

(No Model.)

W. H. YOUNG.

CABLE RAILWAY STRUCTURE.

No. 396,638.

Patented Jan. 22, 1889.

Fig. 1.

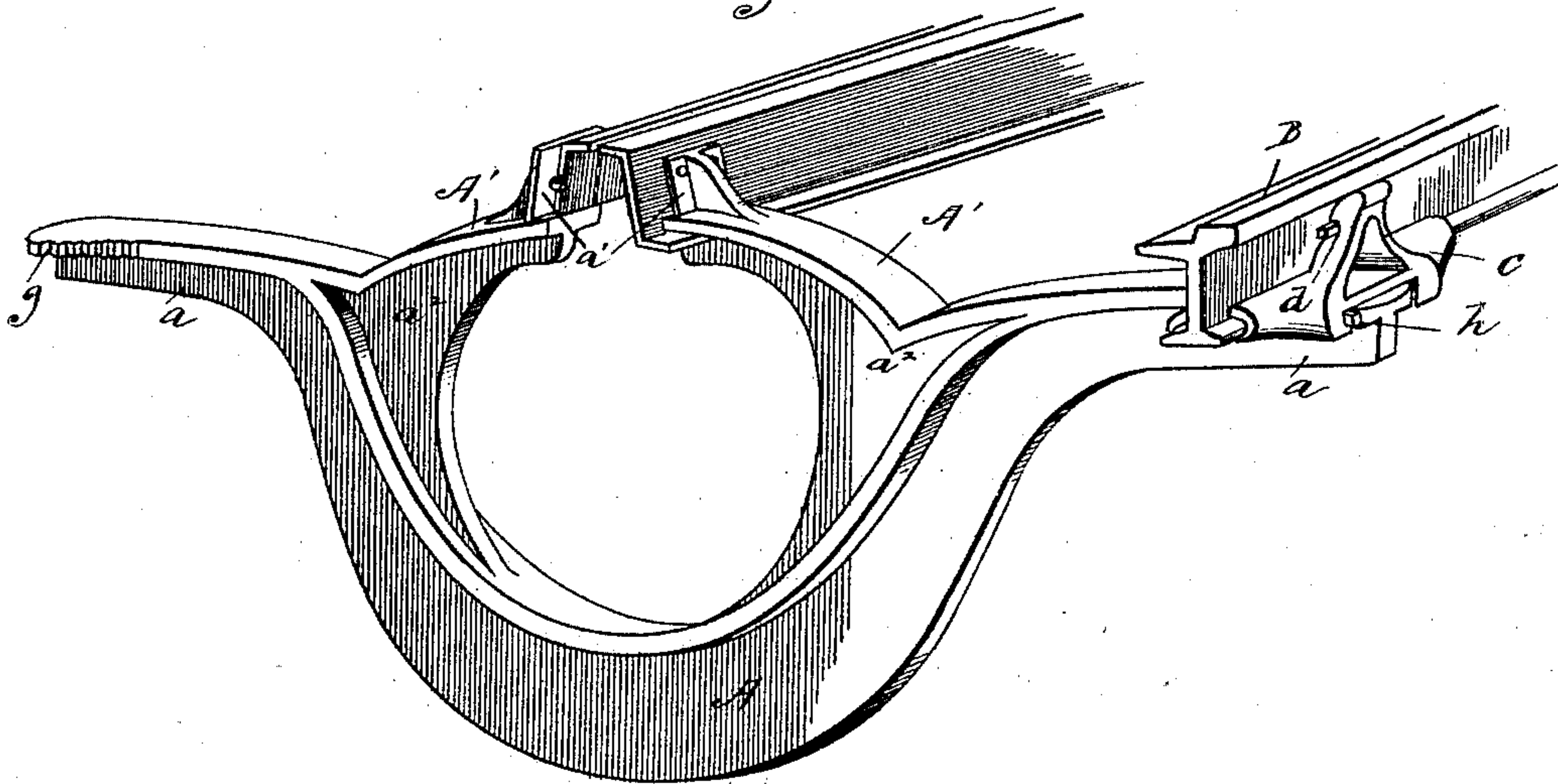


Fig. 2.

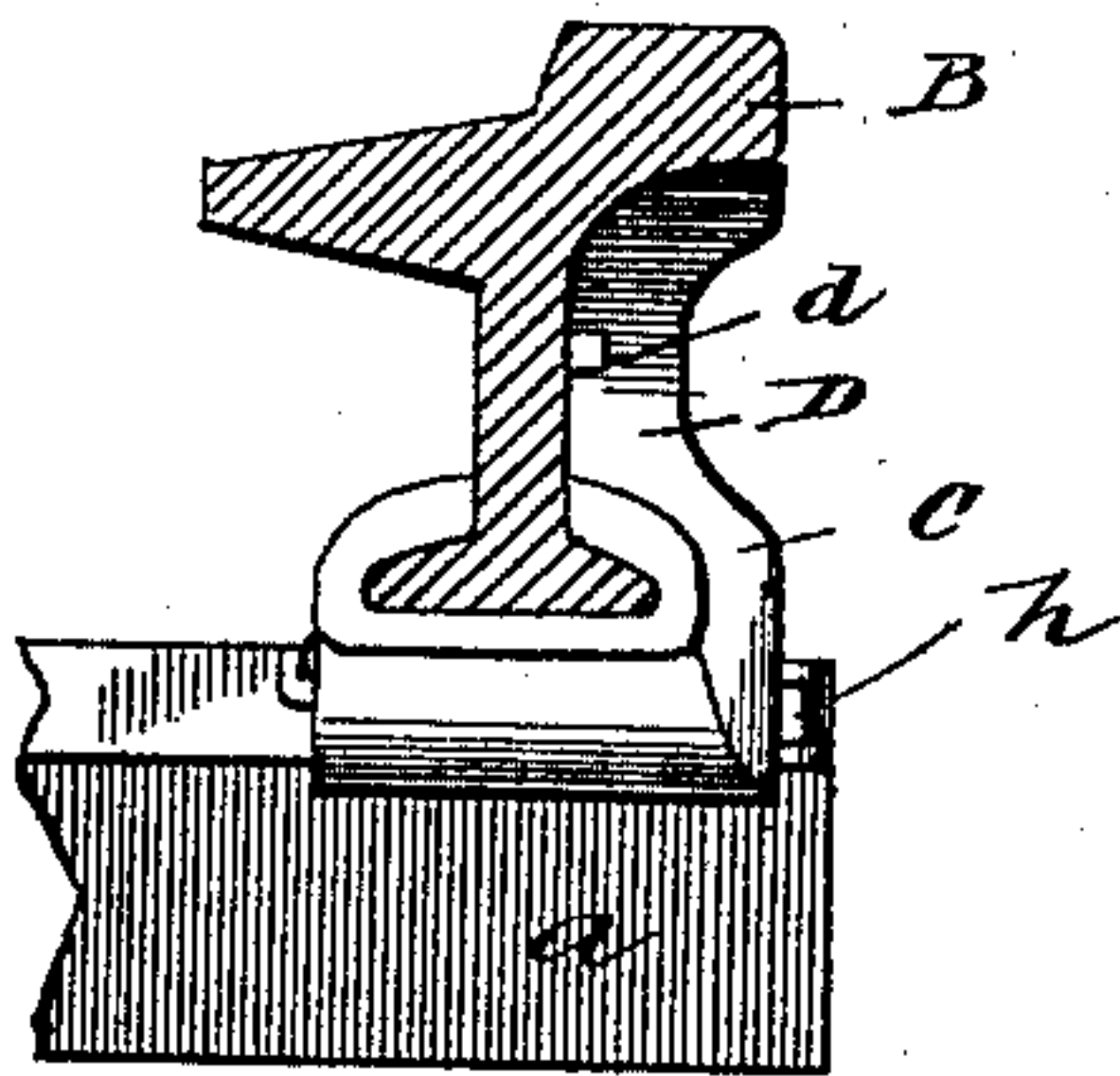
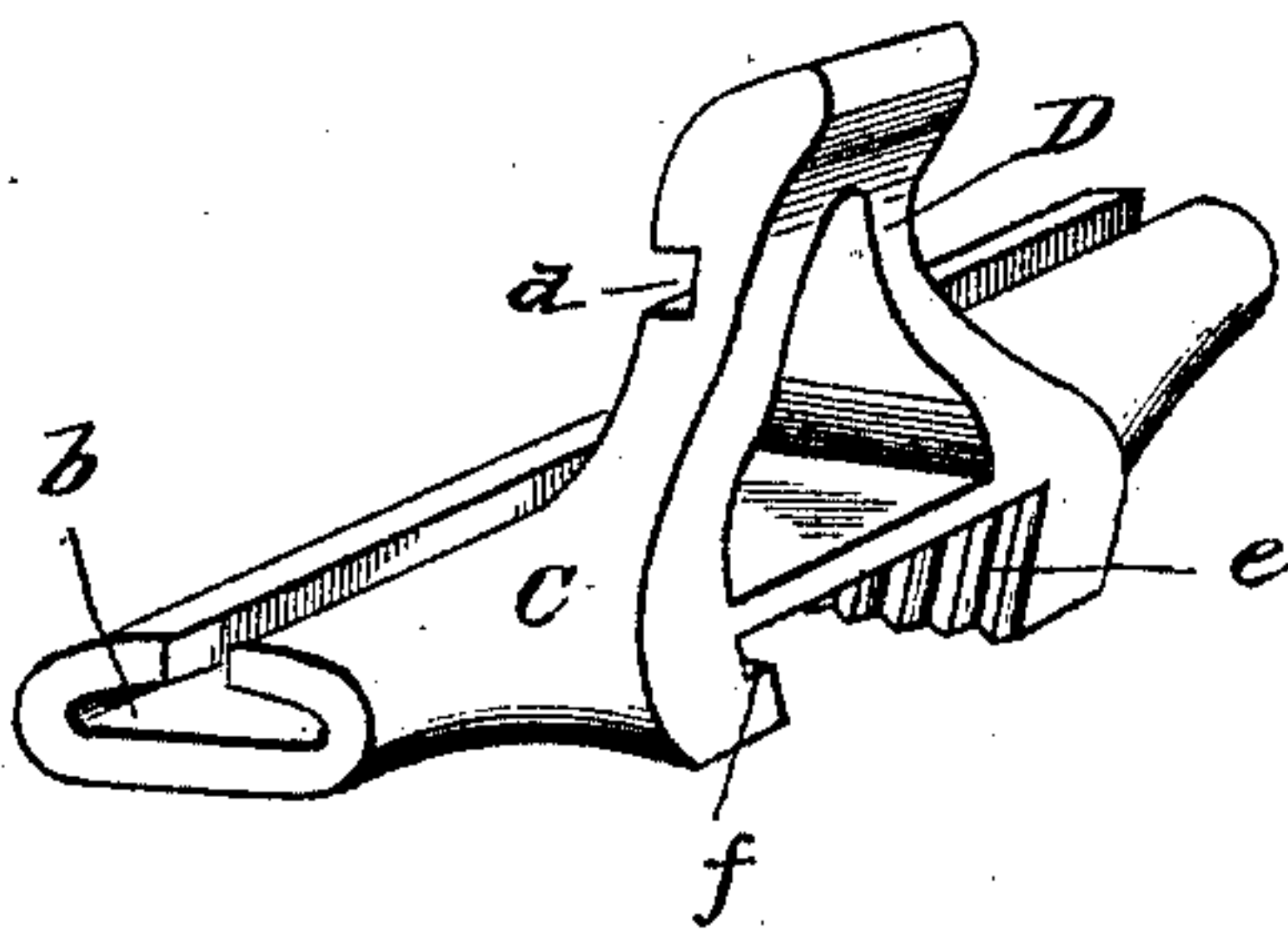


Fig. 3.



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WILLIAM H. YOUNG, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
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CABLE-RAILWAY STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 396,638, dated January 22, 1889.

Application filed May 23, 1888. Serial No. 274,846. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. YOUNG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cable-Railway Structures, of which the following is a specification.

One feature of my invention relates to a chair whereby to secure the rails of a cable-railway track to the yokes, said chair being adapted to receive and support the rail and to be clamped to the side extension of the yoke by means of ratchet-teeth and a locking-key, the chair being preferably cast in one piece.

In a patent issued to me March 20, 1888, No. 379,922, a chair is described which is made of two sections secured together by bolts. My present construction is an improvement thereon, inasmuch as I dispense with the use of these bolts, which are expensive and require time to apply. My present invention embodies some of the features shown in said patent, particularly those features which relate to the support of the base of the rail; but I have materially modified said construction by omitting in my present device a considerable part of the casting, retaining only such as is serviceable in supporting the rail.

In the drawings, Figure 1 is a perspective view of a yoke with a rail secured thereto by means of my improved chair; Fig. 2, an end elevation of the chair, the track-rail being shown in section. Fig. 3 is a perspective view of the chair detached.

A is the yoke, which has side extensions, a a , and the inwardly-arched portions A' A' , which have bolt-flanges a' a' , to which the Z-rails, forming the slit, are bolted. In my present construction the interior of the yoke is almost circular in form, and I prefer to employ therein the strengthening-ribs a^2 a^2 . This form of yoke affords an unobstructed opening, convenient in the placing of the cable and sheaves therein. The yoke is cast in one piece, with the strengthening-ribs so disposed as to resist lateral strain, and angle-rails instead of Z-rails may be used, as shown.

With this construction I am able to dispense with the lateral brace-rods shown in my former patent, and also with the fish-plates commonly employed in structures of this sort.

B is the rail, and C the chair. The chair, as stated, is cast in a single piece and has its base slotted vertically and recessed longitudinally, as shown at b .

D is a rib adapted to receive the web and head of the rail, so as to support it against the outward and downward pressure of the car-wheels. A key-seat, d , is cut on the inner face of that part of the rib D which receives the web of the rail, and a key may be driven therein to tighten the rail in its bearings and prevent movement therein. The chair C is also provided in its base with a dovetailed recess adapted to receive the flanges of the extensions a of the yoke. One of the walls of this dovetailed recess is provided with teeth or corrugations e , and the opposite wall has a key-seat, f . This recess or opening in the base of the chair is of sufficient width to permit the chair to be slipped over the flanges of the extension a of the yoke, and one of said flanges has teeth or corrugations g , corresponding to those marked e on the chair.

In applying this chair to the securing of a track-rail to the yokes the base of the rail is inserted in the recess and slot b and then the chair is applied to the yoke, the teeth e engaging the teeth g , and is secured in proper position thereon by driving in a key, h , which can be secured by bending its end over. From the foregoing description it is apparent that these yokes are rapidly applied, all bolts are dispensed with, and a chair is provided which adapts the rails to be laterally adjusted upon the yokes. The device may be made quite light in weight, as in the form shown the material is so utilized as to secure the necessary strength with due economy of material. The joint between the track-rails is formed in the chair, preferably near the middle of its length—that is to say, the meeting ends of the two rails are inserted in the opposite ends of the chair and abut against each other at a point midway the length of the chair. By these means the necessity of

using fish-plates to connect the rails is dispensed with, as the chair secures the ends of the rails permanently in perfect alignment.

I claim—

5 1. A railway-chair adapted to receive and support the rail, recessed in its base to receive the yoke, and having corrugations to engage similar corrugations on said yoke, and adapted to be secured thereto by a key,
10 substantially as described.

2. A railway-chair having in a single casting a base portion adapted to receive the base of the rail, a transverse recess one wall of which is corrugated to adapt it to engage
15 corresponding corrugations of the yoke and the other wall provided with a key-seat, and

having, also, an upright shoulder or flange to support the web and tread of the rail, substantially as described.

3. A railway-chair consisting of a casting, 20 C, having groove *b*, shoulder D, having key-seat *d*, and a base portion having a recess to receive the yoke, one wall of which recess has the corrugations *e* and the other a key-seat, *f*, said walls converging downwardly, whereby 25 to provide a dovetailed joint, substantially as described.

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Witnesses:

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