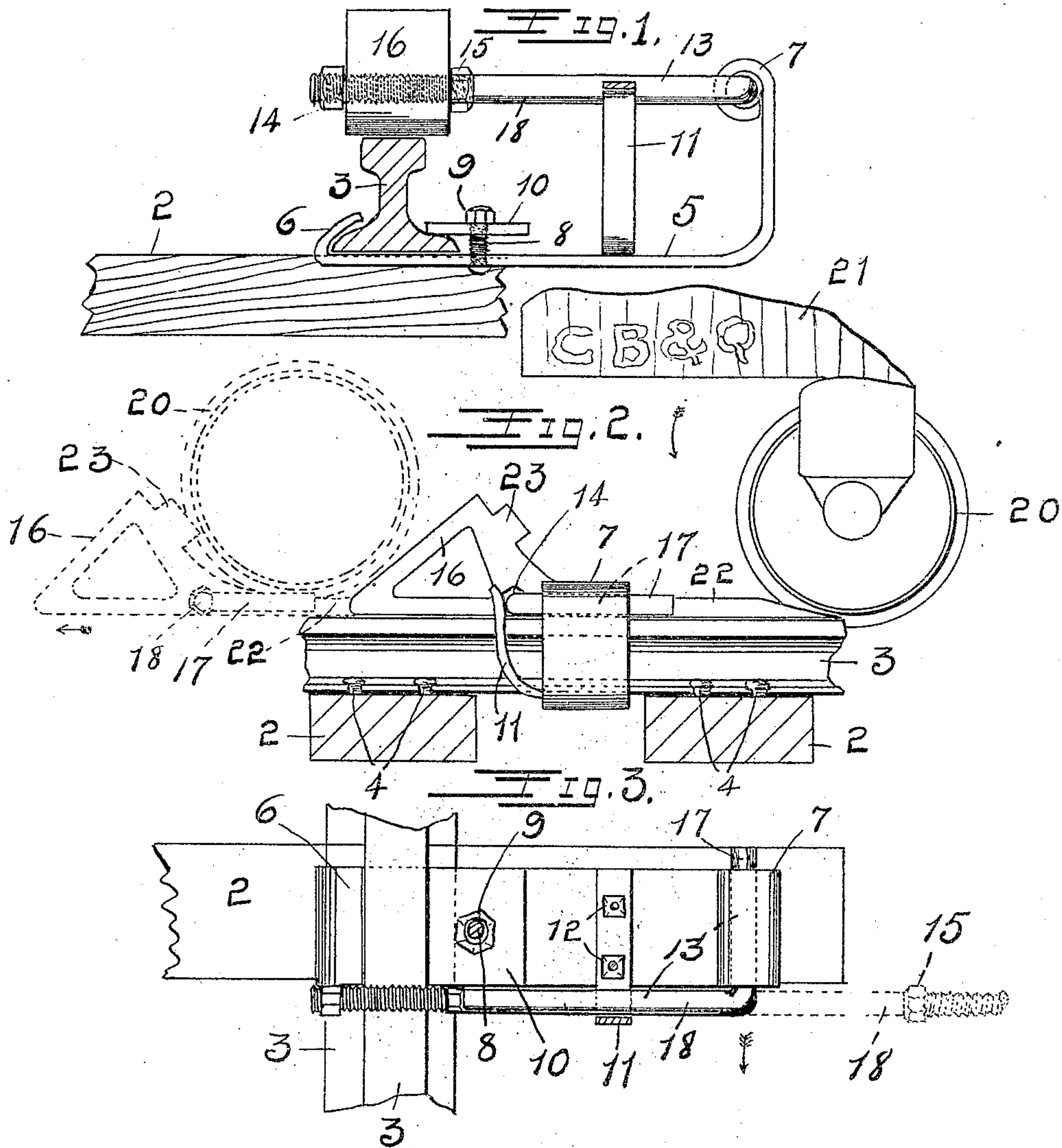


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SKID SHOE PLACER.  
APPLICATION FILED SEPT. 7, 1909.

955,400.

Patented Apr. 19, 1910.



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# UNITED STATES PATENT OFFICE.

THOMAS E. HINES, OF GALESBURG, ILLINOIS.

## SKID-SHOE PLACER.

955,400.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed September 7, 1909. Serial No. 516,447.

*To all whom it may concern:*

Be it known that I, THOMAS E. HINES, a citizen of the United States, and a resident of Galesburg, in the county of Knox and State of Illinois, have invented a new and useful Skid-Shoe Placer, of which the following is a specification.

Skid-shoes as heretofore used on railway rails for the purpose of retarding the speed of a car which has been released from the top of an inclined way or track known to railroad men as a "hump," have been loosely laid manually on one of the track rails. Being heavy, bulky and cumbersome, this has been difficult to accomplish, especially in haste as is sometimes very necessary. Moreover, the jarring of the rail caused by the rapidly approaching car frequently caused the shoe (or "skate," as it is commonly termed by those who employ it,) to fall from the rail, whereby it became not only inoperative but furthermore often caused great injury to the brake-beams and other parts of the car and to the ties and rails. Also, the speed of the car not having been slackened or retarded, it would rush on with great liability of crashing into other cars with resultant great injury.

The primary object of my invention is to provide a simple and effective device which is of itself separable and the parts of which are attachable, one to a track-rail and the other to a skid-shoe, and which parts are so connected that one is arranged to swing with relation to the other in order that the portion which is secured to the shoe may be readily, quickly and easily positioned to place the shoe upon the rail or to remove it therefrom.

Other objects will be in part obvious and in part pointed out.

To the end of carrying out these objects my invention consists in the construction, arrangement and combination of the several parts of the device, as will be more fully hereinafter described and claimed.

In the accompanying drawings, which illustrate my invention embodied in the best way now known to me, and in which I have shown also the coacting parts of a railway track, car and skid-shoe:—

Figure 1 is a rear elevation, illustrating the manner of attaching my improvements to a track rail; Fig. 2, a side elevation, which

will be more fully set forth in the description of the operation; and Fig. 3, a plan view.

Referring to the drawings by numerals, the same one indicating the same part in the different figures thereof, 2 designates either of a pair of track ties, and 3 a track-rail fixed thereto by spikes 4 in the ordinary manner.

What may be termed the base or supporting element of my device comprises an elongated horizontal portion 5 having its inner end reflexed to form a rail-clamp 6, and having its outer end turned upwardly and then bent back to form an eye 7. The horizontal portion is apertured for the reception of a bolt 8 by means of which and a nut 9 a securing-plate 10 coöperates with the reflexed end 6 to fix the device to the flange of a track-rail. A resistance spring 11, preferably L-shaped, has its horizontal arm fixed by bolts 12 to the horizontal portion of the base, and its rising arm projects upwardly to take against a connecting arm 13 presently described. The free end of the spring is preferably turned forwardly as shown best at Fig. 2.

The connecting arm 13, which may be either square or circular in its cross section, is formed of a rod of metal bent to form an L-shaped structure, one limb, 17, of which is adapted for loose engagement with the eye 7 and the other limb, 18, of which is threaded and adapted to enter an aperture in the skid-shoe 16, as shown best at Fig. 1. Nuts 14, 15 hold the shoe in proper position with relation to the rail as well as to the placer, and permit of adjustments of the latter with reference to the rail.

In operation, the device having been assembled and positioned as shown at Fig. 1, and it being desirable to remove the shoe from the rail, the operator by grasping the shoe and lifting or raising it therefrom will cause the limb 17 to turn within the eye 7. A continuation of this movement, it will be evident, will bring the arm 13 over to the dot line position shown at Fig. 3, the shoe of course being brought over with it. Replacement of the shoe is effected by a reverse operation. Again, the shoe having been positioned as shown at Fig. 1 and by full lines at Fig. 2, it will be securely held from displacement from the rail until the wheel 20



of a car 21 has passed well up onto the tail-piece 22 of said shoe, and upon the wheel striking the lug 23 or other rising portion of the shoe, said shoe will be carried forwardly thereby, (see dotted lines at Fig. 2), the limb 17 being forced out of the eye 7 in an evident manner and the spring 11 will act as a resistance spring. After the car wheel has mounted the tailpiece to such extent that it has contacted the rising portion of the shoe, all danger of the latter falling from the track is eliminated, and it will slide or "skate" along the track rail until the movement of the car is stopped thereby.

Although I have specifically set forth and described the construction and relative arrangement of the parts of my improvements, yet I do not desire to be understood as limiting my claims to such specific constructions, as all such unessential changes may be made as fairly fall within the scope of the invention.

I claim as my invention and as new—

1. A skid-shoe placer comprising a base-element provided with an eye at one end and a reflexed portion at the opposite end thereof, and a skid-shoe connecting-arm detachably connected with said eye.

2. A skid-shoe placer comprising a base-element provided with an eye at one end thereof, means for securing said base element to a track-rail, and a skid-shoe connecting-arm hingedly and detachably connected with said eye.

3. A skid-shoe placer comprising means attachable to a track-rail, and means hingedly and detachably connected with said first named means the last recited means being detachable from the first recited means when struck by the wheel of a moving car, and said last recited means being adapted for engagement with a skid-shoe.

4. A skid-shoe placer comprising a base-element provided with an eye and a reflexed portion at opposite ends thereof, a skid-shoe connecting-arm hingedly and detachably

connected with said eye, and a spring adapted to resist the movement of said arm.

5. A skid-shoe placer comprising a base-element provided with an eye, a skid-shoe connecting arm hingedly and detachably connected with said eye, and a spring adapted to resist the movement of said arm.

6. A skid-shoe placer comprising a base element securable to a track-rail, and a skid-shoe arm hingedly connected therewith and adapted to be detached therefrom when struck by the wheel of a moving car.

7. In a skid-shoe placer, a base-element provided with an eye, means for securing said base-element to a track-rail, and a connecting arm detachably engaged with said eye, said arm being also adapted for engagement with a skid-shoe and to be disengaged therefrom upon being struck by the wheel of a moving car.

8. In a skid-shoe placer, a base element provided with an eye, means for securing said base-element to a track-rail, and a connecting arm hingedly engaged with said eye and adapted to be disengaged therefrom when struck by the wheel of a moving car, said arm being also adapted for engagement with a skid-shoe.

9. In a skid-shoe placer, a base-element provided with an eye and a reflexed end, the latter adapted for engagement with a track-rail, a plate removably connected with said base-element and adapted to co-act with said reflexed end in securing said base-element to a track-rail, and a bent connecting arm detachably engaged with said eye, one of its portions adapted for engagement with a skid-shoe.

In witness whereof I have hereunto set my hand at Galesburg, Ill., this 31st day of August, 1909.

THOMAS E. HINES.

In presence of—

MALCOMB BRUCE,  
H. M. RICHARDS.