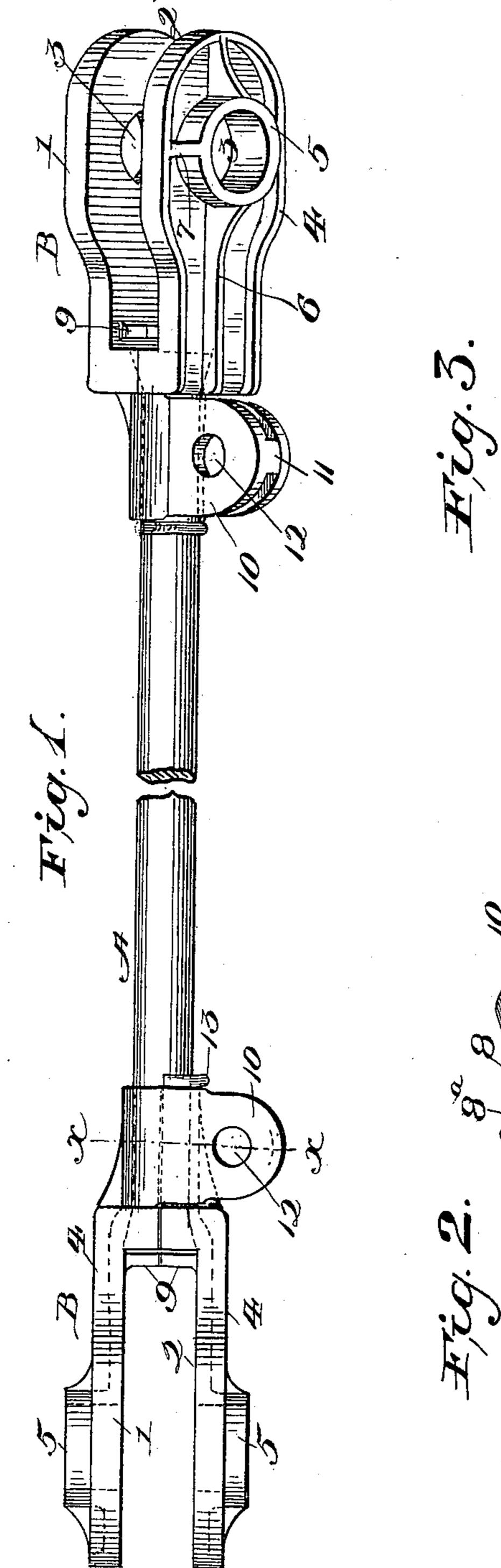
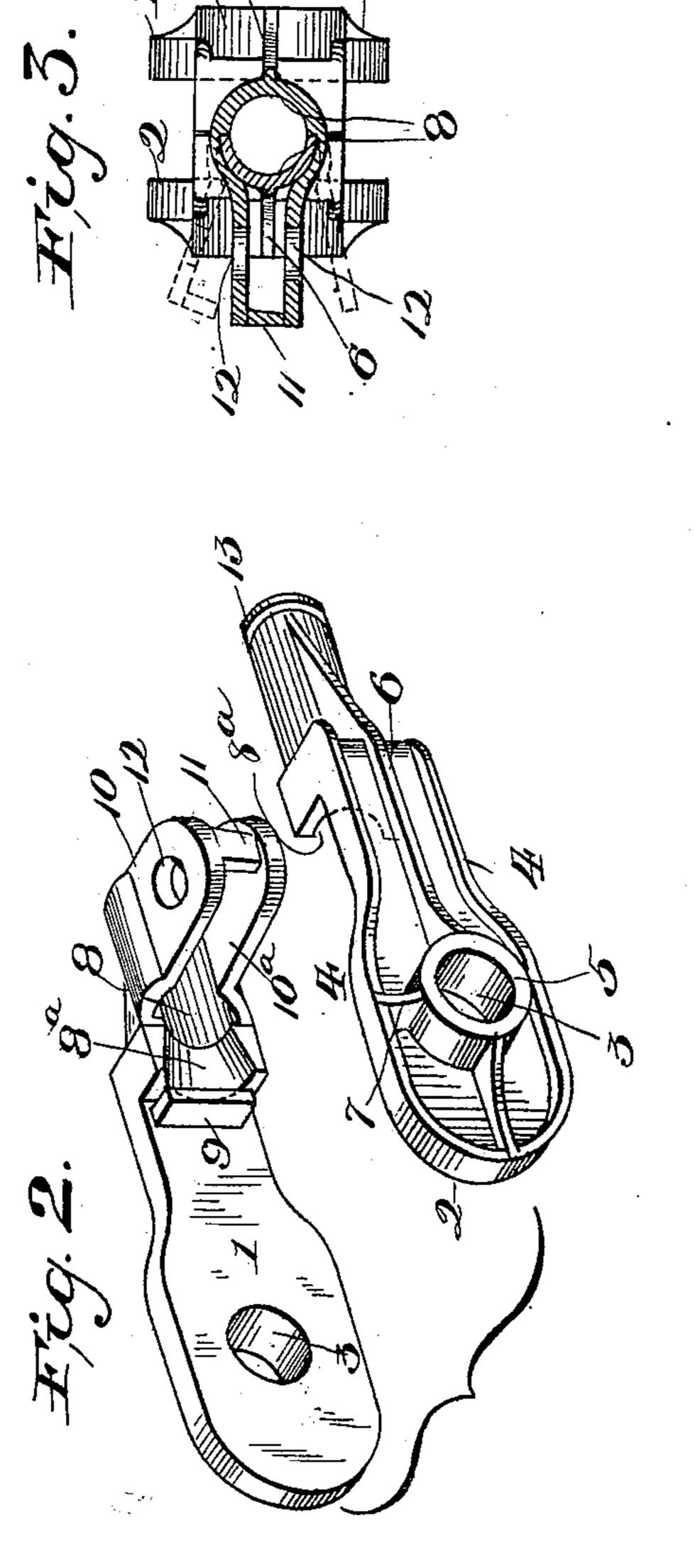
## C. F. HUNTOON. BRAKE CONNECTION ROD.

No. 606,148.

Patented June 21, 1898.





Mitnesses In Darley.

Charles Francis Fine torne By his attorney F.M. Ritter

## United States Patent Office.

CHARLES FRANCIS HUNTOON, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE CHICAGO RAILWAY EQUIPMENT COMPANY, OF SAME PLACE.

## BRAKE CONNECTION-ROD.

SPECIFICATION forming part of Letters Patent No. 606,148, dated June 21, 1898.

Application filed December 30, 1897. Serial No. 664,688. (No model.)

To all whom it may concern:

Be it known that I, Charles Francis HunToon, a citizen of the United States, residing
at Chicago, in the county of Cook, State of
Illinois, have invented certain new and useful Improvements in Brake Connection-Rods;
and I hereby declare the following to be a
full, clear, and exact description of the same,
reference being had to the accompanying
drawings, in which—

Figure 1 is a view of a connection-rod and its jaws embodying my invention, a portion of the rod at the center broken out. Fig. 2 is a detached perspective view of the sections composing the jaw in the position they assume in being put together on the rod. Fig. 3 is a transverse section of the jaw on the line x x, Fig. 1, the rod being omitted.

Like symbols refer to like parts wherever they occur.

20 they occur.

My invention relates generally to the construction of detachable clamp-jaws for connection-rods, and has for its object the provision of means whereby connection-rods may be readily adjusted as to relative angle of jaws and accurately gaged as to distance between centers of pin connections and a maximum tensile strength secured with a minimum of metal or dead-weight in the jaws of the rod.

While my invention is generally useful for all classes of rod connections where the rod is now provided with cast or welded jaws, it has been especially devised for brake connections where strength with lightness and ready adjustability to take up slack or accommodate varying arrangements of brake-rigging are essential.

In carrying out my invention I construct the jaw of a plurality of sections, preferably two, each having a portion of a cylindrical axial seat for the reception of the end of the rod-section, and one of said sections having a clamp to confine the other section and the included end of the rod-section, and such a construction embodies the main feature of my invention.

There are other minor features of invention, all as will hereinafter more fully appear.

I will now proceed to describe my invention more fully, so that others skilled in the lateral jaw-sections if by accident the nut should work loose on the clamp-bolt which passes through the ears 10 10°. The longitudinal rib 6 of the section 2 being extended

art to which it appertains may apply the same.

In the drawings, A indicates the rod-section, the ends of which will be upset or headed 55 to prevent their drawing through the clampjaws.

B indicate longitudinally - separable clamp-jaws, two of which of like construction are usually employed with each connect- 60 ing-rod, though in many cases but a single jaw may be required. Each of said jaws is composed of at least two lateral sections 12, each section having an ear perforated by a pin-hole 3 for the reception of the usual con- 65 nection-pin, and said ears are cast or otherwise formed with marginal ribs 4, an annular rib 5 or marginal collar for the pin-hole, and longitudinal and transverse ribs 6 7, whereby great tensile strength and lightness 70 are obtained and an extended bearing and wearing surface for the connection-pin (not shown) is provided. The said lateral sections 1 and 2 are each provided at the end which laps the rod A with a semicylindrical 75 groove 8, tapered, as at 8<sup>a</sup>, to form, when conjoined, a bore and seat for the end of the rodsection A and its button-head, and on each section adjacent to said tapered portion 8a is a transversely-projecting lug or stop 9, in- 80 tended to restrict the longitudinal movement of the rod-section A in the clamp-jaw B. One of said lateral jaw-sections 1 is provided with transversely-projecting ears 10 10a, provided with a limit-lug 11, and between said limit- 85 lug 11 and the body of the jaw are bolt-holes 12 for the passage of a clamp-bolt, so that the said arms, which in their open or normal position diverge (see dotted lines, Fig. 3) to facilitate the introduction of the mem- 90 ber 2 of the jaw, when the bolt is introduced and the nut thereon tightened down assume a parallel position (see Fig. 2) and become spring-clamps to hold the jaw-sections together and cause the same to bind on the end 95 of rod-section A. On the margin of the other lateral jaw-section 2 is a rib or half-collar 13, which will prevent the disconnection of the lateral jaw-sections if by accident the nut should work loose on the clamp-bolt which 100 passes through the ears 10 10<sup>a</sup>. The longidown onto that portion of the jaw-section which enters between the clamp-ears 10 10<sup>a</sup> and tapered off, as indicated in Figs. 1 and 2, will bind on the clamp-bolt and serve to wedge the lateral jaw-sections together more firmly as the load on the connection-rod increases.

The construction being substantially such as hereinbefore pointed out, the parts are assembled by first placing the headed end of rod-section A in the longitudinal groove 8 of one section, 1, of the jaw, the button-head of the rod-section resting in the tapered seat 8° back of the transverse stop 9, and the other jaw-section, 2, is passed between the clampears 10 10° and applied to the rod-section in like manner, so as to include and bind on the rod-section, after which (in case two jaws are applied to opposite ends of the same rod-section) the angle of the jaw is adjusted and the

parts finally confined by any suitable means, preferably a nut and a clamp-bolt which is passed through the clamp-ears 10 10°.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. A detachable jaw for connection-rods, said jaw composed of lateral sections, each having an axial rod-groove, and one of said sections having transverse clamp-ears; substantially as and for the purposes specified.

2. A detachable jaw for connection-rods, composed of lateral sections each having an axial rod-groove and one or more of said sections having a stop-lug adjacent to the rod-35 groove, and means for confining the jaw-sections; substantially as and for the purposes specified.

3. A detachable jaw for connection-rods, composed of lateral sections each having an 40 axial tapered rod-groove, one of said sections having a stop-lug adjacent to the rod-groove, and one of said sections having laterally-projecting clamp - ears adapted to inclose the other section; substantially as and for the 45

purposes specified.

4. A detachable jaw for connection-rods, composed of lateral sections each having a rod-groove, one of said sections having laterally-projecting perforated clamp-ears, and the 50 other having a tapered rib on the portion included between the clamp-ears of the first-named section; substantially as and for the purposes specified.

In testimony whereof I affix my signature, 55 in presence of two witnesses, this 28th day of

December, 1897.

## CHARLES FRANCIS HUNTOON.

Witnesses:

E. T. WALKER, P. J. CUNNEEN.