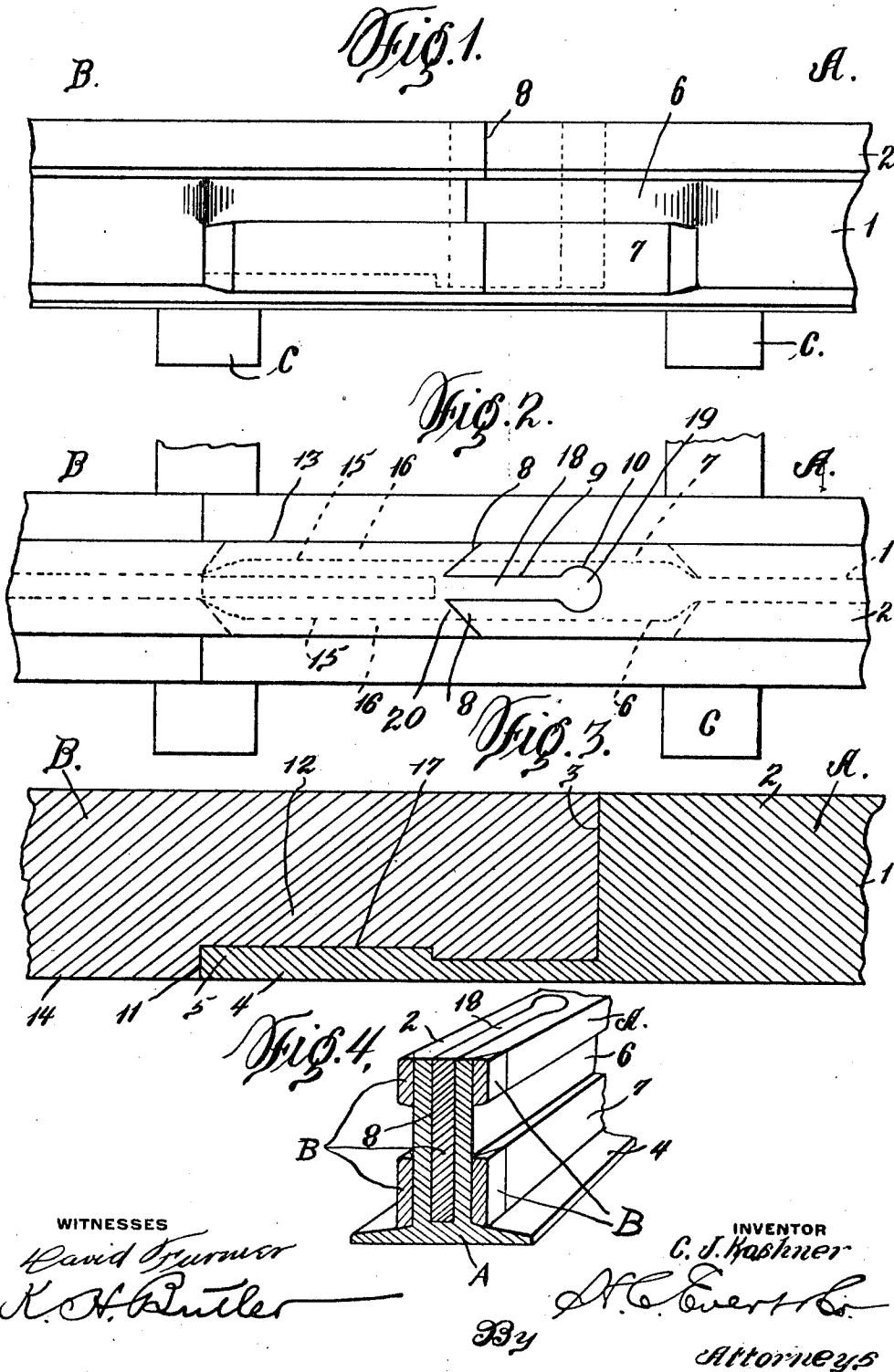


C. J. KASHNER.
RAIL JOINT.
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1,001,412.

Patented Aug. 22, 1911.



UNITED STATES PATENT OFFICE.

CHARLES J. KASHNER, OF CLARENDON, PENNSYLVANIA.

RAIL-JOINT.

1,001,412.

Specification of Letters Patent. Patented Aug. 22, 1911.

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To all whom it may concern:

Be it known that I, CHARLES J. KASHNER, a citizen of the United States of America, residing at Clarendon, in the county of Warren and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to rail joints, and the objects of my invention are to provide means in a manner as will be hereinafter set forth for positively connecting the confronting ends of two rails without the use of
15 nuts and bolts,—to provide a rail joint that will allow expansion and contraction of rails, and can be easily and quickly installed without the use of skilled labor.

Further objects of the invention are to
20 provide practically a continuous tread for rolling stock, thereby obviating the jarring and bumping experienced by rolling stock passing over an ordinary joint and to provide a rail joint that is durable, comparatively
25 inexpensive to manufacture and efficient as a connecting medium for rails.

These and such other objects are attained by a mechanical construction that will be hereinafter specifically described and then
30 claimed.

Reference will now be had to the drawing, wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the construction thereof is
35 susceptible of such changes as fall within the scope of the appended claim.

In the drawing:—Figure 1 is a side elevation of the rail joint, Fig. 2 is a plan of the same, Fig. 3 is a longitudinal sectional view
40 of the joint, and Fig. 4 is a cross sectional view of the rail joint.

The rails to be connected according to my invention are generally designated A and B and these rails are adapted to be supported
45 by ties or sleepers C.

The rail A has the web 1 and the head 2 thereof cut away, as at 3, whereby the base flange 4 of said rail will project beyond the head 2 and the web 1. The base flange 4
50 is provided on its upper face with a central longitudinal rib 5 extending from the outer end of the base flange 4 inwardly throughout the major portion of the length of the base flange 4. The web 1 is provided with
55 side enlargements 6 and with longitudinal reinforcing ribs 7, said ribs being approxi-

mately one-half the depth of the web 1 and having the lower edges thereof integral with the base flange 4 of the rail A. The forward ends of the head 2, web 1, enlargements 6 and the ribs 7 are beveled, as at 8
60 and provided with a longitudinal groove 9 extending from the base flange 4 upwardly to the top of the head 2. The inner end of the groove 9 terminates in a vertical
65 socket 10 corresponding in depth to said groove.

The rail B has the base flange thereof cut away, as at 11 whereby the web 12 and the head 13 of said rail will project beyond the
70 base flange 14 of the rail B. The base flange 14 is cut away to receive the base flange 4 of the rail A, and the web 12 of the rail B is provided with side enlargements 15 and
75 longitudinal reinforcing ribs 16 similar to the ribs 7 of the rail A. The bottom of the web 12 that projects beyond the base flange 4 is provided with a longitudinal groove 17
80 to receive the rib 5 of the base flange 4. The head 13 of the rail B is cut away to cooperate with the web 12 in providing a tongue 18 adapted to fit in the groove 8 of the rail A, the tongue 18 having the outer end thereof
85 provided with a vertical head 19 adapted to fit in the socket 10 of the rail A. The enlargements 15 and the ribs 16 have the forward ends thereof beveled, as at 20, to receive the beveled forward ends of the enlargements and ribs of the rail A.

To place the rails together, the end of the
90 rail B is raised above the end of the rail A and then lowered, whereby the tongue 18 and the head 19 will enter the groove 9 and the socket 10 of the rail A; the rib 5 of the rail A entering the groove 17 of the rail B.
95 The rib 5 cooperates with the head 19 of the rail B in preventing longitudinal and lateral displacement of one rail relative to the other, and, when ordinary spikes are employed for securing the base flanges of the
100 rails upon the ties or sleepers C, the rails will be firmly held together to provide a continuous tread for rolling stock.

What I claim is:—

A rail joint comprising rails A and B,
105 the rail A having a portion of the head and web thereof cut away and the projecting portion of the base flange of said rail provided with a longitudinal rib, enlargements carried by the sides of said rail, longitudinal
110 ribs carried by said enlargements, the head and web of said rail having a vertical groove

formed therein extending from the base
flange of said rail to the top of the head
thereof with the inner end of said groove
terminating in a vertical socket, the head,
5 enlargements and ribs having the forward
ends thereof beveled, the rail B having the
base flange thereof cut away to receive the
base flange of the rail A, enlargements car-
ried by the sides of the rail B, ribs carried
10 by the sides of said enlargements, the bot-
tom of the web of the rail B being cut away
to receive the rib of the base flange of the
rail A, the head of the rail B being cut away
to cooperate with the web of said rail A in

providing a tongue and a head adapted to 15
fit in the groove and socket of the rail A,
and the head, enlargements and ribs of the
rail B having the forward ends thereof
beveled to engage the forward beveled ends
of the head, enlargements and ribs of the 20
rail A, substantially as described.

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

CHARLES J. KASHNER.

Witnesses:

O. G. MARLOW,
T. J. FARR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
