Jan. 15, 1924. 1,480,732

J. J. MAGRADY

PLATFORM SCALE

Filed April 17, 1922

Fig. 1.

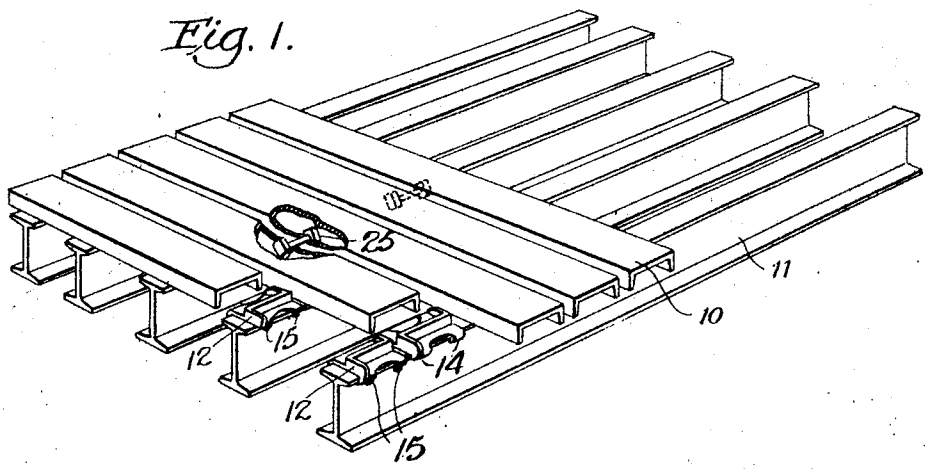


Fig. 2.

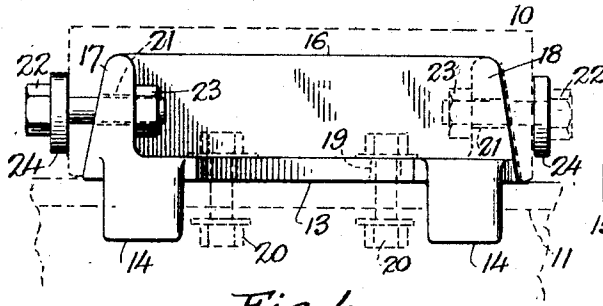


Fig. 3.

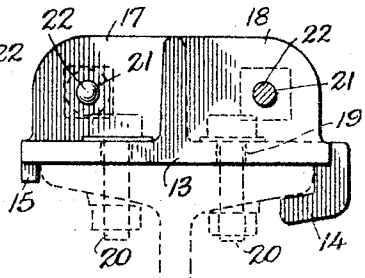
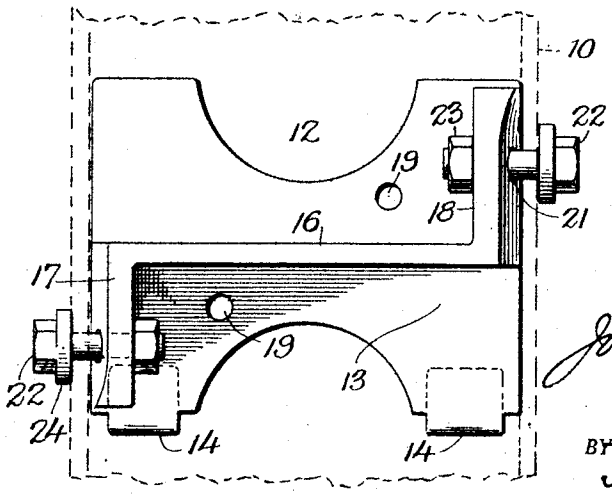


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH J. MAGRADY, OF CHICAGO, ILLINOIS.

PLATFORM SCALE.

Application filed April 17, 1922. Serial No. 554,337.

To all whom it may concern:

Be it known that I, JOSEPH J. MAGRADY, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Platform Scales, of which the following is a specification.

My present invention relates generally to platform scales, and more particularly to heavy duty platform scales particularly those of that type used by municipalities and others where the platform is a part of a roadway, that is alley, street or the like, the deck of the platform being flush with the surface of such roadway, and my object is the provision of an all-metal deck for scale platforms of this type, which will be lasting and durable and which may be taken up or removed with the least possible expenditure of labor and time and adapted to carry any desired load by merely changing the weight and size of the deck forming members I propose.

In the accompanying drawings illustrating my invention and forming a part of this specification,

Figure 1 is a perspective view of a portion of the scale deck proposed by my invention, and

Figures 2, 3 and 4 are respectively a side, end and top plan view of one of the connecting castings.

Referring now to these figures, and to Figure 1 in particular, the scale deck according to my invention is made up of a plurality of spaced parallel channel beams 10 inverted upon and disposed at right angles to a support including a series of spaced parallel I-beams 11. In other words the channel beams 10 are disposed so that they open downwardly transversely across the I-beams 11 to each of which provision is made for connecting each of the channel beams in such a manner that the spaced parallel relation of the latter is maintained at all times and accidental displacement effectively prevented by the use of a minimum number of parts requiring disconnection in the event of removal of the deck for any purpose whatsoever.

I also propose such connecting means that, by virtue of the manner in which the channel beams 10 are disposed, that is their inverted disposition, the connecting means are completely housed and normally protected both from possibly injury and also from the elements.

For the above purposes each of the supporting I-beams 11 is engaged at spaced points along its upper flanges or head by a series of clamping members 12, each of which as most clearly shown in the details, Figures 2, 3 and 4, includes a flat base plate 13 adapted to be seated upon the I-beam, this base plate having at one side depending and inturned angular flanges 14 located adjacent to its opposite ends so as to extend beneath one side flange of the upper head of the I-beam, and having at its opposite side and adjacent to its opposite ends at points opposite the flanges 14, a pair of depending lugs 15 which engage the opposite side of the head of the I-beam so that each clamping member is thus engageable with an I-beam at any desired point along the length of the latter.

The base plate 13 of each clamping member has an upstanding rib 16 projecting therefrom along the line of its longitudinal axis so as to not only strengthen the body plate itself but also act to strengthen and reinforce transversely disposed upright end flanges 17 and 18 which extend partly across the opposite ends of the body plate, in relatively opposite directions from the opposite ends of the rib 16 to which the inner ends of these flanges are joined. Thus the upstanding flanges 17 and 18, whose outer faces it will be noted are inclined to correspond to the inclination of the inner side surfaces of the channel beams 10, form with the upright lengthwise rib 16 a continuous Z-shaped web which, in view of the connection of the base plate flatwise upon the upper head of an I-beam 11 avoids buckling, warping or other distortions.

At opposite sides of its transverse axis and also upon relatively opposite sides of the central lengthwise rib 16, the body plate 13 of each clamping member beneath the two end channel beams has openings 19 therethrough for the reception of bolts 20 which also pass through vertical openings conformably positioned in the upper flanges or head of the I-beams 11 near their ends, and by reference to Figure 3 it will be noted that the upstanding flanges 17 and 18 of each clamping member are each provided with a centrally located opening 21 therethrough to receive a bolt 22 which passes horizontally therethrough and through con-

formable openings in the depending side flanges of the inverted channel members, these bolts 22 it being noted from Figures 2 and 4 in particular being extended inwardly through the side flanges of the channel beams and the flanges 17 and 18 of the clamping members so that the nuts 23 utilized on the bolts will be upon the inside and the threads thus protected from injury.

The outer heads of the bolts 22, which it will be noted are disposed against lead sealing washers 24, form spacing members between adjacent channel beams whereby the latter are held in uniformly spaced relation throughout their lengths at all times and throughout the entire series thereof forming the deck in view of the location of clamping members 12 upon each of the I-beams 11 along the entire length of each of the deck forming channel beams 10.

It is obvious from the foregoing that as each of the clamping members has downwardly projecting and inturned I-beam engaging flanges 14 at one side and mere I-beam abutting lugs 15 at the opposite side, considerable advantage with respect to permanent positioning and avoidance of accidental displacement of the deck forming channel beams, under the severe strains of use, may be obtained by reversing the positions of alternate series clamping members along the I-beams, i. e. reversing the clamping members of alternate channel beams and connecting reversed channel beams in pairs by transverse bolts 25 as seen in Figure 1, such reversal being obviously permitted by the particular construction of the clamping members with respect to their connection to both the I-beams and the channel beams without varying the regular uniform boring of the channel beams for the reception of the connecting bolts 20 and 22.

I claim:

1. An all-metal deck for heavy duty platform scales including a series of spaced parallel supporting beams, a series of spaced parallel channel beams inverted upon, and disposed at right angles to, the said supporting beams, clamping members secured to the several supporting beams at spaced points therealong, said clamping members being disposed within and connected to the channel beams and completely covered and protected thereby and bolts connecting said clamping members with the channel beams.

2. An all-metal deck for heavy duty platform scales including a series of spaced parallel supporting beams, a series of spaced parallel channel beams inverted upon and extending at right angles to the said supporting beams, and clamping members having means for clampingly engaging the supporting beams at spaced points therealong, each of said clamping members upstanding within and between the sides of, one of the channel beams and having connecting flanges, and connecting bolts extending through the said flanges of the connecting members and through the sides of the channel beams.

3. An all-metal deck for heavy duty platform scales including a series of spaced parallel supporting beams, a series of spaced parallel channel beams inverted upon and extending at right angles to the said supporting beams, and clamping members engaging the supporting beams at spaced points therealong, said clamping members having upstanding flanges within and between the sides of the channel beams, and connecting bolts extending through the said flanges of the connecting members and through the side flanges of the channel beams, the last mentioned connecting bolts having their heads turned outermost beyond the sides of the channel beams and forming spacing members between adjacent channel beams to uniformly space the latter throughout their lengths.

4. An all-metal deck for heavy duty platform scales including a series of spaced parallel supporting beams, a series of spaced parallel channel beams inverted upon and extending at right angles to the said supporting beams, and clamping members engaging the supporting beams at spaced points therealong, said clamping members upstanding within the channel beams and between the sides thereof, and having connecting flanges, and connecting bolts extending through the said flanges of the connecting members and through the side flanges of the channel beams and acting as spacing members between the channel beams, said clamping members each having a body plate seated on one of the supporting beams and being provided with depending and inturned beam engaging flanges at lengthwise spaced points on one side and with depending beam engaging lugs at the other side opposite the said flanges.

5. An all-metal deck for heavy duty platform scales including a series of spaced parallel supporting beams, a series of spaced parallel channel beams inverted upon and extending at right angles to the said supporting beams, clamping members engaging the supporting beams at spaced points therealong, said clamping members upstanding wholly within the channel beams and between the sides thereof and having flanges, and connecting bolts extending through the said flanges of the connecting members and through the side flanges of the channel beams, said clamping members being each provided with depending beam engaging elements at the opposite sides thereof and having an upstanding centrally disposed rib connecting the upstanding flanges thereof within the channel beams.

6. An all-metal deck for heavy duty scales of the platform type including a series of spaced parallel supporting beams, a series of spaced parallel tread beams disposed on and crossing the said supporting beams at right angles thereto, and a series of clamping members secured at spaced points along the tread beams having means to reversibly clamp the supporting beams, the end tread beams having their clamping members securely bolted to the supporting beams, and each of the tread beams between said end beams having its clamping members secured in alternately reversed relation to the supporting beams therebeneath as described.

In testimony whereof I have affixed my signature.

JOSEPH J. MAGRADY.