

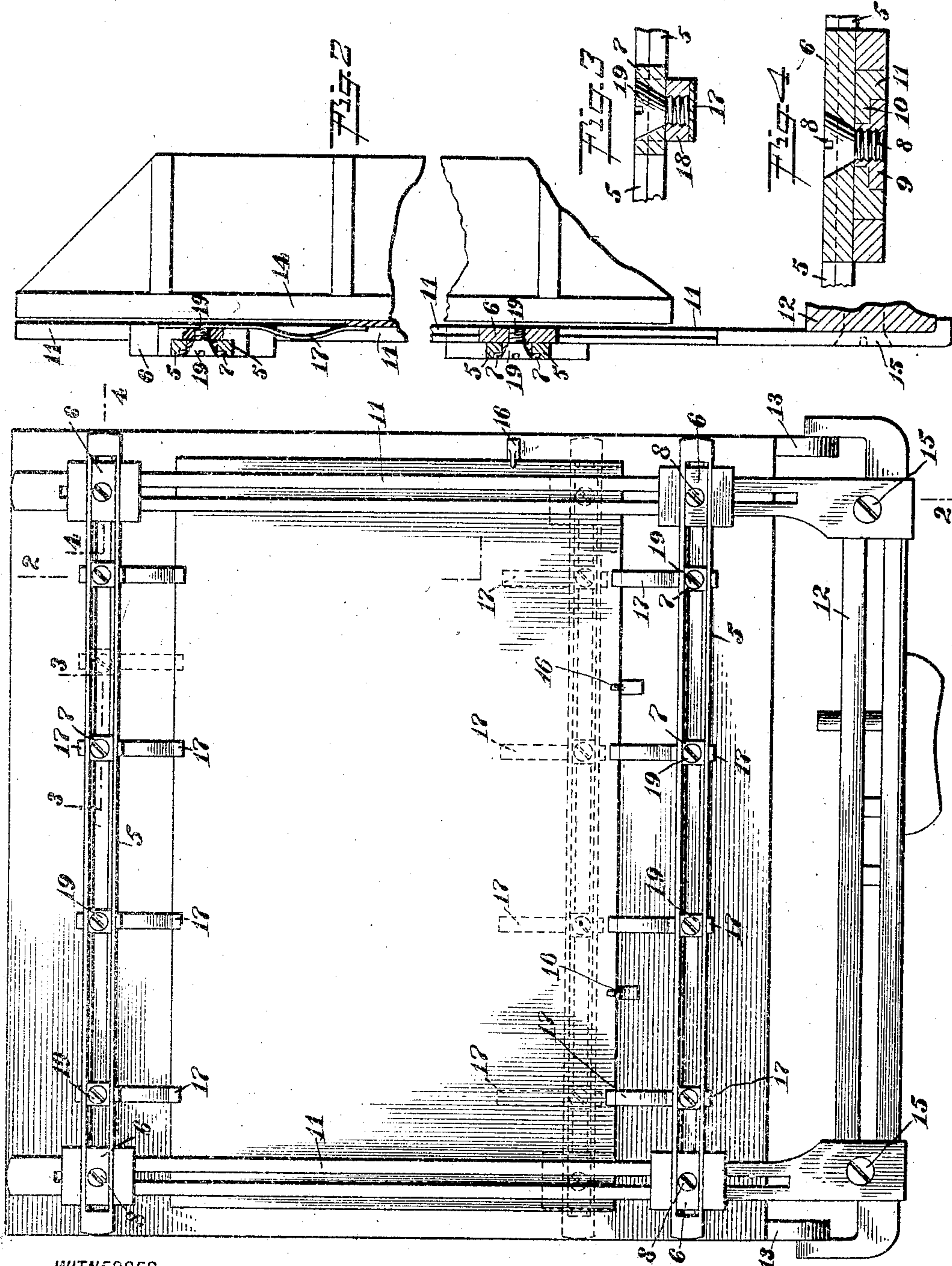
M. W. ALGER & C. L. JACOBSON.

GRIPPER FOR PRINTING PRESSES.

APPLICATION FILED JULY 3, 1909.

940,491

Patented Nov. 16, 1909.



WITNESSES
B. S. Bromley.

[Signature]

Fig. 1

INVENTORS
Morey W. Alger
Carl L. Jacobson
BY
Mum & Co
ATTORNEYS

UNITED STATES PATENT OFFICE.

MOREY W. ALGER AND CARL L. JACOBSON, OF BENTON HARBOR, MICHIGAN.

GRIPPER FOR PRINTING-PRESSES.

940,491.

Specification of Letters Patent.

Patented Nov. 16, 1909.

Application filed July 3, 1909. Serial No. 505,324.

To all whom it may concern:

Be it known that we, MOREY W. ALGER and CARL L. JACOBSON, citizens of the United States, and residents of Benton Harbor, county of Berrien, and State of Michigan, have invented a certain new and useful Gripper for Printing-Presses, of which the following is a full, clear, and exact description.

The objects which the present invention has in view are, to provide adjustable fingers or grippers for printing presses, having horizontal adjustment; to provide gripper fingers to hold the sheet being printed at the top and bottom of the sheet; to provide grippers to grasp at intervals the sheet to be printed; and to provide a mechanism simple and economical in construction and efficient in operation.

One embodiment of the present invention is disclosed in the construction illustrated in the accompanying drawings wherein like characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the platen of a printing press having applied thereto a gripper frame; Fig. 2 is a vertical section of the same taken on the line 2-2 in Fig. 1; Fig. 3 is an enlarged detail taken on the line 3-3 in Fig. 1; and Fig. 4 is an enlarged detail in cross section taken on the line 4-4 in Fig. 1.

In Fig. 1 of the drawings there is shown by dotted lines an adjusted position of a cross bar 5, which is slotted longitudinally to receive sliding members therein. The slotted construction is provided with rabbeted edges to receive blocks 6 and blocks 7. The blocks 6 are provided with a screw 8 the head of which rests in the said blocks 6, while the threaded shank thereof is in threaded engagement with the block 9. When the screw 8 is tightened it draws the block 9 to the block 6. Interposed between the blocks 6 and 9 are the extensions 10 of the side bars 11, which bars are slotted from near their lower ends to near their upper ends. These bars are rabbeted adjacent to the slotted opening, as are the cross bars 5.

The side bars 11 are mounted upon a slotted rail 12 which is suitably secured to extensions 13-13 of the platen bed 14. The method of securing the side bars 11 to the rail 12 is similar to that above described for securing the cross bars 5 upon the side bars 11. Screws 15-15 are provided on the rear

side of the said rail and a movable block with which the said screws are in threaded engagement. The five members thus far described, to wit: the cross bars 5, the side bars 11 and the rail 12 constitute a structure whereby a frame can be blocked out upon the platen bed rapidly and easily.

To form the frame to receive the matter to be printed, the side bars 11 are adjusted to and from the longitudinal center of the platen, by loosening the screws 15, 15, and sliding the blocks and the side bars carrying the said screws laterally thereon. The screws 8, 8, are loosened in the blocks 6, 6, which permits the sliding into vertical adjustment of the cross bars 5, 5. When the side bars 11, 11, are in the proper lateral position, the screws 15, 15, are tightened, effecting a rigid placement of the said side bars, and likewise when the vertical positions of the cross bars 5, 5, are adjusted by the tightening of the screws 8, 8, the said cross bars are held in fixed position. This adjustment is performed with reference to the sheet upon which the printed matter is to be placed. The platen is suitably provided with gages 16, 16, which fix the position of the sheet on the platen with reference to the type on the bed.

In the majority of cases we prefer to hold the sheet by means of spring-formed fingers 17, 17, arranged on the horizontal cross bars 5, 5. By gripping the sheet on the horizontal margin or the top and bottom of the sheet, we provide for a more even separating pull on the sheet.

It will be understood that all of the members are constructed in as flat a form as possible. The method illustrated of securing the members is preferred by us. But we do not wish to be understood as limiting ourselves to any form of construction herein shown as illustrating the features of securing the one member to the other.

When it is desired, the side bars 11 may be provided with the same kind of gripper fingers 17 as shown in conjunction with the cross bars 5.

The gripper fingers 17 are made of any suitable spring material, and are securely fastened to blocks 18 by means of screws 19 which are threadedly engaged with the said blocks and rotatably engaged with the blocks 7, which are mounted to ride on the rabbeted sides of the cross bars 5, 5. It is understood that the fingers 17, 17, are independently mount-

et, and when mounted in the cross bars 5, 5, may each be adjustably secured therein by the screws 19, 19.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. A gripper for printing presses comprising a plurality of vertically extended arms having each a continuous slot formed lengthwise therein; a plurality of horizontally extended arms slidably attached to the said vertical arms and having each a continuous slot formed lengthwise therein; a plurality of separate fastening devices slidably engaging each of the said vertical and said horizontal arms and adapted to hold the same in locked position; a plurality of yielding fingers slidably secured in the slots in said horizontally extended arms; and fastening devices for securing the said fingers in adjusted position.

2. A gripper for printing presses com-

prising a plurality of vertically extended arms having each a continuous slot formed lengthwise therein; a plurality of horizontally extended arms each having a continuous slot formed lengthwise therein; a plurality of fastening devices having guide extensions to fit within the slots in each of said arms, and adapted to secure the said arms rigidly together; a plurality of flat spring fingers having fastening blocks slidably mounted in the slots in said horizontal arms; and fastening devices for securing the said blocks rigidly in adjusted position.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

MOREY W. ALGER.
CARL L. JACOBSON.

Witnesses:

CLARA E. HEMINGWAY,
CHAS. F. SCHAUS.