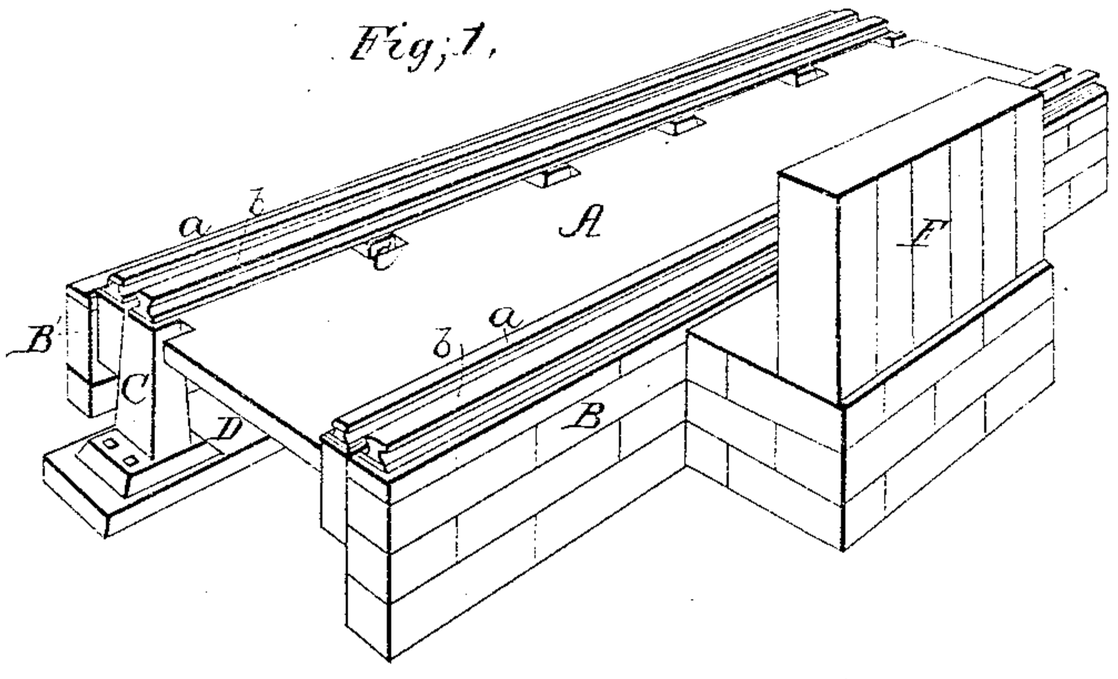
I. Pusey.

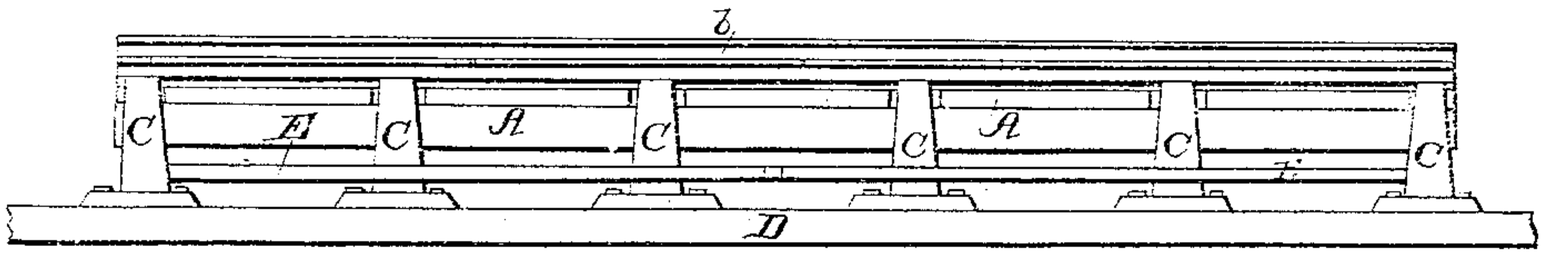
Railroad Platform.

No. 16,286. Patented Dec. 23, 1856.

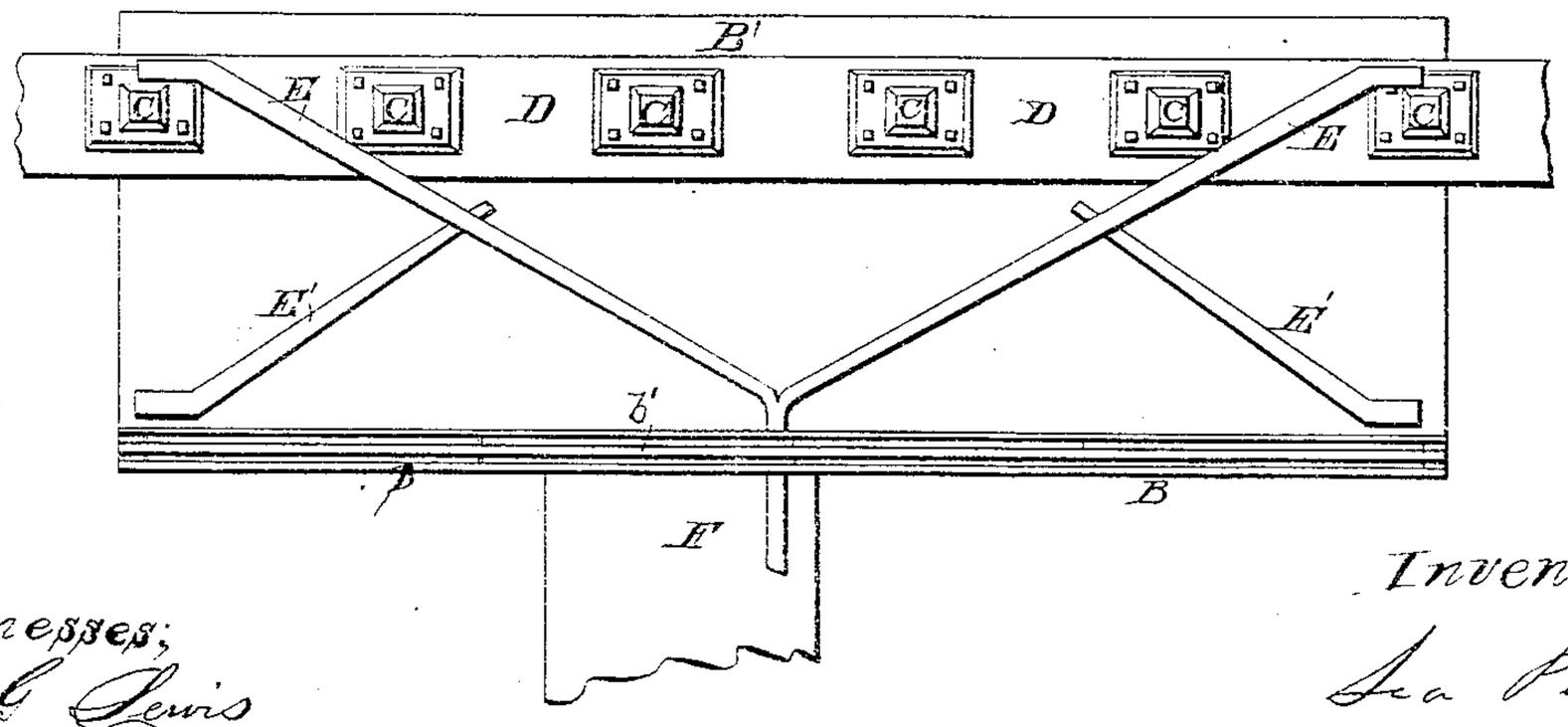
Fig; 1.



Fig; 2.



Fig; 3.



Witnesses;
Saml G Lewis
Wm. Norris

Inventor;
I. Pusey

UNITED STATES PATENT OFFICE.

LEA PUSEY, OF DOWNINGTOWN, PENNSYLVANIA.

ARRANGEMENT OF RAILROAD PLATFORM-SCALES.

Specification of Letters Patent No. 16,286, dated December 23, 1856.

To all whom it may concern:

Be it known that I, LEA PUSEY, of Downingtown, in the county of Chester and State of Pennsylvania, have invented a new and useful Improvement in Railroad-Scales; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a perspective view; Fig. 2, a longitudinal vertical section, and Fig. 3, a plan view—like letters indicating the same parts when in the different figures.

The nature of my invention consists in a peculiar mode of constructing and arranging the rails and platform of a railroad scale, in relation to the supports and rails of the main track, that the locomotive and train may pass directly over the scale without injuring, or even touching the same—whereby the expense and room required for placing the scale on the outside of the main track as heretofore, is entirely avoided.

Referring to the drawings—A, is the platform of the scale; *a*, *a'*, its rails, secured thereto by spikes in the usual manner; B, B', the side walls of the scale pit; C—C, a longitudinal series of cast iron posts, which are bolted firmly down to a longitudinal sill (D) (or to a series of cross sills) so as to project up through a corresponding series of roomy holes, made in the platform of the scale, near one side; and reaching above the upper side of the same, about one or two inches, as shown in the drawings. Upon the top of these posts (C—C,) one of the main-track rails (*b*) is fixed—the corresponding track-rail (*b'*) being fixed upon the side wall (B) of the pit. The platform of the scale, being supported on the levers (E, E',) and connected with the weighing box (F,) in the usual manner. The rails (*a*, *a'*,) are, of course, fixed to the platform so as to be up on a level with the rails of the main-track—and at each end of the scale, the main-track is made to "switch" so as to run the train upon the rails of the platform or not, as occasion may require. It will be readily perceived that notwithstanding the proximity of the two sets of rails as described, they are, nevertheless entirely distinct, and that the platform of the scale will rise and fall in weighing, without touching the main track, or the posts (C—C)—and that when the switch is placed in juxtaposition with the track rails (*b*, *b'*,) the train will pass over the scale without touching it.

The utility and advantage of my invention consists in the fact that a scale can thereby be combined with the main track of the rail road so as to avoid entirely the "outside track" for the scale, as heretofore required—thus saving in the expense of construction, besides enabling me to place the scale in a position where the room for an "outside-track" cannot be procured.

In order to preserve railroad scales from the destructive effects of locomotives and trains of cars passing rapidly upon them it has heretofore been necessary to place the scale in a "siding" or outside track constructed for the purpose, and connected with the main track by "frogs" and "crossings"—involving an expense of about thirteen hundred dollars for the rails and cross ties alone, besides the necessary occupancy of ground for the same of about three hundred yards in length and five in width, which latter, in a city especially, it is of great pecuniary importance to avoid, even if it were possible in all such cases to find locations suitable in other respects for the purposes required.

A chief object then, of my invention is to dispense with this "siding" as a means of preserving the scale from injury; and at the same time also to provide adequate and much less costly means for the necessary weighing—whether the scale be located in the main track, or in a subsidiary or outside extra track, over which the locomotive and train may sometimes be required to pass—so as to prevent the injury mentioned. It will be apparent that these advantages are perfectly attained by combining the scale with either the main or a subsidiary track, in the manner described herein; and that the track is not required to be "crossed" to get the cars either on or off the scale—and therefore the "frogs," heretofore necessary for such purpose, are also dispensed with—an economical advantage never before attained in connecting a scale "siding" with the main track. And besides these advantages consequent upon the adoption and use of my invention, there is another of great importance, consisting in the fact that when the locomotive is used for drawing the cars upon a scale in the "siding," as is necessary on a road doing a "heavy business," the locomotive can be

passed, backward or forward, over the scale without touching, or bearing upon it, and also without crossing the track of the "siding"—because the rails of the said siding, being laterally in such near proximity to the rails of the platform of the scale as described, the passage of the locomotive over the scale without bearing upon it is readily effected, in advance of the cars, by simply "switching" the track rails at each end of the platform as before described—and in constructing and applying new scales on my plan—the track rails and platform rails may respectively be arranged together laterally, so closely as not to require the track rails to be "switched" more than four or five inches, to effect the objects required. In applying my improvement to the scales now in use for weighing cars on railroads, in which the two sets of rails cannot be brought into sufficiently near proximity laterally to admit of switching directly from the one to the other. I fix the first length of the rails of the track at each end of the platform, permanently to the cross sills, so that the ends next to the platform shall be in juxtaposition with the rails on the same, and the said track rails divergent so as to bring their opposite ends within four or five inches of the main track—the rails of which being made to switch at this point so as to communicate alternately with both sets of rails in the manner before described. I am aware that some years ago a certain coal-yard or cart scale, being in a location in this city (Philadelphia) which was required to be crossed by a railroad track, and it being desirable to retain the use of said scale for weighing carts—that the railroad track was constructed so as to pass the train of cars over the said scale without bearing upon the same and without destroying its previous adaptation as a cart-scale—by supporting one of the rails of said track upon wooden posts passing up through roomy holes in the platform—but as there was no connection made with the said track, nor any adaptation of the said platform of the scale for receiving or weighing cars from the said track, or elsewhere, in any manner whatever, it is fairly to be presumed that devices or arrangements for such a purpose were never thought of by the constructor—at least it is certain that the idea, if ever conceived, was never carried out or applied; and the said arrangement for simply crossing the coal-yard or cart scale by a railroad track, having been in public use for eight or ten years, it has therefore been abandoned to the public.

Having thus described the construction and operation of my invention, and pointed out its utility and advantages, I proceed to state that I do not claim a railroad scale in combination with either a permanent or subsidiary track, or "siding," so that a locomotive or cars may be passed upon the said scale; nor simply approximating two tracks of a railroad so that a locomtive or cars may be "switched" from one to the other,—irrespective of the combination and arrangement of the same with the platform of the scale as herein described, so as to avoid both the crossing of the track and the consequent use of a "frog" or its substitute; nor do I claim supporting part of a railroad track upon posts or supports of any kind arranged so as to pass up through roomy holes made in the platform of a scale so as to admit a locomotive or cars to pass over the same without bearing upon the scale—irrespective of the peculiar arrangement and combination of the same with the scale as herein described, whereby the said scale is adapted for receiving, weighing and discharging the said railroad cars without crossing the track or using a "frog" or its substitute; but

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

The arrangement of the platform of a railroad scale, either in the main or a subsidiary track of a railroad, substantially in the manner herein described and set forth—so that when the said platform is not in use for weighing as a railroad scale, the locomotive and train may pass directly over the same without bearing upon the said platform or scale, and also so that the cars may be passed on and off the said scale, in the course of weighing, without crossing the track, and therefore without using a "frog" or its substitute, as described—whereby all the advantages heretofore derived from a "siding" constructed for preserving the scale from the injurious effects of the locomotives and trains passing rapidly over it, are equally attained; and the room and expense required for the construction and use of the said "siding" entirely avoided.

LEA PUSEY.

Witnesses:
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SAML. G. LEWIS.