

G. T. TURNER.
RAILROAD TRACK SCALE.
APPLICATION FILED NOV. 7, 1910.

1,012,935.

Patented Dec. 26, 1911.

3 SHEETS—SHEET 1.

Fig. 1.

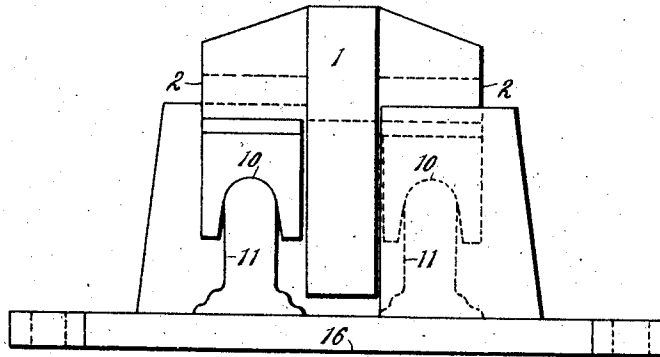


Fig. 3.

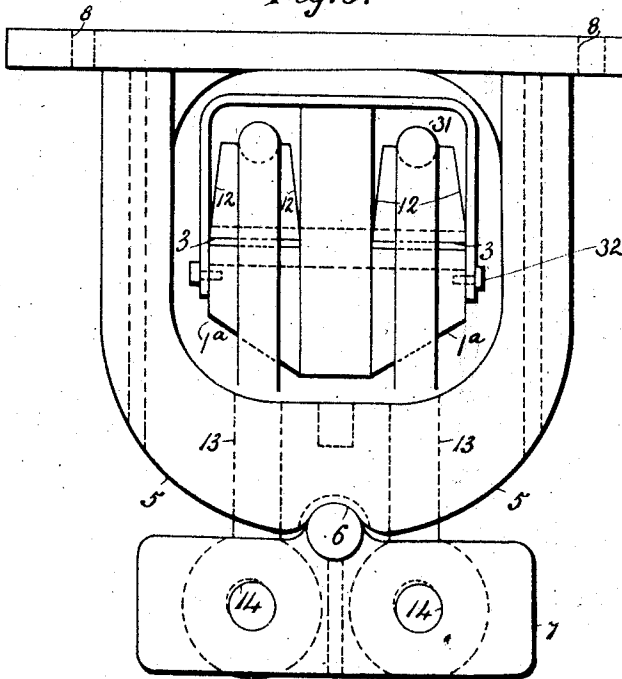
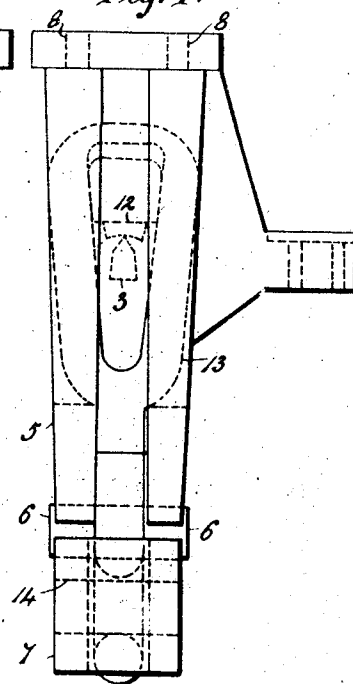


Fig. 4.



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3 SHEETS—SHEET 2.

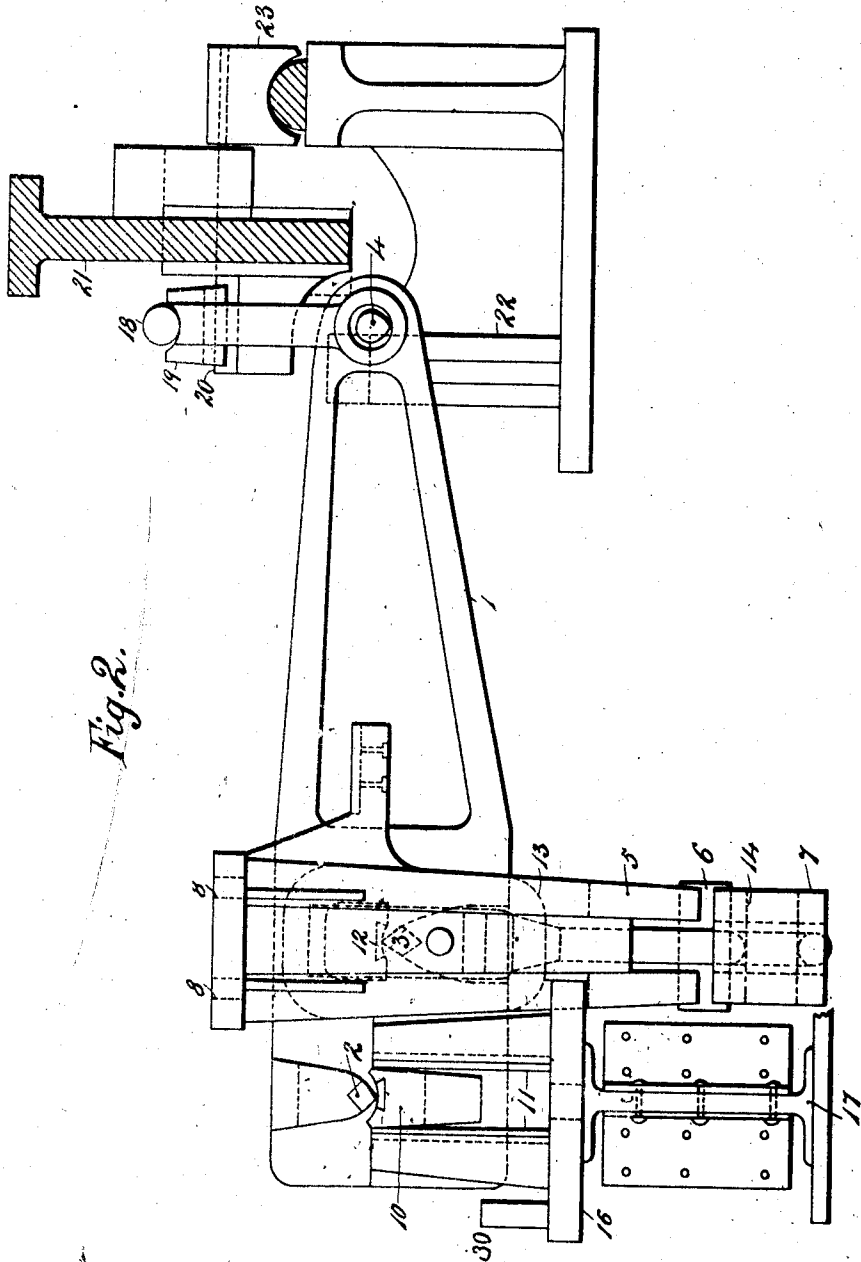


Fig. 2.

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3 SHEETS-SHEET 3.

Fig. 5.

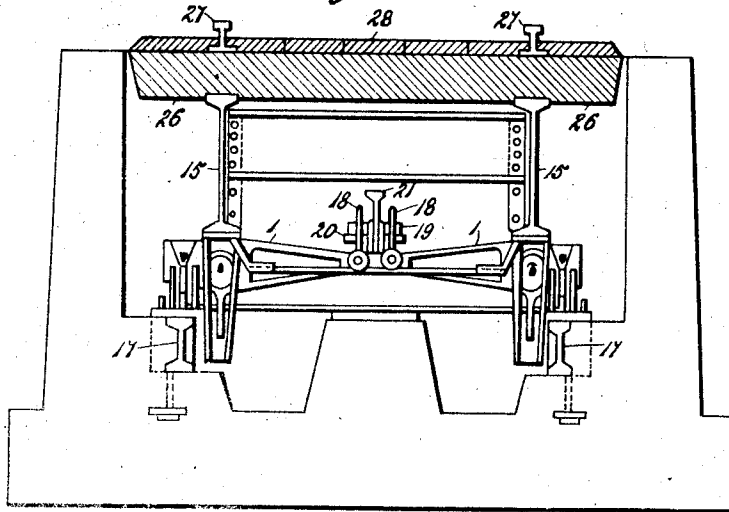
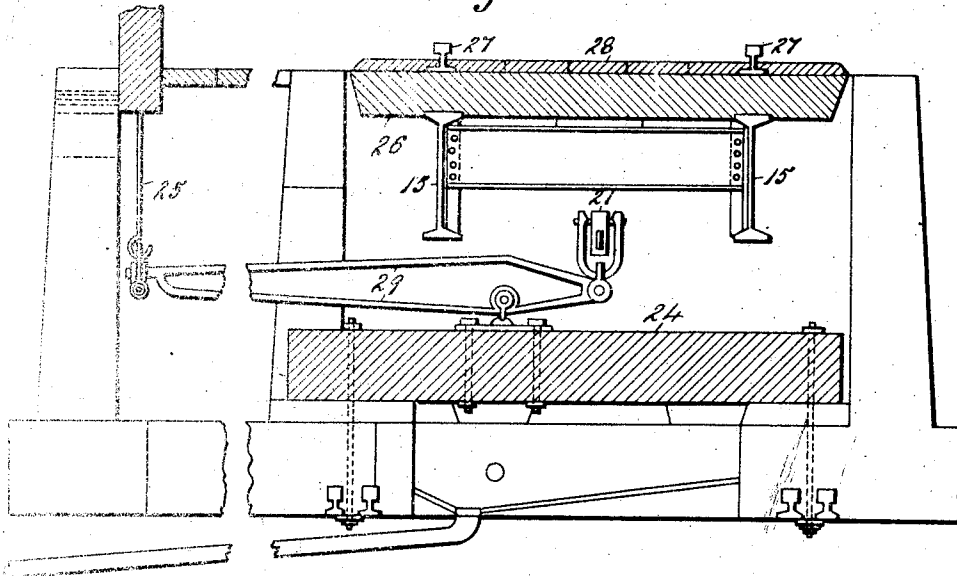


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE THOMAS TURNER, OF HAMILTON, ONTARIO, CANADA, ASSIGNOR TO GURNEY SCALE CO., OF HAMILTON, CANADA.

RAILROAD TRACK-SCALE.

1,012,935.

Specification of Letters Patent.

Patented Dec. 26, 1911

Application filed November 7, 1910. Serial No. 591,062.

To all whom it may concern:

Be it known that I, GEORGE THOMAS TURNER, a subject of the Dominion of Canada, residing at Hamilton, in the county of Wentworth, Province of Ontario, and Dominion of Canada, have invented new and useful Improvements in Railroad Track-Scales, of which the following is a specification.

The invention relates to certain improvements in the class of scales used on railroads by means of which the following advantages are secured: (1) A more easy mode of admitting repairs to be made. (2) A more perfect and free oscillation of the platform. (3) Greater stability of the levers. (4) More perfect adjustability of the rocker bearings. I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a detail rear view illustrating the mounting of the rear end of a main lever, hereinafter described, with one of the housing members removed, Fig. 2 is a side view of one of the main levers and its co-operating elements, Fig. 3 is a detached side view of one of the arches hereinafter described, Fig. 4 is an edge view of the parts shown in Fig. 3, Fig. 5 is an end view with the platform in section, and Fig. 6 is a central cross sectional view.

Similar letters refer to similar parts throughout the several views.

In the drawing 1, represents one of the main levers of solid steel and provided with three bearing pivots 2, 3, 4, as shown in Fig. 2, each of said levers is cast with an opening and the said steel pivots are driven through the openings in the levers with reinforcements at the back of the bearings for greater strength.

A series of inverted steel arches 5, rest on raised half round projections 6, of the rocker blocks 7, and are bolted to the stringers or I-beams 15, by bolts made to pass through holes 8, 8.

The pivot 2, rests upon rocker bearings 10, 10, which are of hardened steel and supported by feet 11, 11, one on each side of lever 1, giving a full, rigid and adjustable bearing to the said pivot 2.

The anti-friction blocks 12, 12, rest upon pivot 3, and carry a hanger 13, which is connected with rocker block 7, by pins 14, 14, thus supporting the load as received

from the I-beams 15, 15, in connection with the arch casting 5.

A yoke 31 may be provided, said yoke being secured by screws 32 to extensions 1^a of lever 1, which extensions underlie pivot 3, whereby the structure is further strengthened.

A block or bench plate 16, rests on a base concrete foundation reinforced by short steel I-beams 17, and supports the rocker bearings 10, 10, and feet 11.

The main lever 1, of which there may be any number more than four, is supported at the opposite or small end by a loop 18, held on anti-friction block 19, which in turn, rests on pivot 20, which passes through the center of train levers 21, the same resting on stand 22, the same being provided with adjustable rocker blocks 23, which are supported on the center stand 22.

24, represents the anchor sill for 5th lever, 29, which is in the center of the scale that runs to the beam rod 25, of the graduated bar, the latter not being thought necessary to show on the drawing.

26, Fig. 6, represents one of the base ties which carry the scale rails 27, and platform floor 28.

The old makes of railroad scales had a rigid bearing, the disadvantage of which was that when worn, the chair had to be removed and replaced by a new one. I construct the rocker block and chair in separate parts, but so combine them that I can remove the rocker block and insert a new one without removing the chair.

It may further be said that with the old method of constructing the pivots of the main levers, they were very difficult to remove when worn out, to be replaced with new ones.

With my improved device, the levers can be taken out without any difficulty or loss of time, and replaced easily and quickly, and at the same time allow free oscillation to the platform, while the levers remain practically rigid, the pivots always having a long horizontal even bearing.

It may still further be explained for greater elucidation, that the object of the split steel arch 5, is to allow the body of the hanger 13, to be made in one piece and to hang inside of the arch, with a loop to receive the saddle block 12, at the upper end, and an eye at the lower end to receive the

bearing pin 14, which shall be set at a right angle to the saddle block 12. This form of construction is intended to prevent the hanger from stretching under a heavy strain and to provide for the free oscillation of the scale platform in all directions, at the same time keeping the individual saddle blocks 12, in position on the knife edges without rocking or swiveling.

It will still further be observed that with the old method of construction the pivots of the main levers, when worn out, were very difficult to remove, when they required to be replaced with new ones. While with my construction, the worn pivots can be taken out without difficulty or loss of time and replaced easily and speedily while at the same time they always have a long horizontal even bearing.

If desired a stop 30 may be provided upon bench plate 16 to limit the movement of the main lever 1.

I claim:—

1. In a device of the character described the combination with a pair of inverted arch castings having recesses formed in their bottom faces, of a pair of hangers, a main lever, pivots carried by the main lever which lie between the arch castings, saddle blocks over which the hangers pass, said saddle blocks bearing upon the pivots of the main lever, a rocker block supported by said hangers, and transversely extending members carried by the rocker block which enter

the recessed under faces of the arch castings to provide a rocking support for said castings upon the rocker blocks.

2. In a device of the character described, the combination of an arch casting 5, a hanger, a main lever, a pivot carried by said main lever and lying within said casting, a saddle block upon said pivot with which said hanger engages, a rocker block engaged with said hanger and a member carried by said rocker block upon which said arch casting has rocking support.

3. In a railway scale, the combination of a split arch casting 5, a hanger 13, made integral and adapted to hang inside the arch, a loop formed at the upper end, a saddle block 12, made to pass through the loop, and rest on a bearing pivot, an eye at the lower end of the hanger 13, a bearing pin 14, made to pass through the eye at right angles to the saddle block, for the purpose of preventing the hanger from stretching under a heavy strain and allow free oscillation of a scale platform in all directions and keeping the individual saddle blocks in position on the bearing pivots without rocking or swiveling.

Signed at Hamilton, Ontario, Dominion of Canada, this 26th day of October, 1910.

GEORGE THOMAS TURNER.

Witnesses:

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