

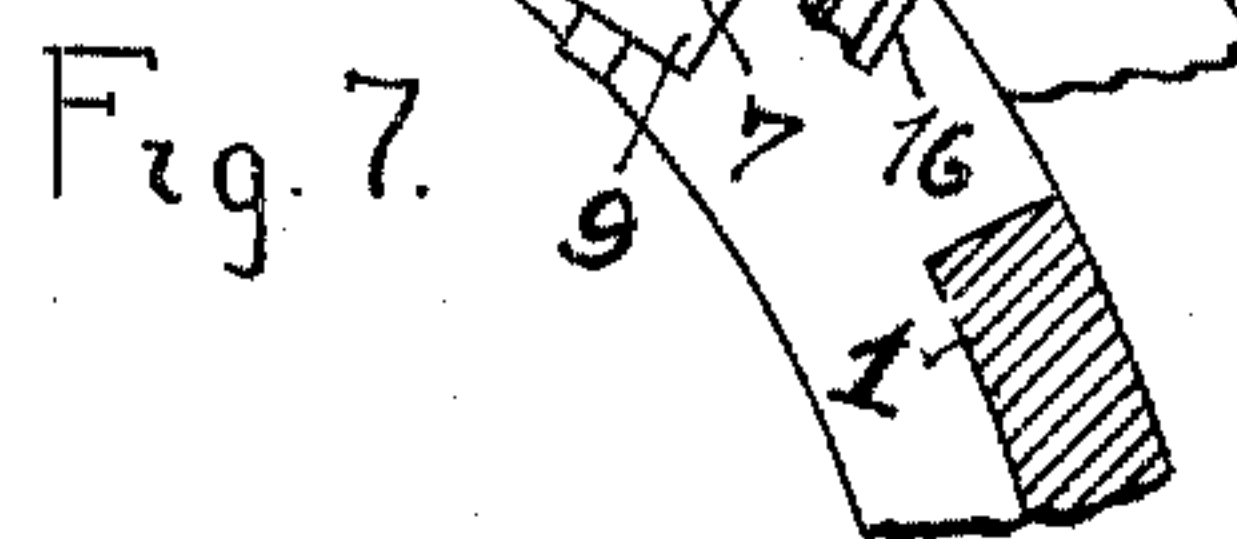
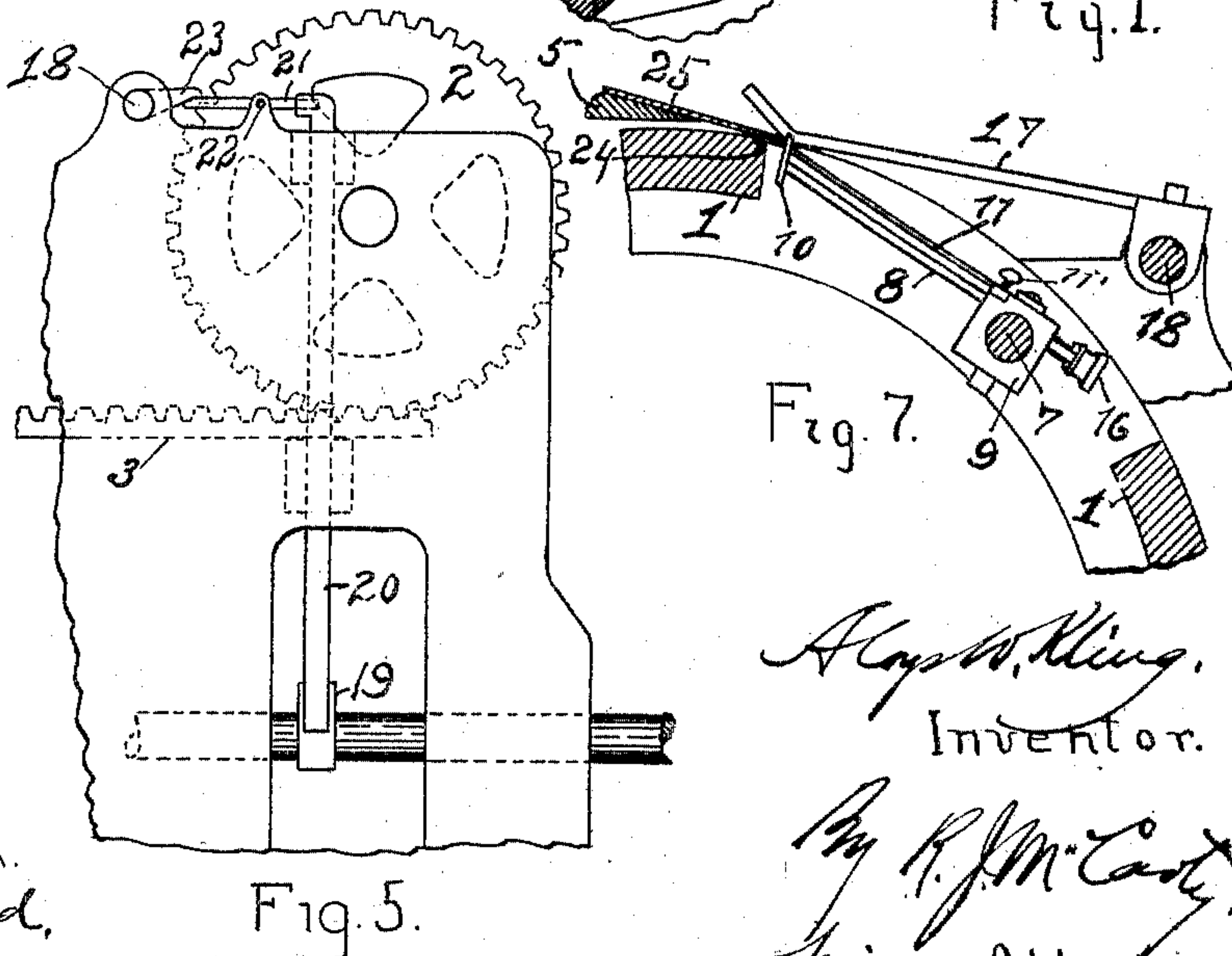
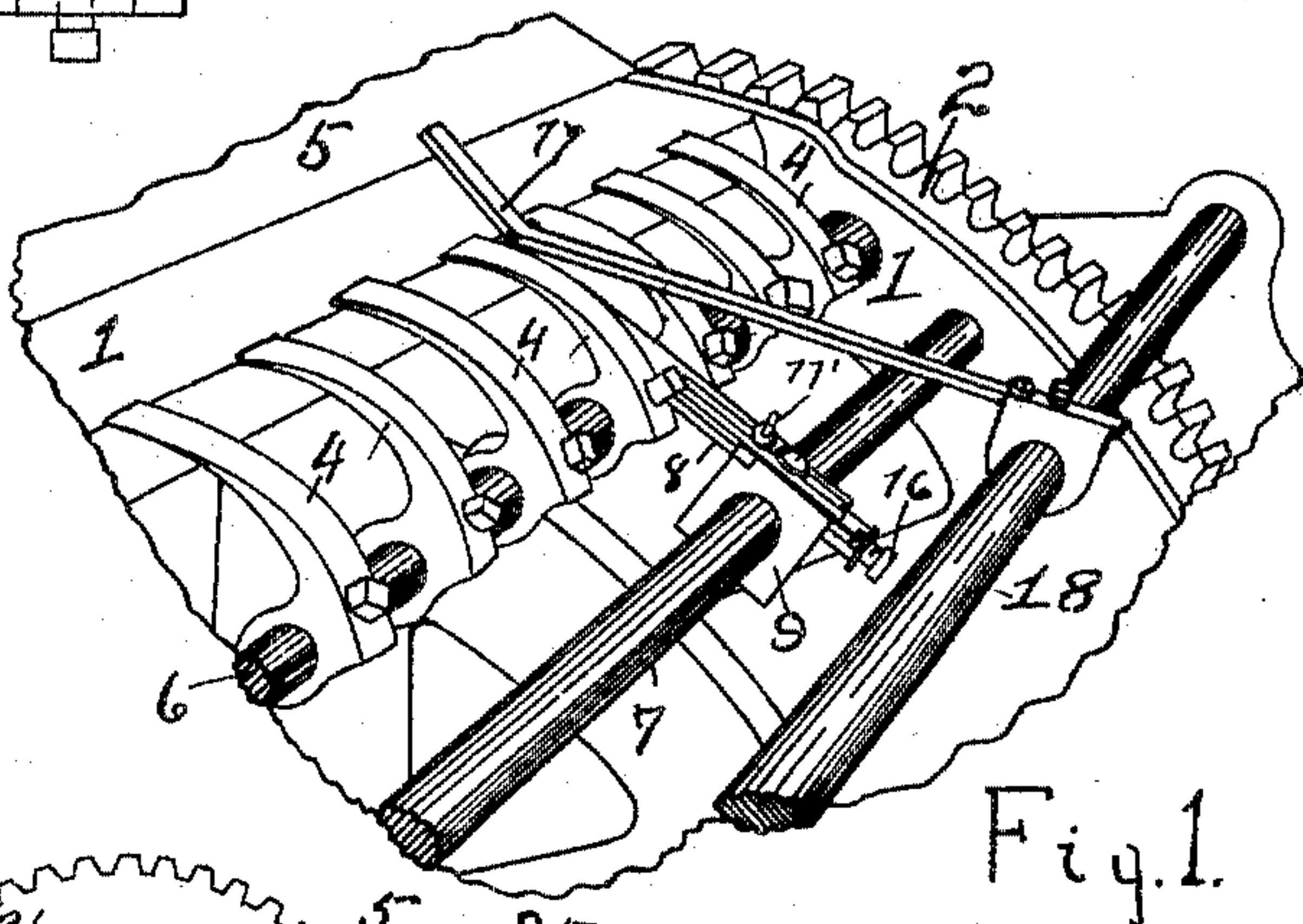
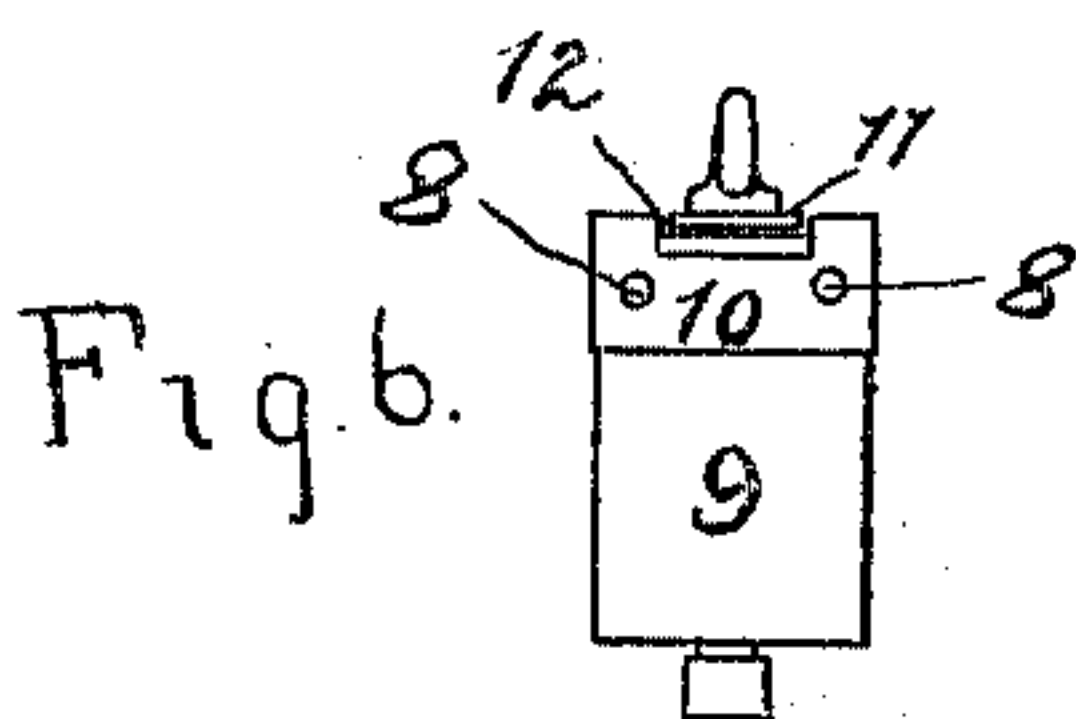
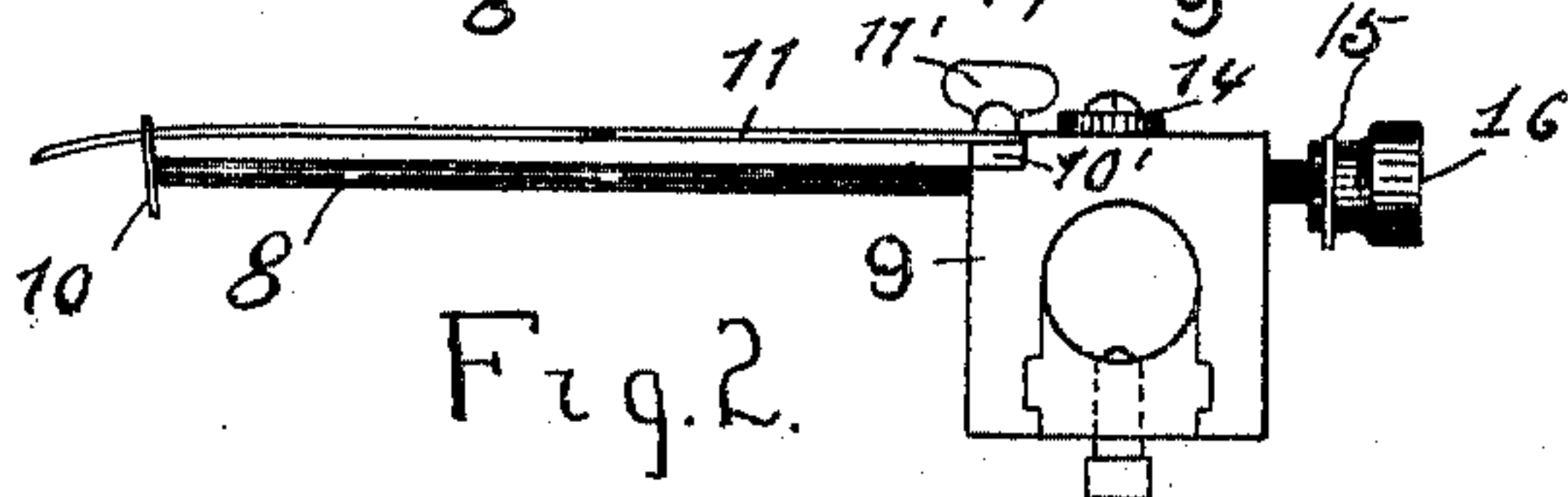
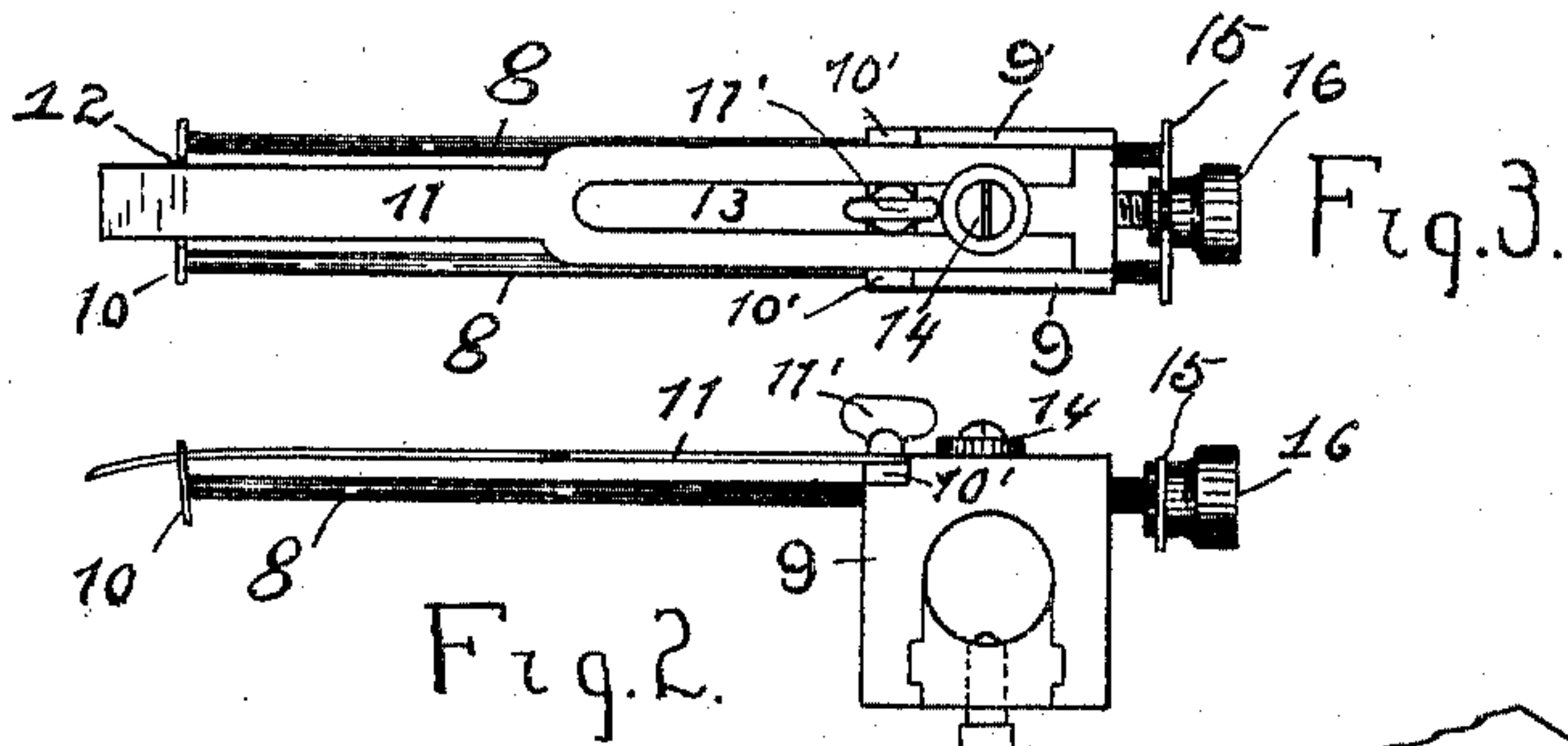
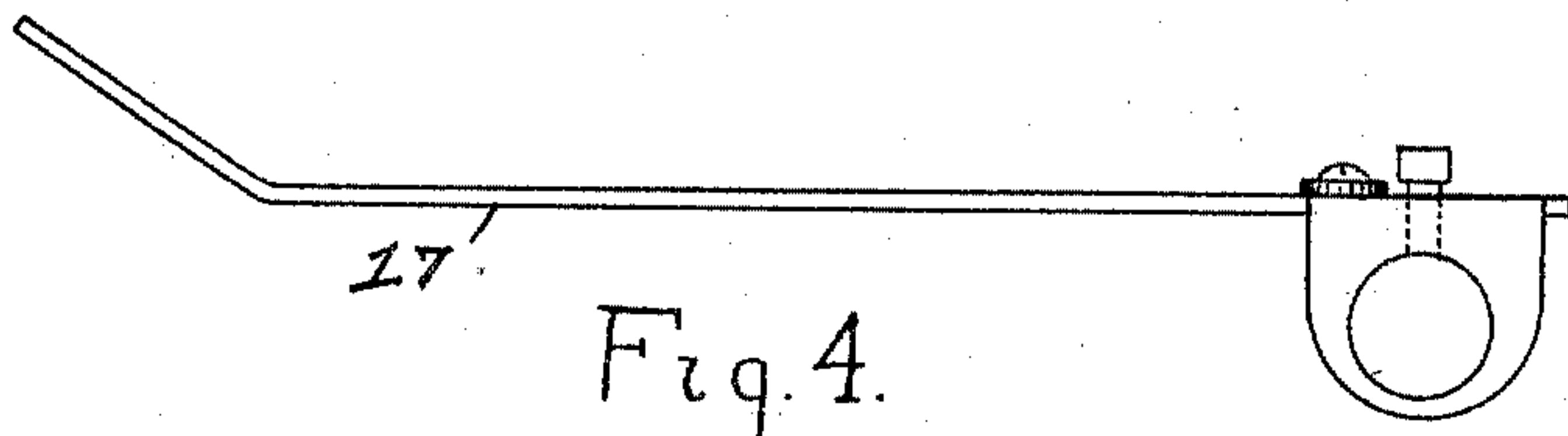
No. 780,200.

PATENTED JAN. 17, 1905.

A. W. KLING.

REGISTER GAGE FOR LITHOGRAPHING AND PRINTING PRESSES.

APPLICATION FILED JAN. 11, 1904.



Witness.

J. Fred Hamburger.  
C. M. Theobald.

A. W. Kling.  
Inventor.

R. J. McCarty,  
his Attorney



# UNITED STATES PATENT OFFICE.

ALOYS W. KLING, OF DAYTON, OHIO.

## REGISTER-GAGE FOR LITHOGRAPHING AND PRINTING PRESSES.

SPECIFICATION forming part of Letters Patent No. 780,200, dated January 17, 1905.

Application filed January 11, 1904. Serial No. 188,486.

*To all whom it may concern:*

Be it known that I, ALOYS W. KLING, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Register-Gages for Lithographing and Printing Presses; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a register-gage for stop-cylinder lithographing and printing presses and by means of which the sheets are accurately fed to the cylinder. The regulation of the gage heretofore has been attended with some difficulty, owing to the necessity of adjusting the upper guide or tongue with its downwardly-bent end relatively to the gage-plate. This also renders it necessary to loosen the lower guide or tongue, and thereby allow said lower guide or tongue to rise and renders it impossible to regulate the gage-plate when the press is in motion. This is the case, owing to the lower guide or tongue loosening when it is desired to regulate or adjust the gage-plate and the upper guide or tongue being out of position relative to said gage-plate.

In the present invention the lower guide or tongue is adjustable independently of the gage-plate, and in effecting such adjustment it is not necessary to loosen the connection of said gage-plate, and, further, the upper guide or tongue need not be adjusted relatively to said gage-plate.

Preceding a detail description of the invention reference is made to the accompanying drawings, of which—

Figure 1 is a perspective view of a portion of a stop-cylinder, showing the attachment of my improved register-gage. Fig. 2 is a detached side elevation of the register-gage. Fig. 3 is a plan view of the register-gage. Fig. 4 is a detail of the upper guide or tongue. Fig. 5 is a side elevation of the cylinder and operating mechanism. Fig. 6 is an end view

of the gage-plate, lower guide or tongue, and support. Fig. 7 is a sectional elevation of a portion of the cylinder, showing my improved register-gage in position.

In a detail description of the invention similar reference characters indicate corresponding parts.

1 designates the press-cylinder, which is driven in the usual manner by means of gear-wheels 2, on each end thereof, which are driven by racks 3 in a well-known manner.

4 designates a series of grippers which grip the sheets of paper which are fed from the feed-board 5 to the gage. It will be seen from Fig. 1, also Fig. 7, that a portion of the cylinder is open in order that the grippers may be set in proper relative position to the feed-board, and at that point of said cylinder there are extended from end to end two parallel bars 6 and 7, the former of which provides a support for the grippers, which are rigidly attached thereto, and the latter of which is utilized for the mounting of the register-gage, of which there is one located and rigidly attached to the bar 7 at each end of the cylinder. The register-gage consists of rods 8, which project from and are adjustably mounted in the upper side of a box 9, which is attached to the bar 7. The forward ends of the rods 8 support a gage-plate 10, against which the sheets are fed and which forms a stop for each sheet. The other ends of said rods pass through openings in the box 9 and are united to a cross-plate 15, which is secured to an adjusting-screw 16, that enters the box 9. By means of this screw the said rods 8 and the gage-plate 10 are given a proper adjustment relative to the feed-board and the grippers.

10' is a block which fits in a corresponding recess in the upper surface of the box 9 above the rods 8 and is tightened against said rods 8 by a thumb-screw 11' after said rods are moved to the proper position by the adjusting-screw 16 to bring the gage-plate 10 to the right position relatively to the line of the grippers, as in Fig. 7.

11 designates a lower guide or tongue which is independently secured to the upper side of the box 9, parallel with and above the rods 8.



This tongue 11 has a longitudinal slot 13 in the body thereof, through which passes an adjusting-screw 14, that penetrates the box 9, and thus the said tongue may receive independent longitudinal adjustment to place the forward end thereof in a proper position relative to the line of the grippers, as shown in Figs. 2 and 7. The end of the tongue rests upon the tapered portion 24 of the cylinder and prevents the sheet 25 from passing into said cylinder. The sheets are fed onto said tongue and against the portion of the gage-plate 10 which is above the end of the tongue.

17 designates an upper guide or tongue, of which there is one mounted above and in line with each of the lower guides or tongues 11. These guides or tongues 17 are rigidly attached to a rocker-rod 18, which has its ends mounted on the side frames of the machine in a well-known manner, and in the present instance it is utilized for the mounting of said guides or tongues. The function of said guides or tongues is to prevent the sheets from rising as they are fed to the gage, the free end of said guides or tongues 17 flaring upwardly at a point above the free end of the lower guides or tongues 11. The rod 18 is actuated through the well-known means shown in Fig. 5 and consisting of a cam 19, pitman 20, lever 21, pivoted at 22 and engaging an arm 23, fixed to the end of said rod 18.

The upper and lower guides or tongues 17 and 11 having been adjusted to their proper position, it is not necessary to give them any further adjustment for future work. The gage-plate 10 is the only element of the device that requires any further attention in the

regulation of the gage for work at different times. It may be stated here that it is difficult, if not impossible, to move the plate or stone in the press with such a degree of accuracy as to render it unnecessary to adjust the gage-plate 10 for each job, and also during the progress of the work it often becomes necessary to change the position of said gage-plate. This is done with much greater facility and accuracy, owing to the fact that the positions of neither the upper nor the lower guides or tongues 17 and 11 are disturbed.

Having described my invention, I claim—

A register-gage for lithographing and printing presses, consisting of a gage-plate supported upon longitudinally-adjustable rods, means for imparting such adjustment to said rods to bring the gage-plate to the desired position, a tongue mounted above said rods with its free end projected beyond the gage-plate to bridge the space between the gage-plate and the adjacent edge of the cylinder, said tongue being adjustable longitudinally and independently of the gage-plate, means for imparting such adjustment to said tongue, and a stationary upper guide or tongue, the free end of which is projected upwardly from a point above the gage-plate, said upper guide or tongue serving to prevent the sheets from rising as they are fed to the gage-plate, as herein shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ALOYS W. KLING.

Witnesses:

R. J. McCARTY,  
C. M. THEOBALD.