(No Model.)

J. M. & S. B. MOODY.

RAILWAY RAIL JOINT.

No. 414,239. Patented Nov. 5, 1889.

FIG. 2.

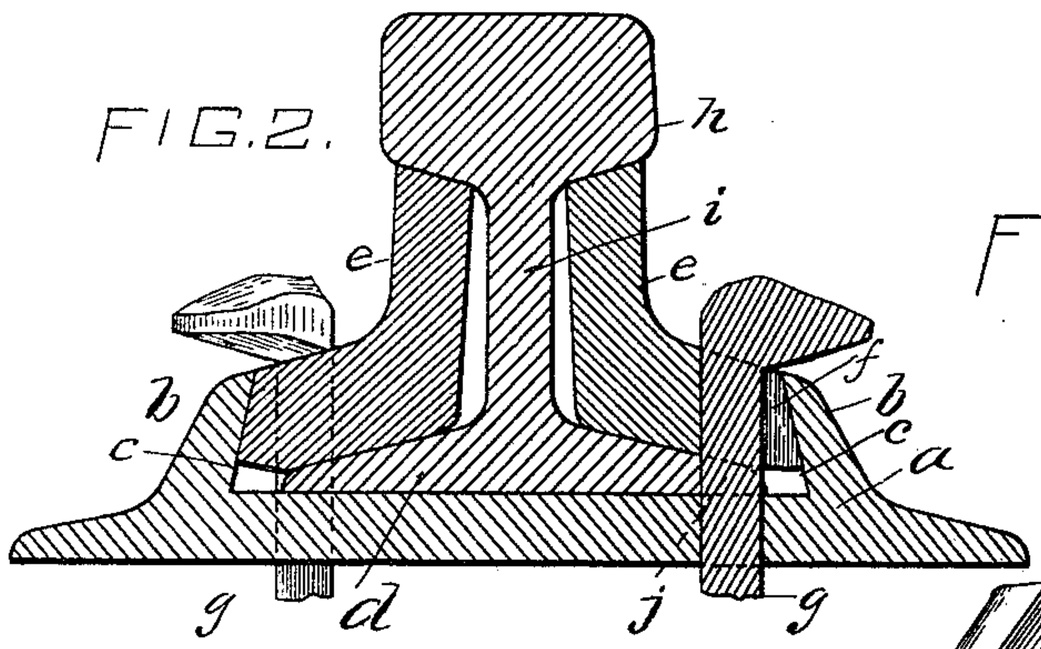


FIG. 1.

FIG. 4.

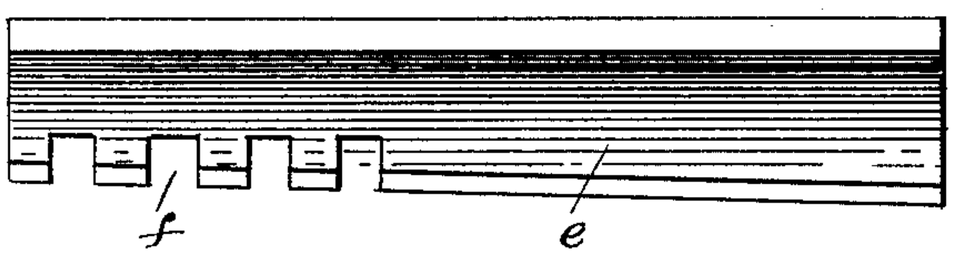
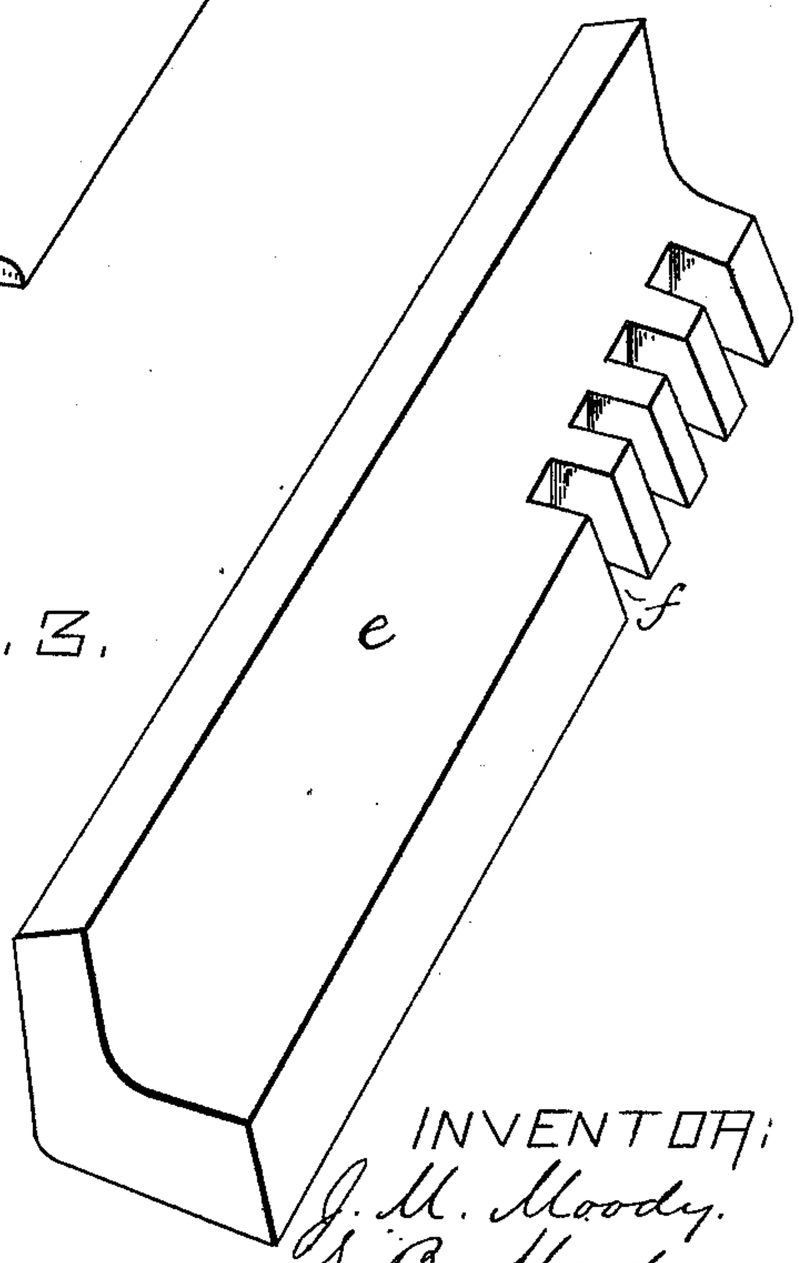


FIG. 3.



WITNESSES:
W. b. Ramsay.
K. E. Brown.

INVENTOR:
J. M. Moody.
S. B. Moody.
by Wright, Brown & Crossley,
their attys.

UNITED STATES PATENT OFFICE.

JAMES M. MOODY AND SIDNEY B. MOODY, OF HARWICH, MASSACHUSETTS.

RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 414,239, dated November 5, 1889.

Application filed May 31, 1889. Serial No. 312,708. (No model.)

To all whom it may concern:

Be it known that we, JAMES M. MOODY and SIDNEY B. MOODY, of Harwich, in the county of Barnstable and State of Massachusetts, have invented certain new and useful Improvements in Railway-Rail Joints, of which the following is a specification.

It is the object of our invention to provide such improvements in the railway-rail joint patented to us August 21, 1888, by Letters Patent No. 388,063 as will simplify its construction, cheapen its cost of manufacture, and increase the facility with which it may be applied to use.

In the structure shown and described in our before-mentioned patent the flanges of the chair were provided on their inner faces with grooves, to which a tongue on each wedge was fitted, the wedges being also formed to substantially fit the adjacent sides of the rails, and the flanges of the chair were notched, so as to permit of the driving of the spikes in an inclined direction. Experience has shown us that this construction is somewhat unnecessarily complicated and costly of construction, and at the same time not the most convenient and easy of application.

By our present improvements the inner faces of the flanges of the chair are made to incline inwardly, and are formed without a groove, and the wedges are made to bear on the base of the rail and against the under side of the tread, but do not come in contact with the web, notches being formed in the flange of the chair for the spikes, which may be driven in vertically.

Reference is to be had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

In the drawings, Figure 1 is a perspective view of our improved railway-rail joint with a portion of two rails in position therein. Fig. 2 is a transverse section of the same. Figs. 3 and 4 are views of one of the wedges.

In the drawings, *a* designates the chair, which is provided with two flanges *b*, the inner faces *c* of which have plain surfaces and are inclined inwardly, as is clearly shown in Fig. 2. The flanges *b* are sufficiently wide apart to permit of the base *d* of the rail being dropped vertically therebetween.

e designates wedges—one for each side of the rail—which wedges have plain faces corresponding to the plain surfaces *c* of the inclined flanges, are provided with notches *f* for the reception of the shanks of the spikes *g*, and are formed so as to bear against the inclined faces *c* of the flanges of the chair on the upper surface of the base of the rail and against the under surface of the tread *h* of the same, but preferably not against the web *i*. The upper surface of the base *d* being upwardly inclined, and the lower surface of the tread *h* being inclined in the opposite direction, provision is afforded whereby the rail can be held laterally in the chair without the necessity of accurately fitting the wedges, so that the same will fit the sides or web of the rail as well as the sides of the flanges. The inner faces of the flanges of the chair being inclined no necessity arises for grooving the same, nor for forming a tongue or rib on the wedges, as in our patented device referred to. Again, there is no necessity for notching the ribs of the chair; but by forming notches *f* in the chair and corresponding notches *j* in the base *d* of the rail and holes through the base of the chair the spikes *g* may be driven through into the ties in vertical position.

With these improvements, as stated at the outset of the specification, we are enabled to materially simplify and cheapen the cost of the construction of our railway-rail joint and at the same time provide a form which facilitates the work of applying or using it.

Having thus explained the nature of our invention and a form of constructing and manner of using the same, we declare that what we claim is—

1. A railway-rail joint consisting of the chair provided with plain faces, inwardly-inclined flanges, as described and shown, and wedges having plain faces constructed and arranged to bear against said flanges, the upper surface of the base, and the under surface of tread of the rail, but not against the web of the same, substantially as and for the purpose set forth.

2. The combination, with the rail, of the

chair provided with the plain faces, inwardly-inclined flanges, as described and shown, the base of said chair being provided with holes, wedges having plain faces provided with notches and constructed and arranged to bear against said flanges, the upper surface of the base, and the under surface of the tread of the rail, but not against the web of the same, and spikes driven vertically through the notches in the wedges, notches in the base of the rail, and the holes in the base of the chair, substantially as and for the purpose set forth.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 28th day of May, A. D. 1889.

JAMES M. MOODY.
SIDNEY B. MOODY.

Witnesses:
JOSEPH W. RAYMOND,
THOMAS R. ELDREDGE.