C. C. WARREN.

Railway Scale-Platforms.

No. 139,216. Patented May 20, 1873.

Fig. 2.

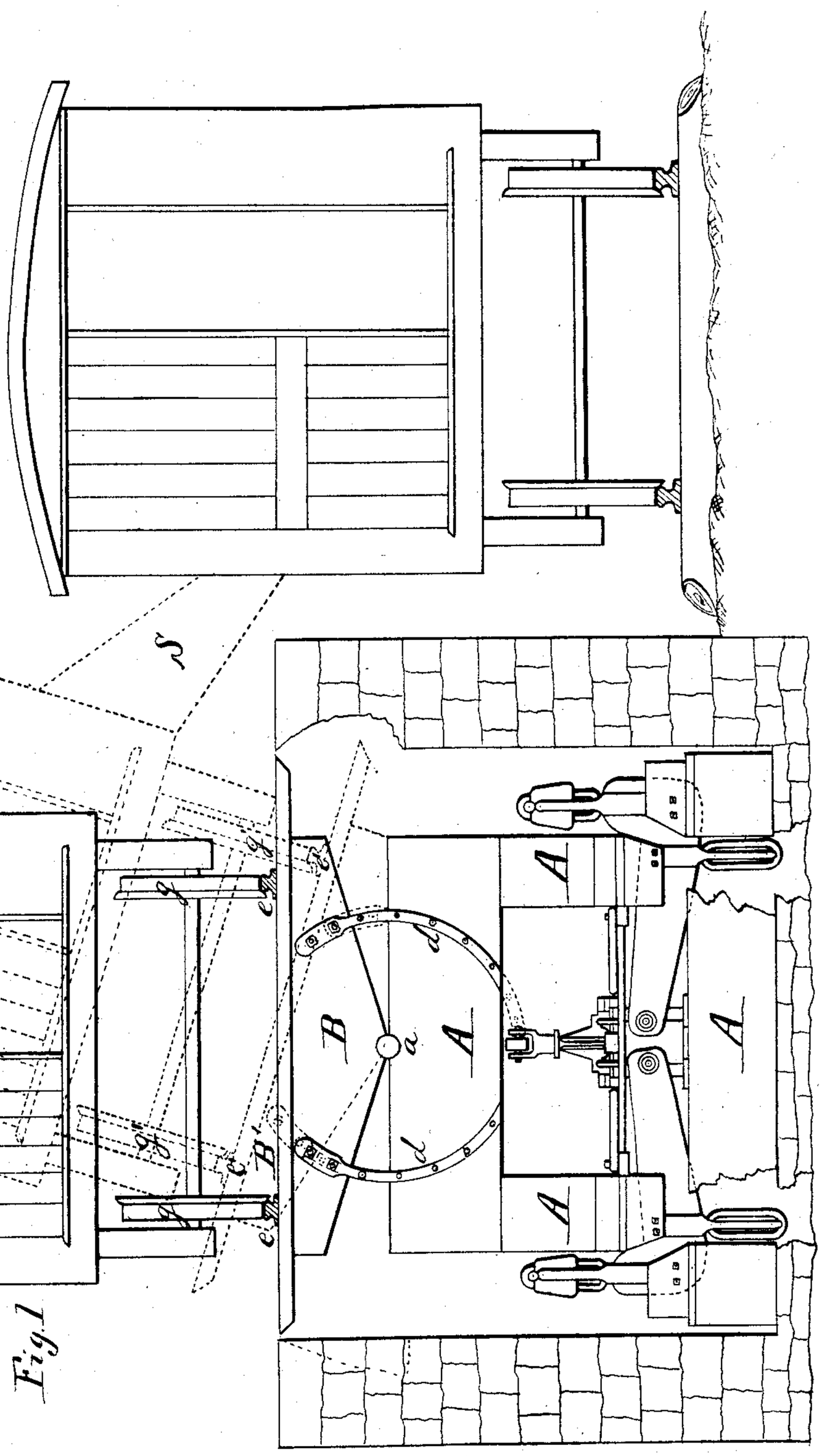

Fig. 1.

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CHARLES C. WARREN, OF EARL, ILLINOIS.

IMPROVEMENT IN RAILWAY-SCALE PLATFORMS.

Specification forming part of Letters Patent No. **139,216,** dated May 20, 1873; application filed November 23, 1872.

To all whom it may concern:

Be it known that I, CHARLES C. WARREN, of the town of Earl, in the county of La Salle and State of Illinois, have invented a new and useful Improvement in the Process of Weighing and Transferring Grain and other similar material from one conveying-vehicle to another; and I do hereby declare the following to be a full and accurate description of said improvement, referring to the accompanying drawing and to the letters and figures marked thereon as a part of this specification.

My improvement consists, principally, in combining an elevated railroad-track, laid upon the platform of railroad-track scales, with another railroad-track laid parallel therewith, and upon a lower bed than the platform of such track-scales, so as to admit of weighing a single car or a train of cars while loaded with grain or other similar material, and then transferring the grain, &c., to a car or cars standing on the lower and parallel track; then obtaining the weight of the car or cars from which the grain, &c., has been transferred, and thus obtaining at a single operation the net weight of the grain, &c., and transferring the same to other cars or vessel of transportation.

In the accompanying drawing, Figure 1 represents a vertical and end view of the railroad-track scale, the elevated railroad-track with its rocker-beam for inclining the car, and the vertical and inclined position of the car upon the scale while the weighing and transferring process is being conducted. Fig. 2 represents the position of the receiving-car upon the lower track and the connection between the spout S. The dotted lines, which connect Figs. 1 and 2, show the relative positions of the cars during the process of transferring the grain, and also the means by which the transfer is effected.

In Fig. 1, A A A, &c., represent the railroad-track scale with its foundations and surrounding frame-work and platform upon which the elevated track is laid. B B represent the rocker-beam, which rocks upon its pivot-point *a*, and is held in any desired position by means of the circular iron stay-lock *d d*, made fast to the rocker-beam by means of screw-bolts and nuts, as seen at *h h*. In Fig. 1, *e e* represent an end view of the iron rail or track laid upon the platform of the track-scales. *g g* represent the car-wheels standing on the track. C C represent the body of the car standing in position to be weighed before the transfer of the grain, and C′ C′ show the position of the body of the car when tilted for transferring the grain to the car, shown in Fig. 2, which represents its position while receiving the transfer. The track upon the platform of the track-scales must be sufficiently above the track upon which the receiving car or cars stand to place the loaded car, when on the scales, so far above the receiving-car that the grain passing from the lowest point of the discharging-car shall be above the highest point or line of the grain in the receiving-car when fully loaded. This elevated track, built upon railroad-track scales, may be continued any desirable distance, so as to be able to weigh any desirable number of loaded cars at a single operation, the track-scales being set at a distance from each other corresponding to the length of each car. The elevated track is thus set upon a series of elevated track-scales, and is combined with a lower railroad-track, set on its permanent bed, running parallel with and at a suitable distance from the elevated track to admit of the easy transfer of the grain by the connecting-spout S.

The operation of weighing and transferring is as follows: By means of suitable inclines the loaded cars are run upon the elevated track in the usual manner, each car placed in proper position over the scale, its gross weight taken, and noted down. It is then tilted or inclined toward the receiving-car standing on the lower track by means of the rocker-beam B. The connecting-spout S is then adjusted, and, by opening the gate-way in the discharging-car, the grain, &c., by the force of gravity, commences flowing into the receiving-car, and may be aided in doing so by a man with a grain-shovel, throwing the grain to the spout S. The grain being all transferred, the car on the elevated track is again placed in its upright position, its weight is taken and deducted from the gross weight, giving the net weight of the grain transferred.

In the construction and operation of this improvement the rocker-beam B may or may not be used for facilitating the operation of

transferring the grain, as parties may desire.

The above is a full description of the structure and operation of my said improvement.

What I claim as my invention, and desire to secure by Letters Patent, is—

An elevated railroad dumping scale-platform, provided with the rocker-beam B and stay-lock *d*, in combination with the frame A, adapted to operate in conjunction with a lower and parallel track, substantially as and for the purpose specified.

CHARLES C. WARREN.

In presence of—

JOEL TIFFANY,

N. H. WARREN.