No. 889,645. PATENTED JUNE 2, 1908.

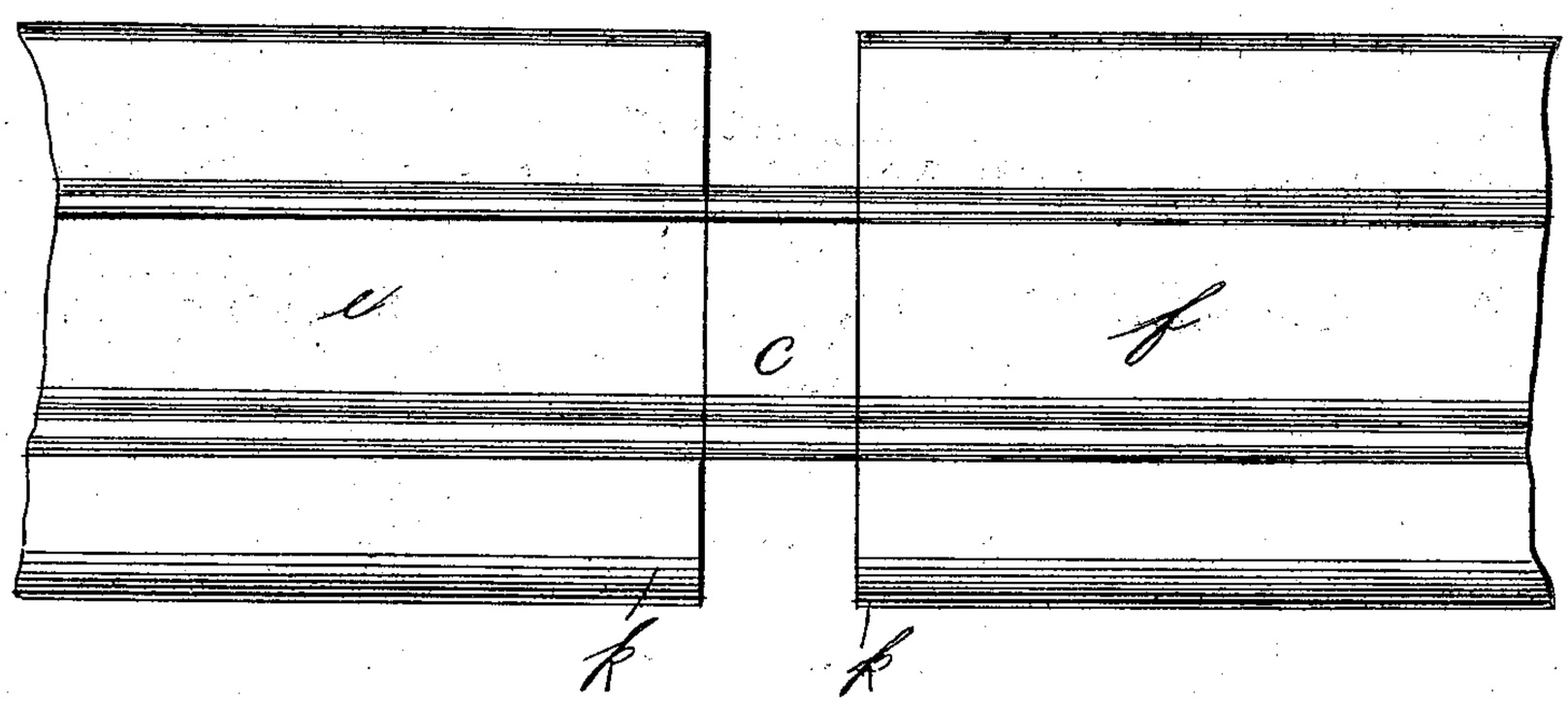
W. TAYLOR.

RAIL JOINT.

APPLICATION FILED DEC. 18, 1905.

2 SHEETS—SHEET 1.

Fig. 1.



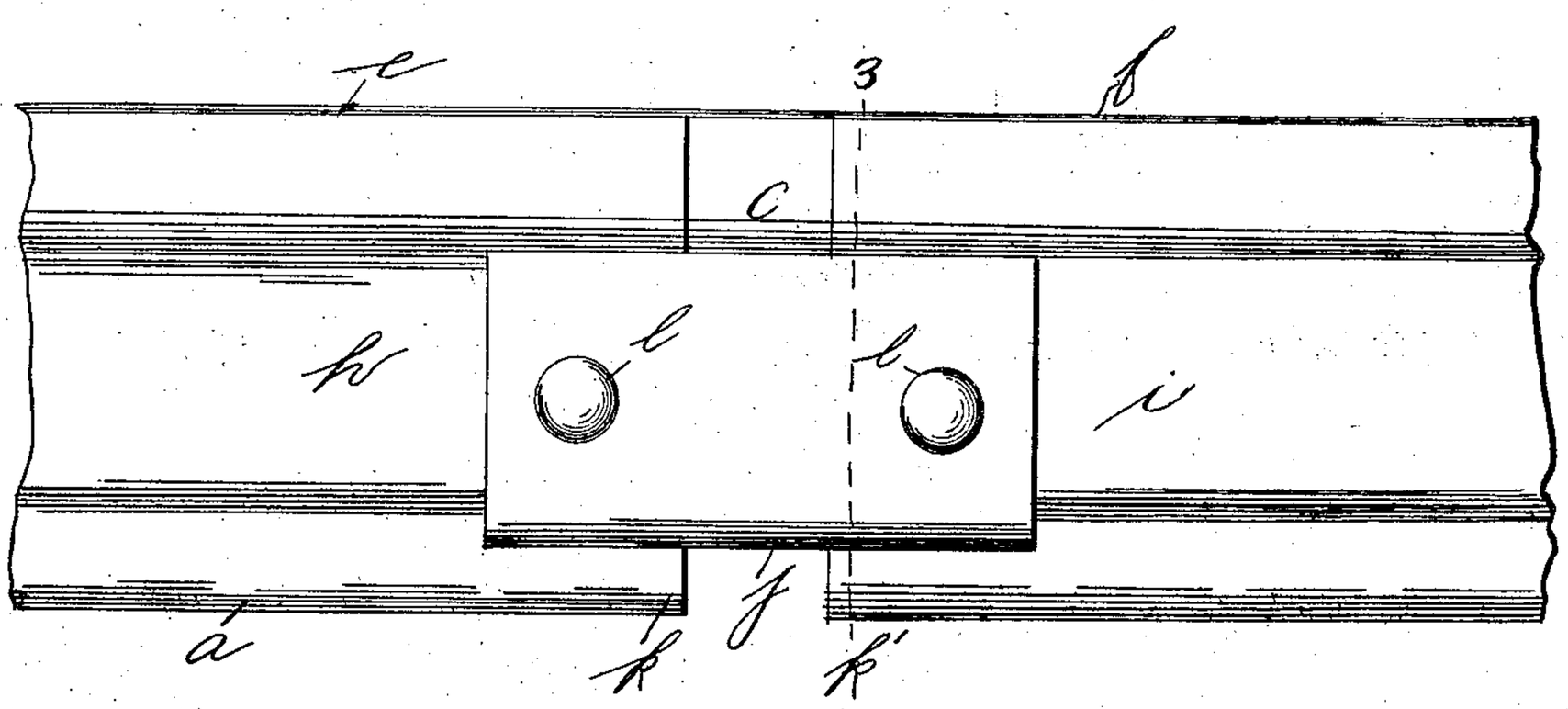


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

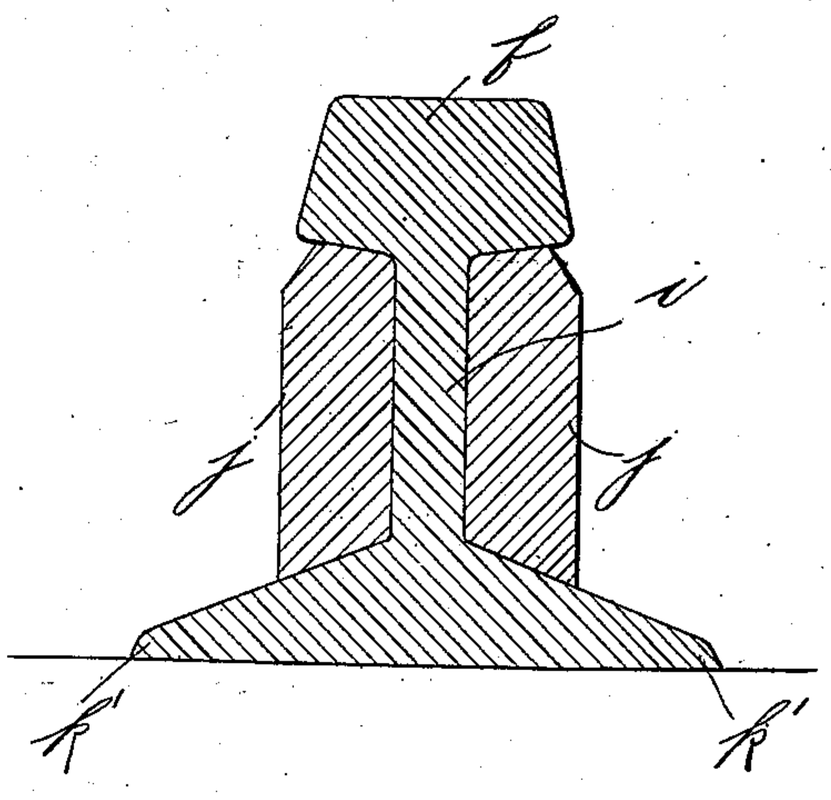
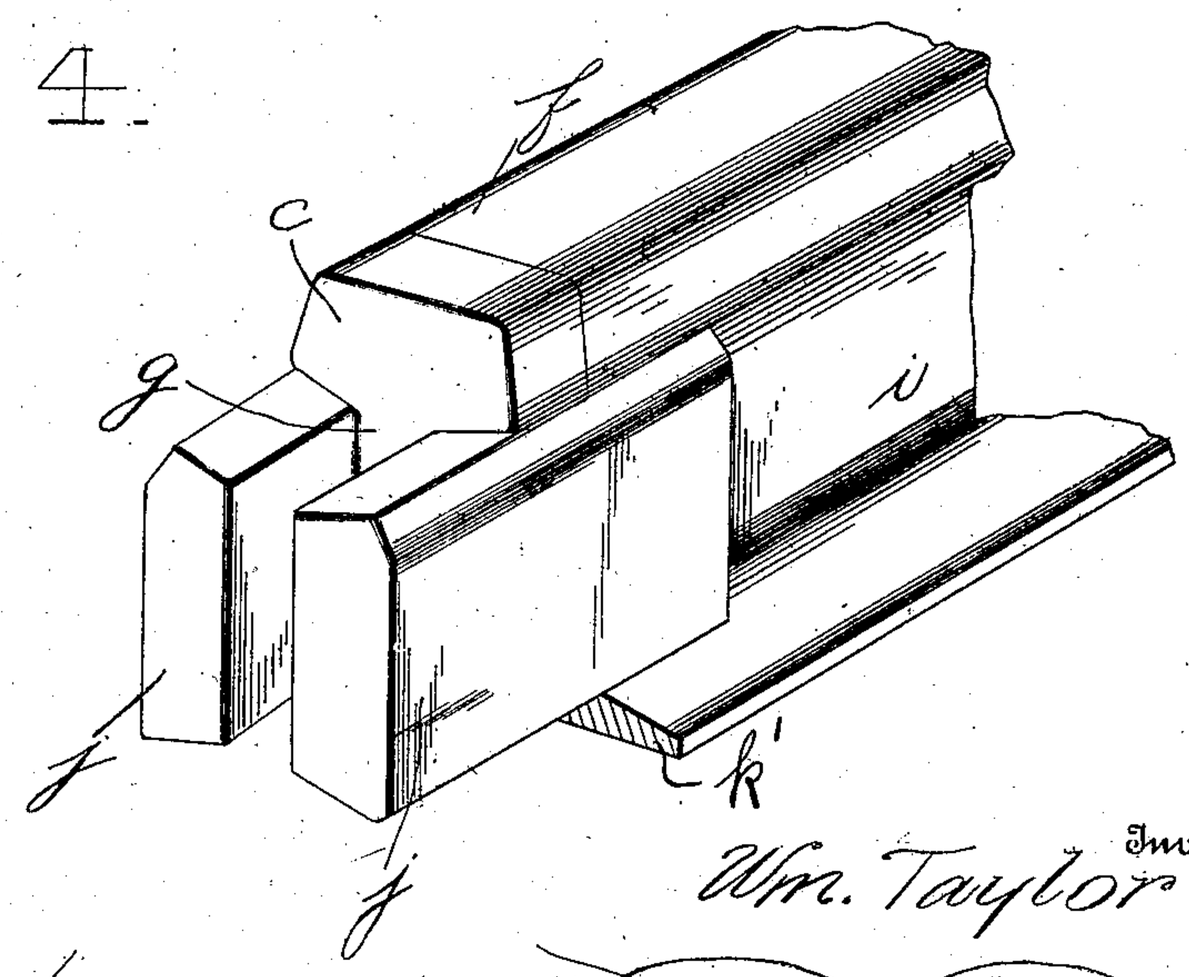


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM TAYLOR, OF EMORYVILLE, WEST VIRGINIA.

RAIL-JOINT.

No. 889,645. Specification of Letters Patent. Patented June 2, 1908.

Application filed December 18, 1905. Serial No. 292,200.

To all whom it may concern:

Be it known that I, WILLIAM TAYLOR, a citizen of the United States, residing at Emoryville, in the county of Mineral, State of West Virginia, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to means for connecting the meeting ends of railway rails for the accomplishment of which time and ingenuity have already been spent by railway engineers and others.

It is the object of the invention to provide a railroad-rail joint that shall be at once simple in construction and most efficient in use. It is proposed to provide means that shall keep the web and ball of the rail in position to perform their functions without essential jar, preserving their alinement perfectly, and experience has shown that more than this is unessential, as the rails need little to keep them in exactly proper place if they are left in some appreciable measure to assume it of their own accord.

My invention consists of a railway-rail joint consisting of a connecting section of web corresponding exactly to the webs of the meeting ends of the rail, a ball or tread portion or section having the same relationship to the balls or treads of the meeting rails as has been explained with respect to the webs, and extensions on both sides of the webs of the meeting ends similar to fish-plates, which extensions shall fit the sides of the webs closely and be without need of bolts and nuts to cause them to hold the meeting ends in place. However, it is not designed in some cases to do away with the railway chair entirely.

The drawings hereto annexed form a part of this specification and show in Figure 1 a top plan view of the invention complete. Fig. 2 is a side elevation. Fig. 3 is a section on the line 3, 3 of Fig. 2. Fig. 4 is a perspective view of one rail and the joining member or section.

In the drawings, there are shown the meeting ends of two rails one of which includes a tread *e*, a web *h* and a base flange *a*, while the other includes a tread *f*, a web *i* and a base flange *k'*. In practice, the ends of the rails are spaced sufficiently far apart to receive a joining section between them. This joining section includes a tread *c* and a web *g*, the transverse dimensions of which are the same as those of the rails so that these portions of the joining section form in effect continuations of the rails. The joining section also includes integral fish plates *j* that are of such dimensions and so spaced apart that they fit between the treads and flanges of the rails in close contact with them and tightly hug the side faces of the webs of the rails.

The above described structure not only serves to form a practically continuous rail, but prevents sagging of the ends of the rails with respect to each other, and it will be noted that the downward pressure upon the tread of the joining section is transmitted by the fish plates or side wings *j*, to the base flanges of the connected rails. In this manner, the depression of the tread of the joining section below the treads of the rails is prevented and jarring to the car does not occur. Furthermore, there is required no supplemental securing means for the joining section although, as illustrated in Fig. 2 of the drawings, bolts *l* may be passed through the fish plates and the webs of the rails.

What I claim is:—

A railway-rail joint consisting of a joining section or member having a ball and web corresponding in form to the same parts of the ends of the rails, combined with the rails between which the said joining member is placed, the latter being provided with the fish-plates formed integral with the ball and web portions and extending longitudinally along the sides of the ends of both rails, the joining member being free of supporting means below the web.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM TAYLOR.

Witnesses:
WM. TURNER,
THOS. TAYLOR.