

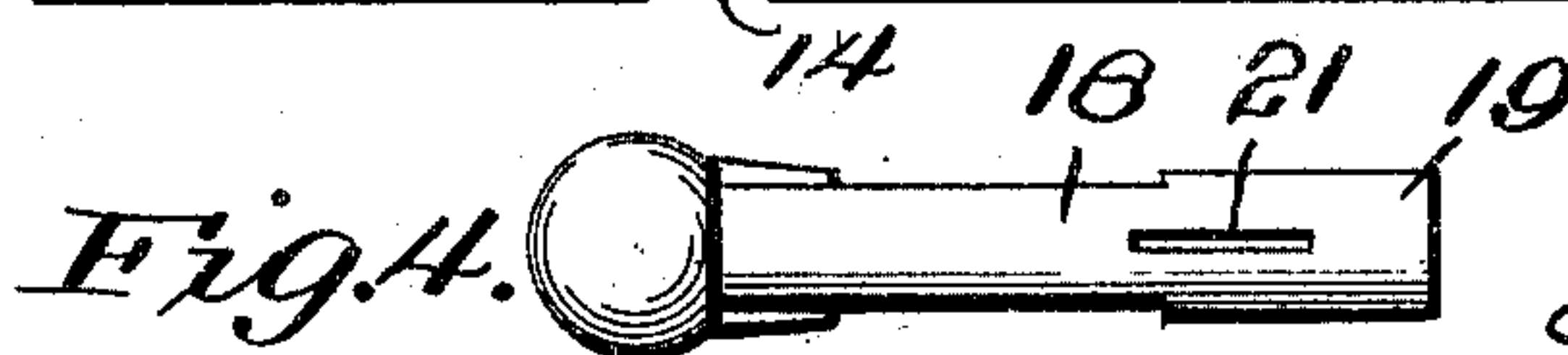
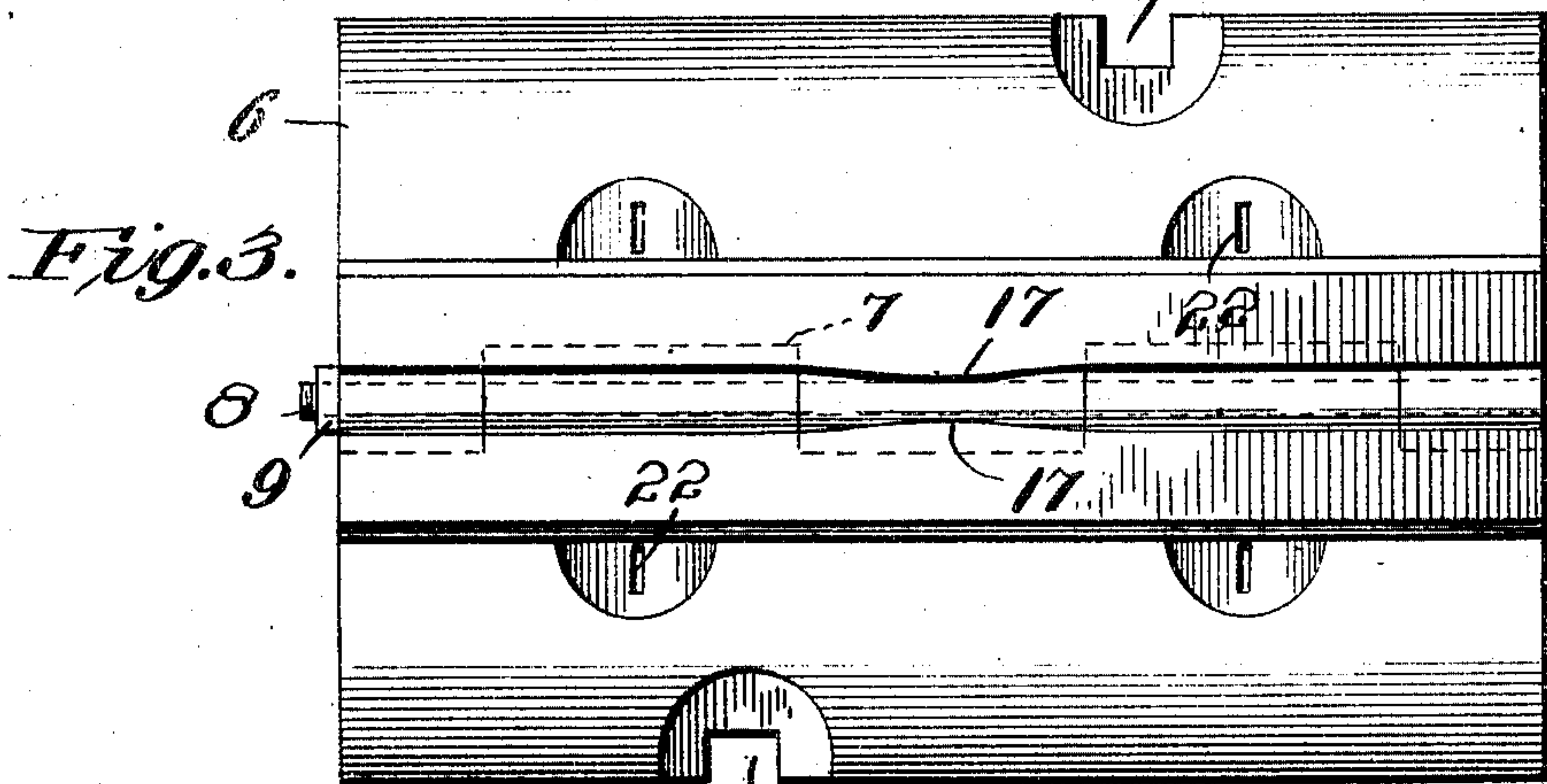
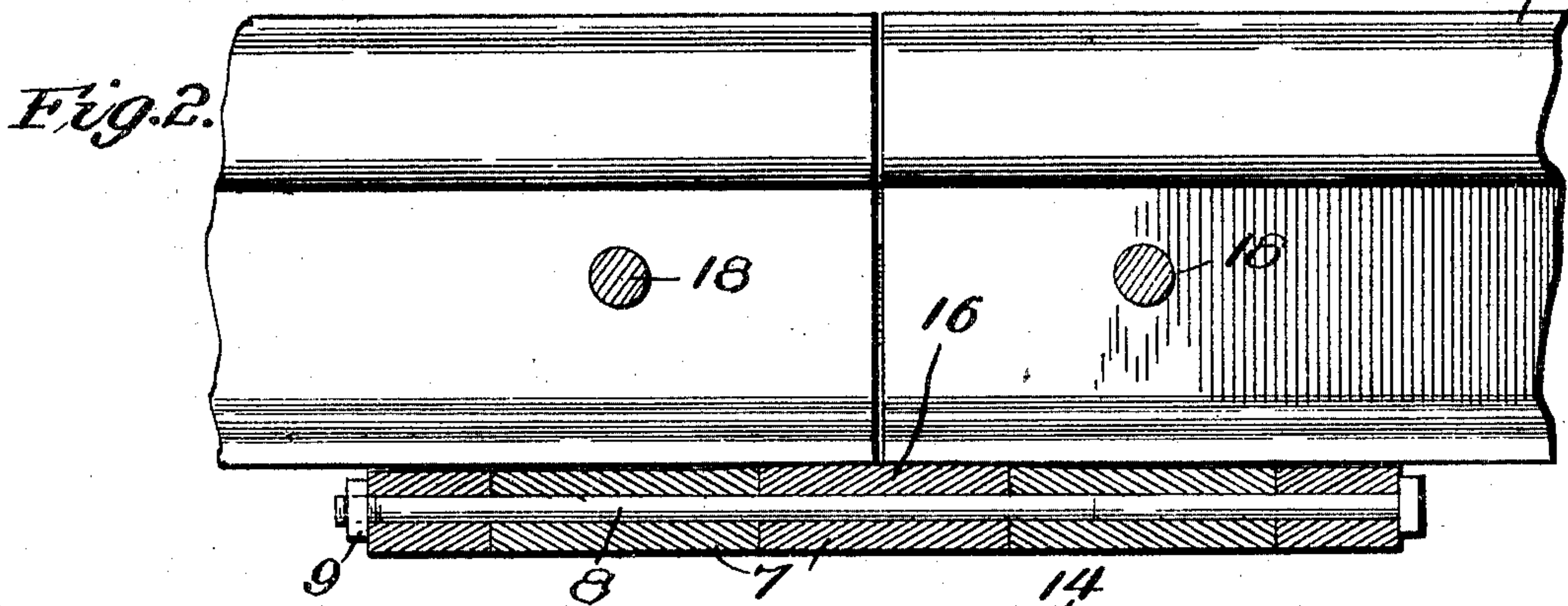
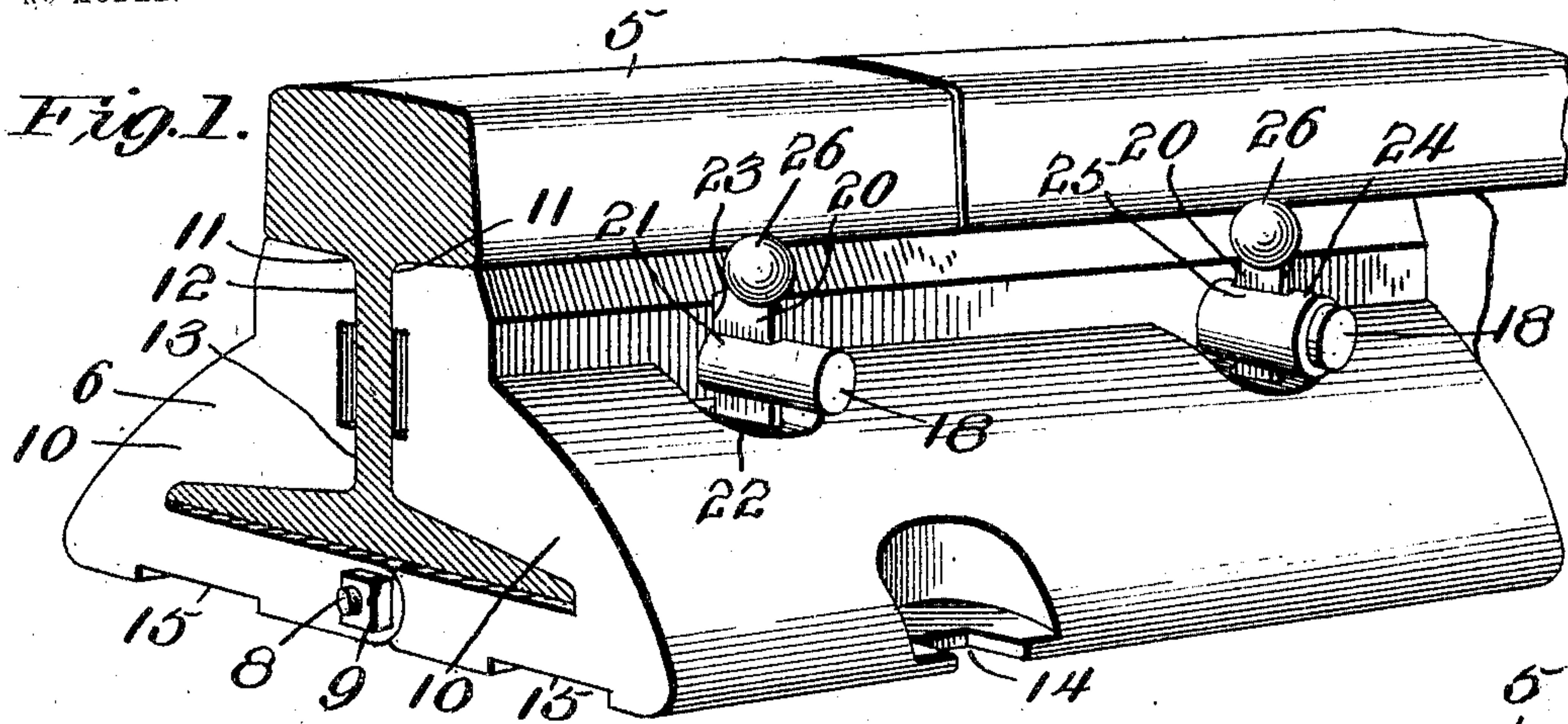
No. 776,287.

PATENTED NOV. 29, 1904.

F. M. ANNIS.  
RAIL CHAIR.

APPLICATION FILED JULY 23, 1904.

NO MODEL.



Inventor

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Witnesses

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# UNITED STATES PATENT OFFICE.

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TO MELVIN L. DEVORE AND EZRA F. ANNIS, OF CONNEAUT, OHIO,  
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## RAIL-CHAIR.

SPECIFICATION forming part of Letters Patent No. 776,287, dated November 29, 1904.

Application filed July 23, 1904. Serial No. 217,836. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK M. ANNIS, a citizen of the United States, residing at Conneaut, in the county of Ashtabula and State of Ohio, have invented new and useful Improvements in Rail-Chairs, of which the following is a specification.

My invention relates to rail-chairs, and has for its object simple and efficient means for joining and supporting the meeting ends of two rail-sections to prevent spreading thereof.

Improved details in construction and arrangements of the several parts of the invention will be apparent from the detailed description hereinafter when read in connection with the appended claims, reference being had to the drawings hereto annexed, in which—

Figure 1 is a perspective view of the rails and the chair. Fig. 2 is a central longitudinal section. Fig. 3 is a plan view of the chair. Fig. 4 is a side elevation of the bolt used for fastening the chair to the rails.

Referring specifically to the drawings, 5 denotes the rail-sections, and 6 the chair. The latter is in two parts and extends under the base of the rail to support the same, where a series of knuckles 7 are formed, which are made to register and form a hinge by passing a long bolt or pin 8 through the registering knuckles, as plainly shown in Fig. 3. The bolt is secured by a nut 9 or in any other suitable manner. The chair-sections extend around and over the base of the rail, as at 10, and under the head, as at 11. They are also shaped to grip the web of the rail in two or more places, preferably as at 12 and 13, being the top and bottom thereof, respectively. The chair is spiked to the tie in the usual manner, it being provided with recesses 14 to receive the spike-head, the said recesses being staggered, as shown in Fig. 2. To assist in holding the chair against lateral displacement, grooves 15 are formed in both sections of the chair, on the under side thereof, which are filled with the road-bed when the chair is in place.

The seat of the chair is swelled slightly in the middle, as indicated at 16 in Fig. 2, and

that portion which grips the web of the rail is also made slightly fuller in the middle, as indicated at 17 in Fig. 3, these parts being at the meeting ends of the rail-sections. Pressure on the rails tends to increase the grip of the chair by reason of the hinged construction, and said grip will be greatest at the meeting ends of the rail-sections, where it is most needed, because of the shape of the chair at this point, as above described.

At 18 are indicated bolts which extend through the chair and rails for fastening the same together. The bolts are headed and have enlarged ends 19 to strengthen them. They are not threaded, but are fastened by keys 20, which extend through a transverse slot 21 in the bolt. The lower ends of the keys extend into slots 22 made in the chair on one side thereof. The keys are wedge-shaped, and referring to Fig. 1 it will be noted that the edge of one of the keys is shaped so as to abut against the chair, as at 23, thus jamming it against the rail, whereby the parts are securely bound together. Both bolts can be fastened in the same manner; but in Fig. 1 I have shown the modified fastening means. This comprises a sleeve 24, which is slipped over the enlarged end of the bolt and abuts against the chair. The sleeve has a transverse slot 25, which registers with the slot in the bolt, the key extending through both slots. When the key is driven down, it jams the sleeve up against the chair and securely binds the parts. The keys are also provided with a weighted head 26, which assists in holding them in position.

The parts above described form a safe and strong rail-joint, and they are also simple and can be readily assembled.

What I claim as new, and desire to secure by Letters Patent, is—

1. A rail-chair comprising two parts which are hinged under the base of the rail; bolts extending through the rails and chair; and keys extending transversely through the bolts and into the chair.

2. A rail-chair comprising two parts which are hinged under the base of the rail; bolts

extending through the rails and chair; a wedge-shaped key extending transversely through the bolts and into the chair, and jamming the latter against the rails.

5 3. A rail-chair comprising two parts which are hinged under the base of the rail; bolts extending through the rails and chair; a sleeve over the end of the bolts; a wedge-shaped key extending transversely through the sleeve  
10 and bolt and into the chair; and jamming the sleeve against the chair.

4. A rail-chair comprising two parts which

are hinged under the base of the rails and extend therefrom to grip the rails, the seat of the chair being highest under the meeting 15 ends of the rails and the portions which grip the rails being fuller at the same point.

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

FRANK M. ANNIS.

Witnesses:

M. L. DEVORE,

MATT G. SPAULDING.