

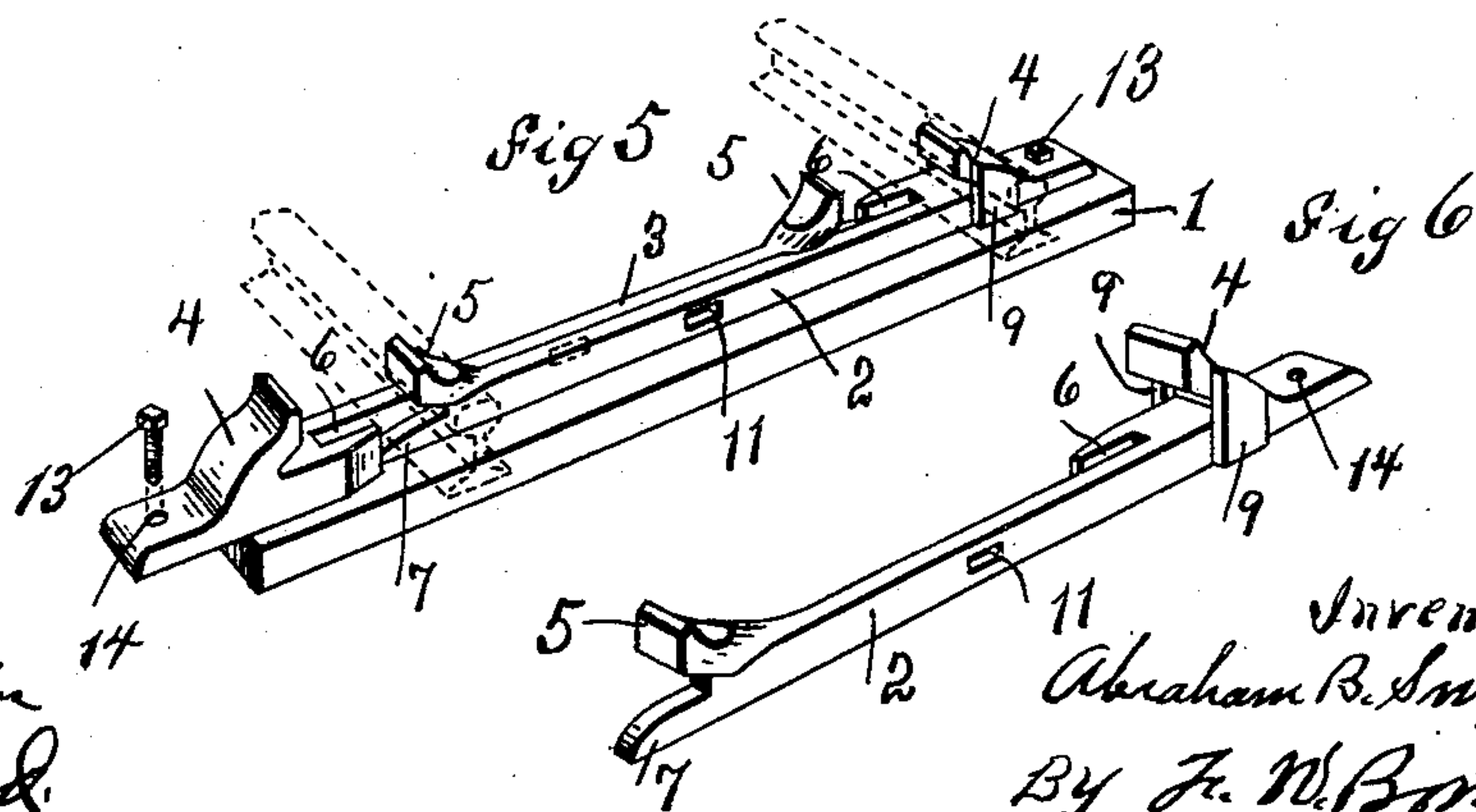
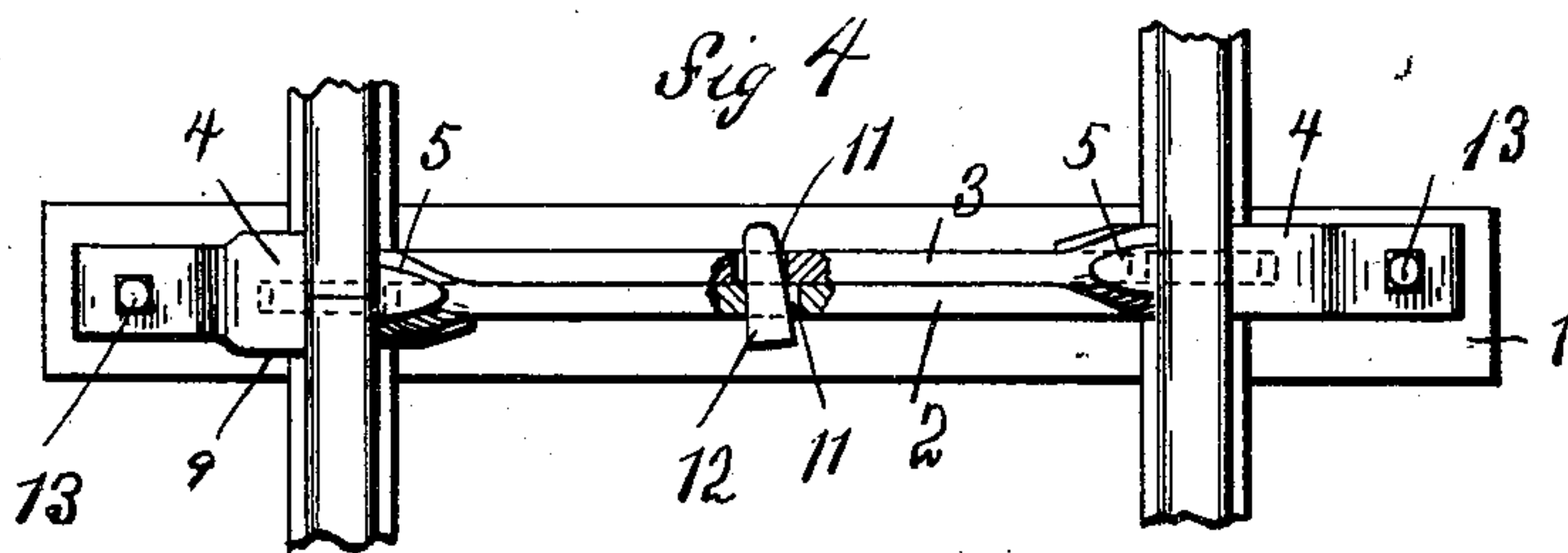
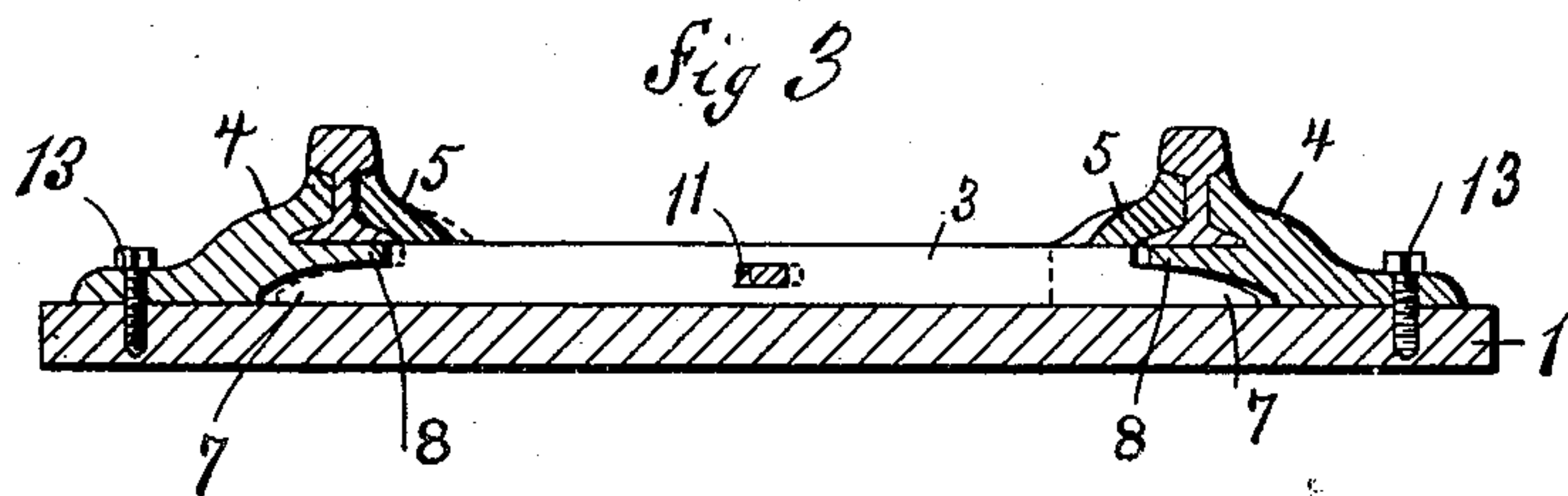
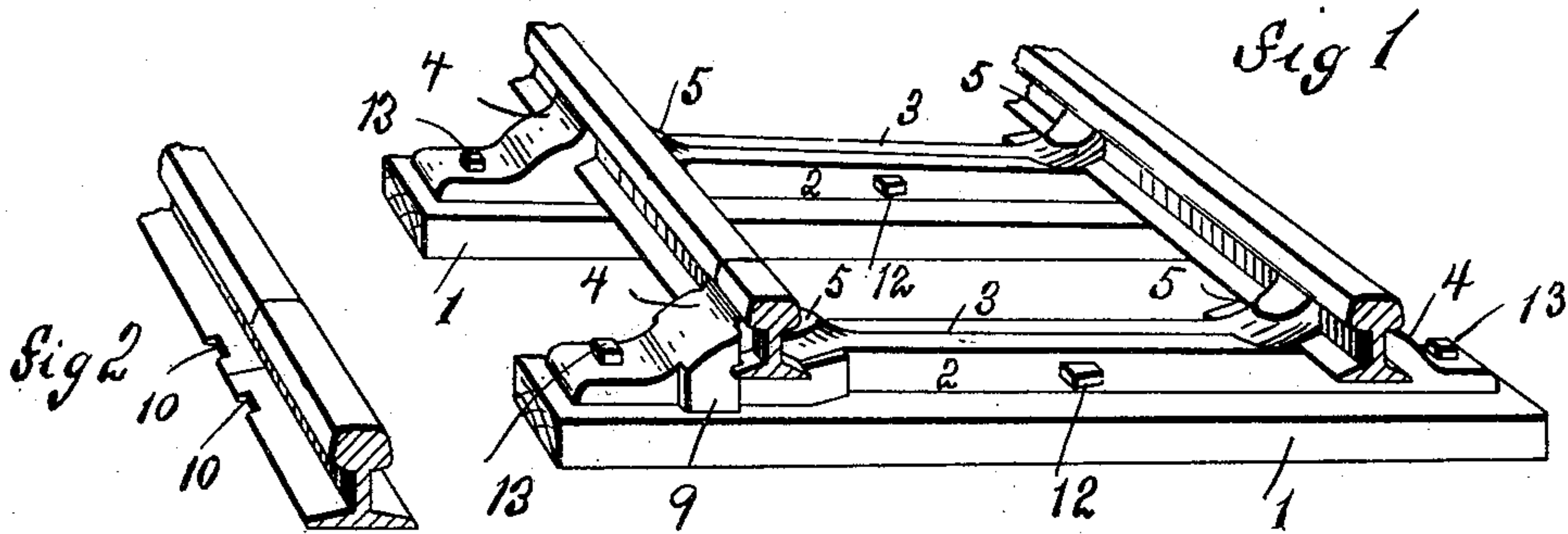
No. 734,102.

PATENTED JULY 21, 1903.

A. B. SNYDER.
COMBINED TIE AND RAIL JOINT.

APPLICATION FILED MAR. 21, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

ABRAHAM B. SNYDER, OF LOUISVILLE, OHIO.

COMBINED TIE AND RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 734,102, dated July 21, 1903.

Application filed March 21, 1903. Serial No. 148,836. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM B. SNYDER, a citizen of the United States, residing at Louisville, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in a Combined Tie and Rail-Joint; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a perspective view showing two ties placed in proper position and illustrating railway-rails properly connected, also showing two rails joined together. Fig. 2 is a view showing portions of two rails and illustrating their flanges notched. Fig. 3 is a longitudinal section of the base, also showing section of one of the tie sections or parts. Fig. 4 is a top view of a single tie, showing the different parts properly arranged. Fig. 5 is a view showing the tie members placed in proper relative position and one of the members slipped, so as to provide for placing the railway-rails in proper position to be clamped. Fig. 6 is a detached view of one of the tie-sections.

The present invention has relation to a combined tie and rail-joint designed to hold the railway-rails in proper position and to join the ends of adjacent rails together.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the base, which is preferably formed of wood about half the thickness of the ordinary wood tie. This is simply to form a proper support or foundation for the tie members 2 and 3, which are substantially of the form shown in Fig. 6 and are formed of metal.

The tie members 2 and 3 are provided with the rail-retaining heads 4 and 5, the head 5 arranged to come upon the inside of the railway-rail and the head 4 upon the outside of the railway-rail, this feature being best shown in Fig. 4.

The tie members 2 and 3 are each provided with the open-ended recesses 6 and the lips 7, said lips being so formed that when the tie

members 2 and 3 are placed side by side, as illustrated in Figs. 1, 4, and 5, they will enter the recesses 6, as illustrated in Fig. 3. For the purpose of providing or assisting in holding the tie members 2 and 3 in proper relation to each other throughout their entire length the lips 7 are so formed that they will come under the ledges 8 of the recesses 6, this feature being illustrated in Fig. 3.

The heads 4 are formed so that they will embrace and properly hold the outer sides of the railway webs and flanges and the heads 5 so formed that they will embrace the inner flanges and webs of the railway-rails. The heads 4 are provided with the flanges 9, which flanges are so formed and located that when the members 2 and 3 are brought into proper relation to hold the railway-rails they will be seated in the notches 10, formed in the flanges of the railway-rails, said flanges and notches being for the purpose of preventing any accidental displacement of the rails by reason of expansion and contraction.

It will be understood that it is not necessary to provide all of the heads 4 with the flanges 9, owing to the fact that ties located between the ends of the rails need no provision to provide against displacement.

For the purpose of securely clamping the heads 4 and 5 against the flanges and webs of the railway-rails, which may be provided with slots 11, and into which slots a key, such as 12, is driven, the arrangement of the slots and the taper of the key are such that as the key is driven through the slots it will have a tendency to move the members 2 and 3 in the direction to bring the heads 4 and 5 toward each other.

For the purpose of securely connecting the tie members 2 and 3 to the base 1 lug-screws 13 are provided, which lug-screws are passed through apertures 14, formed in the tie members, and seated in the base 1, as illustrated in Fig. 3.

It will be understood that by my peculiar arrangement I am enabled to provide a railway-tie that the end of adjacent rails can be coupled together without the use of the ordinary fish-plates and bolts. It will also be understood that the heads 4 and 5 should be formed of sufficient width to give the proper

bearing-surface, so as to properly bind and connect the ends of the railway-rails together.

Having fully described my invention, what I claim as new, and desire to secure by Letters
5 Patent, is—

A railway-tie consisting of two members each member provided with rail-retaining heads, a recess formed in one of the members and a tongue in the other, flanges located upon
10 one of the heads of each section, and notches

formed in the flanges of the railway-rails, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ABRAHAM B. SNYDER.

Witnesses:

J. R. BOND,

F. W. BOND.