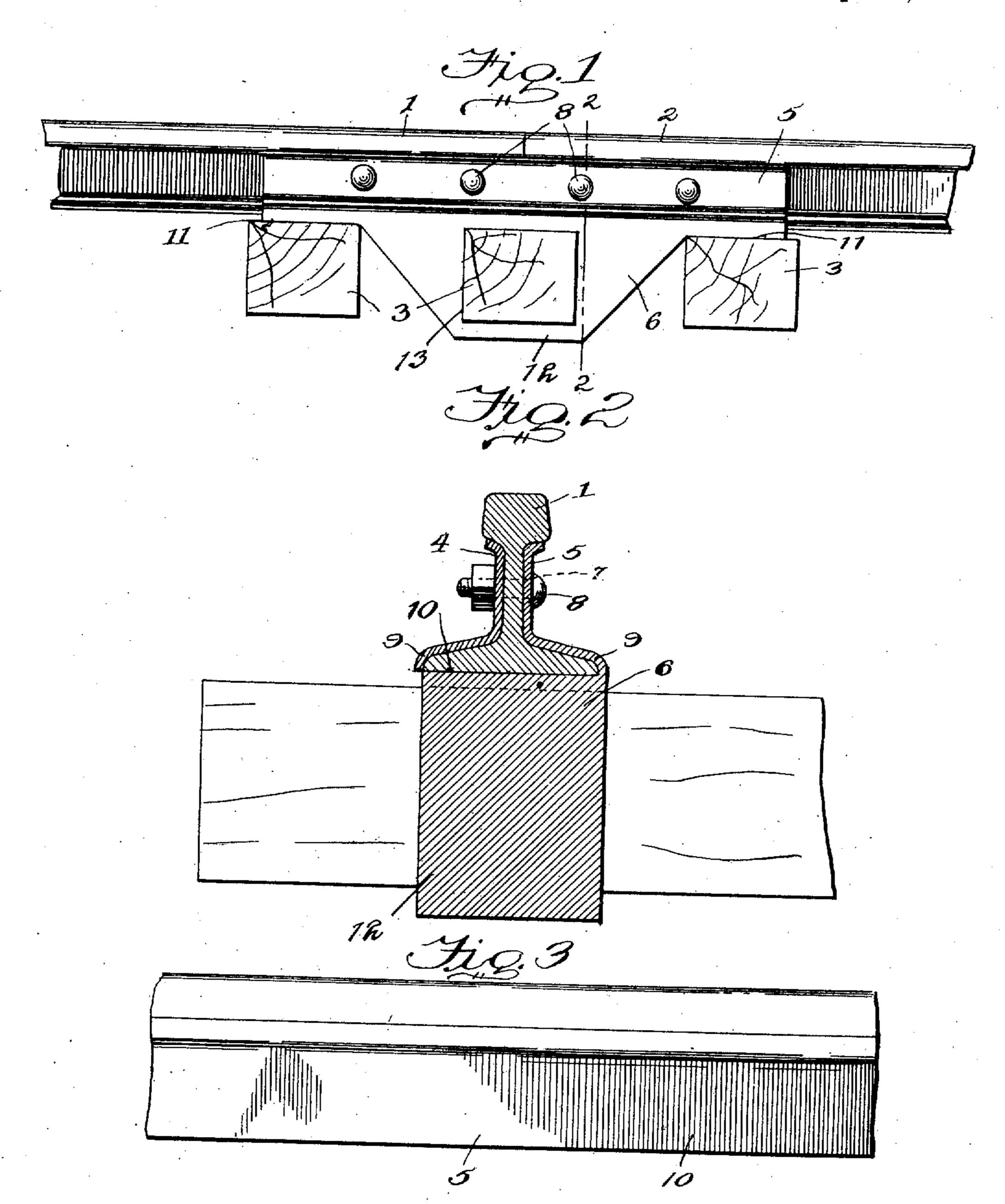
## G. H. BURGE. RAIL JOINT. APPLICATION FILED JULY 6, 1910.

989,565.

Patented Apr. 18, 1911.



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## UNITED STATES PATENT OFFICE.

GEORGE H. BURGE, OF RICHMOND, MISSOURI.

## RAIL-JOINT.

989,565.

Patented Apr. 18, 1911. Specification of Letters Patent.

Application filed July 5, 1910. Serial No. 570,429.

To all whom it may concern:

Be it known that I, George H. Burge, a citizen of the United States, residing at Richmond, in the county of Ray and State 5 of Missouri, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail joints or splicing connections between the meeting 10 ends of railway rails, the object of the invention being to provide a simple, inexpensive strong and durable construction of joint which will connect and hold the rails against longitudinal and lateral movements, 15 and at the same time firmly truss and sup-

The invention consists of the features of construction, combination and arrangement of parts, hereinafter fully described and 20 claimed, reference being had to the accom-

panying drawings, in which:—

port the rails against depression.

Figure 1 is an inner side elevation of the meeting ends of a pair of rails connected by my improved joint. Fig. 2 is a vertical 25 transverse section on the line 2—2 of Fig. 1. Fig. 3 is a plan view of the chair and inner fish plate.

Referring to the drawing, 1 and 2 designate the meeting ends of adjoining railway 30 rails, and 3 the ties or sleepers disposed beneath the meeting ends of the rails. In the present instance I have shown three of these ties spaced equidistantly apart, one arranged immediately below the joint and the others

35 on opposite sides thereof.

The improved joint or rail fastening embodying my invention comprises an outer fish or splice plate 4 and inner fish or splice plate 5 and a chair or truss member 6. The 40 fish plates 4 and 5 are provided with the transverse opening 7 for the passage of bolts 8 whereby they are fastened to the rails, and are formed or provided with curved bases 9 to rest upon and engage the base flanges of 45 the rails.

The chair or truss member 6 consists of a horizontal bed or plate 10, which forms a

seat support for the bases of the rails, and to one side of which the base portion 9 of the inner fish plate 5 is permanently united in 50 any preferred manner either by making said fish plate integral with the chair or by permanently fastening it thereto. The chair or truss member is of a length to extend over the ties 3 and its end portions 11 form sup- 55 ports to rest upon the outer ties. From the central portion of the chair plate depends an inverted frusto-conical base 12 having a socket or passage 13 to receive the central tie. This base 12 is coextensive in width 60 with the chair plate 10. Such base, therefore, serves as a means for connecting the parts of the joints positively to the central tie, and as a truss for firmly staying and supporting the rails, holding them from both 65 Iongitudinal and lateral movement while at the same time preventing depression and hammering of the rail ends by the wheels of passing trains. A strong and durable construction of joint is thus provided which 70 can be readily applied and removed and manufactured at a comparatively low cost.

Having thus described the invention, I

claim:—

The combination with the meeting ends of 75 rails, and ties arranged below and on opposite sides of the joint, of a chair plate resting upon the ties and supporting the meeting ends of the rails, an inverted frustoconical base depending from said chair 80 plate between the outer ties and having a transverse socket receiving and engaging the central tie, an inner splice plate permanently united to the chair plate, an independent outer splice plate, and bolts passing 85 through the rails and splice plates and coupling the same together.

In testimony whereof I affix my signature

in presence of two witnesses.

GEORGE H. BURGE.

Witnesses:

O. H. Hubbell, JOHN W. McCart, Sr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."