

(No Model.)

J. I. & A. J. IRWIN.
RAIL HOLDER.

No. 592,291.

Patented Oct. 26, 1897.

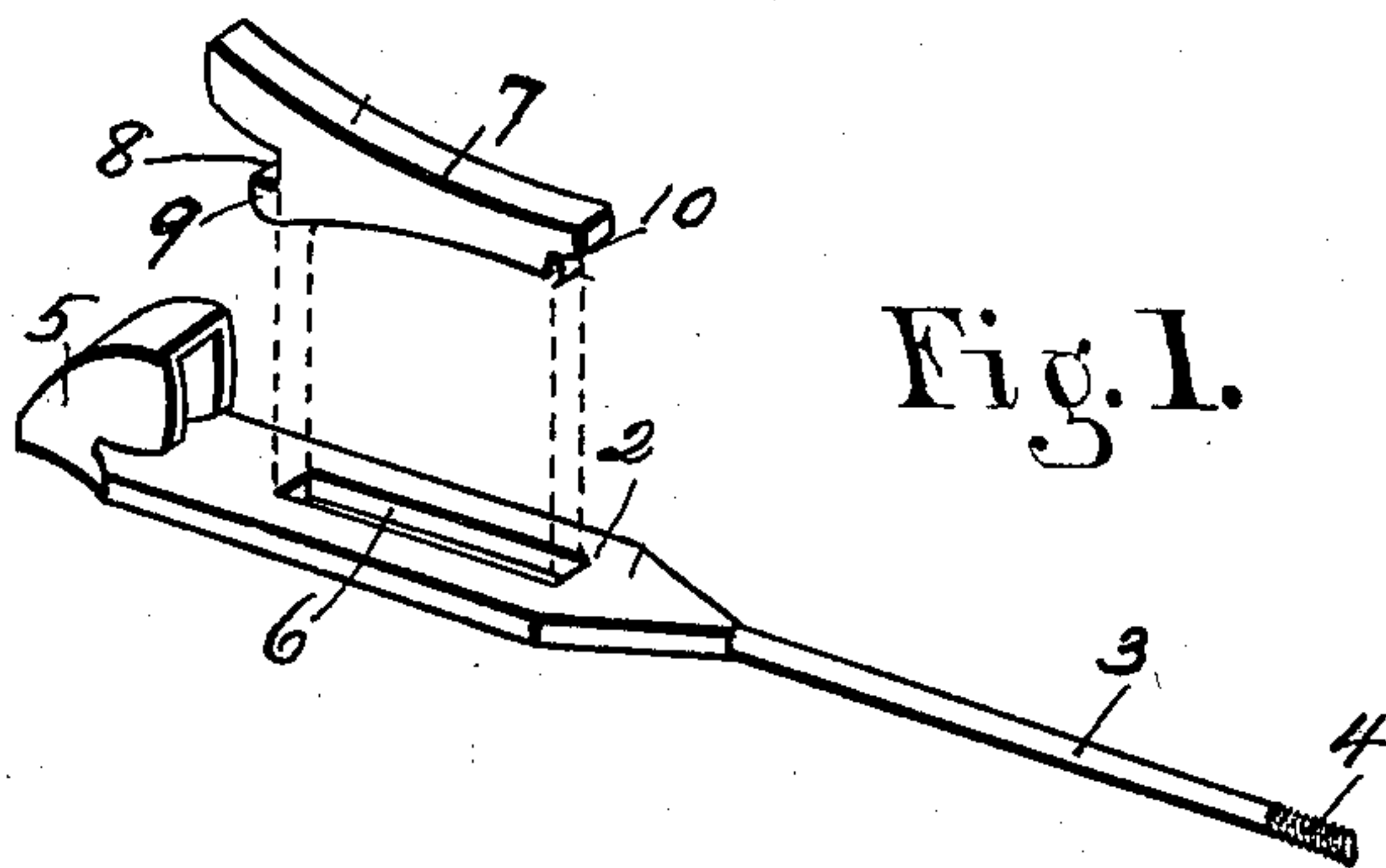


Fig. 1.

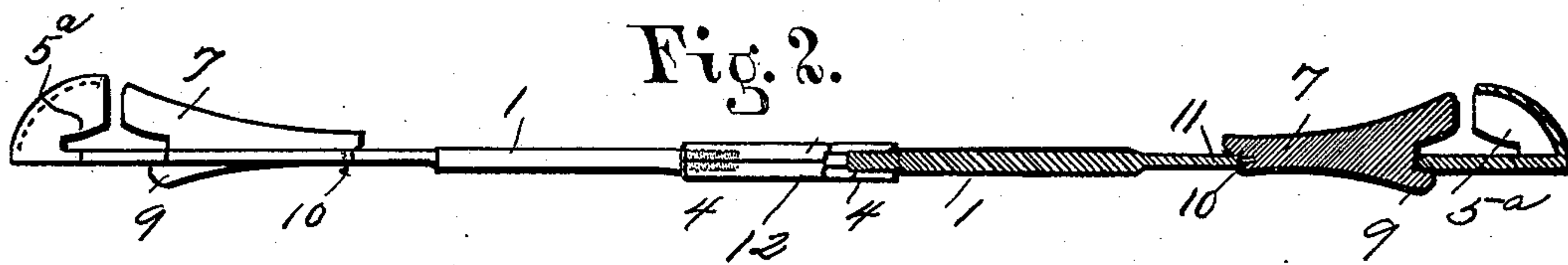


Fig. 2.

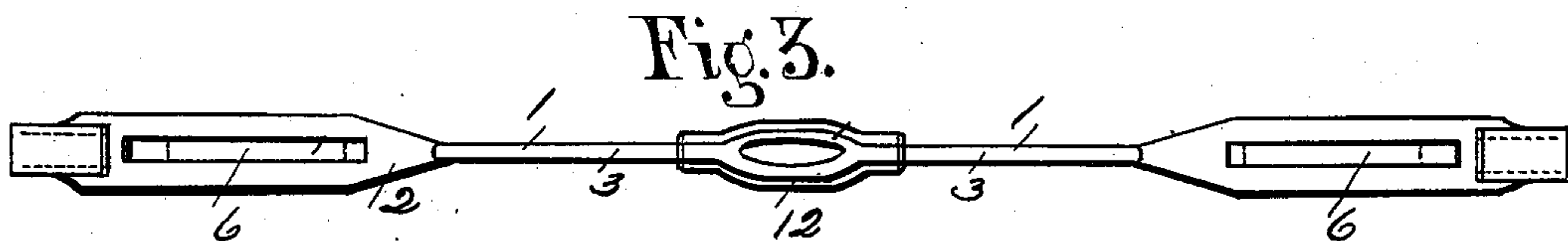


Fig. 3.

WITNESSES:

Stewart Wood,

M. Newman

James I. Irwin
Andrew J. Irwin

INVENTORS

UNITED STATES PATENT OFFICE.

JARED I. IRWIN AND ANDREW J. IRWIN, OF SANDERSVILLE, GEORGIA.

RAIL-HOLDER.

SPECIFICATION forming part of Letters Patent No. 592,291, dated October 26, 1897.

Application filed October 22, 1896. Serial No. 609,757. (No model.)

To all whom it may concern:

Be it known that we, JARED I. IRWIN and ANDREW J. IRWIN, citizens of the United States, residing at Sandersville, in the county of Washington, State of Georgia, have invented certain new and useful Improvements in Devices to Prevent Railroad-Tracks from Spreading; and we 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 relates to improvements in rail-holders.

The object of the invention is to provide a device of the character mentioned which shall be simple in its construction and adapted to hold the rails of a railway-track so that the same may be maintained at a proper gage at all times, and thus overcome liability to the same spreading and thereby causing accidents.

With this object in view the invention consists substantially in the novel constructions, combinations, and arrangements of parts, as will be hereinafter fully illustrated, described, and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a section of a holder. Fig. 2 is a side elevation. Fig. 3 is a top plan view.

Similar numerals of reference designate corresponding parts throughout the figures of the drawings.

Referring to the drawings, 1 1 designate a pair of complementary sections which may be formed of any suitable material adapted for the purpose, and each of said sections 1 comprises a flat body 2, having projecting from one of its ends a stem 3, the free end of which is provided with a series of screw-threads 4, and it will be noted that said threads 4 of the sections are reversely arranged for a purpose to be presently stated. The end of the body 2 opposite to the stem 3 of each of the sections is provided with an upwardly-extending clamping-lug 5, the lower end of which is provided with a curved shoulder 5^a, which shoulder is spaced slightly from the body 2 in order to receive one side of the base-flange of the rails, and by reason of the shoulder 5^a

being curved it is apparent that the same will conform to the shape of the rail and thereby fit closely upon the bottom flange and the web thereof.

Formed in the body 2 of each of the sections 1 is an elongated slot 6, which slots lie at the inner sides of the track-rails when the holder is in its proper applied position, and said slots 6 are adapted to receive locking-blocks 7. Each of the locking-blocks 7 is formed of a material suited for the purpose intended, and the end of each of the blocks 7, which is designed to lie adjacent to the track-rail, is provided with an inwardly-extending notch 8, whereby a securing-shoulder 9 is formed at the lower side of each of said blocks, and said notches 8 are designed to receive the ends of the slots 6, which also lie adjacent to the said rails. The ends of the blocks 7 opposite to the notches 8 are each rabbeted, so that the lower side of the block 7 may fit snugly within the slots 6, and secured to each of said rabbeted ends is a leaf-spring 10, which may be attached to the blocks 7 by screws or their equivalent to provide a firm attachment with the locking-blocks 7. It will be observed that the free ends of the springs 10 are slightly curved, so as to facilitate the same entering the slots 6, and the ends of said slots which are opposite to the ends thereof entering the notches 8 are slightly beveled, as at 11, so as to provide a firm seat for the springs 10 when the blocks 7 are positioned in the slots 6.

In order that the sections 1 may be adjusted toward and away from each other, a turnbuckle 12 is employed, the ends of which are provided with right and left hand screw-threads adapted to correspond with the threads formed on the sections 1 1, and by reason of this construction it is obvious that said sections 1 1 may be moved toward or away from each other, according to the gage of the road upon which the holder is designed to be placed. This adjustment provides for the application of the holder upon both broad and narrow gage roads, and after the same has been so applied the rotation of the turnbuckle 12 will cause the same to firmly clamp the rails.

The clamping-lugs 5, as shown in the drawings, are preferably hollow to reduce the

weight, but if desired the same may be solid and provided with the rounded shoulder 5^a, as is obvious.

The method of applying the herein-described rail-holder is as follows: The sections 1 1 are placed under the rails, so that the threaded stems thereof project between said rails and lie approximately at the center of the track. The turnbuckle 12 is then applied to the threaded stems 3, and by adjusting said turnbuckle it is apparent that said sections 1 1 may be so moved that the clamping-lugs 5 may be brought into contact with the outer sides of the rails, the outer side of the base-flanges entering beneath the rounded shoulders 5^a, and the webs of the rails lying against the inner ends of said clamping-lugs. In this position it will be seen that outward movement of the rails is positively prevented, and after the sections have been thus applied the locking-blocks 7 are inserted into the elongated slots 6. This is accomplished by first introducing the shoulders 9, so that the latter lie beneath the undersides of the body portions 2, the ends of the slots 6 lying adjacent to the rails being received by the notches 8. After this step has been taken the ends of the blocks 7, upon which the springs 10 are secured, are then forced downwardly into the slots 6, so that said springs ride over the beveled ends 11 of said slots and are brought into engagement therewith. By reason of this it is apparent that the springs 10 become seated upon said beveled ends, and thereby retain the blocks 7 within the slots 6 and prevent displacement of said blocks therefrom. It will also be noted that the ends of the blocks 7 above the notches 8 are brought into engagement with the inner sides of the web of the rails and lie beneath the heads thereof, so that the inner sides of the base-flanges become seated in the notches 8, and upward movement of the rails is entirely prevented. Hence the track-rails are held in rigid position and movement of the same entirely overcome.

From the foregoing description it will be seen that the herein-described improvements provide a rail-holder which is exceedingly simple in its construction and adapted to be manufactured at a comparatively low figure, and by the employment of the same spreading of railroad-tracks is entirely prevented. The holder will also overcome liability to accidents arising from the tracks moving or slipping on the road-bed, as in such event the holder will maintain the exact gage, so that the wheels of a train passing over the track will not pass therefrom.

The improvements may also be employed for switch-bars with great efficiency. If at any time a part should be broken or become worn to such an extent as to be useless, the same can be repaired without removing the rails, and, furthermore, the invention will assist greatly in preventing the rails creeping.

The form herein shown and described is

what is believed to be a preferable embodiment of the invention, but it will of course be understood that the same is susceptible of various changes in the form, proportion, and minor details of construction, and hence we do not limit ourselves to the precise arrangement of parts, but reserve the right to change, modify, or vary the invention as falls within the spirit and scope thereof.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a holder of the class described, the combination with a series of clamp-sections, of a series of locking-blocks adapted to be applied to said sections, and springs for locking the blocks in their applied positions upon the sections, substantially as described.

2. In a holder of the class described, the combination with a series of clamp-sections each of which is provided with a clamping-lug adapted to engage the sides of the track-rails, of a series of removable locking-blocks adapted to be applied to the sections, springs for locking the blocks in their applied positions upon the sections, and means for adjusting the sections toward and away from each other, substantially as described.

3. In a holder of the class described, the combination with a series of clamp-sections, of a series of locking-blocks adapted to be applied to said sections, springs carried by said blocks and adapted to engage the sections to retain the blocks in their proper applied positions thereon, and means for adjusting the sections toward and away from each other, substantially as described.

4. In a holder of the class described, the combination with a series of clamp-sections each of which is provided with an elongated slot, of a series of removable locking-blocks adapted to be inserted in said slots to apply the same to the clamp-sections, springs carried by the blocks for locking the same in their proper applied positions, and means for adjusting the sections toward and away from each other, substantially as described.

5. In a holder of the class described, the combination with a series of clamp-sections each of which is provided with an elongated slot, of a series of removable locking-blocks adapted to be inserted in said slots to apply the same to the clamp-sections, springs carried by the blocks for locking the same in their proper applied positions, and means for adjusting the sections toward and away from each other, substantially as described.

6. In a holder of the class described, the combination with a series of clamp-sections each of which is provided with a clamping-lug and an elongated slot spaced therefrom, of a series of locking-blocks adapted to be inserted in said slots, springs carried by said blocks for retaining the same in their proper applied positions, and means for adjusting the sections toward and away from each other, substantially as described.

7. In a holder of the class described, the combination with a series of clamp-sections each of which is provided with a clamping-lug and an elongated slot spaced therefrom, 5 said lug being provided with a shoulder adapted to lie against the web of the rails, of a series of removable locking-blocks adapted to be inserted in said slots, springs carried by said blocks for locking the same within the 10 slots, and means for adjusting the sections toward and away from each other, substantially as described.

8. In a holder of the class described, the combination with a series of clamp-sections 15 each of which is provided with a clamping-lug and an elongated slot spaced therefrom, of a series of locking-blocks adapted to be inserted in said slots, said blocks being provided with locking-shoulders adapted to lie 20 beneath the clamp-sections when said blocks are inserted within the elongated slots, springs carried by the blocks for locking the latter within the slots, and means for adjusting the sections toward and away from each other, 25 substantially as described.

9. In a holder of the class described, the combination with a series of clamp-sections each of which is provided with a clamping-lug having a locking-shoulder, and an elongated slot spaced from said lug, of a series of 30 locking-blocks adapted to be inserted in said slots, each of said blocks having a locking-shoulder adapted to lie beneath and engage the under surface of the clamp-sections when the blocks are inserted in said slots, springs 35 carried by said blocks and adapted to lock the latter within the elongated slots, the ends of said slots farthest from the clamping-lugs being beveled, whereby said springs are adapted to be seated thereon and lock the blocks within 40 the elongated slots, and means for adjusting the sections toward and away from each other, substantially as described.

This 15th day of October, 1896.

JARED I. IRWIN.
ANDREW J. IRWIN.

Witnesses:

NEWMAN WOOD,
M. NEWMAN.