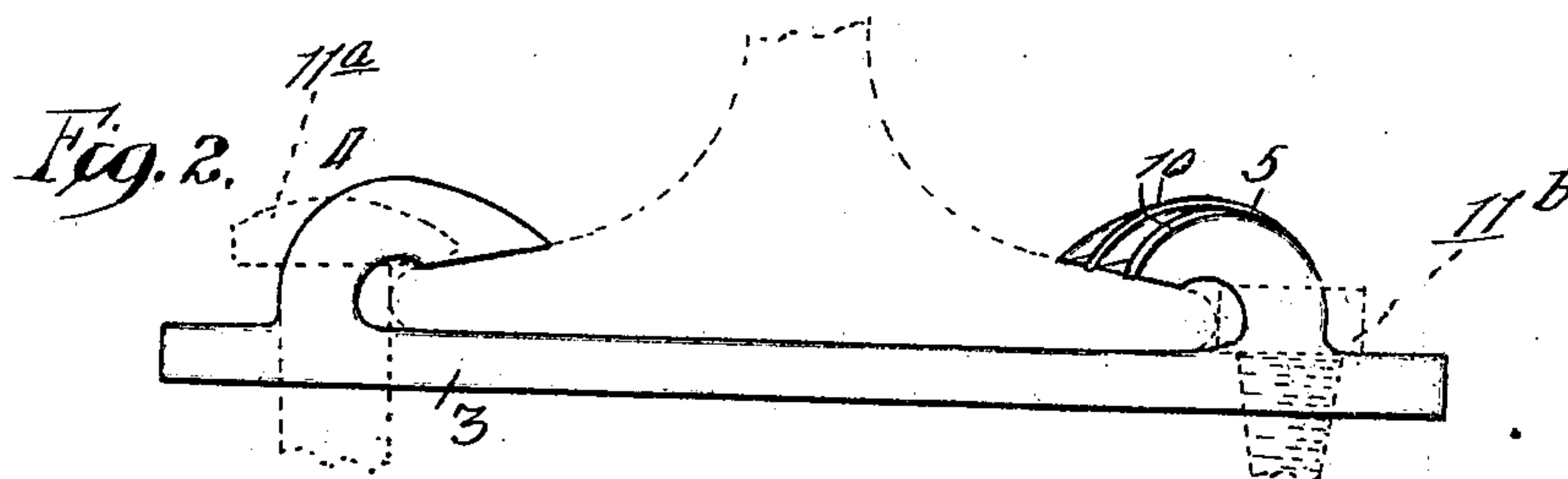
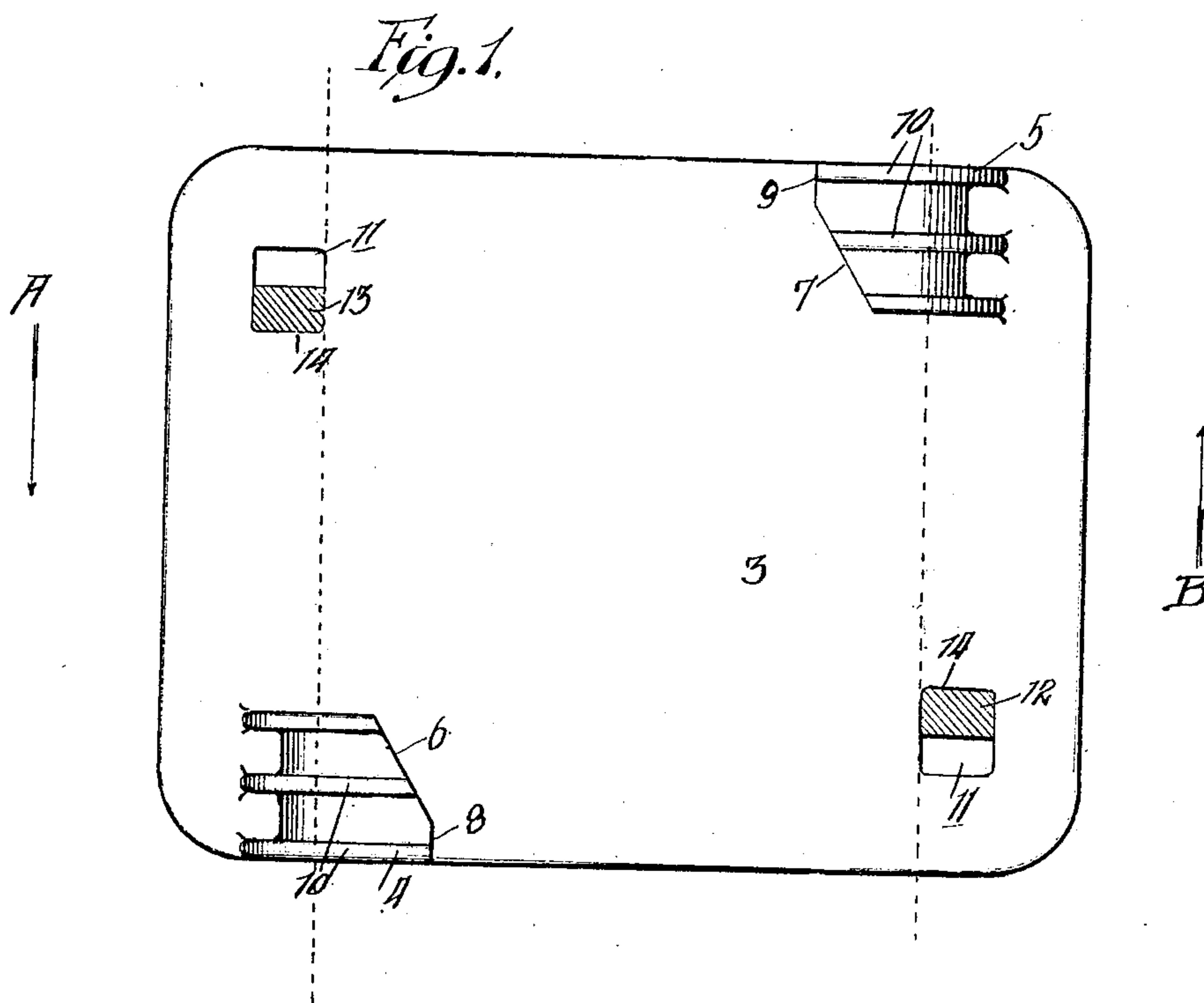


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COMBINATION TIE PLATE AND RAIL ANCHOR.
APPLICATION FILED JUNE 15, 1909.

955,529.

Patented Apr. 19, 1910.



Witnesses:

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UNITED STATES PATENT OFFICE.

PHILIP W. MOORE, OF EVANSTON, ILLINOIS.

COMBINATION TIE-PLATE AND RAIL-ANCHOR.

955,529.

Specification of Letters Patent.

Patented Apr. 19, 1910.

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To all whom it may concern:

Be it known that I, PHILIP W. MOORE, a citizen of the United States, residing at Evanston, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Combination Tie-Plate and Rail-Anchor, of which the following is a specification.

This invention relates to an improved construction in tie plates and rail anchors, and its essential object is to provide a device that will serve not only as a tie plate but, in addition, act as a rail anchor, the same being simple in construction and inexpensive to manufacture.

The invention consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a top or plan view of this improved combination device, and Fig. 2 an end elevation thereof.

This improved device comprises a base or bed plate 3 having, as shown, integral gripping jaws 4 and 5, respectively, positioned diagonally from one another and having inner angular faces 6 and 7 parallel with each other, said faces merging into straight outer side walls 8 and 9. As indicated, these integral gripping jaws 4 and 5 are somewhat deeper transversely than the base of a railway rail, which they grip very tightly on the top and bottom, and are each provided, as illustrated in Fig. 1, with transverse ribs 10, which reinforce the gripping jaws against transverse or lateral strain.

Elongated spike holes or openings 11 are made in the base of the bed plate 3, diagonally from one another, adjacent to the corners of the plate, for receiving spikes 12 and 13, which are driven thereinto, adjacent to the inner edges 14 of the spike holes or openings, for the purpose of causing the gripping jaws to grip the top and bottom of both edges of the railway rail base more tightly when the same tends to move longitudinally. The slots are shown as rectangular in shape, but it is intended that their form be altered to suit various other shapes of spikes, as screw spikes.

In use, the device is brought into engagement with the rail base by first placing it in such a position angularly with respect to the rail base that the inner jaw faces 6 and 7 align with the rail base. The device is then raised and turned slightly until the outer corners of the jaws are in engagement with

the edges of the rail base. Then the device is turned until its longer axis stands at right angles with the longitudinal axis of the rail, the contour of the jaws 4 and 5 being such that they grip the top and bottom of the rail base very tightly and some force is necessary to bring the device into its final position. Having positioned the device in the manner described, spikes 12 and 13 are driven into the tie through the slots 11 adjacent the inner edges 14 of the slots. As the spikes 12 and 13 are driven through the plate into normal engagement with the inner side edges 14 of the spike holes or openings 11, it is apparent that when the plate tends to move in the direction indicated by the arrow A the spike 12 serves to act as a pivot, causing the gripping jaws 4 and 5 to tightly impinge against the rail base, thus preventing the rail from longitudinal movement and travel. When the rail tends to move in the direction indicated by the arrow B, the spike 13 in like manner acts as a pivot so that the jaws will firmly impinge upon the rail base and prevent longitudinal movement. Of course, other methods of securing the device to the tie may be used, provided they are so placed as to insure the automatically increasing gripping action upon the rail base above described. In the device as shown, the spike 11^a is so located that when driven its head overlaps the edge of the rail base. While this adds to the security with which the rail is fastened to the tie, such a construction need not necessarily be followed, as the gripping jaws 4 and 5 are intended to be sufficiently strong to hold the rail in place without the use of spikes. The device, therefore, may be fastened to the tie by means so placed as to be wholly independent of the relative position of the rail base, as indicated by the screw spike 11^b. It will thus be seen that this improved device performs not only the function of a tie plate, but, in addition, serves as a rail anchor for preventing any longitudinal movement or travel of the rail with which it engages.

Without specifically limiting myself to the aforesaid construction, I claim:

1. A one-piece combination tie plate and rail anchor provided with diagonally opposite gripping jaws, said device having spike openings of a size greater than the diameter of the spike and adapted to permit spikes to normally engage their forward or rear edges

and to be free of their opposite edges, so that when the rail tends to creep in either direction said spikes will act as pivots, causing the gripping jaws to more firmly engage and anchor the rail, substantially as described.

2. A one-piece combination tie plate and rail anchor provided with diagonally opposite gripping jaws, said device having elongated rectangular spike openings to permit spikes to normally engage their forward or

rear edges and to be free of their opposite edges, so that when the rail tends to creep in either direction said spikes will act as pivots, causing the gripping jaws to more firmly engage and anchor the rail, substantially as described. 15

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