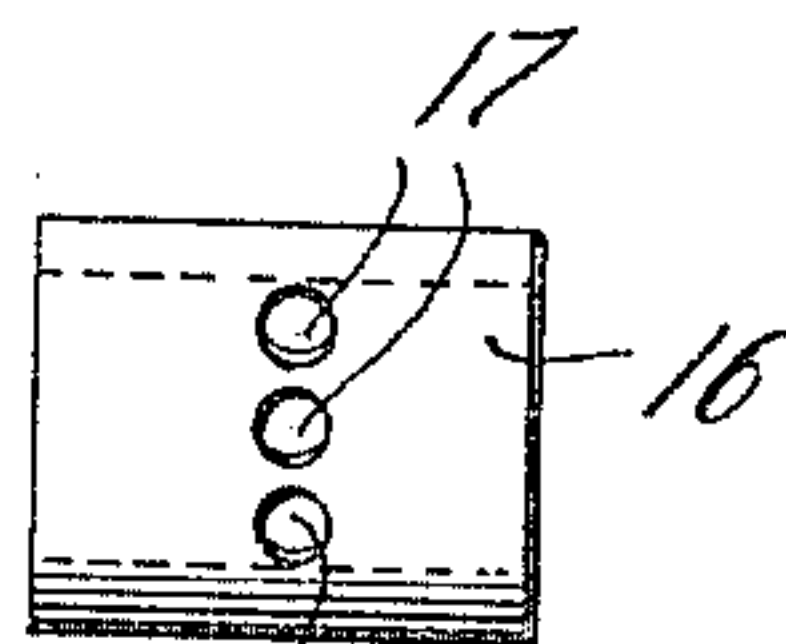
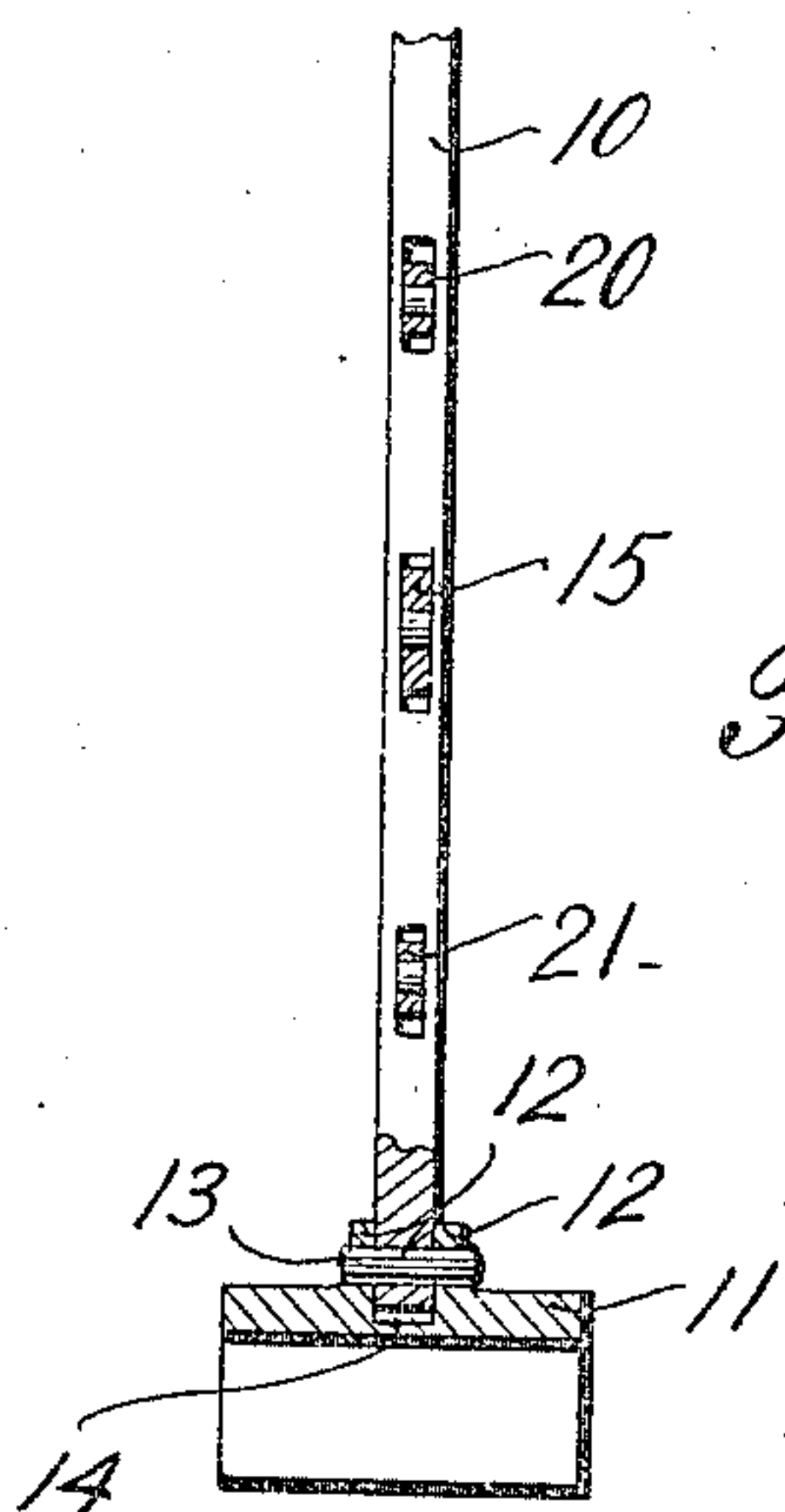
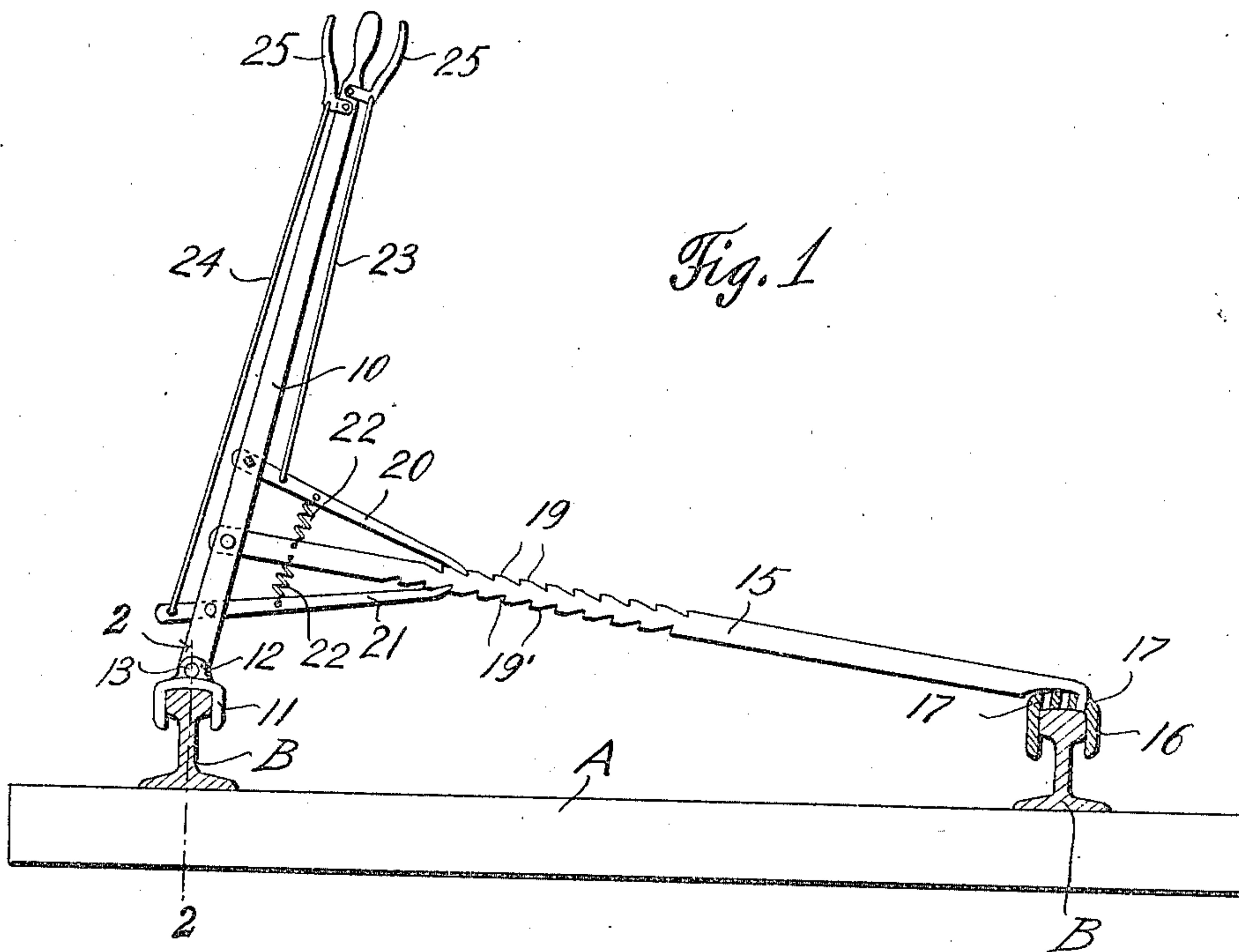


B. NETAHLA, JR.
RAIL STRAIGHTENER.
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960,682.

Patented June 7, 1910.



Witnesses

E. Larson
Charles Wilson

Inventor

B. Netahla Jr.

By

Decker & Cobb

Attorneys

UNITED STATES PATENT OFFICE.

BENJAMIN NETAHLA, JR., OF MILLIGAN, NEBRASKA.

RAIL-STRAIGHTENER.

960,682.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed March 18, 1910. Serial No. 550,141.

To all whom it may concern:

Be it known that I, BENJAMIN NETAHLA, Jr., citizen of the United States, residing at Milligan, in the county of Fillmore and State of Nebraska, have invented certain new and useful Improvements in Rail-Straighteners, of which the following is a specification.

This invention relates to railroad appliances or tools, and particularly to that class of tools known as rail straighteners, wherein the same is made light and durable, and of such a construction that it may be easily transported from place to place.

This invention also contemplates the construction of a rail straightener wherein the same will be operative both in spreading and drawing the rails.

With the above and other objects in view, this invention consists of the construction, combination and arrangement of parts all as hereinafter more fully described, claimed and illustrated in the accompanying drawings wherein;

Figure 1 is a side elevation of a device constructed in accordance with the present invention; Fig. 2 is a section taken along line 2—2 of Fig. 1, eliminating the rail; Fig. 3 is a plan view of the shoe carried by the extremity of the spanning rod.

Referring to the drawings, A indicates a tie carrying the rails B thereon in approximately the usual spaced relation.

The rail straightener forming the subject matter of the present invention comprises an operating lever 10 pivoted at its lower extremity to the shoe 11 which is adapted to engage preferably the movable rail. This shoe 11 comprises a longitudinally extending member adapted to fit over the head of the rail, said shoe being provided with the ears or lugs 12 between which is pivoted the lever 10 through the instrumentality of the transverse pin 13. The shoe is provided with a depression 14 in its upper face in which the lower terminal of the lever oscillates.

The spanning bar 15 is pivoted adjacent to the lower extremity of the lever 10 and extends toward the other rail B where it engages the shoe 16. This shoe is provided with a plurality of orifices 17 in which the downwardly bent lug 18 formed at the free terminal of the spanning bar is received.

A plurality of teeth 19 and 19' are formed on the upper and lower edges of the span-

ning bar respectively in such a manner that the teeth 19' are located centrally with respect to the teeth 19.

A pair of latches or pawls 20 and 21 are pivoted to the lever 10 above and below the pivotal point of the spanning bar 15 respectively. The pawl 21 is pivoted in such a manner that the work arm projects to the rear of the operating lever 10, thus having the fulcrum between the power arm and the work arm. The pawl 20, however, is pivoted to the lever at the extremity thereof and consequently has both the work arm and the power arm on the same side of the fulcrum.

The springs 22 are interposed between the pawls and the spanning bar 15 and consequently are adapted to retain said pawls normally in contact with the teeth.

A plurality of rods 23 and 24 are secured to the latches 20 and 21 respectively, the rod 24 being connected to the projecting portion of the lever 21, while the rod 23 is connected between the catch portion of the pawl 20 and the fulcrum thereof. The upper terminals of the rod are connected to the handles or levers 25 in such a manner that upon exerting a pressure upon said handles, the pawls will be disengaged from the teeth.

It will be noted from the foregoing that, when it is desired to spread the rails, the pawl 20 is raised from contact with the teeth and a pressure exerted on the lever 10 toward the opposite rail B. This movement will move the rail to which the shoe 11 is attached from the opposite rail. During this operation, the pawl will drop into the successive teeth and prevent the rails from springing back into their original positions upon removing the pressure from the lever 10. However, if it is desired to draw the rails together, the pawl 21 is removed from contact with the teeth and a pressure exerted in the opposite direction on the lever 10, consequently moving the rail to which the shoe 11 is attached toward the opposite rail, the pawl dropping into the successive teeth and preventing the springing back, as heretofore described.

Having thus fully described my invention, what is claimed as new is:

1. In a device of the class described, the combination with a spanning bar, of a lever pivoted to one extremity of said spanning

bar, shoes carried by the lower extremity of said lever and at the free terminal of said spanning bar, and means whereby said spanning bar may operate in either direction and be retained from springing back.

2. In a device of the class described, the combination with a spanning bar, a shoe detachably secured at one terminal of said spanning bar, a lever pivotally connected at the other extremity of said bar, a shoe pivoted to the lower extremity of said lever, and a series of oppositely disposed pawls adapted to coöperate with said spanning bar.

3. In a device of the class described, the combination with a spanning bar, a lever pivoted to one extremity of said rod, means whereby said bar and lever may engage the rails, and pawls above and below said bar

and pivoted to said lever adapted to co-operate with said bar in spacing said rails.

4. In a device of the class set forth, the combination with a spanning bar provided with a plurality of teeth, a lever pivoted to one extremity of said spanning bar, means whereby said lever and spanning bar engage the rails, and spring operated pawls above and below said bar adapted to coöperate with said teeth and retain the rails in spaced relation after the same are operated on by the spanning bar.

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

BENJAMIN NETAHLA, JR.

Witnesses:

C. SMRHA,

AGNES SMRHA.