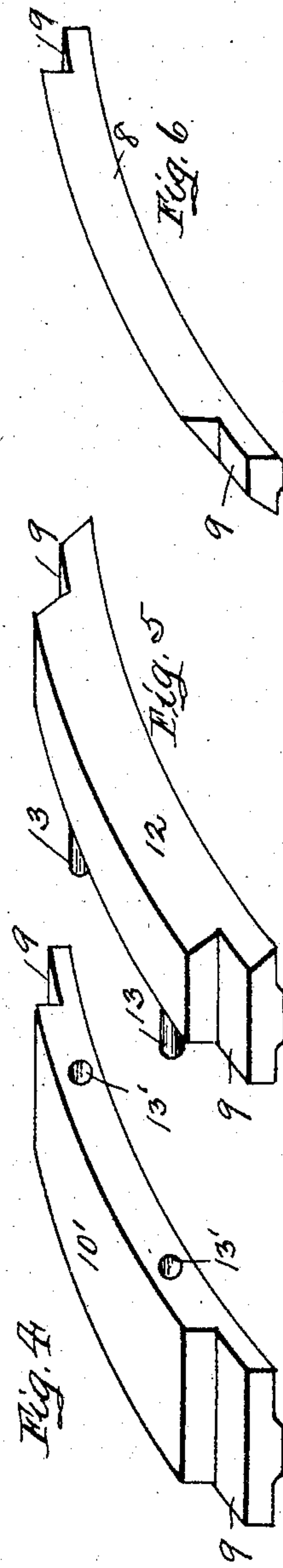
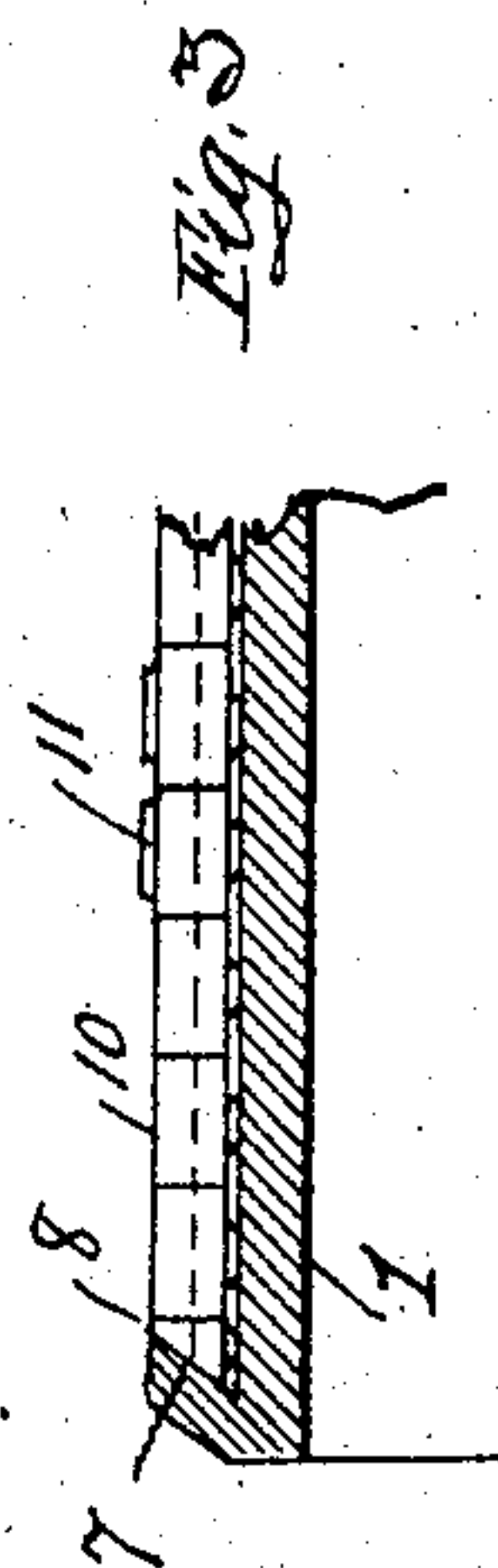
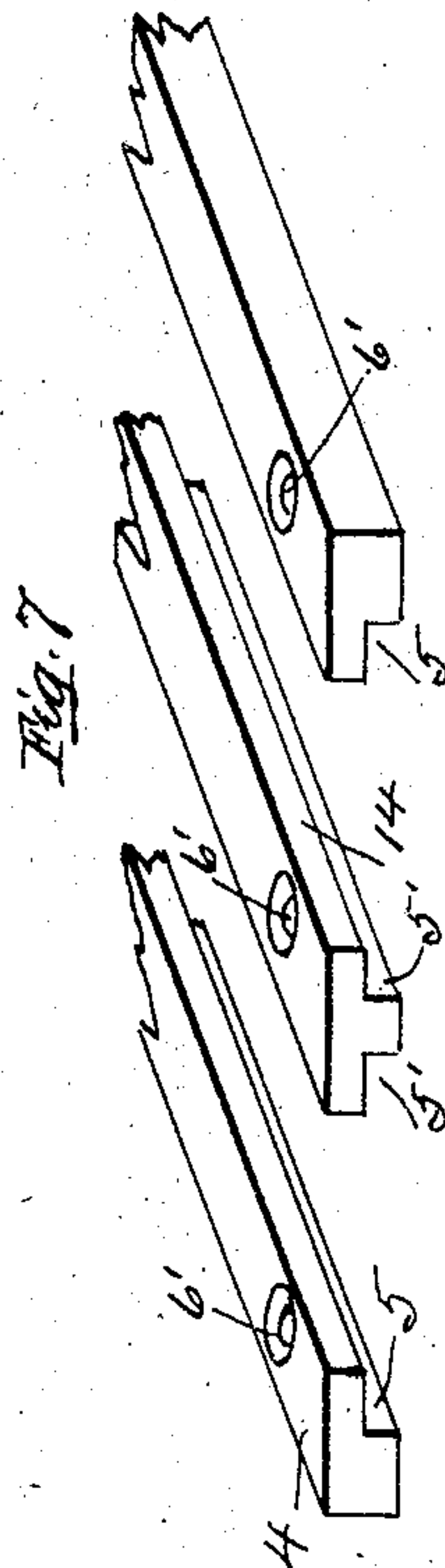
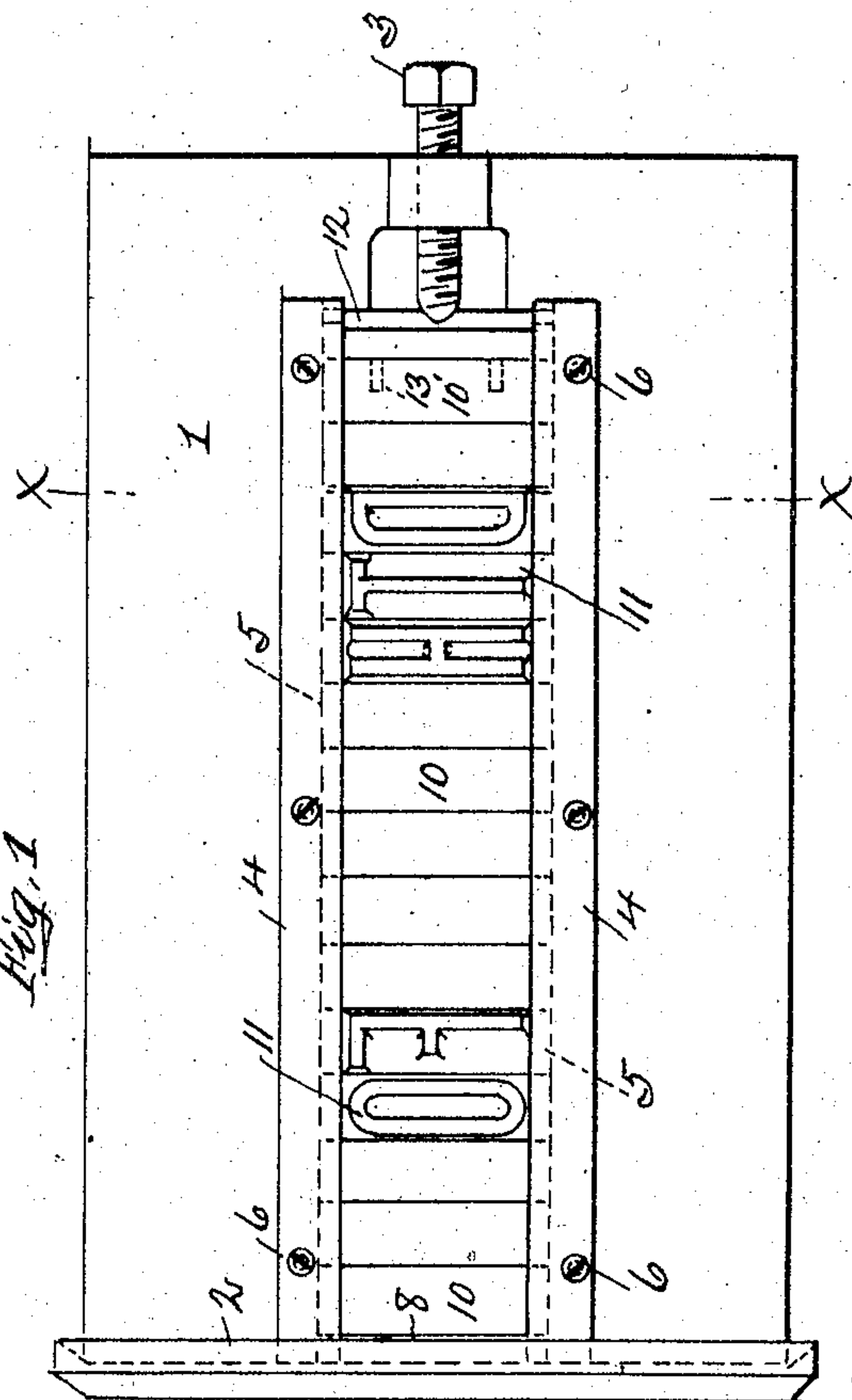
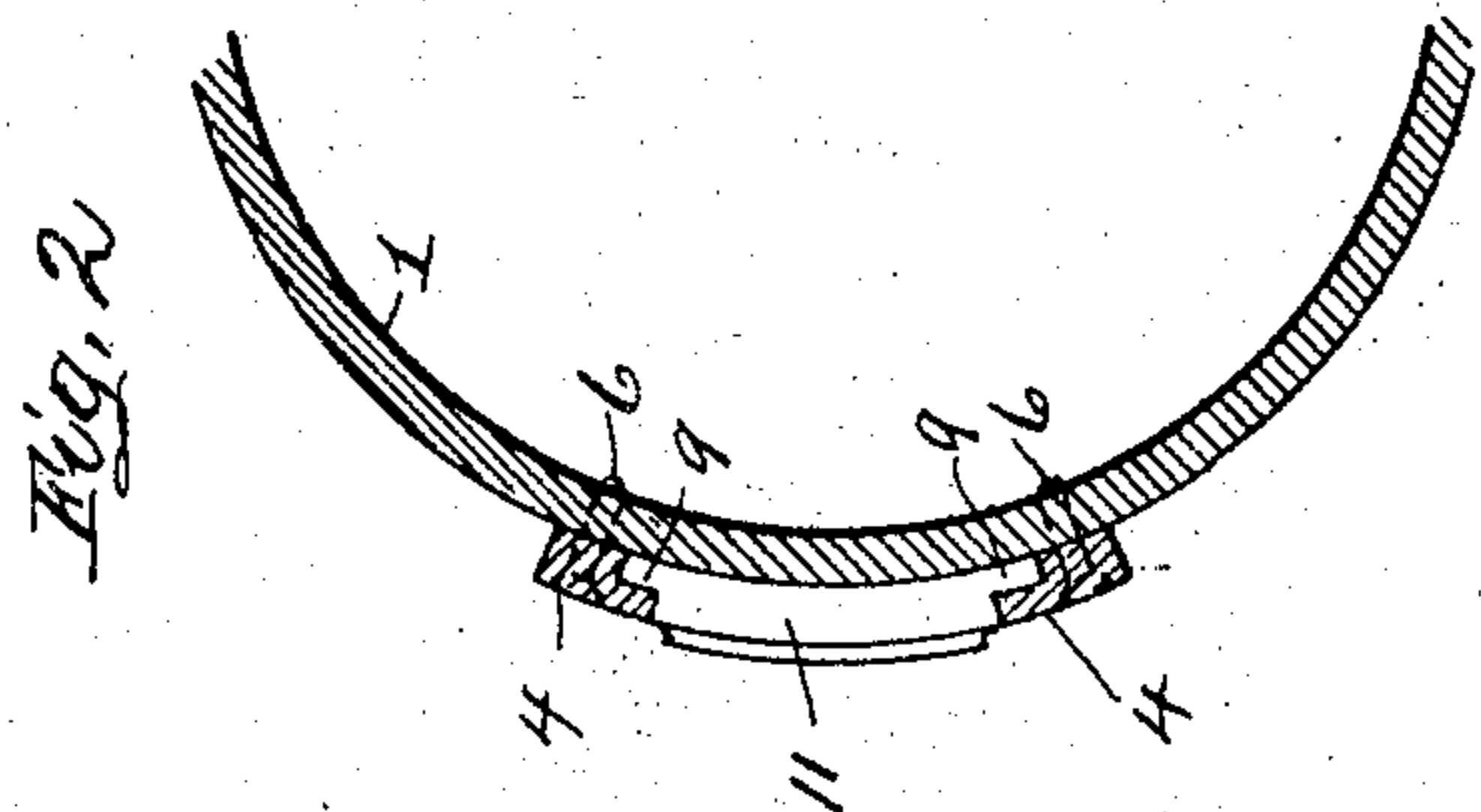


No. 778,341.

PATENTED DEC. 27, 1904.

J. H. SWAIN.  
PRINTING COLOR DISPLAY.  
APPLICATION FILED DEC. 8, 1903.



Witnesses:  
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W. Hunter.

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att'y.



# UNITED STATES PATENT OFFICE.

JAMES H. SWAIN, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO THE PRESS PUBLISHING COMPANY, OF PITTSBURG, PENNSYLVANIA.

## PRINTING COLOR DISPLAY.

SPECIFICATION forming part of Letters Patent No. 778,341, dated December 27, 1904.

Application filed December 8, 1903. Serial No. 184,353.

*To all whom it may concern:*

Be it known that I, JAMES H. SWAIN, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Printing Color Display, of which improvement the following is a specification.

This invention relates to an improved means for printing late news in color display on newspapers; and it consists in flanged or beveled bars attached securely in parallel lines to the printing-cylinder and a series of flanged type held in position by said bars, together with certain details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a side elevation of a press-cylinder provided with flanged bars and showing the manner in which the type are arranged and confined between said bars, the said view being constructed and arranged in accordance with my invention. Fig. 2 is an end sectional elevation of a portion of the same, the said section being taken on the line X X of Fig. 1. Fig. 3 is a sectional plan view taken between the flanged bars. Fig. 4 is a perspective view of one of the blanks or type. Fig. 5 is a similar view of the beveled piece placed at one end to engage with the cylinder-plate clamp. Fig. 6 is a perspective view of the beveled piece used to square up the cylinder. Fig. 7 is a perspective view of a portion of the flanged bars, showing an intermediate T-bar by means of which a double row of type may be used, the said view being a modified form of my invention.

To put my invention into practice and afford a means whereby display-type may be quickly arranged upon the color-cylinder of a printing-press and as readily removed, thereby dispensing with a cumbersome holder or chase, such as are now in common use, I provide two bars 4, recessed along one edge thereof to form a flange 5 and provided with countersunk openings 6, through which short

screws 6 are passed to permanently attach the said bars to the press-cylinder 1. These bars 4 are arranged in the direction of the length of the cylinder the one parallel to the other and the flange 5 of the one opposite that of the other. At Fig. 6 of the drawings I have shown a beveled piece 8, having a concave back the radius of which corresponds to that of the cylinder 1, a convex surface or edge and reduced or flanged end portions 9, which are adapted to fit snugly beneath the flanges 5 of the bars, and the said piece 8, used to square up the beveled flange 2 at the one end of the cylinder. I now form from suitable metal a number of type and blank or space pieces, (see Fig. 4,) the backs of which are concave and the faces convex and each formed with flanges 9 to fit beneath the flanges 5 of the bars, as above described. The filling or blank pieces 10 when in position are slightly below the type 11 and are not provided with the side openings 13', (shown at Fig. 4 of the drawings,) but made with plain uniform edges. The end blank 10' and beveled end piece 12 are formed with pins 13 and openings 13' to register therewith, thereby attaching the two together to engage with the clamping device 3 used on this class of cylinders.

It will be readily understood from the foregoing description, taken in connection with the accompanying drawings, that by releasing the clamp the type may be easily removed or replaced.

If it is desired to use a double display-line, the T-bar 14, having flanges 5', is attached to the cylinder between the flanged bars 4 and the type set and removed in the manner above described.

It is obvious that slight modifications and changes may be made in the details of construction without departing from the general spirit of the invention. Therefore I do not wish to confine myself to that shown and described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—



1. The combination with the cylinder, of a pair of flanged type-holding bars of less length than the cylinder removably secured to the cylinder in parallel relation to each other, means on one end of the cylinder receiving one end of the bars, a plurality of type-pieces and a plurality of pieces each having flanged ends received under the flanges of the holding-bars, and clamping a screw arranged at the other end of the cylinder and contacting with one of said pieces for holding the type-pieces and filling-pieces in fixed position.

2. The combination with the cylinder having an undercut flange and a beveled piece at one end, of a pair of parallel holding-bars removably secured to said cylinder and engaged at one end by the beveled end piece, a plurality of type-pieces and a plurality of filling-pieces held on the cylinder by engagement with the bars, and a screw contacting with one of said filling-pieces at the other end of the cyl-

inder for securing the filling-pieces and type-pieces in fixed position.

3. The combination, consisting of the cylinder, the flanged bars 4 attached thereto, the end beveled piece 8, the type 11 and filling-pieces 10, each having a concave back and convex face, the end pieces of similar form, one 10' of which is provided with openings 13' and the other 12 with corresponding projecting pins, whereby the two may be connected together, and a means for clamping the parts together, all arranged and combined for service, substantially as and for the purpose described.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES H. SWAIN.

In presence of—

MAX W. KURNIKER,

M. HUNTER.