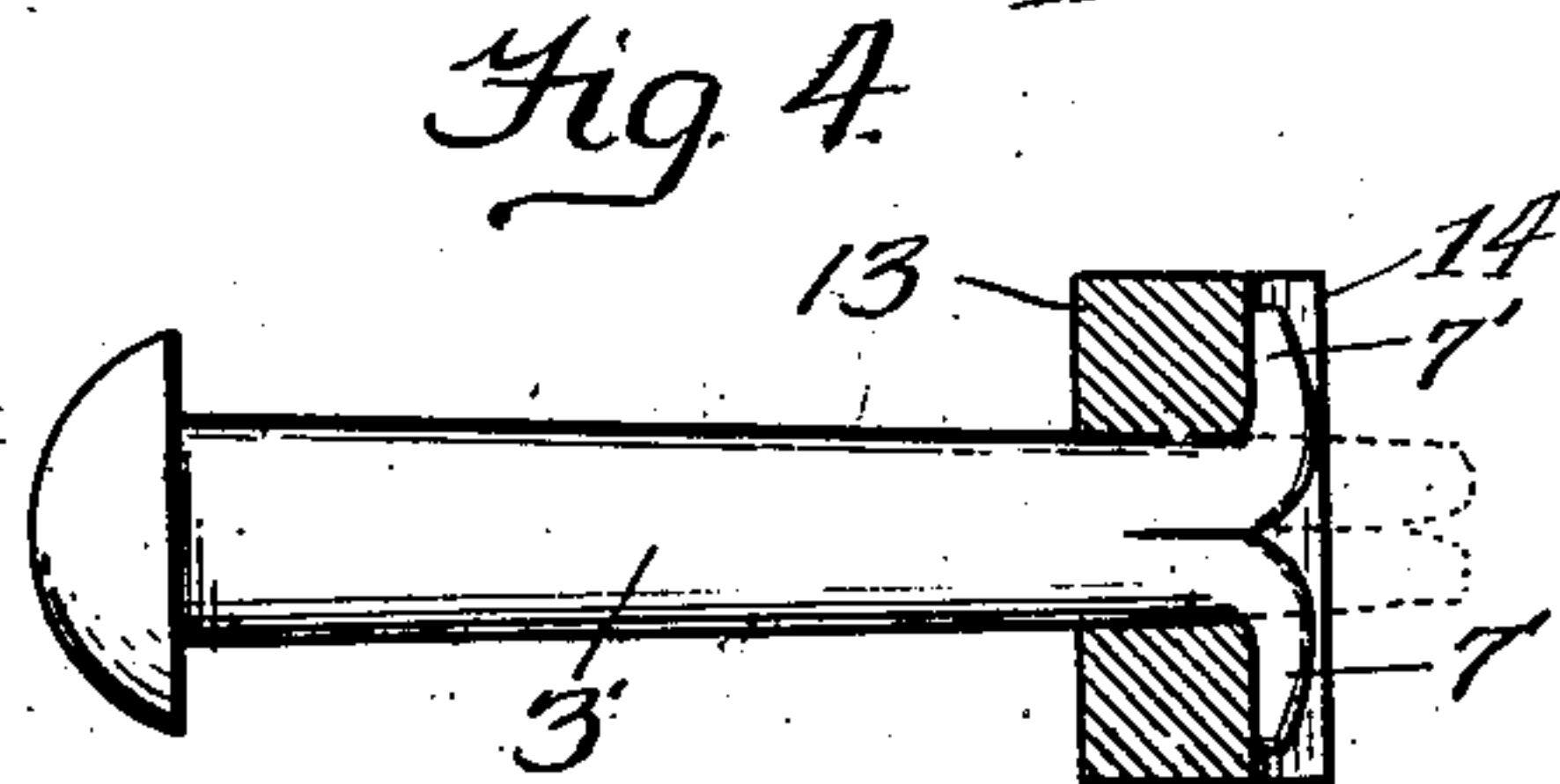
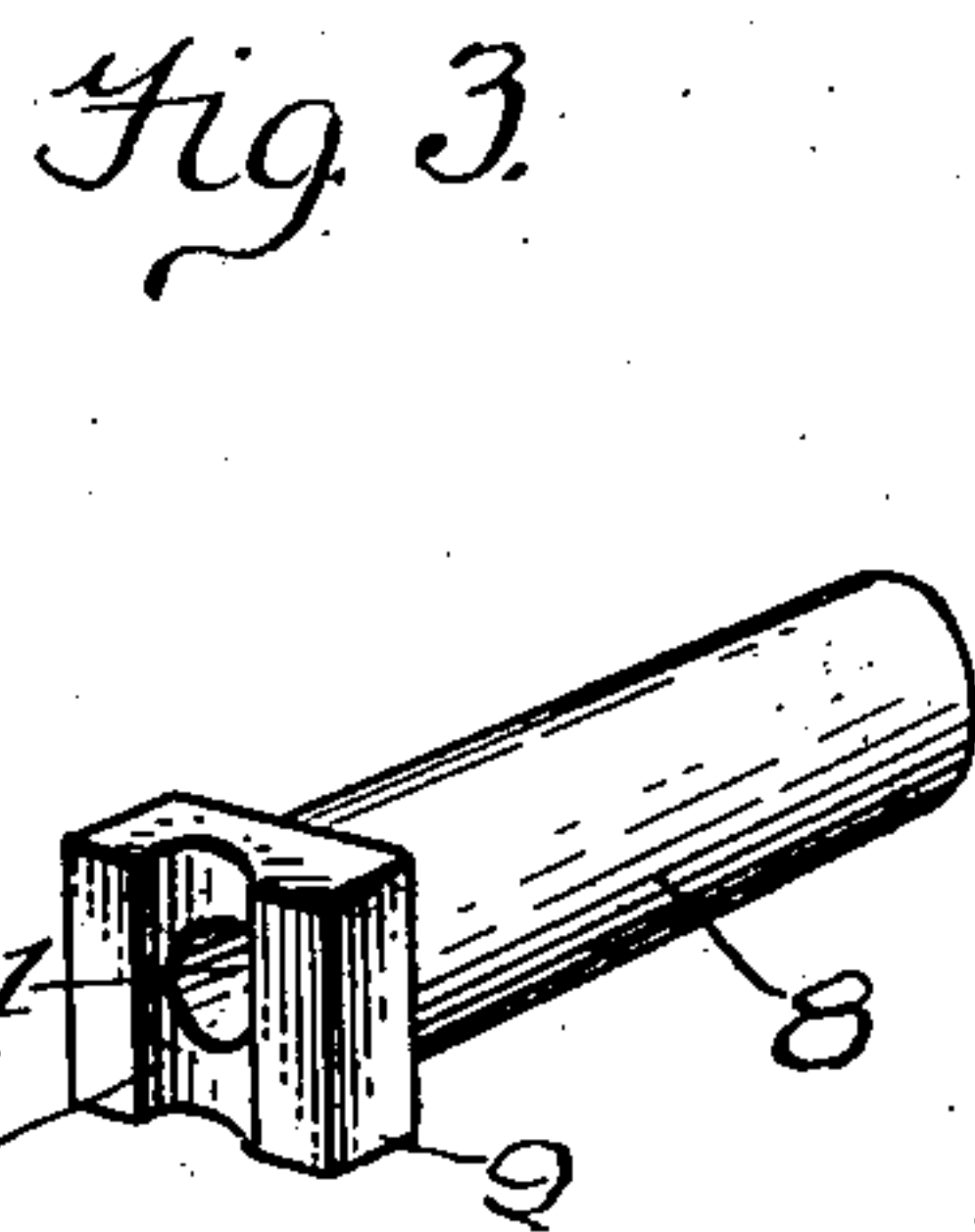
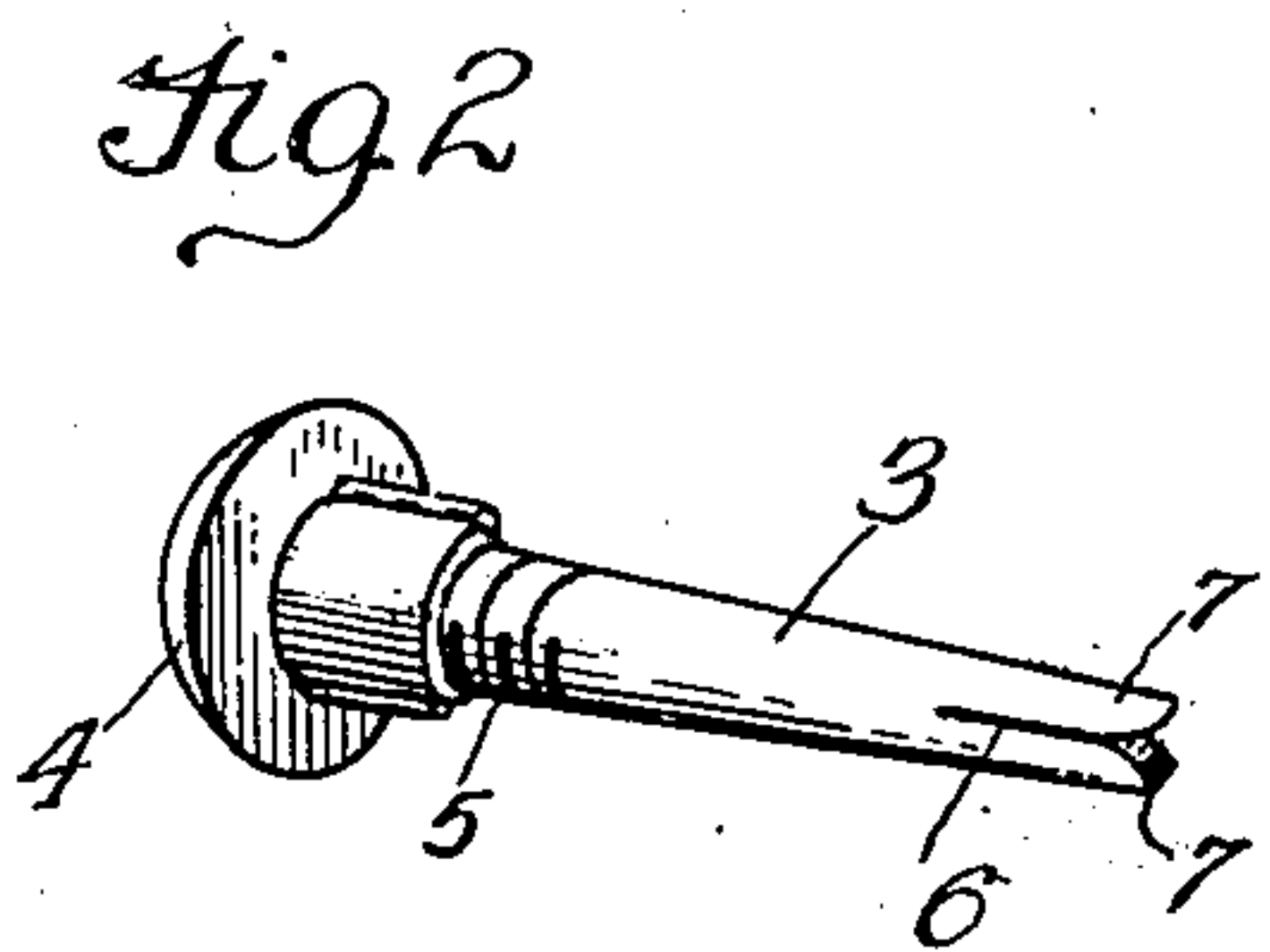
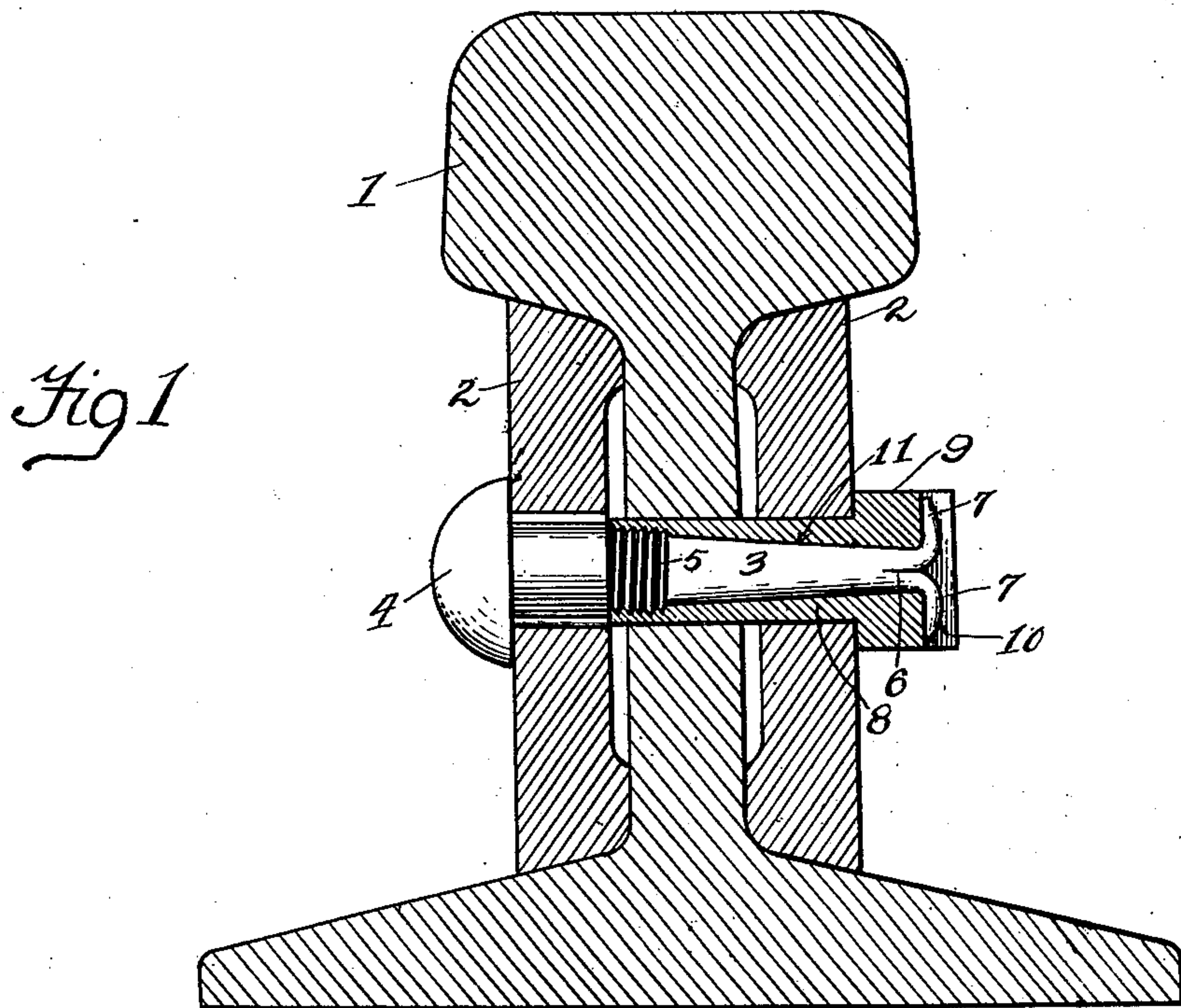


J. F. NICOLS.
RAILROAD BOLT.
APPLICATION FILED JAN. 14, 1910.

980,823.

Patented Jan. 3, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES F. NICOLS, OF EMERSON, ARKANSAS.

RAILROAD-BOLT.

980,823.

Specification of Letters Patent.

Patented Jan. 3, 1911.

Application filed January 14, 1910. Serial No. 538,129.

To all whom it may concern:

Be it known that I, JAMES F. NICOLS, a citizen of the United States, residing at Emerson, in the county of Columbia and State of Arkansas, have invented new and useful Improvements in Railroad-Bolts, of which the following is a specification.

This invention relates to bolts, and is primarily directed for securing the fish plates of bolts to the webs of the rails, and the object of the invention is to provide a device of this character which may be easily and quickly positioned within the openings of the rails and fish plates and which effectively locks the said plates as well as the bolt upon the rails thereby obviating the liability of accident due to the loosening of the nut through the pounding of the rolling stock passing over the rails and the consequent disconnection of the bolt and nut.

With the above, and other objects in view, which will appear as the description progresses, the invention resides in the novel construction and combination of elements hereinafter fully described and claimed.

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the improvement, and in which drawings,

Figure 1 is a transverse sectional view of a rail and fish plate, showing my improved bolt in applied position, the sleeve of the bolt being sectioned. Fig. 2 is a view in perspective of the bolt. Fig. 3, is a similar view of the sleeve. Fig. 4, is an elevation, partly in section of a modification.

In the accompanying drawing the numeral 1 designates the meeting ends of a pair of rails and 2 the fish plate connected with the rails. The webs of the rails and the fish plates are provided with the usual alining openings, and the numeral 3 designates my improved bolt adapted to be received within the said openings. By reference to Fig. 2 of the drawings it will be noted that the bolt 3 is provided with a head 4 and a threaded portion 5. The body of the bolt is beveled as clearly illustrated in the said Fig. 2 and the outer extremity of the bolt is slit a suitable distance longitudinally as designated by the numeral 6 to provide a pair of fingers 7.

The numeral 8 designates the sleeve which coöperates with the bolt 3. This sleeve is provided with an enlarged head 9 the same

having a transversely arranged depressed portion 10 the purpose of which will presently be apparent. The sleeve 8 is also provided with an inclined bore 11 corresponding with the beveled portion of the bolt 3.

When the device is to be applied as illustrated in Fig. 1 of the drawings, the sleeve is first inserted within the openings provided by the fish plates and webs of the rails. The bolt 3 is then inserted within the bore of the sleeve 8 and the sleeve is rotated upon the said bore until its threaded portion engages the threads 5 so as to bring the enlarged heads 4 and 9 of the members tightly against the opposite fish plates. When this is accomplished the fingers 7 of the bolt 3 are bent in an opposite direction into engagement with the depressions 10 of the head 9 of the sleeve 8, as clearly illustrated in Fig. 1 of the drawings, thus securely and effectively connecting the members 8 and 3.

In Fig. 4 I have illustrated a slightly modified form of the device. In this figure the bolt member 3' has its extremity threaded and provided with a longitudinally arranged slit so as to form the fingers 7'. The numeral 13 designates a suitable nut adapted for engagement with the threaded portion of the bolt 3', and when the nut is screwed home upon the bolt 3', the fingers 7' are bent in opposite directions so as to engage within a channel 14 provided upon the outer face of the nut 13.

From the above description, taken in connection with the accompanying drawings, it will be noted that I have provided an extremely simple and effective device for the purpose intended, and while I have illustrated and described the preferred embodiment of the improvement, as it now appears to me, minor details of construction within the scope of the following claims may be resorted to if desired.

Having thus described the invention, what I claim as new is:—

1. In a device for the purpose set forth, a bolt having an enlarged head and a cone-shaped extension, said extension being centrally slotted to provide oppositely disposed fingers, an elongated sleeve having an enlarged head provided with a transverse groove, said sleeve being provided with a bore tapering from its outer end toward its head adapted to engage the cone-shaped extension of the bolt, and the fingers of the

said extension adapted to be received within the transverse groove of the head of the sleeve.

2. In a device for the purpose set forth, a
5 bolt having an enlarged head and being provided with a threaded portion adjacent its head, the bolt being further provided with a cone-shaped extension, the said extension being centrally slitted to provide oppositely
10 disposed fingers, a sleeve, said sleeve being provided with a cone-shaped bore having threads adapted to engage the threads of the

bolt, the sleeve being also provided with an enlarged head, the said head having a transverse groove adapted for the reception of the 15 fingers of the bolt when the latter are bent, substantially as described.

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

JAMES F. NICOLS.

Witnesses:

O. L. MALOCH,
Z. T. JOHNSTON.