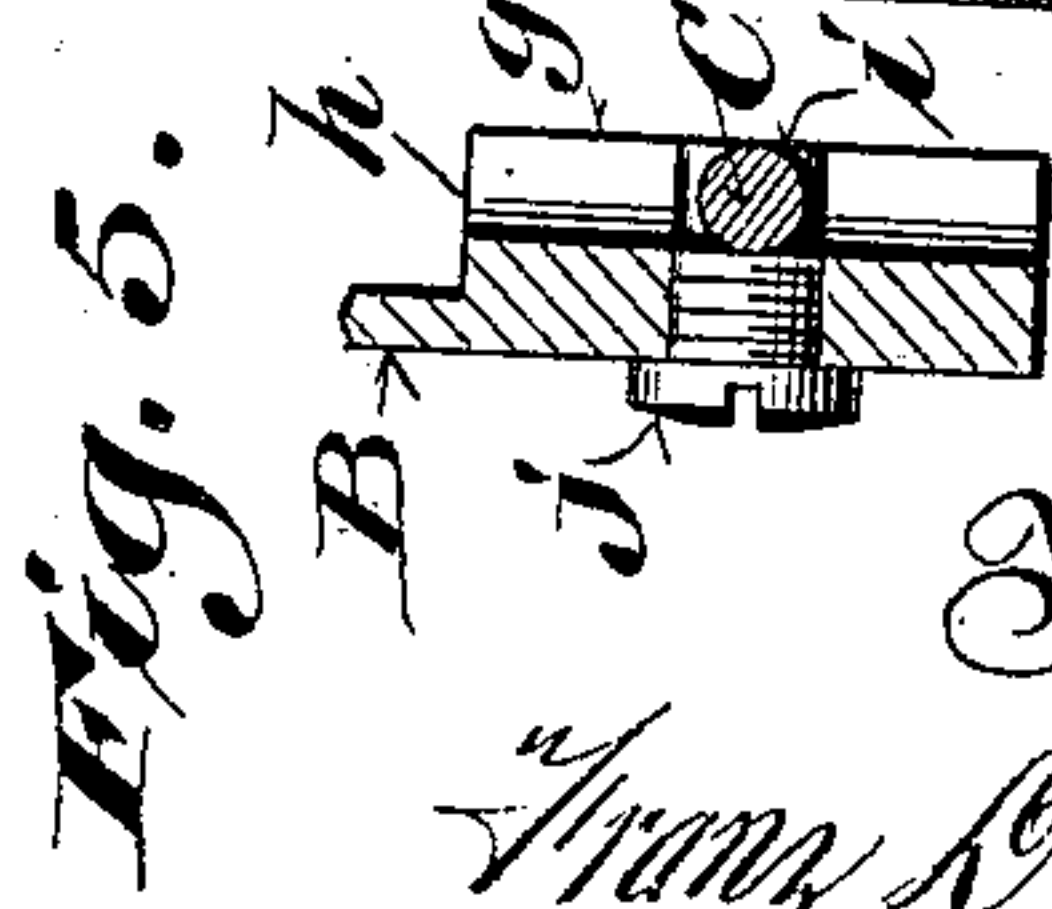
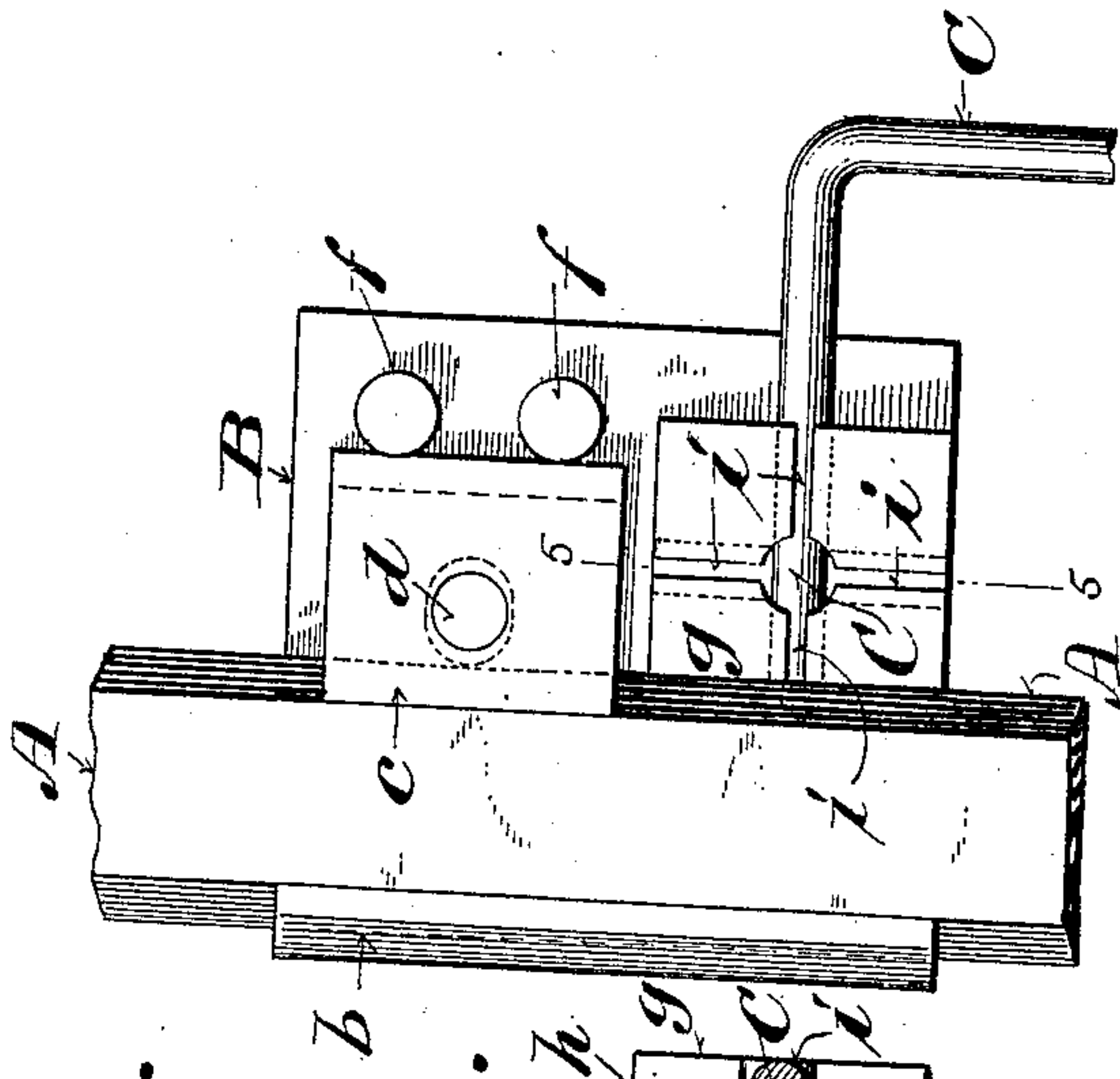
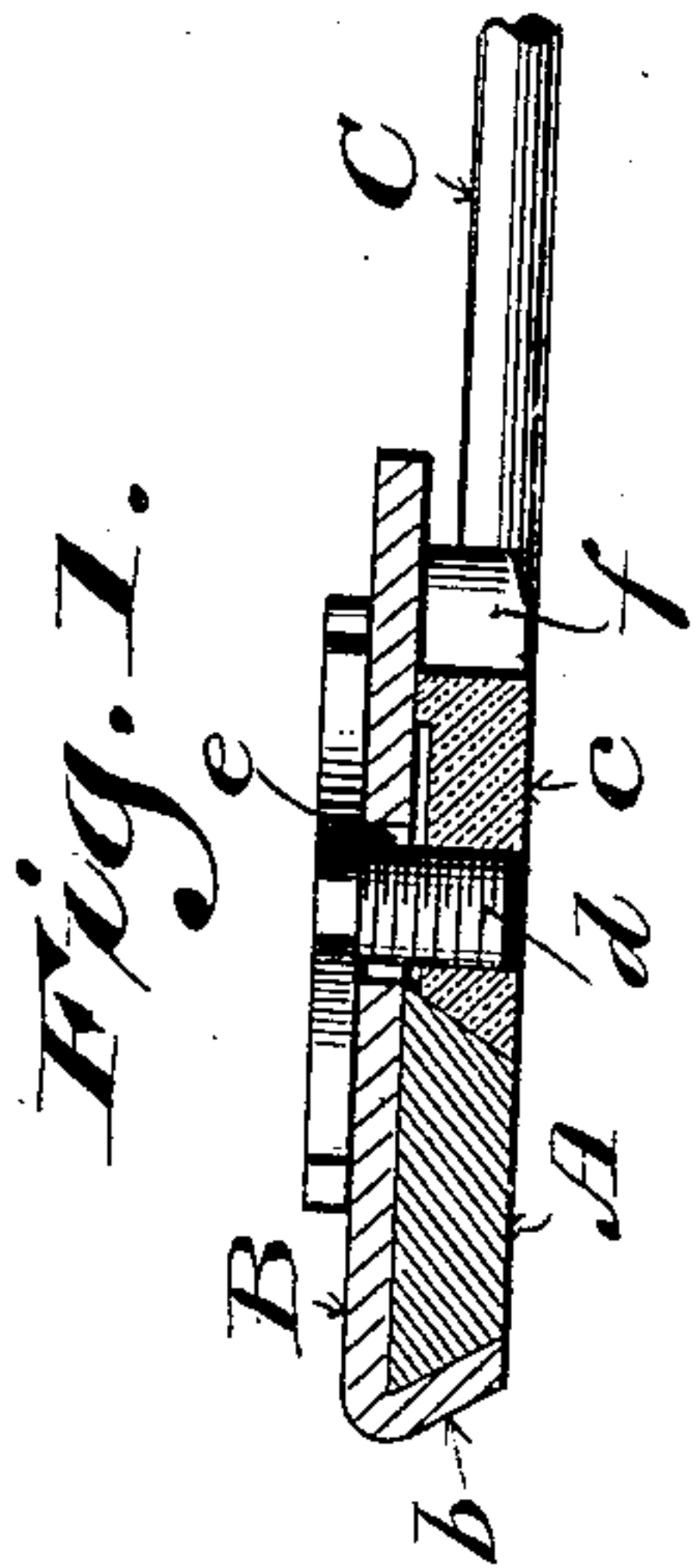
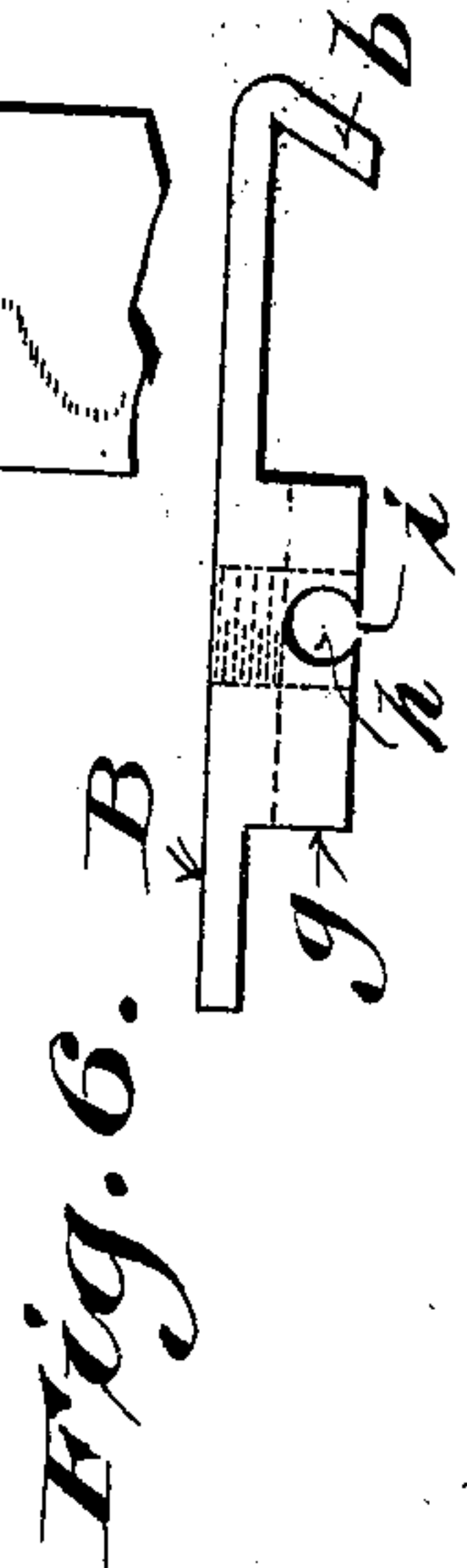
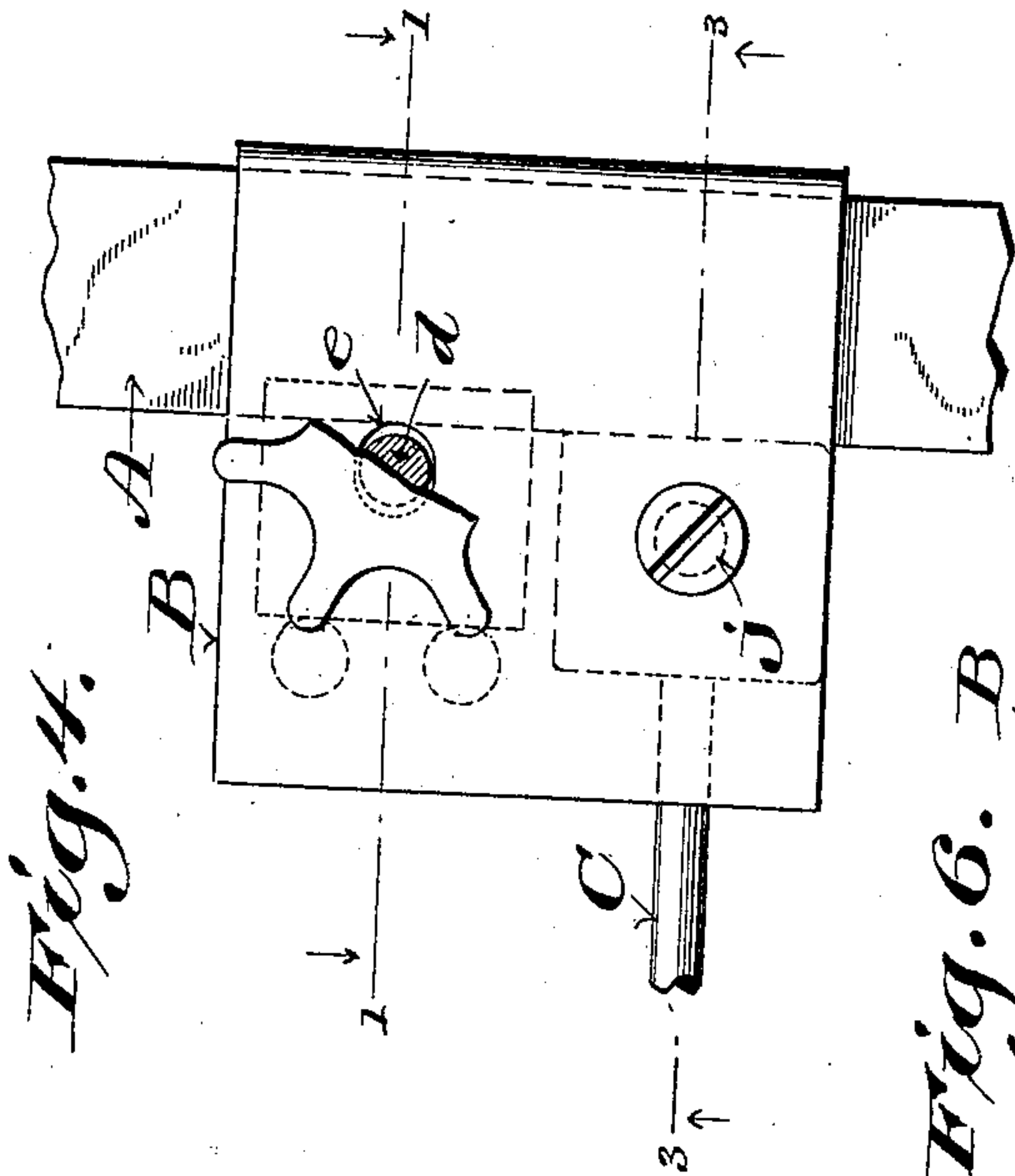
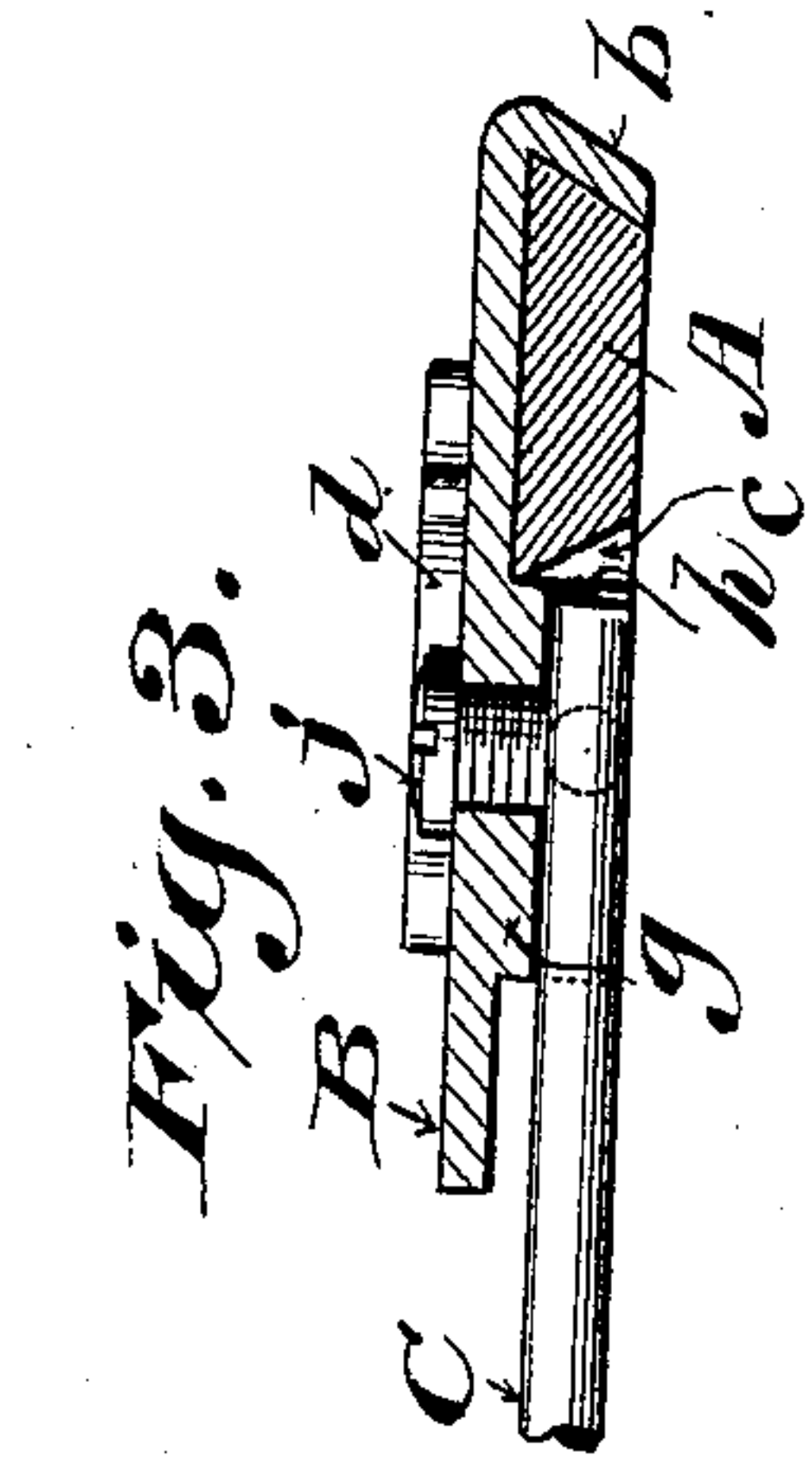


925,092.

F. D. HAKE.  
PRINTING PRESS GRIPPER.  
APPLICATION FILED SEPT. 14, 1908.

Patented June 15, 1909.



Witnesses  
George Feller  
B. J. Muir.

Fig. 2.

Fig. 5.

Inventor:  
F. D. Hake.  
By Clifton Young  
Attorneys.



# UNITED STATES PATENT OFFICE.

FRANZ D. HAKE, OF MILWAUKEE, WISCONSIN.

## PRINTING-PRESS GRIPPER.

No. 925,092.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed September 14, 1908. Serial No. 452,958.

*To all whom it may concern:*

Be it known that I, FRANZ D. HAKE, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Printing-Press Grippers; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in what is herein shown, described and pointed out in claims; its object being to provide simple, economical and readily adjustable printing-press gripper-attachments designed to facilitate the holding of sheets to be printed upon firmly on tympan of platen-printing presses, as well as to prevent inaccuracies of register, shifting, picking and pulling of the fed sheets, their entanglement with mechanism or inking-rollers of the presses and the blurring of ink on said sheets, said invention having especial reference to improved detail of what is disclosed in my application Serial No. 440,225, filed June 25, 1908.

Figure 1 of the accompanying drawings represents a transverse section on the plane indicated by line 1—1 in Fig. 4, the same illustrating a gripping device and clutch-mechanism for holding the same in adjusted position longitudinally of a gripper-bar arm that has both edges thereof beveled; Fig. 2, a plan view of an inversion of a fragment of gripper-arm, a clutch-mechanism and a rod-gripper in engagement with a socket-block projection of a plate embodied in said mechanism; Fig. 3, a transverse section view on the plane indicated by line 3—3 of the next, in numerical order, of the several views; Fig. 4, an obverse plan view of the aforesaid fragment of gripper-arm, clutch-mechanism and rod-gripper, parts in this view being broken away; Fig. 5, a section view of a detail of the invention, and Fig. 6, an elevation of the block-end of the plate aforesaid.

Referring by letter to the drawings, A indicates a fragment of an arm similar to those that are ordinarily bolted at one end to the gripper-bar of a platen printing-press, but for my purpose both longitudinal edges of the bar are beveled. In slidable engagement with the bar A is a plate B having a flange *b* matching one bevel-edge of said bar. The plate is clamped in adjusted position on the bar by means of a bevel-edge clutch-block *c* that matches the other bevel-edge of said bar against which it is tightened

by means of a screw *d*, that engages a suitably threaded aperture in said block, there being play of the screw in an elongated opening *e* of said plate. The head of the screw is preferably flat and radially spoked, as herein shown. To insure draw of the clutch-block on the opposed bevel-edge of the gripper-arm, the plate B is provided with guide-lugs *f* in opposition to the said block. The inner side of the plate B is also provided with a stationary block-projection *g* that clears the adjacent bevel-edge of the gripper-arm. The block *g* is provided with centrally intersecting apertures *h* and these apertures are intersected by slots *i* cut in the under face of said block. The apertures in the block *g* are for the engagement of an end of a rod-gripper C, that is flush with the under face of said block through slots in the same, said end of the rod-gripper being horizontal or vertical according to the block-aperture with which it is engaged, and a binding-screw *j* engages a suitably threaded plate-and-block aperture against said rod-gripper to hold the same in place.

The rod-gripper may be straight or crooked, it being my intention to supply the trade with rod-grippers in sets, some straight and others variable as to extent of crook, either angular or curved, or pressmen may readily make straight or crooked rod-grippers from lengths of wire of suitable gage. It is also to be understood that the clutch-mechanism herein specified is applicable in connection with any form of sheet-gripping device, as means for holding the same in any position of adjustment longitudinally of a gripper-arm having opposite bevel edges. And my invention is generic to any printing-press gripper-attachment having opposite longitudinal edges thereof beveled, a sheet-gripping device, and means in connection with the same for clamping contact with said edges of said attachment.

I claim:

1. A printing-press gripper-arm having the opposite longitudinal edges thereof beveled, a plate slidable on the arm and having a beveled edge flange matching one of the edges of same, a beveled edge clutch-block matching the other of said edges of said arm, a block-controlling screw extending through a play-opening in the plate, guide lugs projecting from said plate in opposition to the clutch-block, and sheet-gripping means in connection with the aforesaid plate.



2. A printing-press gripper-arm having the opposite longitudinal edges thereof beveled, a plate slidable on the arm and having a beveled flange matching one of the beveled edges of same, a beveled edge clutch-block matching the other of said edges of said arm, a block-controlling screw extending through a play-opening in the plate, a stationary block projecting from said plate and having an aperture and slot therein intersecting one another, a rod-gripper engaging said aperture flush with the stationary block through said slot, and a binding screw arranged to hold the rod-gripper in said stationary block.

3. A printing-press gripper-arm having opposite longitudinal edges thereof beveled, a plate slidable on the arm and having a beveled flange matching one of the beveled edges of same, a cross-apertured and slotted block stationary on the plate, there being intersection of the apertures and slots, a rod-gripper engaging either aperture to be flush with the block through a slot in same, a binding screw arranged to hold the rod-gripper in said stationary block, a beveled edge clutch-block matching the other of said edges of said arm, and a clutch-block controlling-screw extending through a play-opening in said plate.

4. A printing-press gripper-arm, a plate slidable on the arm, means in connection with the plate for holding the same in adjusted position on said arm, a stationary block projecting from a side of said plate and having an aperture and slot therein intersecting one another, a rod-gripper engaging the aperture flush with the stationary block through said slot, and a binding-screw arranged to hold the rod-gripper in said block.

5. A printing-press gripper-arm, a plate slidable on the arm, means in connection with the plate for holding the same in adjusted position on said arm, a cross-apertured and slotted stationary block on a side of the plate, there being an intersection of the apertures and slots; a rod-gripper engaging either aperture to be flush with a side of the block through a slot of same, and a binding-screw arranged to hold the rod-gripper in said block.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee in the county of Milwaukee and State of Wisconsin in the presence of two witnesses.

FRANZ D. HAKE.

Witnesses:

N. E. OLIPHANT,  
GEORGE FELBER.