

A. H. LEVENE.
MOVABLE PLATFORM.
APPLICATION FILED NOV. 3, 1919.

1,336,973.

Patented Apr. 13, 1920.

5 SHEETS—SHEET 1.

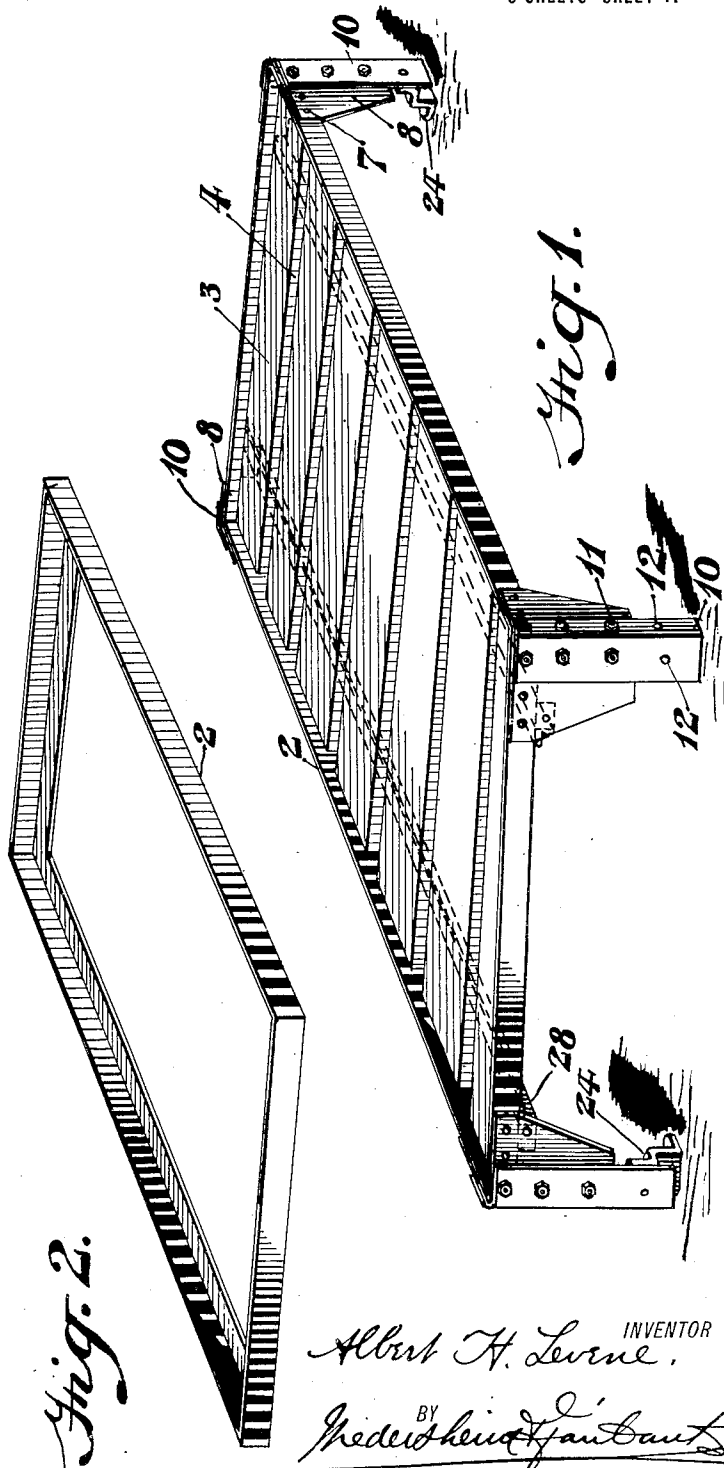


Fig. 2.

Fig. 1.

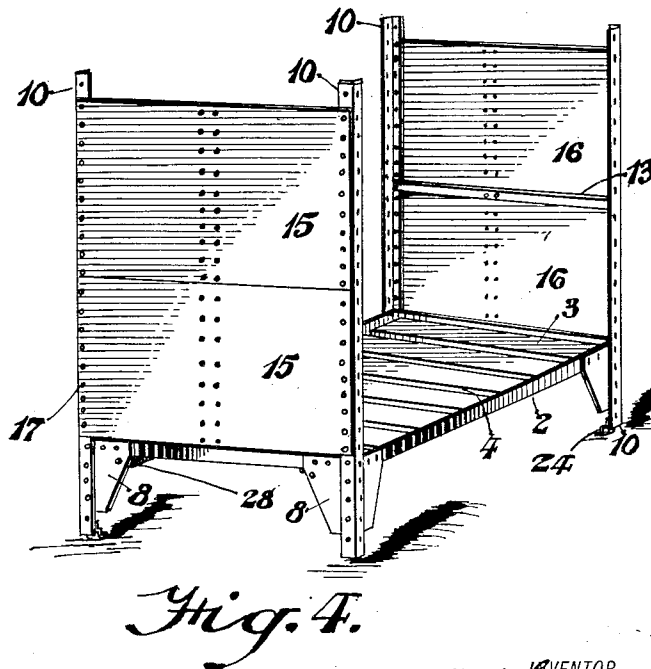
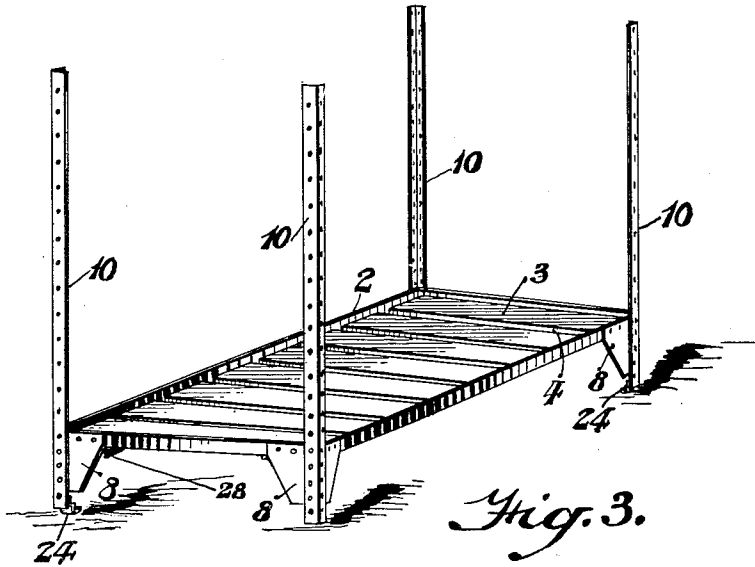
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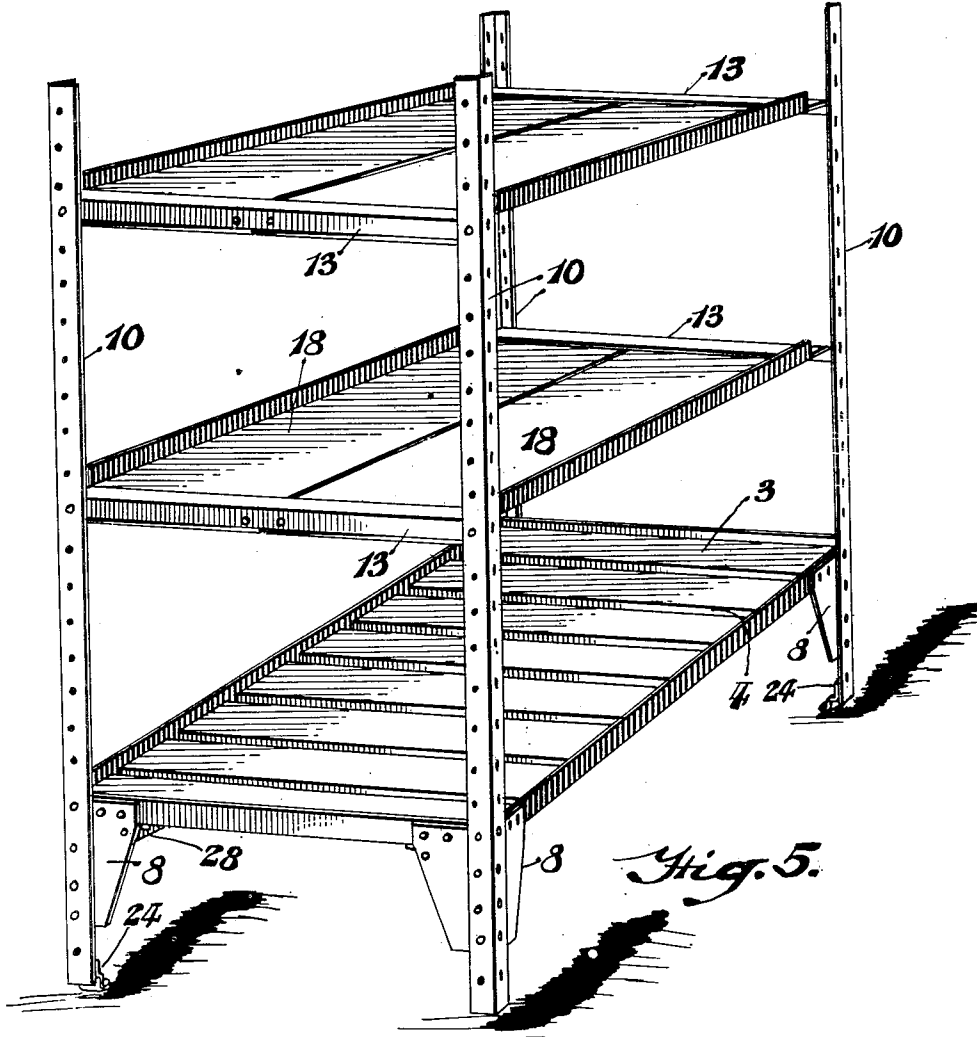


Fig. 5.

Fig. 6.

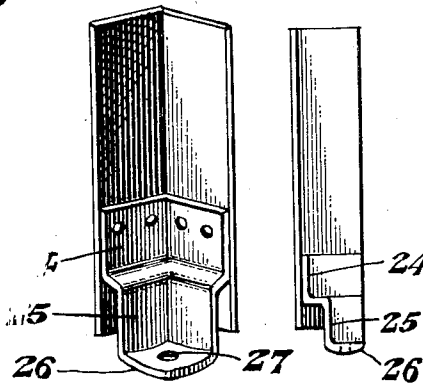


Fig. 7.

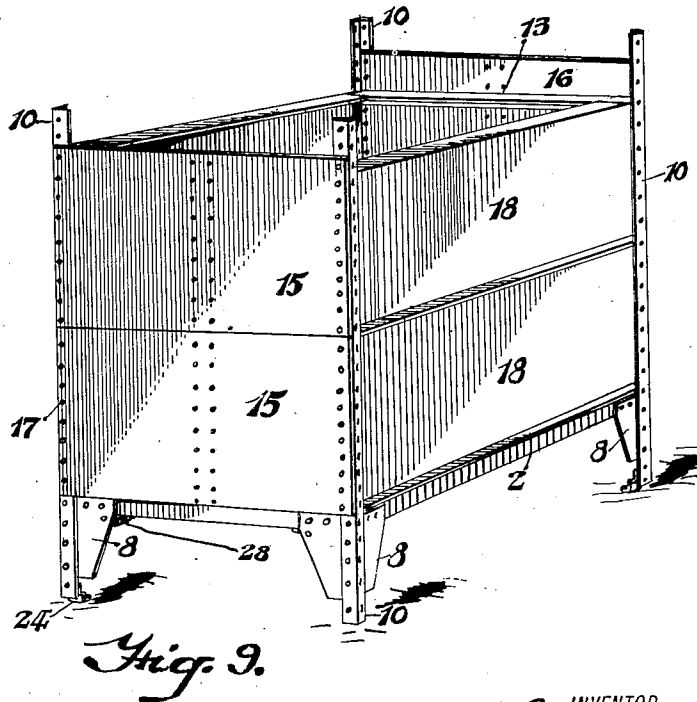
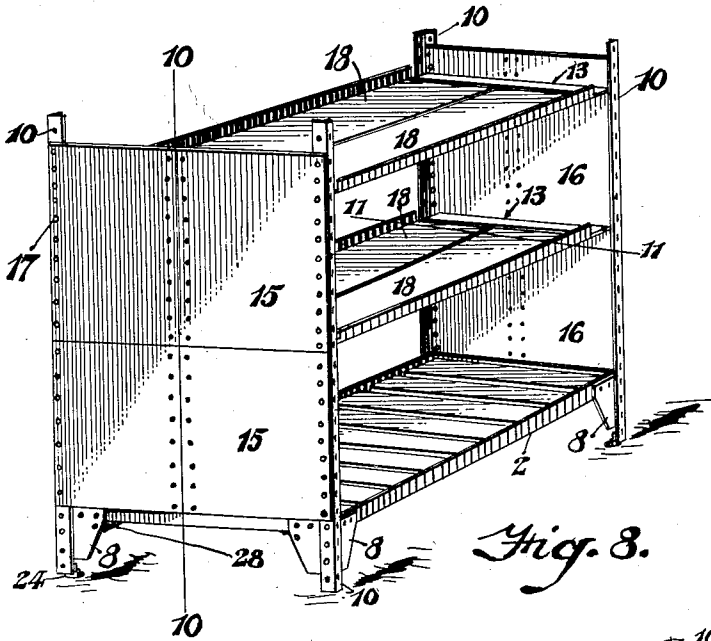
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5 SHEETS—SHEET 4.

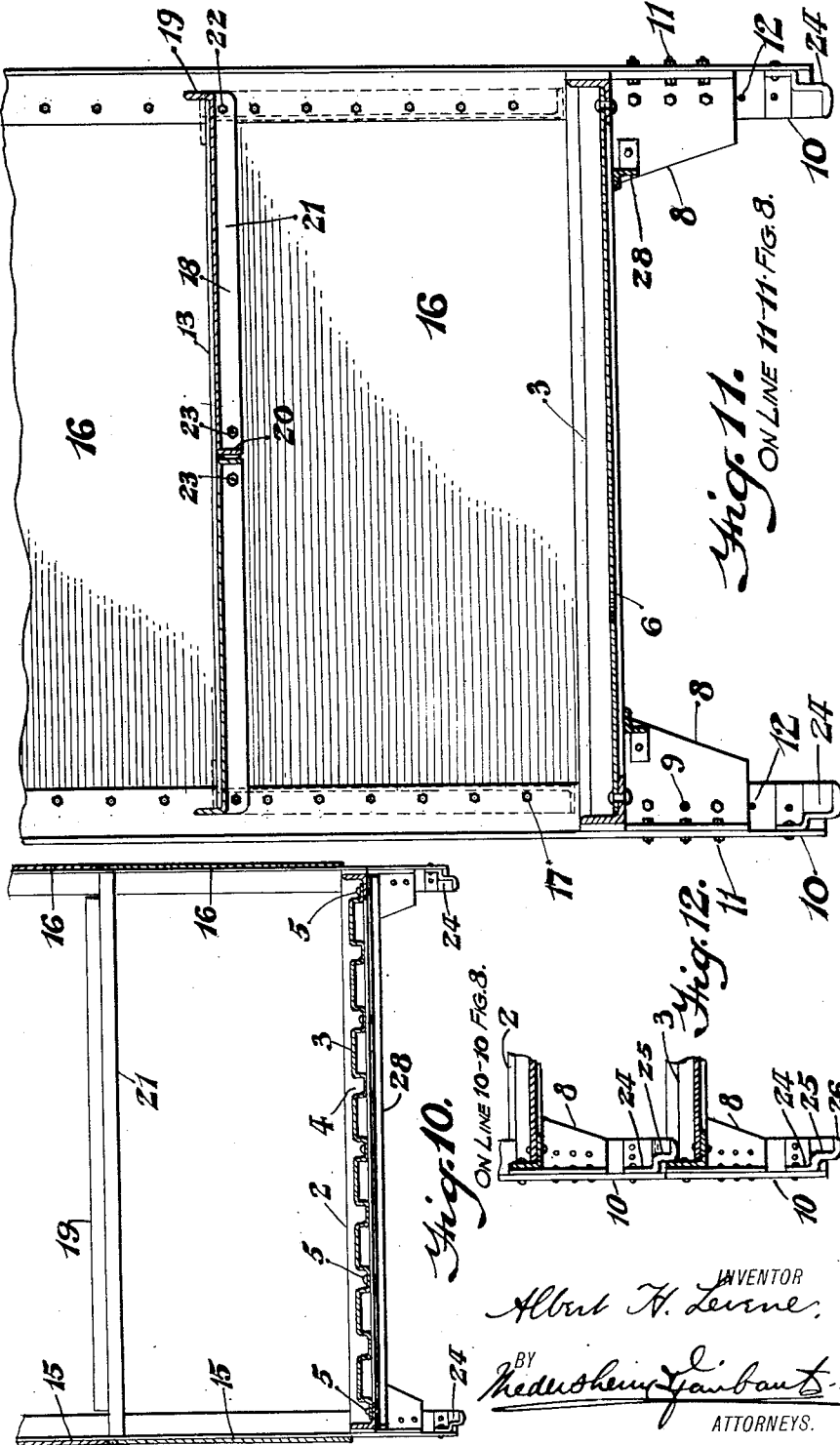


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1,336,973.

Patented Apr. 13, 1920.

5 SHEETS—SHEET 5.



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UNITED STATES PATENT OFFICE.

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MOVABLE PLATFORM.

1,336,973.

Specification of Letters Patent. Patented Apr. 13, 1920.

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To all whom it may concern:

Be it known that I, ALBERT H. LEVENE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Movable Platform, of which the following is a specification.

It is now the practice in up to date manufacturing plants for the workman at the different machines to stack the finished articles on movable platforms and when a platform is full an elevating truck is passed beneath it and the platform with its contents is removed to a desired point of utilization. These platforms as heretofore constructed have been made to fit the heights of the different elevating trucks on the market and as it frequently happens that different factories have different types of elevating trucks, which can be only used with platforms of special types or sizes, it is necessary for a factory to purchase platforms which can be used with the special type of elevating trucks which they have on hand.

It is the object of my present invention to devise a novel construction of a movable truck platform which can be readily adjusted to any desired height of platform truck and also readily adjustable to suit the character of the material which is to be handled, which can be quickly and readily converted from an ordinary platform type into a skeleton type of truck adapted to carry shelves or into one having a closed front and rear or into one of the box type of construction.

With the above in view my present invention comprehends a novel construction of a truck platform wherein the parts are constructed and assembled in a novel manner and wherein the supporting legs or standards are adjustable so that the height of the platform from the floor may be varied in accordance with conditions and requirements met with in practice.

It further comprehends a novel construction of a truck platform having corner stakes adjustably connected therewith and provided with a novel construction and arrangement of shelves which when unfastened at specified points can be lowered to form closed sides on the truck platform.

Other novel features of construction and advantage will hereinafter more clearly appear in the detailed description of the invention.

For the purpose of illustrating my invention, I have shown in the accompanying drawings preferred embodiments of it which in practice will give satisfactory and reliable results. It is, however, to be understood that these embodiments are typical only and that the various instrumentalities of which my invention consists can be variously arranged and organized and that the invention is not limited to the precise arrangement and organization of these instrumentalities as herein set forth.

Figure 1 represents, in perspective, a truck platform, embodying my invention.

Fig. 2 represents, in perspective and in detached position, the framework which supports the truck body on which the articles are placed.

Fig. 3 represents, in perspective, the truck platform having the corner angled and adjustably connected therewith.

Fig. 4 represents, in perspective, a truck platform having sheet metal or other plate removably connected to close the front and rear ends of the truck platform.

Fig. 5 represents, in perspective, the truck platform as it appears when provided with shelves.

Fig. 6 represents in elevation the construction of a bottom corner standard so that an antifriction or wheel caster can be connected therewith to change the platform into a truck.

Fig. 7 represents, in side elevation, the construction seen in Fig. 6.

Fig. 8 represents in perspective, the platform truck provided with front and rear plates and with shelves.

Fig. 9 represents, in perspective, the construction seen in Fig. 8 with the shelves dropped to form a box type of platform.

Fig. 10 represents a section on line 10—10 of Fig. 8.

Fig. 11 represents a section on line 11—11 of Fig. 8.

Fig. 12 represents an elevation showing the manner in which the trucks can be stacked.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:

The truck is provided with a framework which consists of a rectangular or other shaped frame 2 formed preferably of structural metal such as for example a single angle bar which is bent into the desired

shape and has its free ends connected together by welding, riveting or any other desired manner.

3 designates the body of the truck platform which preferably consists of a sheet metal plate having the corrugations 4, the marginal edges of this plate resting on the bottom flange of the angle which forms the frame 2 and is secured thereto by rivets or other fastening devices 5, see more particularly Fig. 10, said fastening devices being located in the corrugations so that the body 3 will present a flush surface. In order that dirt or foreign material which collects in the corrugations 4 may be readily removed, I provide one or more apertures 6 in the bottom of such corrugations. Fixedly secured to the corners of the frame 2 by means of fastening devices 7 are the depending brackets 8 which have the apertures 9 formed in them so that the adjustable corner angles 10 can be adjustably connected therewith by means of fastening devices 11 such as for example bolts and nuts which pass through desired apertures 12 in the angles 10.

It will be apparent that by connecting the standards formed by the angles 10 to the truck platform so that they can be readily adjusted, the height of the body 3 from the floor may be varied to suit different height platform trucks. The corner standards formed by the angle 10 may extend to any desired height above the body 3 and the apertures 12 are formed in each face of the angle and preferably extend in spaced relationship from the bottom to the top thereof so that they can be adjustably connected to the body portion of the truck platform, and also so that they can be properly braced by means of cross angles or bars 13, see Fig. 4. Whenever desired a front plate 15 and a rear plate 16 is connected to the angles 10 by means of fastening devices 17, as will be understood by reference to Fig. 4.

It will thus be seen at any time desired the front plate 15 and the rear plate 16 can be removed and it will be apparent that one or more of such front and rear plates may be employed in accordance with the character of the material.

18 designates the shelves any desired number of which may be employed and for convenience of illustration, I have shown a plurality of shelves as being employed. The detailed construction of these shelves will be best understood by reference to Fig. 11 from which it will be seen that the outer side flange of a shelf is bent upwardly as indicated at 19 while the opposite side flanges 20 and the end flanges 21 are bent downwardly in order to reinforce the construction. The shelves are pivoted to the juxtaposed corner standards 10 by means

of fastening devices 22 and at the central portion of the truck they are secured to the cross angles 13 by means of removable fastening devices 23. If the fastening devices 23 are removed the shelves 18 will swing into the position seen in Fig. 9 and a box type of truck platform will be formed.

Any desired number of superimposed shelves may be employed so that certain of these shelves may have the function of forming sides of a compartment while other shelves can be secured in a horizontal position and have the function of shelves.

Each adjustable corner angle has connected to it a foot piece 24 which consists of an angle or casting seated within the flanges of a corner angle and riveted, bolted or otherwise connected thereto. Each foot piece is off-set as at 25 and terminates in a rounded bottom plate 26 which serves as an antifriction device in case the truck platform is to be moved along the floor and this bottom rounded portion 26 is apertured as at 27 in order to enable it to receive the shank of an antifriction ball or roller casting or a caster of any desired type, it being understood that when such casters are employed the truck platform becomes a combined truck and truck platform.

It will be understood that in accordance with my present invention each corner angle is provided with a foot piece so that the corner angles will not cut into the floor or foundation when the platform is loaded.

It will be clear from the foregoing that in accordance with my present invention the corner angles are adjustably connected with the truck platform in such a manner that the body of the platform will be at the proper height from the ground so that the elevating truck which the individual has in his plant can be used with the movable platform. The movable platform can thus be used with any desired height of elevating truck.

Owing to the novel construction and arrangement of the foot pieces carried by the corner angles of the movable platform, the platforms can be stacked one above the other when desired as will be readily understood by reference to Fig. 12.

In accordance with my present invention the superstructure of the movable platform can be readily converted from a superstructure consisting simply of corner angles into one of racks, one of shelves or the shelves can be adjusted so that a box type of superstructure can be readily provided with a minimum amount of labor.

When the trucks are stacked one above the other it will be apparent that the foot pieces of an upper platform will interlock with the angles or with the body portion of an under platform so that a rigid construction will be provided.

The body portion of the truck platform has connected with it in any desired manner and preferably by riveting, the guide angles 28, which are also preferably riveted or otherwise secured to the brackets 8. The purpose of the guide angles is to guide the elevating truck as it is moved under the truck platform.

While I have preferred to show the body portion or table of the truck platform consisting of a corrugated steel plate, it will be understood that it is within the scope of my invention to employ in lieu of this corrugated plate a flat steel or other plate and in many cases in practice wooden boards or planks are employed. The upper face of such plate or board is preferably below the upper face of the angles forming the framework, so that the upper flanges of such angles will serve to prevent displacement of the material placed on the truck platform. If a corrugated plate or its equivalent is employed the fastening devices are preferably placed in the corrugations so that the upper face of the plate will present a flush surface.

It will now be apparent that I have devised a new and useful construction of a movable platform which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described preferred embodiments thereof which will give in practice satisfactory and reliable results, it is to be understood that such embodiments are susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A movable truck platform, comprising a body portion, and corner standards adjustably connected to said body portion, whereby the height of the body portion from the ground may be varied to enable the use of truck platforms of different heights.

2. A movable truck platform, comprising a body portion consisting of an angle framework bent to shape and connected together, a sheet of corrugated metal secured to said framework, and corner standards adjustably connected with said body portion, whereby the height of the body portion from the ground may be varied to enable the use of truck platforms of different heights.

3. A movable truck platform, comprising a body portion, consisting of a framework, a corrugated metal plate, fastening devices in the corrugations to secure the plate to the framework, and corner standards adjustably connected to said body portion, whereby the height of the body portion from the

ground may be varied to enable the use of truck platforms of different heights.

4. A movable truck platform, comprising a body portion formed by a structural metal bar bent to shape and having its free ends connected together, a corrugated steel plate, fastening devices in the corrugations to secure the plate to the framework, said corrugations having cleaning openings there-through, and corner standards adjustably connected to said body portion.

5. A movable truck platform having a body portion, corner standards adjustably connected to the body portion, whereby the height of the body portion from the ground may be varied, and a foot piece connected to each corner standard, each foot piece having an offset portion to enable the interlocking of the platforms when stacked one above the other.

6. A movable truck platform having a body portion, corner standards adjustably connected to the body portion, whereby the height of the body portion from the ground may be varied, and a foot piece connected to each corner standard, each foot piece having an offset portion to enable the stacking of the platforms and provided with a foot flange having a rounded body portion.

7. A movable truck platform having a body portion, corner standards adjustably connected to the body portion, whereby the height of the body portion from the ground may be varied, and a foot piece connected to each corner standard, each foot piece having an offset portion to enable the stacking of the platforms and provided with a foot flange having a rounded body portion and provided with means to receive an anti-friction device.

8. A movable truck platform, comprising a body portion, corner standards adjustably connected to said body portion to enable the height of the body portion from the ground to be varied, said standards having their flanges provided with longitudinally spaced apertures, a front plate removably secured to the front standard and a rear plate removably secured to the rear standard.

9. A movable truck platform, comprising a body portion, corner standards adjustably connected to said body portion and having their flanges provided with longitudinally spaced apertures, a front plate secured to the front standards, a rear plate secured to the rear standards, sectional shelves pivotally connected to said standards, and means to support the juxtaposed portion of the shelf sections.

10. A movable truck platform, comprising a body portion, corner standards adjustably connected to said body portion and having their flanges provided with longitudinally spaced apertures, a front plate secured to the front standard, a rear plate secured

to the rear standard, sectional shelves pivotally connected to said standards and fastening devices to secure the shelf sections in a horizontal position, said shelves when said fastening devices are removed permitting the shelves to swing downwardly to convert the platform into a box type of platform.

11. A movable truck platform, comprising a body portion, corner standards adjustably connected to said body portion and having their flanges provided with longitudinally spaced apertures, a front plate connected to the front standards, a rear plate connected to the rear standards, and a plurality of superimposed sectional shelves, each section being pivotally connected to its respective standard, and fastening devices to retain said shelves in a horizontal position, said shelves swinging downwardly when the fastening devices for a shelf are removed, to convert the platform into a box type of platform.

12. A superstructure for a platform, comprising uprights and sectional shelves, each shelf section being movably connected with the juxtaposed uprights, and means to lock

said shelf sections in horizontal position, whereby when said locking means are released the shelf sections will move downwardly to form sides.

13. A superstructure for a platform, comprising uprights having shelf sections each of which is movably connected to its respective upright, means to lock the shelf sections in a substantially horizontal position to form a continuous shelf, and a front and rear closure connected to said upright whereby when said locking means are released the shelf will move downwardly to convert the superstructure into a box type of structure.

14. A platform superstructure, comprising uprights and sectional shelves, each shelf section being movably connected with the juxtaposed uprights, and means to lock said shelf sections in horizontal position, whereby when said locking means are released the shelf sections can be moved upwardly or downwardly to form sides.

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Witnesses:

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F. A. NEWTON.