

P. BARGION.
Railroad Rail.

No. 236,530.

Patented Jan. 11, 1881.

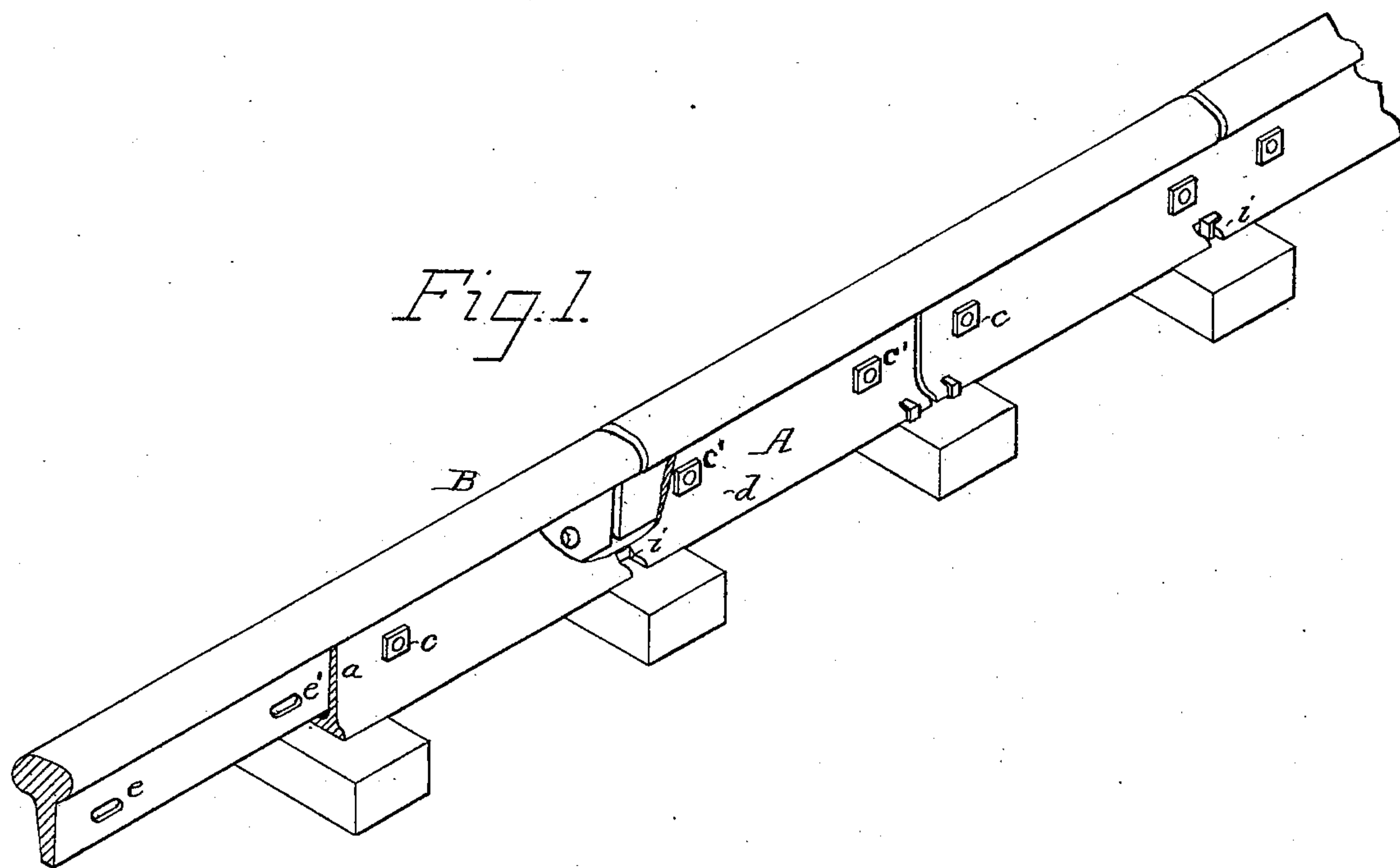


Fig. 2.

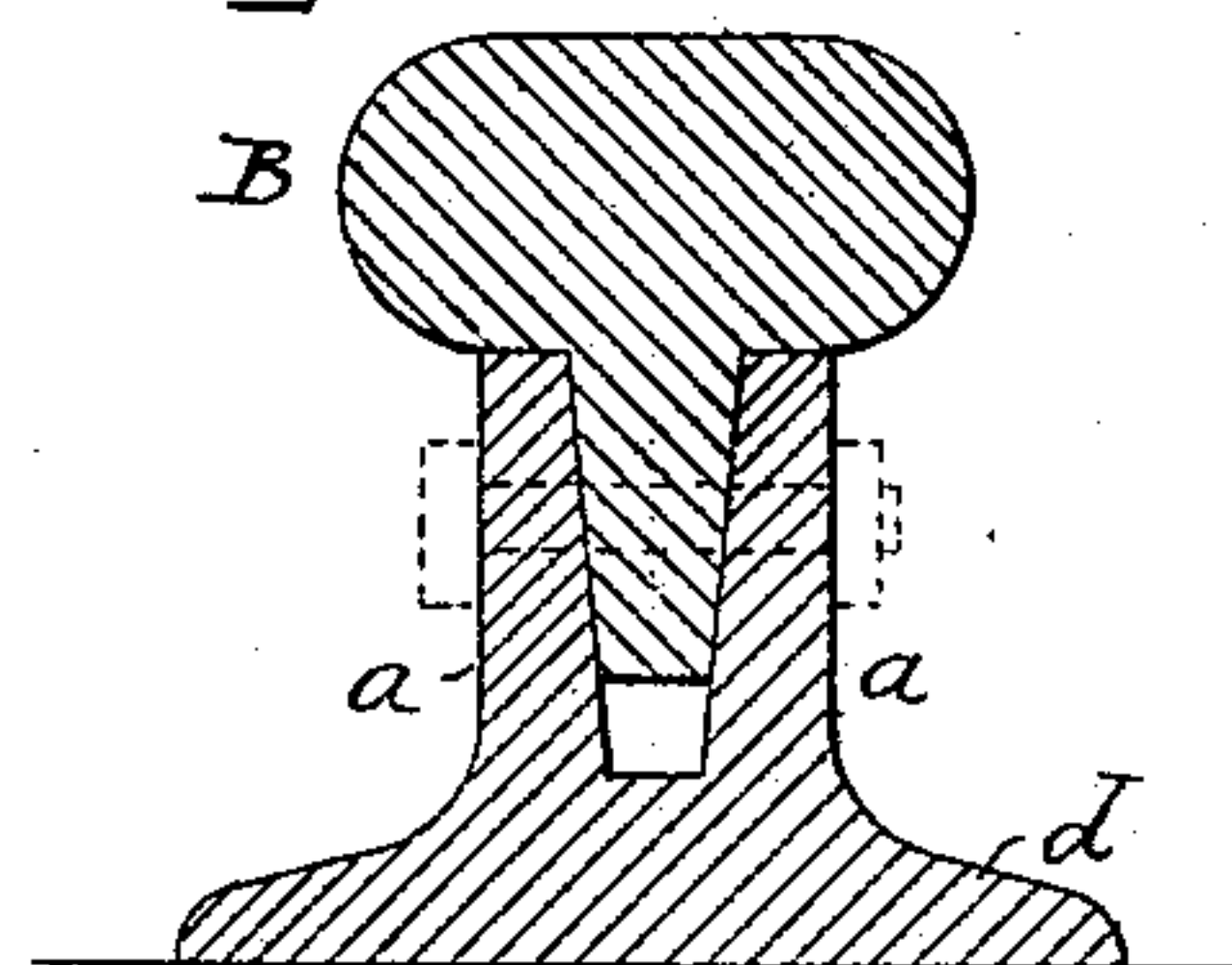
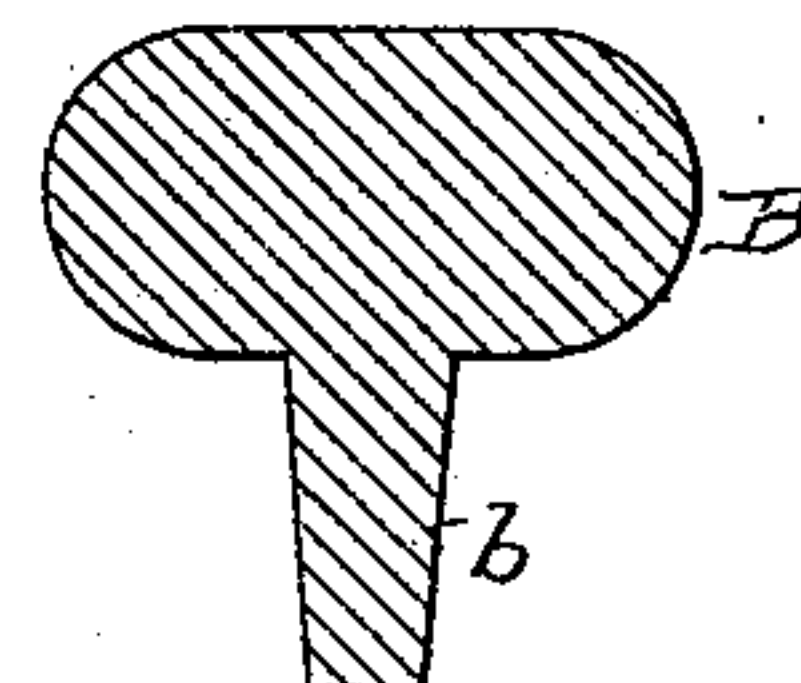
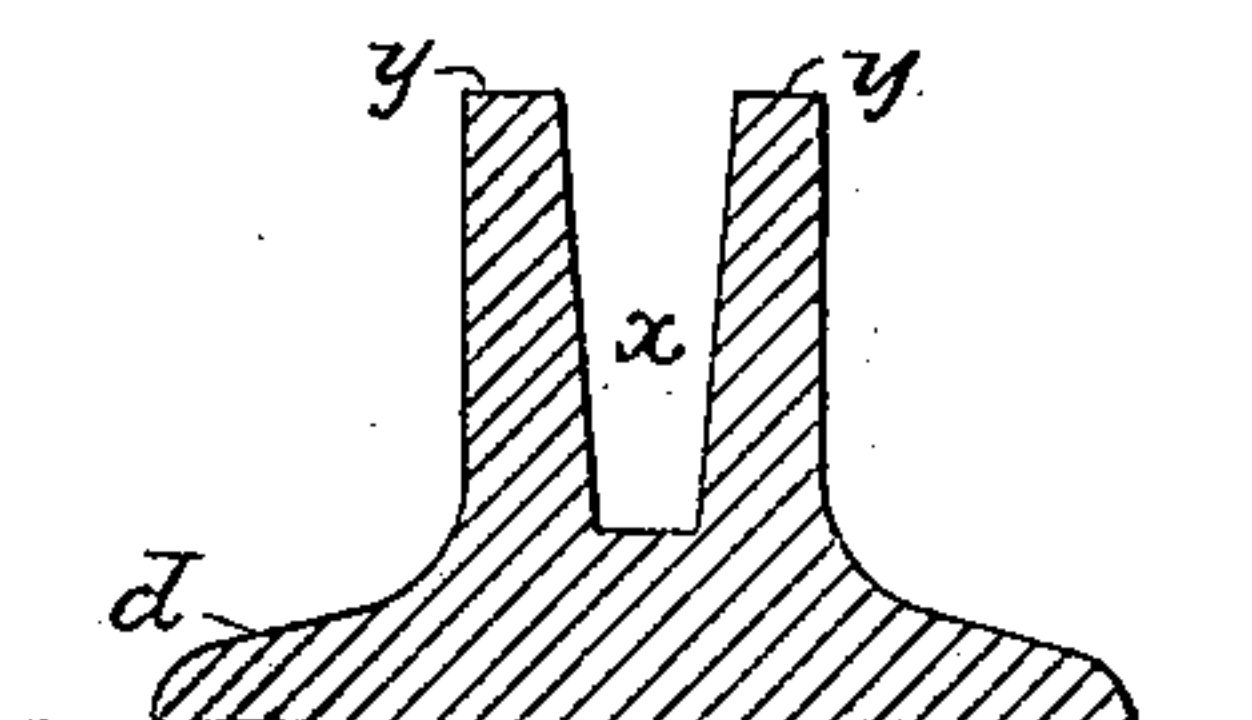


Fig. 3.



Attest:

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By his attorney
Charles E. Foster

UNITED STATES PATENT OFFICE.

PETER BARGION, OF BLACK DIAMOND, CALIFORNIA.

RAILROAD-RAIL.

SPECIFICATION forming part of Letters Patent No. 236,530, dated January 11, 1881.

Application filed August 15, 1879.

To all whom it may concern:

Be it known that I, PETER BARGION, of Black Diamond, Contra Costa county, California, have invented Improvements in Railroad-Rails, of which the following is the specification.

My invention relates to that class of compound rails in which the lower rail is provided with flanges for receiving the central flange or web of the upper section, the object of my invention being to prevent the creeping of the rail.

In the drawings forming part of this specification, Figure 1 is a perspective view illustrating my invention; Fig. 2, a cross-section; Fig. 3, sections of the parts detached.

The rail consists of the lower section, A, of iron, and the upper section, B, of steel, the former having two upright flanges, *a a*, with inclined inner faces, inclosing a recess, *x*, contracting toward the bottom. The central web or flange, *b*, of the section B is not so deep as the recess *x*, the sides correspond in angle to the faces of said recess, and the width is such as to completely fill said recess, so as to permit no lateral movement. When the section B is applied to the section A the web *b*, being, if anything, slightly wider than the recess *x*, will be forced so tightly between the flanges *a* as to prevent lateral motion. Owing, however, to the taper of the web and recess, this close fitting of the parts is not effected until the shoulders *yy* of the head are directly upon their permanent bearings at the edges of the flanges. When, therefore, a train is upon the rail, the head is directly supported by the flanges *a*, while there is no springing or jumping of the section B, and no rattling resulting from the striking together of the parts.

Each section B is bolted immovably to one end of the section A below by bolts *c c*; but the bolt-openings *e e'* in the opposite end of

the section B, which is supported by the adjacent section A, are elongated for the passage of bolts *c' c'*, so that the sections are securely bolted together, while the slight longitudinal movement of the upper or lower sections is not prevented, so there is no "buckling" from the expansion of any part of the rail.

In order to prevent that creeping of the rails upon the sleepers apt to result when the rail is in two sections of materials expanding unequally, especially when the road is inclined, I form in the center of the lateral flange *d* a notch, *i*, so that the section A may be spiked immovably at the center to the sleeper. The other spikes merely overlap the flange, so that each section can expand equally in both directions.

As the upper sections are arranged to break joint with the lower sections, it will be apparent that the expanding of the free ends of the sections below each upper rail, being in opposite directions, will tend to prevent any movement of the upper sections, while, as each section B is secured immovably at one end to the lower section, no independent creeping of the upper sections can take place.

I claim—

The combination, in a compound rail, of the lower sections, A, secured centrally to the sleepers, and upper sections, B, each bolted positively at one end to the section below, and having slots *e* at the opposite end for the passage of bolts, securing it to the section A below, the upper and lower sections being arranged to break joint, as set forth.

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

PETER BARGION.

Witnesses:

JOHN RAFFERTY,
J. ROBERT READ.