 and 18 are adapted to removably receive one of a number of pairs of interchangeable gripper members, or arms, as 27, 28 and 29.

Each pair of the gripper arms 27, 28, 29 have body portions 30 and 30^a of different lengths from the body portions of the other pairs of arms to permit different gripper arms to be employed as occasion may require for properly holding paper of various sizes when fed on the platen of the press, and the body portion of each of the gripper arms is substantially rectangular as viewed transversely as well as being of a width so as to be freely disposed in, or removed from the recess 23 of one of the carrier plates 17 and 18. The lower end of the body portion of each of the gripper arms 27, 28, 29 is reduced to provide a projecting pin, or lug 31 adapted to be inserted in the socket 26 of the carrier plate when the gripper arm is applied thereto, and in the side edges of each of the gripper arms adjacent to its projecting pin 31 are grooves, as 32 and 33, which are of shapes to receive the ribs 24 and 25 extending into the recess 23 of the carrier plate to which the gripper arm is applied.

As shown, the pair of gripper arms 27 are considerably longer than the pairs of gripper arms 28 and 29, and the ends of each of the gripper arms 27 opposite to its projecting pin 31 are reduced to provide an extending lug 34. Serving to allow sheets of paper of larger sizes than the platen of the press to be evenly held during the printing process, a removable finger, as 35, may be applied to one, or all of the gripper arms 27 so as to increase their lengths. There may be as many of these fingers as there are gripper arms, and each finger has on one of its ends a sleeve 35^a adapted to be disposed on the lug 34 of one of the gripper arms 27, and the other portion of each of the fingers is preferably curved so as to be disposed over the edge of the platen of the

press which is opposite to the supporting bar 10 when one, or more of the gripper arms 27 are used.

In practice a single pair of gripper arms 27, 28, 29 may be used, or instead thereof one of each pair, or any desired combination of the arms may be employed, in which instance there must always be a corresponding number of the adjustable carrier plates provided on the supporting bar 10. When one of the gripper arms is applied to one of the carrier plates the grooved end of the arms is inserted in the recess 23 of one of the carrier plates so that the pin 31 will be disposed in the socket 26 of the carrier plate and the ribs 24 and 25 will be positioned in the grooves 32 and 33 of the gripper arm. The gripper arm will then be held to the carrier plate against accidental displacement as well as being susceptible of being interchanged with one of the other gripper arms when desired. All of the gripper arms may be removably applied similarly to the carrier plates, and by using the gripper arms in conjunction with carrier plates in a like manner paper and the like of various sizes when fed on the platen will be smoothly and evenly held to receive the impressions of the type matter in the press after the carrier plates and the gripper arms are properly adjusted on the supporting bar 10, the set screws 20 and 21 serving when manipulated accordingly to permit the carrier plates to be loosened and tightly held on the supporting bar.

In the foregoing description, I have embodied the preferred form of my invention, but I do not wish to be understood as limiting myself thereto, as I am aware that modifications may be made therein without departing from the principle, or sacrificing any of the advantages of this invention, therefore I reserve to myself the right to make such changes as fairly fall within the scope thereof.

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

1. In a gripper device for printing presses, a support adjacent to the platen of the press, removable carrier plates on the support, means connecting each of the carrier plates to the support so that the plates may be adjusted toward and from each other, and each of the carrier plates having a recess and a communicating socket, a plurality of gripping arms of different lengths, each formed so that one of its ends may be removably inserted in the recess of one of the plates, and each gripper arm having a projecting pin for insertion in the socket of the carrier plate whereby the gripper may be interchangeably connected to the carrier plates, and a number of fingers each adapted to be detachably applied on one of a num-

ber of the gripper arms to increase the length of said arms, for the purpose specified.

2. In a gripper device for printing presses,
5 a slotted support adjacent to the platen of the press, removable carrier plates on the support, each having an opening in register with the slot of the support, a set screw passing through the opening of each carrier
10 plate and through the slot of the support so that the plates may be adjusted toward and from each other, and each of the carrier plates having a recess and a communicating
15 socket, a plurality of pairs of gripper arms, each pair of different lengths, and each grip-

per arm being so formed that one of its ends may be removably inserted in the recess and in the socket of one of the plates whereby the gripper arms may be interchangeably
20 connected to the carrier plates, and a number of curved fingers each adapted to be detachably applied on one of a number of the gripper arms to increase the lengths of said arms, for the purpose specified.

This specification signed and witnessed 25
this nineteenth day of July A. D. 1915.

BENIAMINO W. CONTESSA.

Witnesses:

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ROBT. B. ABBOTT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."