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Machala

[11] **3,727,707**

[45] **Apr. 17, 1973**

[54] **CONCRETE PIT AND DECK CONSTRUCTION FOR PLATFORM SCALES AND METHOD OF MAKING THE SAME**

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[52] **U.S. Cl.** **177/134,** 52/169, 52/266

[51] **Int. Cl.** **G01g 19/02**

[58] **Field of Search**.....177/132–135, 253; 52/169, 266, 602

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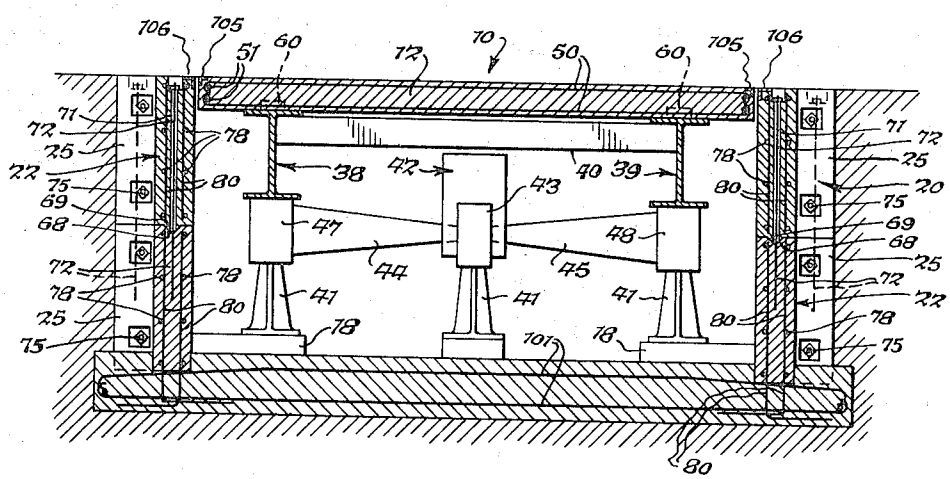
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[57] **ABSTRACT**

A pit and deck construction for platform scales including a plurality of precast concrete panels joined end-to-end horizontally and secured to a supporting weighbridge to form the deck. The pit walls each comprise a plurality of precast concrete panels joined end-to-end, disposed vertically and supported by the pit floor, and the panels include flanges which when connected to adjacent flanges of adjoining panels form pilasters for supporting the walls. The walls are constructed by supporting a first row of panels a predetermined distance above the pit bottom and then pouring the concrete floor to a level above the bottom edge of the row of panels. A second row of panels then is placed on the first row, being supported thereby, and horizontally adjacent and vertically adjacent panels are connected together.

7 Claims, 11 Drawing Figures



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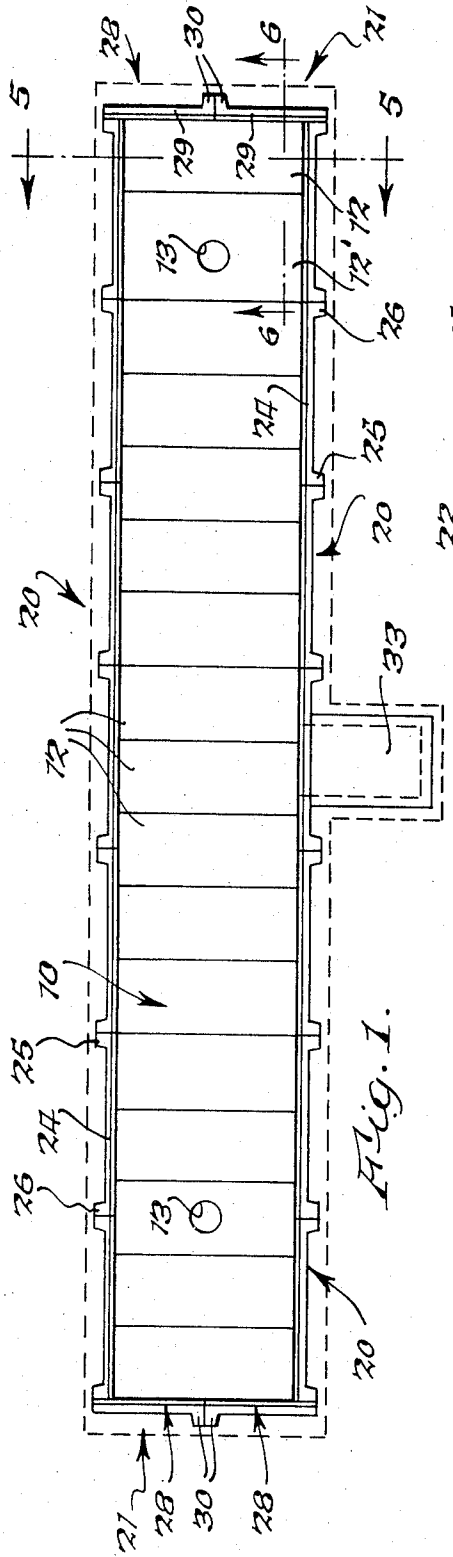


Fig. 1.

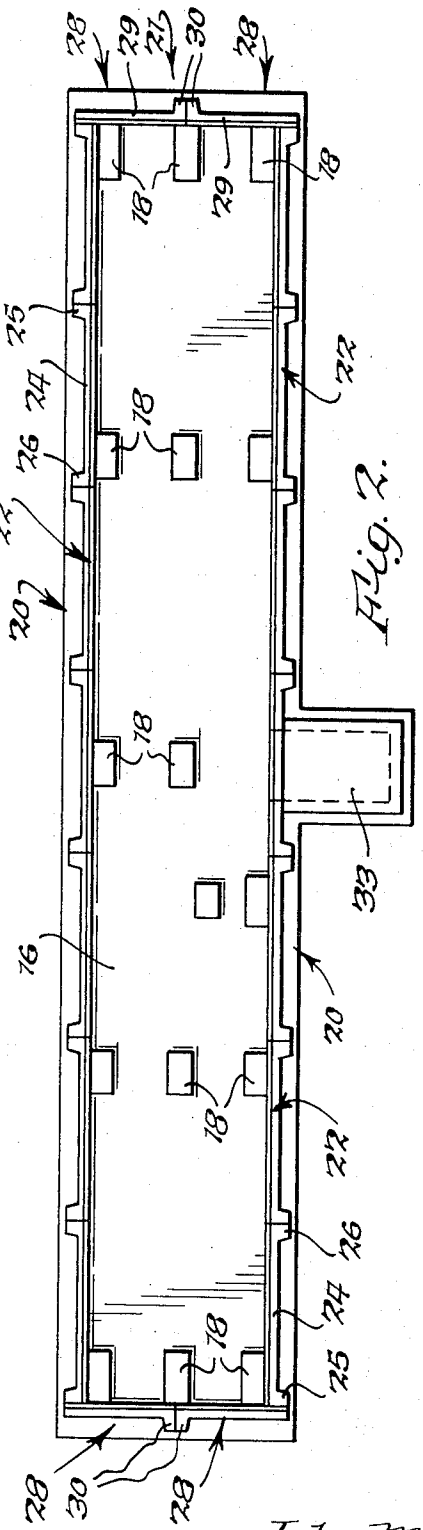


Fig. 2.

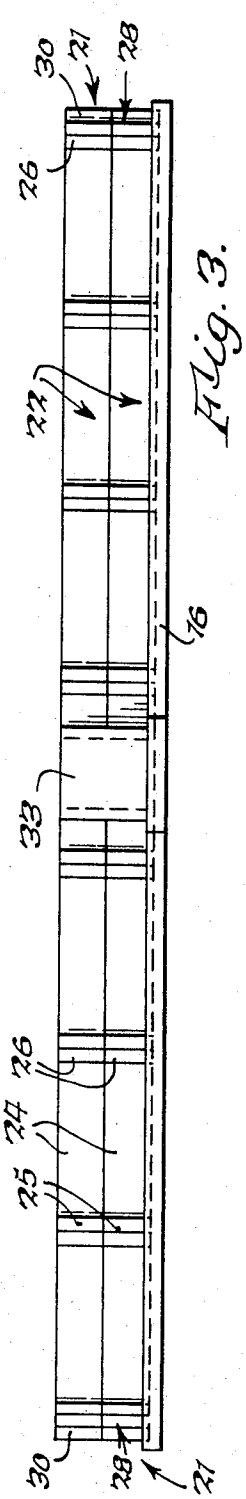


Fig. 3.

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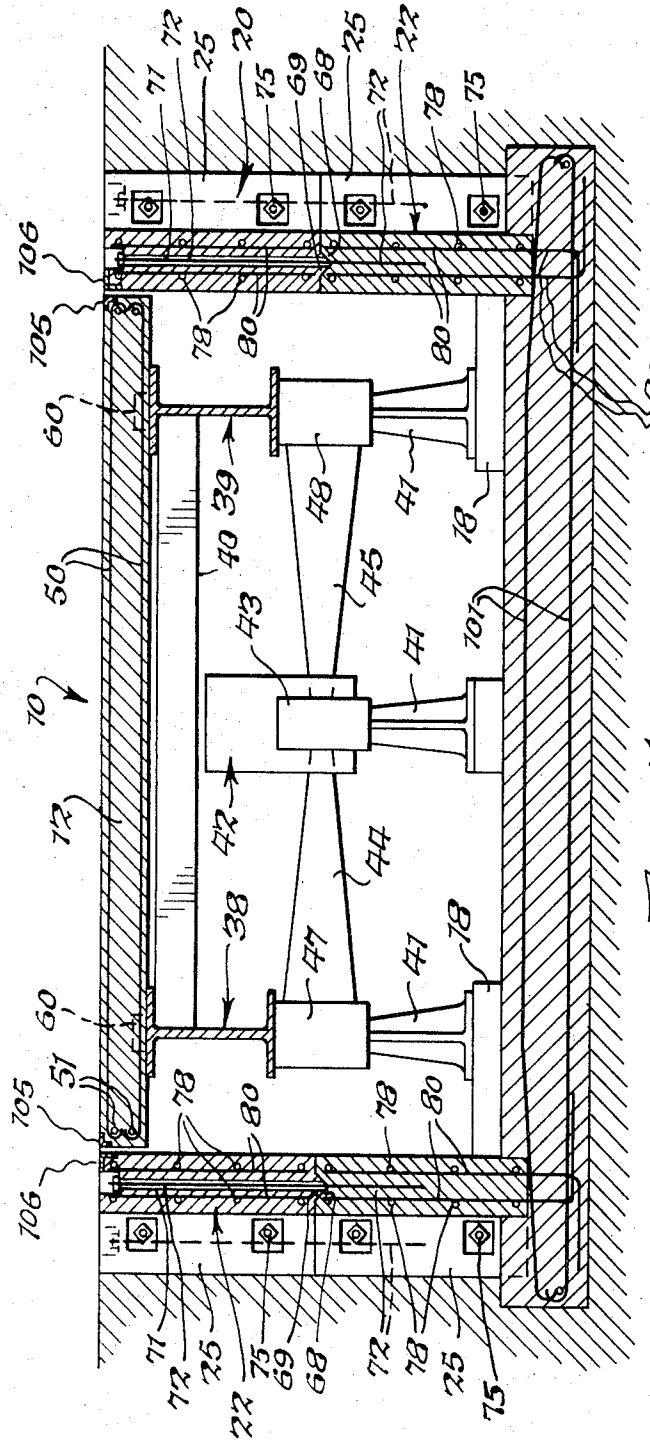


Fig. 5.

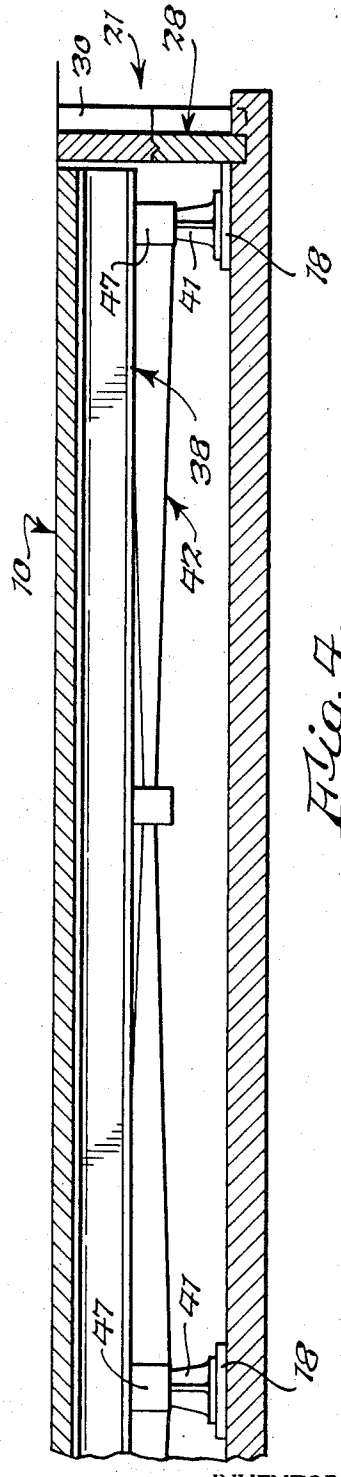


Fig. 4.

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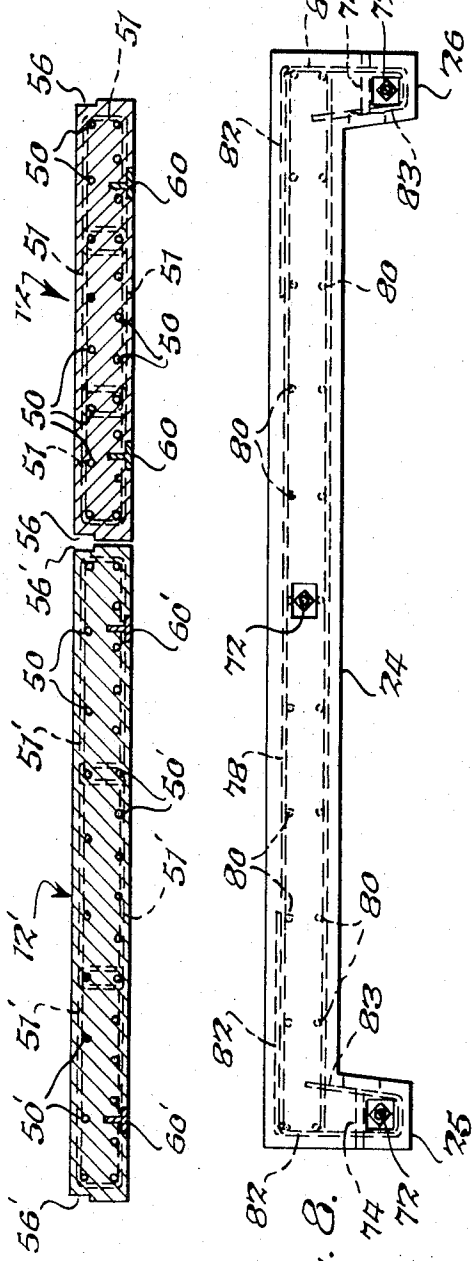


Fig. 6.

Fig. 8.

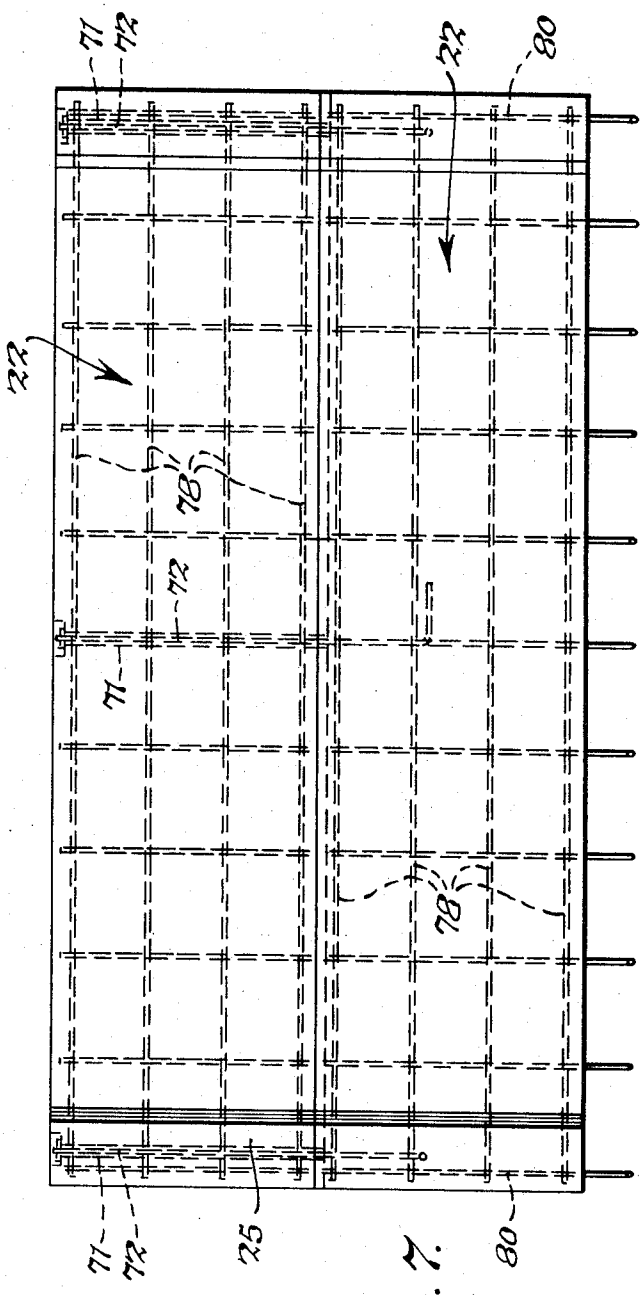


Fig. 7.

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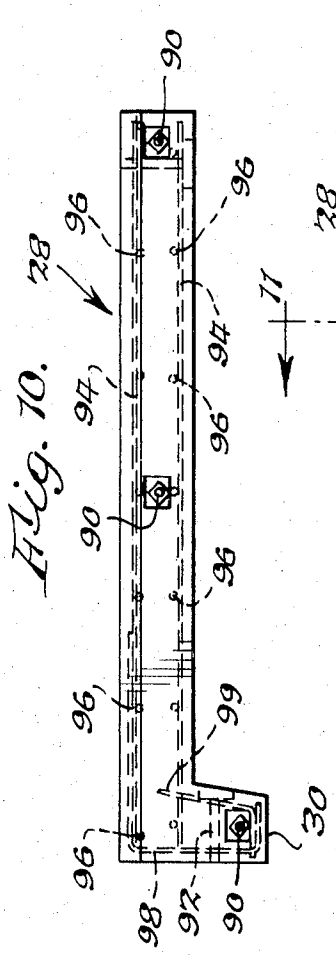


Fig. 10.

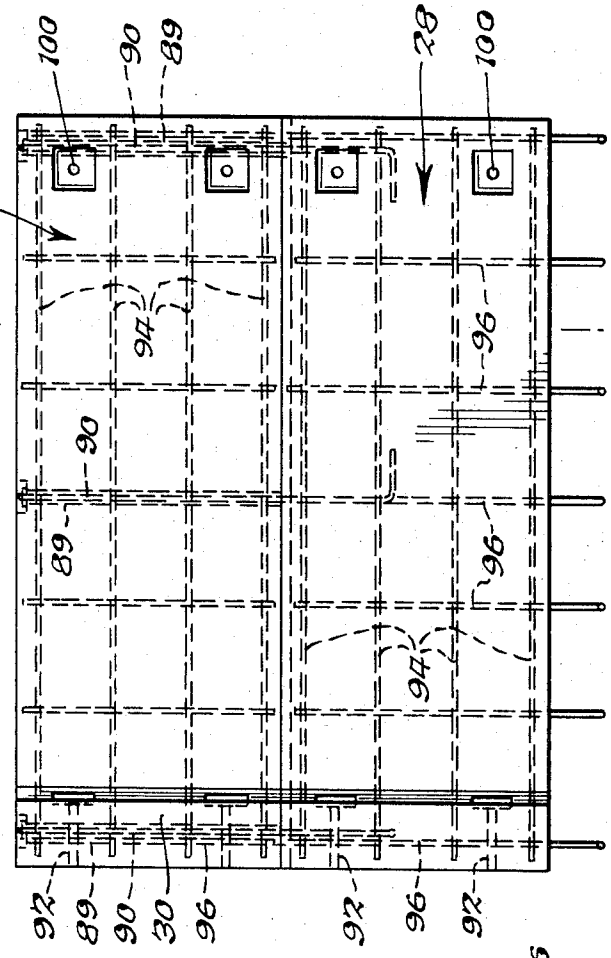


Fig. 9.

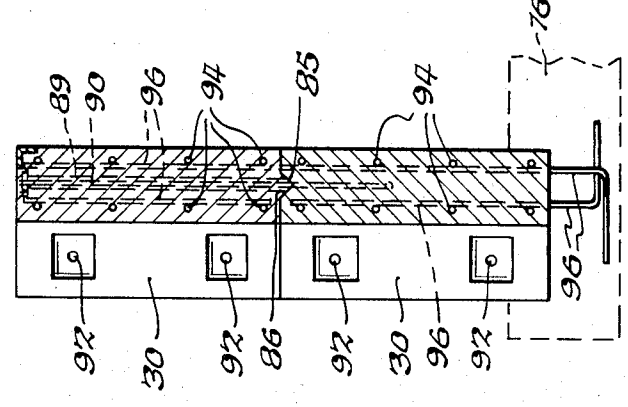


Fig. 11.

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CONCRETE PIT AND DECK CONSTRUCTION FOR PLATFORM SCALES AND METHOD OF MAKING THE SAME

BACKGROUND OF THE INVENTION

This invention relates to platform scales for weighing heavy vehicles such as trucks and, more particularly, to a new and improved pit and deck construction for such scales.

Platform scales for weighting heavy vehicles such as trucks include a pit below the ground level provided with a floor and walls formed from concrete. Within the pit is a weighbridge and scale lever system, and a deck, usually of concrete, is supported by the weighbridge and levers within the walls and at or near the ground level. The deck is movable up and down as a weight is placed on the deck or removed from it, and corresponding movements of the weigh-bridge and levers are transmitted to a scale indicator which provides a reading of the magnitude of the weight.

Heretofore the floor, walls and deck have been formed by pouring concrete at the scale site. This requires a considerable number of man hours to assemble a complete scale installation, and a waiting period is required to allow sufficient time for the concrete to harden prior to use. Such labor requirements and delays all result in considerable expense.

SUMMARY OF THE INVENTION

It is, therefore, an object of this invention to provide a pit and deck construction and method of making the same for platform scales including precast concrete sections which can be formed at a manufacturing site and which then can be assembled at the scale installation site and be ready for substantially immediate use.

It is a more particular object of this invention to provide a pit and deck construction and method of making the same for platform scales wherein either or both of the deck and the pit walls comprise a plurality of precast concrete panels which are suitably joined together at the scale site to provide an assembly which is ready for substantially immediate use.

It is a further object of this invention to provide such a pit and deck construction having sufficient strength and rigidity so as to provide the required degree of safety and to have a relatively long wear life.

The present invention provides a pit and deck construction for platform scales including a plurality of precast concrete panels joined end-to-end horizontally to form the deck along the scale weighbridge and supported by the same. The pit walls comprise a plurality of precast concrete panels joined end-to-end, disposed vertically and supported by the pit floor. The walls are constructed by supporting a first row of the panels a predetermined distance above the pit bottom and then pouring the concrete floor to a level above the bottom edge of the first row of panels. A second row of panels then is placed on the first row, being supported thereby, and horizontally adjacent and vertically adjacent panels are connected together.

The foregoing and additional advantages and characterizing features of the present invention will become clearly apparent upon a reading of the ensuing detailed description together with the including drawing wherein:

BRIEF DESCRIPTION OF THE DRAWING FIGURES

FIG. 1 is a top plan view of a deck and pit construction for platform scales according to the present invention;

FIG. 2 is a top plan view of the construction of FIG. 1 but without the deck thereof and as it would appear removed from the ground;

FIG. 3 is a side elevational view of the construction shown in FIG. 2;

FIG. 4 is a fragmentary side elevational view, partly diagrammatic, and on an enlarged scale illustrating the weighbridge and lever system within the scale pit and deck construction of the present invention;

FIG. 5 is an enlarged sectional view taken about on line 5—5 in FIG. 1 and illustrating the scale weighbridge and lever system in diagrammatic form;

FIG. 6 is an enlarged sectional view taken about on line 6—6 in FIG. 1;

FIG. 7 is an enlarged elevational view of the side wall panels in the construction of FIGS. 1 and 2;

FIG. 8 is a top plan view of the panel construction of FIG. 7;

FIG. 9 is an enlarged elevational view of the end wall panels in the construction of FIGS. 1 and 2;

FIG. 10 is a top plan view of the panel construction of FIG. 9; and

FIG. 11 is a sectional view taken about on line 11—11 in FIG. 9.

DETAILED DESCRIPTION OF THE ILLUSTRATED EMBODIMENT

Referring now to FIGS. 1–3, the structure provided by the present invention comprises a deck 10 disposed at or near the ground level and comprising a plurality of precast concrete panels suitably joined or bonded together and supported by the scale weighbridge and lever system which presently will be described. In an illustrative scale installation, deck 10 would include sixteen panels 12 each approximately 10 feet long by 4 feet wide by 6 inches thick, and one panel 12' would be included adjacent one end of deck 10 and of the same width and thickness but having a slightly longer length, about 5 feet 10 ¾ inches, to accommodate a manhold 13 provided therein which allows access to the scale region beneath deck 10 for maintenance purposes.

The scale pit according to the present invention includes a floor 16 located below the ground level. Floor 16 preferably is of concrete poured and cast at the scale site, and according to the foregoing illustration a typical floor 16 is 73 feet long by 13 feet wide by 1 foot deep. A plurality of piers 18 are provided in floor 16, such as by being cast integrally therewith, for supporting the lever system, weighbridge and deck 10. The particular size and elevation of each pier 18 together with the locations of the various piers are determined by the characteristics of the particular scale mechanism which is to be installed.

The scale pit construction of the present invention further comprises a pair of spaced apart side walls 20 and spaced apart end walls 21 joining corresponding ends of the side walls, the walls 20, 21 extending vertically upwardly from floor 16 and spaced a slight distance from the periphery of deck 10 whereby deck

10 is movable vertically with the weighbridge in response to the presence or absence of a load thereon. Each side wall 20 is formed by a plurality of precast concrete side wall panels 22 which panels are arranged end-to-end in a first or lower row supported by floor 16 and secured thereto in a manner to be described, and in a second or upper row of panels resting on and supported by the lower row. Panels 22 in the two rows forming each side wall 20 are substantially coplanar and are joined together by means to be described. Each panel 22 has a planar body portion 24 and spaced-apart flanges 25, 26 extending outwardly from opposite edges of a panel 22 in the same direction and substantially normal to the plane of body portion 24. When panels 22 are assembled in position, flanges 25, 26 are disposed vertically, and adjacent flanges of horizontally adjoining panels cooperate to form together a pilaster which supports wall 20. According to the foregoing example of a satisfactory scale installation, each side wall panel 22 is about 10 feet long by 2 ½ feet wide by 6 inches thick, and seven panels are included in each row forming a single side wall 20. In this illustrative arrangement each side wall 20 would be provided with six pilasters spaced therealong and formed by cooperating adjacent flanges of the seven panels in each wall.

Each end wall 21 is formed by a plurality of precast concrete end wall panels 28, there being in the present illustration a first or lower row including two panels 28 arranged end-to-end supported by floor 16 and secured thereto in a manner to be described, and a second row of two end wall panels 28 resting on and supported by the lower row. Panels 28 in the two rows forming each end wall 21 are substantially coplanar and are joined together by means to be described. Each end wall panel 28 includes a planar body portion 29 and a single flange 30 extending outwardly from one edge of panel 28 in a direction substantially perpendicular to body portion 29. The four end wall panels 28 which are assembled together to form each end wall 21 are positioned relative to each other so that the flanges 30 together form a single pilaster which supports the corresponding end wall. According to the foregoing illustrative example, end wall panels 28 each are about 6 ½ feet long by 2 ½ feet high by about 6 inches thick.

A relatively small extension of the scale pit is designated generally at 33 and it provides a space for a lever projecting from the lever system below deck 10 as well as providing support for a scale dial and related equipment which rests on top of extension 33. Extension 33 is provided with a floor, walls and top which preferably are formed of concrete cast at the scale site. The side wall panels 22 adjacent extension 33 would be provided with a suitable opening through which the aforementioned lever would project from the lever system below deck 10.

Deck 10 is movably supported by a weighbridge and scale lever system. The scale lever system forms no part of the present invention and accordingly will be only briefly described. The particular arrangement shown is merely illustrative of various types of scale lever systems which can be used with the deck and pit construction provided by the present invention. Referring now to FIGS. 4 and 5, deck 10 rests on a pair of spaced-apart I beams 38, 39 which extend longitudinally beneath deck 10 and which are joined at spaced locations therealong by laterally extending connecting beams 40. Deck 10 and the weighbridge comprising beams 38—40 are movably supported by a scale lever system which in turn is supported from floor 16 by piers 18, connection between the levers and piers 18 being provided by bracket members 41. In particular, a lever shown schematically at 42 extends longitudinally beneath deck 10 and actually comprises a plurality of interconnected levers. Lever 42 is connected through a suitable means shown schematically at 43 to a bracket 41 extending from a pier 18. The lever system also includes an arrangement of laterally extending levers 44, 45 as shown in FIG. 5, each lever extending outwardly from a connection at one end to lever 45 and attached at the opposite end to a corresponding one of the means indicated schematically at 47, 48 which, in turn, are supported through brackets 41 to corresponding piers 18. Similar arrangements of laterally extending levers are provided at locations spaced along the lever 42. A more detailed description of lever systems for use in platform scales and which can be included in conjunction with the pit and deck construction of the present invention may be obtained in readily available literature as well as in U.S. Pat. Nos. 3,266,585 and 3,442,343.

FIG. 6 illustrates in further detail the construction of deck panels 12 and the manner in which adjacent panels are joined end-to-end horizontally along the scale weighbridge. Deck panels 12 and 12′ are precast of concrete rated at 4000 pounds per square inch with entrained air in an amount from about 6 percent to about 8 percent by volume. The concrete should be formed with a minimum of 585 pounds of cement per cubic yard of concrete and a maximum slump of 4 inches. The aggregates within the concrete must meet the particular state requirements for paving, and, for example, the New York State Department of Transportation requirement for the maximum coarse aggregate size is 0.75 inch. Each of the panels 12, 12′ is reinforced by using ASTM A615–60 grade rods and by using galvanized mesh of grade ASTM A185 rated at 70,000 p.s.i.

As shown in detail in FIG. 6, each of the panels 12 included in deck 10 is reinforced by rods indicated at 50 and 51 embedded therein and located near the top and bottom surfaces of panel 12 and extending generally at right angles to each other. In particular, rods 50 are of the number 8 variety and extend lengthwise of each panel 12. In a panel 12 having a width of about four feet there are eight rods 50 substantially equally spaced relative to each other and to the top surface of panel 12, and eleven rods 50 substantially equally spaced relative to each other and to the bottom surface of panel 12. Rods 51 extend generally along the top and bottom surfaces and edges of panel 12 and are of the 412–48 type. Furthermore, rods 51 are trained around selected ones of the rods 50 as shown in FIG. 6. Referring to FIG. 5 it can be seen that rods 50 are hooked at each end thereof around a corresponding rod 51. Panel 12′ is reinforced by a similar arrangement including ten rods 50′ of number 8 variety extending lengthwise along and below the top surface of panel 12′ and 16 rods 50′ of number 8 variety extending lengthwise along and apaced from the bottom surface of panel 12′. Similarly, a series of rods 51′ extend along the width of

panel 12' and are trained around particular ones of the rods 50'.

Panels 12 and 12' are provided with recesses 56 and 56' extending lengthwise along opposite sides. Recesses 56, 56' extend from the top surface of each panel 12, 12', respectively, for a depth of about 2 inches. When adjacent panels are brought into proximity for assembling deck 10, corresponding recesses 56 of adjacent panels cooperate to provide a plurality of grooves spaced at regular increments along deck 10. The grooves are filled with a plastic joint material, for example that which meets Federal specification SS–S–164.

Panels 12 and 12' each are provided with weld plates 60 and 60', respectively, in the bottom surfaces thereof, there being four weld plates in each panel. Referring to FIGS. 5 and 6, each weld plate 60 and 60' comprises a plate set into the bottom surface of panel 12, 12', securement to the panel being provided by a rod embedded within the concrete and joined at each end to the plate. The weld plates 60, 60' are tack welded to I beams 38, 39 as shown in FIG. 5. Accordingly, the spacing of weld plates 60, 60' relative to the periphery of panel 12, 12' will be determined by the lateral distance between beams 38, 39 which, in turn, is determined by the particular scale lever system to be installed.

FIGS. 5, 7 and 8 illustrate in further detail the construction of side wall panels 22 and the manner in which they are assembled to form the side walls 20 of the scale pit. Panels 22 are precast of concrete which is rated at 4000 pounds per square inch with entrained air in an amount of from about 6 percent to about 8 percent by volume. The concrete for panels 22 should be formed with a minimum of 585 pounds of cement per cubic yard of concrete and a maximum slump of 4 inches. The size of the aggregates in the concrete is determined by the requirements of the particular state of interest, for example the New York State Department of Transportation requirements specify a maximum coarse aggregate size of 0.75 inch. Reinforcing rods for panels 22 is of ASTM 615–40 grade, and galvanized mesh of ASTM A185 grade rated at 70,000 p.s.i. is employed. Panels 22 are precast to the indicated shape having a planar main body portion 24 and flanges 25, 26 at opposite ends of body portion 24 each projecting outwardly in the same direction and at substantially a right angle to the plane of body portion 24. Flanges 25, 26 of each panel 22 extend along the entire width thereof.

As described hereinabove, the pit side walls 20 are constructed by assembling panels 22 in a lower row supported by floor 16 and an upper row supported by the lower row of panels 22. The panels 22 in the lower row are suitably supported while the concrete for floor 16 is poured to a level above the bottom edge of the panels 22 thereby providing a keyway for the wall as will be described in more detail presently. Each of the panels 22 of the lower row is provided with a groove 68 along the top edge thereof and extending lengthwise of panel 22 as shown in FIG. 5. The bottom edge of each panel 22 of the upper row is provided with a tongue or projection 69 extending along the entire length thereof. In other words, the upper panels are provided with a bottom edge shaped for fitting in groove 68. When each panel 22 of the upper row is placed on a corresponding panel 22 of the lower row, tongue 69 sets in or is received by groove 68, the two being aligned whereby the upper and lower panels are substantially coplanar. In addition, the panels 22 of the upper row are provided with bores 71 for receiving threaded rods 72 for connecting adjacent or corresponding upper and lower panels 22 together. For example there are three generally vertical bores 71 provided in each panel 22, each bore having a diameter of 1 ⅛ inch and formed by an air tube while panel 22 is being cast in its form or mold. Both the top and bottom panels 22 are provided with generally horizontal bores 74 through flanges 25, 26 at vertically spaced locations for receiving bolts which connect horizontally adjacent panels 22 in each row, for example the bolts designated 75 in FIG. 5.

Each panel 22 is reinforced by a plurality of rods 78, each of number 3 type, extending lengthwise of panel 22. With each panel 22 being about 2 ½ feet wide, each is provided with four rods 78 horizontally disposed near the front and rear surfaces of main body portion 24. Each panel 22 is reinforced further by a plurality of rods 80, also of number 3 type, which extend generally perpendicular to rods 78. With each panel 22 being about 10 feet long eleven rods 80 are disposed near each of the front and rear surfaces of main body portion 24. In the lower row of the panels 22, it will be noted that rods 80 project from the bottom edge of panels 22 into the poured concrete floor 16. As shown in FIG. 5, the rods 80 disposed near the inner surface of the panels 22 extend downwardly in a vertical direction into floor 16 whereupon they are bent or turned and extend further in a generally horizontal and outward direction. The rods 80 disposed near the outer surface of panel 22 extend vertically downwardly into floor 16 whereupon they are turned or bent and extend further in a generally horizontal and outward direction. Flanges 25, 26 of each panel 22 are reinforced by bars 82 and 83 which extend from main body portion 24 into and around flanges 25, 26 in generally horizontal and opposite directions and near the outer surfaces thereof as shown in FIG. 8.

FIGS. 9–11 illustrate in further detail the structure of end wall panels 28. Panels 28 are precast of concrete having the same characteristics as the concrete used in casting side wall panels 22. Likewise, the reinforcing is according to the same grades and specifications as that of panels 22. End wall panels 28 are cast to a shape having a planar main body portion 29 and a single flange 30 extending from one edge of panel 28 in a direction substantially perpendicular to body portion 29. At each end of the pit constructed according to the present invention, two end wall panels 28 are set into floor 16 and supported in a manner similar to panels 22 whereby the wall provides a keyway. A groove 85 is provided along the top edge of each of the two lower end wall panels 28. On each of the two upper end wall panels 28 the bottom edge is provided with a tongue or projection 86 which sets in groove 85 when the end walls are assembled in a manner similar to assembly of the side walls 20. Each of the upper end wall panels 28 is provided with bores 89 for receiving threaded rods 90 for connecting adjacent or corresponding upper and lower panels 28. For example, three bores 89 are provided, each being generally vertical and having a

diameter of 1 ⅛ inches, and are formed by an air tube while panel **28** is in its form or mold during casting. All of the end wall panels **28** are provided with generally horizontal bores **92** in the flanges **30** thereof for receiving bolts for connecting horizontally adjacent panels **28** to each other in a manner similar to the connection of the side wall panels. As a result, the four flanges **30** of the corresponding four panels **28** providing each end wall **21** form a single pilaster for supporting the wall.

Each end wall panel **28** is reinforced by a plurality of generally horizontal rods **94** each being of number 3 type and positioned near the front and rear surfaces of main body portion **29**. Four rods **94** are located near each face. Each panel **28** is reinforced further by a plurality of rods **96**, also of number 3 type, disposed generally perpendicular to rods **94**. Seven rods **96** are located near each face of body portion **29**, and rods **96** of the lower panels **28** extend into floor **16** in a manner similar to that of the rods **80** included in the lower side wall panels **22**. In addition, flanges **30** are reinforced by bars **98**, **99** extending horizontally from body portion **29** into and around each flange **30** near the outer surfaces thereof. End wall panels **28** also are provided with bores **100** along the edge opposite flange **30** for receiving bolts for joining end wall panels **28** to corresponding panels **22** at corresponding ends of the pit side walls.

The method of constructing the scale pit and deck according to the present invention is performed in the following manner. An excavation is made at the scale installation site which usually is adjacent a highway. The excavation is made of a suitable size and depth depending upon the type of scale to be installed. The bottom of the excavation is provided with the required amount of foundation filler, such as crushed stone or gravel, depending upon building regulations and the type of scale to be installed. Then the required number of side wall panels **22** and end wall panels **28** are placed in the bottom of the excavation to provide the lower row of panels forming the two side walls and two end walls. Each panel **22**, **28** is suitably supported by means such as three-legged jack devices and at a predetermined distance, for example about **8** inches, above the bottom of the excavation. According to the foregoing example, a total of fourteen side wall panels **22** would be positioned in the excavation to form two spaced-apart rows of seven panels each corresponding to opposite side walls. In addition a total of four end wall panels **28** would be positioned in the excavation, two at each end of the construction. Adjacent side wall panels **22** would then be connected together by means of bolts **75** received in the bores **74** in adjacent flanges, and the end wall panels **28** would be connected together by bolts received in bores **92**. Also end wall panels **28** would be connected to corresponding side wall panels as previously described. Then concrete is poured into the bottom of the excavation to form floor **16**. According to the foregoing example, floor **16** is poured to a thickness of 1 foot, whereby each of the panels **22**, **28** is set into floor **16** for a distance of **4** inches below the surface of floor **16**. A suitable arrangement of forms would be provided to define piers **18** of the required size and relative location. Floor **16** is reinforced by a plurality of rods **101**, shown in FIG. **5**, each of the number 5 type. When floor **16** hardens, it provides a keyway supporting the panels **22**, **28** which are set into the floor **16**.

The next step according to the method of the present invention is placing the upper row of side wall panels **22** and end wall panels **28** onto the lower row. Preferably this is done after floor **16** has sufficiently hardened. An identical number of side wall panels **22** and end wall panels **28** are lowered into the pit. Groove **68** on the upper edge of each lower side wall panel **28** receives the tongue or projection **69** on the lower edge of the upper sidewall panel **22**. Likewise, the upper end wall panels **28** are positioned on the lower panels **28** whereby groove **85** receives tongue or projection **86**. Rods **72** are inserted to connect vertically adjacent side wall panels **22** together and rods **90** are inserted to connect together vertically adjacent end wall panels **28**. Horizontally adjacent panels are bolted together and the end wall panels are bolted to corresponding side wall panels in a manner similar to that of the lower rows.

Following this the weighbridge and lever system, previously described, is installed. Then deck **10** is assembled by bringing adjacent panels **12** together so that recesses **56** define the grooves as previously described. The panels **12** are secured to the weighbridge by tack-welding the weld plates **60** to I beams **38**, **39**. The grooves defined by recesses **56** are provided with filler material. The upper peripheral edge of deck **10** is provided with an angle iron **105**, and a similar angle iron **106** is provided around the inner edge periphery of the pit walls as shown in FIG. **5**.

It is therefore apparent that the present invention accomplishes its intended objects. Deck panels **12** and wall panels **22** and **28** all can be precast of concrete at a manufacturing site thereby affording the economies of such precasting techniques. Then the panels can be shipped to the scale installation site whereupon they can be immediately assembled. By reducing the amount of concrete that must be actually poured at the scale site, further economy is realized. Furthermore the scale pit and deck construction of the present invention requires a relatively shorter waiting time until ultimate use. The wall construction of the present invention, including a lower row of panels set into a poured concrete floor and supported thereby together with a corresponding upper row of panels supported on the lower row provides a wall construction which is self-supporting and sufficiently strong, convenient and economical to construct, and has a relatively long wear life. Similarly, the deck of the present invention including a plurality of precast concrete panels suitably joined together has sufficient strength and rigidity so as to provide the required degree of safety and has a relatively long wear life.

While a single embodiment of the present invention has been described in detail, this is done by way of illustration without throught of limitation.

I claim:

1. In a pit and deck construction for platform scales used in weighing vehicles and the like wherein a scale lever system and weighbridge are supported by the horizontal floor of said pit and wherein said deck is supported by said weighbridge, the improvement comprising:

a. a plurality of precast concrete panels forming spaced-apart pit side walls, said panels of each of said walls being arranged end-to-end in a first row on said pit floor and end-to-end in a second row resting on said first row of panels, said panels of said first and second rows being substantially vertically coplanar, each of said panels including a generally planar body portion and a pair of spaced-apart flanges extending outwardly from opposite edges of said panel in the same direction and substantially normal to the plane of said body portion, said flanges being disposed generally vertical and adjacent flanges of adjoining panels of each of said rows being connected together and forming pilasters for supporting said row;

b. means connecting vertically adjacent panels of said first and second rows together;

c. a plurality of precast concrete panels forming spaced-apart pit end walls joining corresponding ends of said side walls, said panels of each of said end walls being arranged end-to-end in a first row on said pit floor and end-to-end in a second row resting on said first row of panels, said panels of said first and second rows being substantially vertically coplanar and each of said panels having an outwardly directed generally vertical portion which is connected to a corresponding portion of an adjoining panel of the row to form a pilaster for supporting said row; and

d. means connecting vertically adjacent panels of said first and second rows together.

2. A pit and deck construction according to claim 1 wherein said panels in said first rows of said side and end walls are set in said floor with the bottom edges of said panels being below the surface of said floor whereby said panels are supported by said floor, and wherein said panels of said first rows are provided with a groove along the top edge thereof and said panels of said second rows are provided with a bottom edge shaped for fitting in the groove of the corresponding panel of said first row, and including a plurality of connecting rods extending vertically through said panels of said second rows and into corresponding ones of said panels of said first rows.

3. A pit and deck construction as defined in claim 1 wherein two end wall panels are included in each of said rows and wherein each of said end wall panels includes a planar body portion and a flange extending outwardly from one edge of said panel substantially normal to the plane of said body portion, said flange being disposed generally vertical and connected to the flange of the adjoining panel in the row, whereby a single pilaster is formed on each end wall for supporting said wall by adjacent flanges of adjoining panels in each row being connected together.

4. A pit and deck construction as defined in claim 1 wherein each of said panels is precast of concrete rated at 4,000 pounds per square inch and formed with a minimum of about 585 pounds of cement per cubic yard of concrete and wherein each of said panels is reinforced to withstand a force of 70,000 pounds per square inch.

5. A pit and deck construction as defined in claim 1 wherein said deck comprises a plurality of precast concrete panels joined end-to-end horizontally along said weighbridge and supported by said weighbridge.

6. In a pit and deck construction for platform scales used in weighing vehicles and the like wherein a scale lever system and weighbridge are supported by the horizontal floor of said pit and located within the vertical walls of said pit and wherein said deck is supported by said weighbridge, the improvement comprising:

a. a plurality of precast concrete panels forming said deck, said panels being joined end-to-end horizontally along said weighbridge;

b. a plurality of spaced-apart members provided in one surface of each of said deck panels for securing said panels to said weighbridge; and

c. each of said panels being of precast concrete rated at 4000 pounds per square inch with entrained air in an amount from about 6 percent to about 8 percent by volume and formed with a minimum of about 585 pounds of cement per cubic yard of concrete and a maximum slump of about four inches and wherein each of said panels is reinforced to withstand a force of 70,000 pounds per square inch.

7. A pit and deck construction as defined in claim 6 wherein said pit walls are formed by a plurality of precast concrete panels, each of said panels being supported by said pit floor and including a planar body portion and a pair of spaced-apart flanges extending outwardly from opposite edges of said panel in the same direction and substantially normal to the plane of said body portion, said flanges being disposed generally vertical and adjacent flanges of adjoining panels being connected together to form pilasters for supporting said walls.

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