

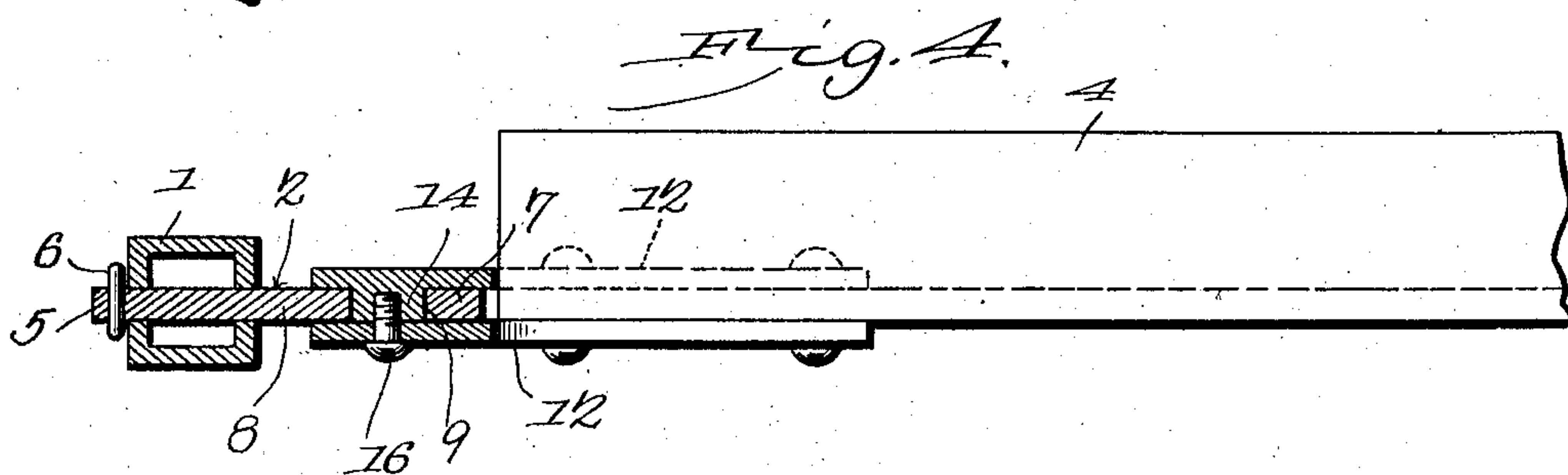
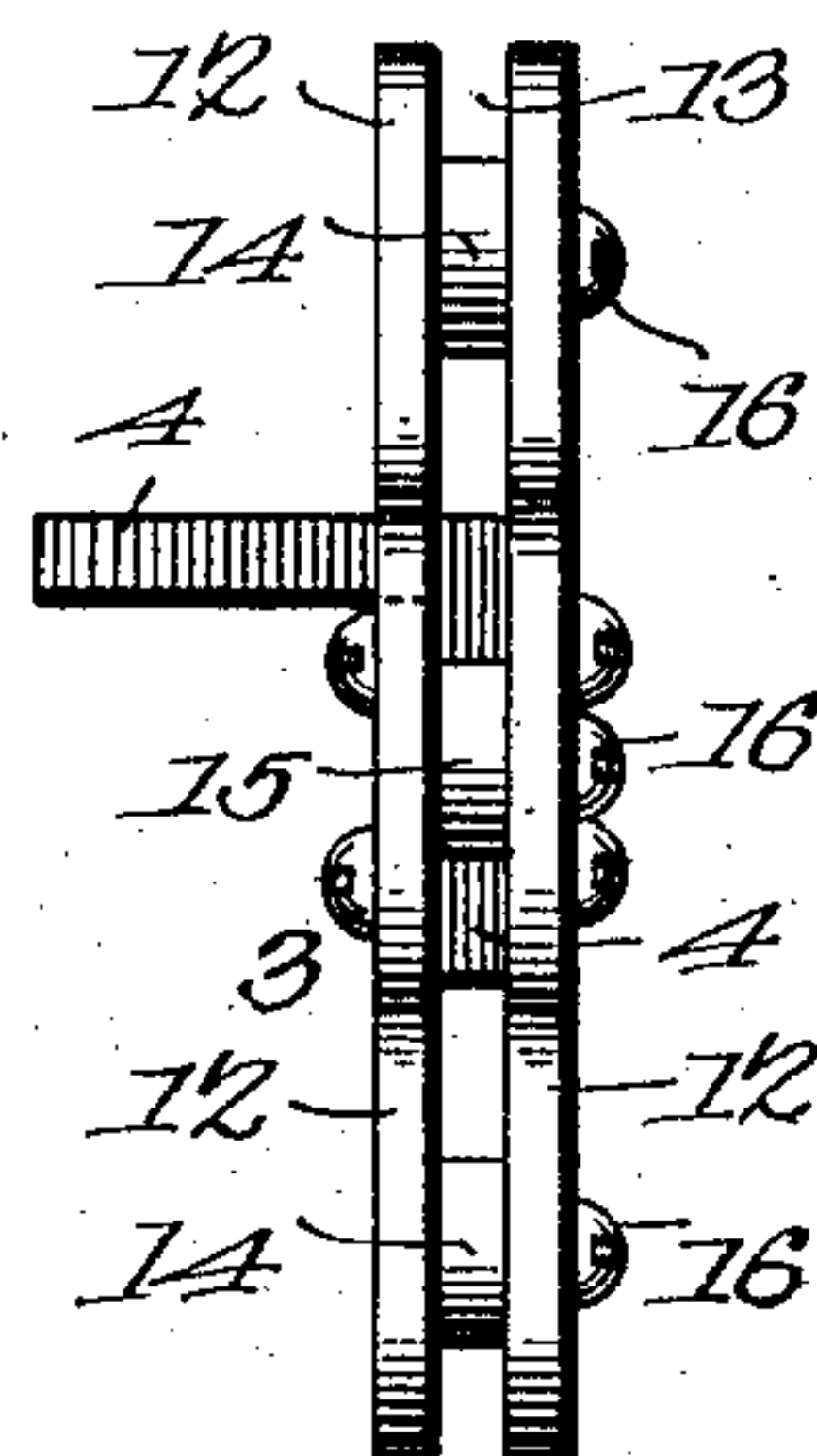
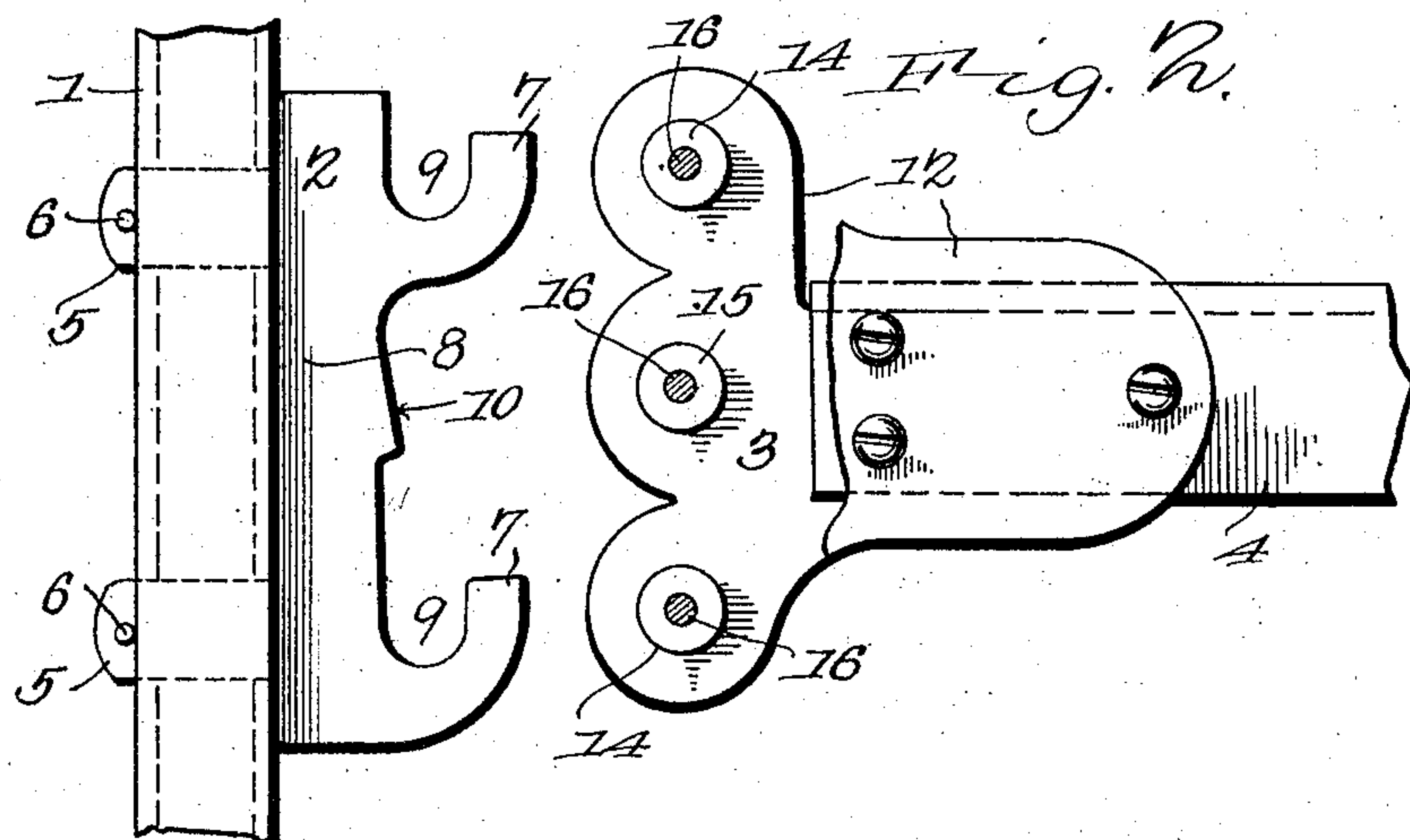
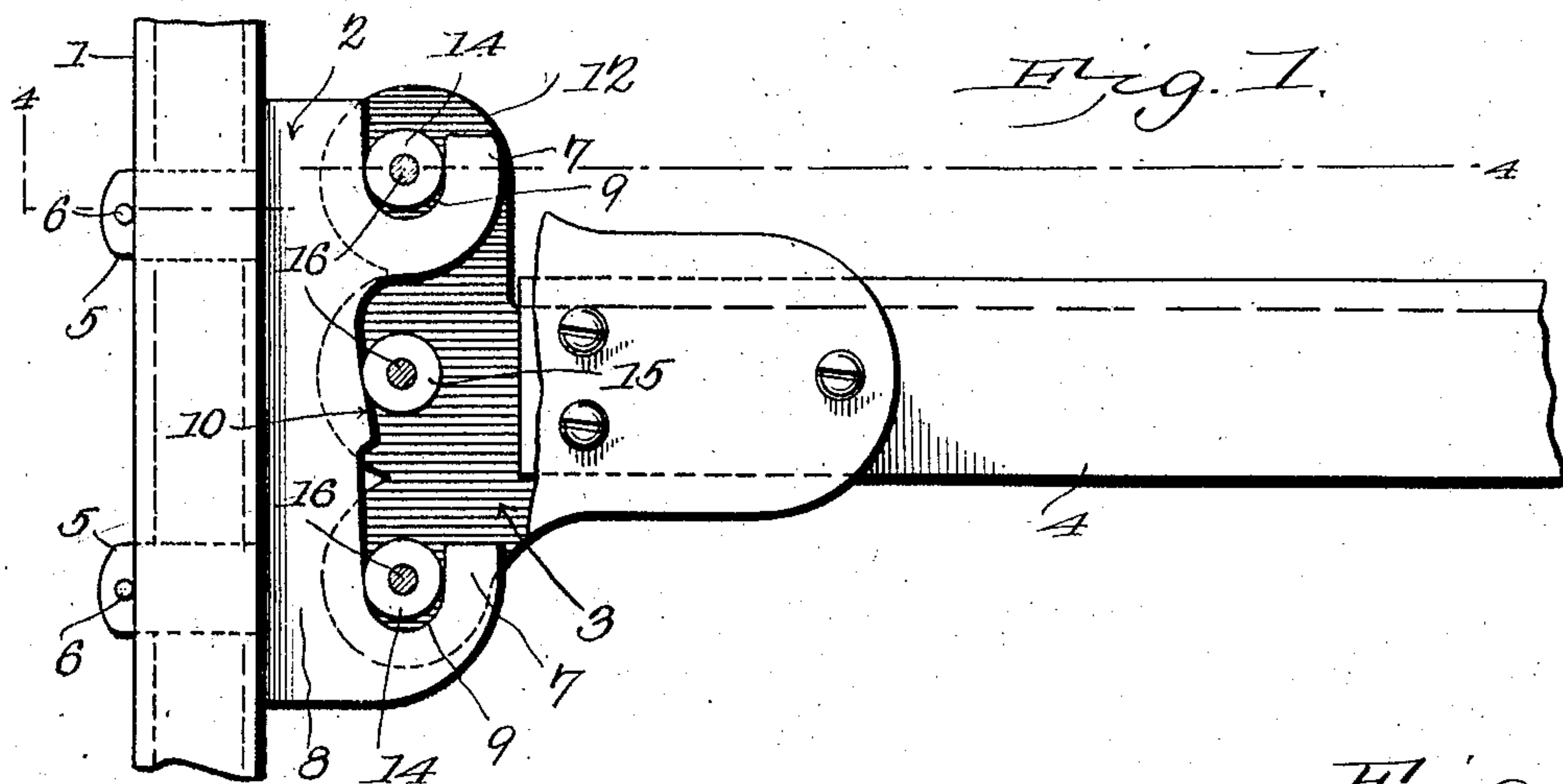
No. 765,402.

PATENTED JULY 19, 1904.

W. STORCH.
BED RAIL FASTENER.

APPLICATION FILED MAR. 9, 1904.

NO MODEL.



Witnesses

E. F. Stewart
J. J. Elmore

William Storch,
Inventor,

by

C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM STORCH, OF PHILADELPHIA, PENNSYLVANIA.

BED-RAIL FASTENER.

SPECIFICATION forming part of Letters Patent No. 765,402, dated July 19, 1904.

Application filed March 9, 1904. Serial No. 197,324. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM STORCH, a subject of the Emperor of Germany, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Bed-Rail Fastener, of which the following is a specification.

My invention relates to bed-rail fasteners such as are employed for coupling the ends of the rails with the bedstead-posts, and has for its objects to produce a simple inexpensive device of this character by which the parts will be firmly and securely connected and one in which the rail portion of the fastener in moving to coupling engagement will be automatically guided to its seat.

To these ends the invention comprises the novel combination and arrangement of parts, more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side sectional elevation portion of a bedstead embodying my invention and illustrating the parts in coupling engagement. Fig. 2 is a similar view showing the parts uncoupled. Fig. 3 is an end elevation of the rail. Fig. 4 is a sectional plan on the line 4 4 of Fig. 1.

Referring to the drawings, 1 designates a post, preferably of tubular form, as herein shown, and carrying the male coupling member 2 of my improved fastener, the female member 3 of which is carried by the rail 4, the latter being preferably of angle-iron.

The male or primary member 2, which is stamped or otherwise formed from plate-steel, has provided upon and projecting outward from its inner face, which bears against the adjacent face of the post, a pair of vertically-spaced extensions or arms 5, which pass through suitable openings in the post and are secured by fastening devices or pins 6, disposed transversely through the ends of the extensions to bear upon the adjacent face of the post. Formed upon the outer edge of the member 2 is a pair of vertically-spaced engaging members or hooks 7, which project outward and upward and serve conjointly with the adjacent edge of the body portion 8 of the member 2 to produce vertically-disposed upwardly-opening sockets or seats 9 for a pur-

pose which will hereinafter appear, while upon the edge of the body 8 and between the members 7 there is formed a downwardly and outwardly inclined cam-face 10. Attention is here especially directed to the fact that the outer edge of the upper engaging member 7 follows a compound curve from its upper end to its point of juncture with the body portion 8, thereby producing a cam-face 11, the function of which will later appear.

The female or secondary coupling member 3 consists of a pair of side plates 12, disposed, respectively, upon opposite sides of the rail 4, whereby they are suitably spaced transversely to produce between them a socket 13, designed for the reception of the engaging members 7, said socket having arranged therein to extend transversely between the plates a pair of engaging members or trunnions 14, disposed, respectively, adjacent to the top and bottom of the socket in position to coincide and engage with the members or hooks 7 when the parts are coupled, as in Fig. 1. Situated in the socket 13 centrally between the members 14 and in vertical alinement therewith is a bearing member or trunnion 15, extended transversely between the plates 12 and adapted in practice to bear upon the cam-face 10 when the parts are coupled and to cooperate with said cam for pressing the member 3 outward from member 2, thereby maintaining the primary members 7 into secure frictional engagement with the cooperating members 14.

The members or trunnions 14 and 15, which are preferably of circular form in cross-section, are formed integral with one of the plates 12 and are provided with central holes for the reception of screw 16, employed for attaching the other plate 12 in position. It is obvious that by this arrangement an exceedingly strong connection between the plates is established, while at the same time the said members 14 15 will be materially strengthened for withstanding the strains to which they are in practice subjected.

In practice when the member 3 is moved into coupling assemblage with the member 2 the upper engaging hook 7 will enter the socket 13 in the space between trunnions 14 and 15, and the latter coming into contact with the

cam-face 11 will ride downward and inward thereon, thereby guiding the hook 7 readily to position and automatically drawing the upper trunnion 14 downward to its seat in the upper socket 9, it being apparent, of course, that a simultaneous seating of the lower member 14 into the adjacent socket 9 will occur. Attention is particularly directed to the fact that because of the member 15 being in vertical alinement with the members 14 the lateral strain upon the latter owing to the engagement of said member 15 with the cam-face 10 will be minimized, and, furthermore, that because of this arrangement of the parts the end of the angle-rail 4 may be brought into closer proximity to the post 1 than otherwise, thus obviating liability of the bedclothing falling between the post and rail. Furthermore, housing of the members 14 within the socket between the plates 12 obviates liability of the bedclothing becoming entangled with the said members.

From the foregoing it is apparent that I produce a simple inexpensive device admirably adapted for the attainment of the ends in view; but it is to be understood that minor changes may be made in the details herein set forth

without departing from the spirit of the invention.

Having thus described the invention, what is claimed is—

The combination with a bedpost, of a primary coupling member carried thereby and having a seat and a cam-face, a rail, a secondary coupling member carried thereby and comprising a pair of plates spaced to produce a socket for the reception of the primary coupling member, a plurality of trunnions formed integral with one of the plates and extending transversely of the socket, and fastening devices extending through the other plate and engaged with the trunnions, one of said trunnions being adapted for engagement with the seat and the other to bear upon the cam-face for binding the first-mentioned trunnion in said seat.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM STORCH.

Witnesses:

RUDOLF TOBLER,
KARL MÜLLER.