

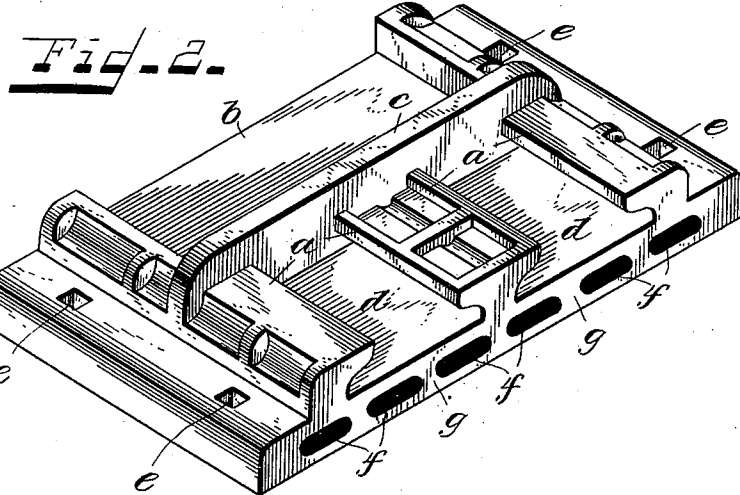
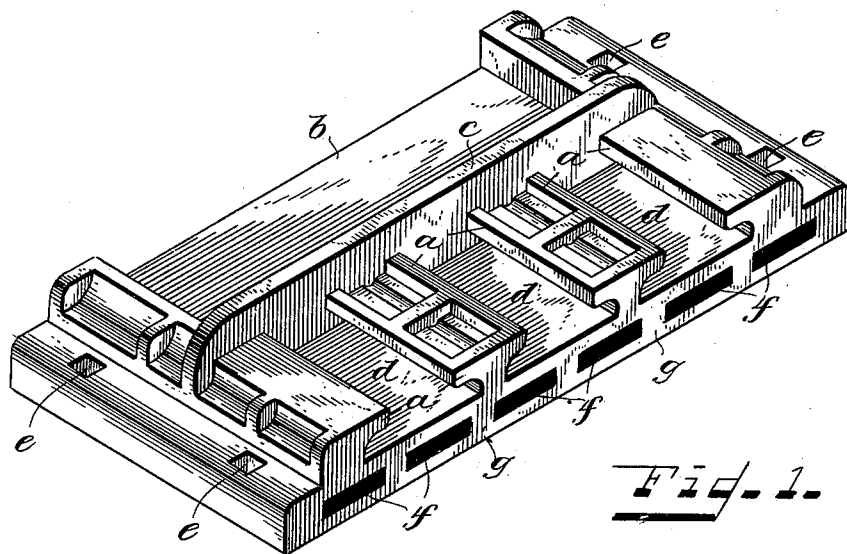
(No Model.)

R. C. SCHENCK.

HEAD CHAIR FOR STUB SWITCHES FOR RAILWAYS.

No. 463,430.

Patented Nov. 17, 1891.



Witnesses.

J. Thomson Cross.
George Heidman.

Inventor.

Robert C. Schenck
by Arthur Schenck

Attorney.

UNITED STATES PATENT OFFICE.

ROBERT C. SCHENCK, OF DAYTON, OHIO.

HEAD-CHAIR FOR STUB-SWITCHES FOR RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 463,430, dated November 17, 1891.

Application filed May 4, 1891. Serial No. 391,515. (Nomodel.)

To all whom it may concern:

Be it known that I, ROBERT C. SCHENCK, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Head-Chairs for Stub-Switches for Railways, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The invention relates to head-chairs or switch-chairs for railway-switches in which an iron chair is provided fastened to the tie to receive and support the ends of the rails, so that they may be brought into proper alignment and firmly supported and held in place, the details of which will be more fully hereinafter set forth and described.

In the accompanying drawings, Figure 1 is a perspective view of a triple stub-head chair embodying my improvements. Fig. 2 is a perspective view of a double-head chair embodying my improvements in a slightly-modified form.

These head-chairs have been made of ordinary cast or gray iron; but in order to fully resist the weight and jar must be made so heavy as to be expensive and inconvenient to handle. To overcome this difficulty they have also been constructed of wrought-iron; but when so made they are in parts or sections riveted together, and the jar soon shakes them to pieces or deranges the parts and loosens the joints and they are forced out of shape. Attempts have also been made to make them of malleable iron; but when made thick and heavy enough it was impossible to thoroughly anneal them throughout. In order to effect this thorough annealing and also to lighten them, they were then paneled out on the under side; but practice has shown this to be undesirable, as the ribs cut into the tie rendering it necessary to face it off whenever the head-chair is reset. It is therefore very desirable that the lower surface resting on the tie be plain so as to rest firmly on the tie and not cut into it.

My invention consists in making the head-chair of malleable iron so as to secure all the desired results, and produce a much stronger chair with no greater weight of metal.

The upper surface of my improved head-

chair is constructed with the flat surfaces *d d* to receive the ends of the stationary or fixed rails, which are anchored in place by the flanges *a a* on the other side of the chair, the broad flat surface *b* receives the end of the movable switch-rail, separated from the ends of the fixed rails by the rib *c*. The base of the chair is provided with openings *e e* for spiking it securely to the tie.

In casting the chair, cores are used extending through or partly through between the upper and lower faces and producing the openings *f f*, which preferably extend almost entirely through the chair, or may extend entirely through, it being a little more convenient in casting to extend them not quite through. These openings *f f* leave the solid metal ribs *g g* between them, which form substantially a series of I-beams between the upper and lower portions of the head-chair. When thus constructed the entire mass or body of metal can be thoroughly annealed throughout, which is done in the usual manner. The form is much stronger and better adapted to resist the strain as applied, and a head-chair is produced in a single piece stronger than any other form of casting and better than wrought-iron, as it cannot work to pieces. Much less metal may be used than in a gray-iron chair and it is many times as strong.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As an article of manufacture, a metallic head-chair made of one piece throughout and having the base-plate cored, whereby the whole may be thoroughly annealed, substantially as shown and described.

2. As an article of manufacture, a metallic head-chair made of one piece throughout, cored out between its upper and lower faces in the manner described, so that the upper portion is supported on a series of ribs integral with the body of the chair, and the lower face forms a broad support adapted not to cut into the tie, and so that the whole may be thoroughly annealed, substantially as shown and described.

ROBERT C. SCHENCK.

Witnesses:

EDWIN P. MATTHEWS,
HARVEY CONOVER, Jr.