April 15, 1924. 1,490,665

R. T. GIFFORD

PLATFORM SKID

Filed Sept. 5, 1922 2 Sheets-Sheet 1

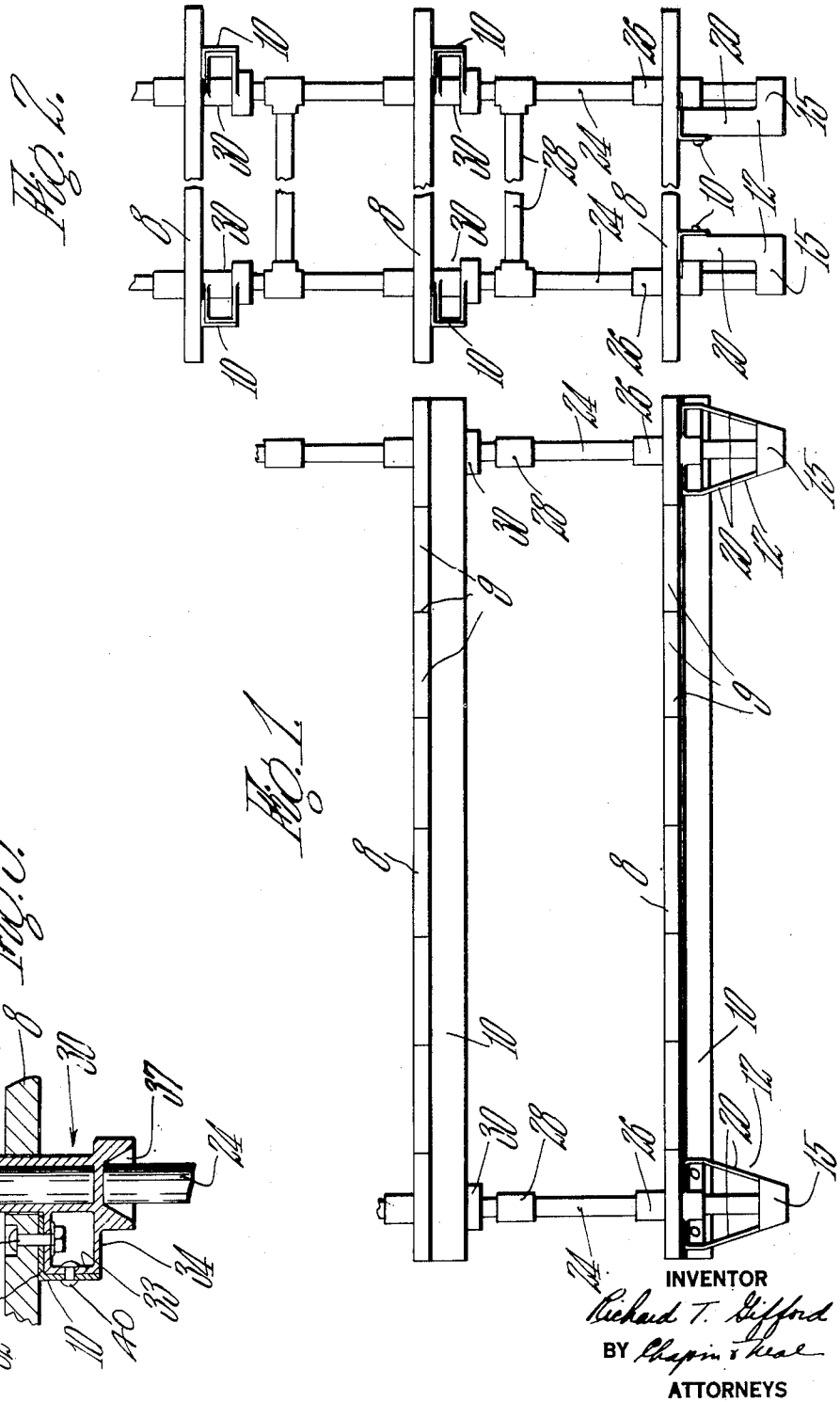


Fig. 2.

Fig. 1.

Fig. 3.

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Fig. 4.

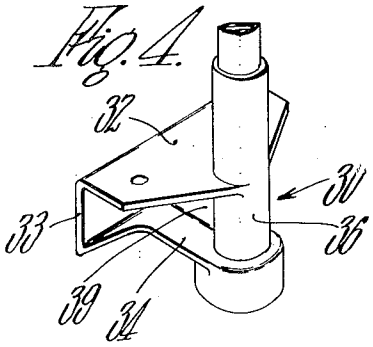


Fig. 5.

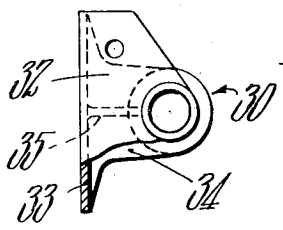


Fig. 6.

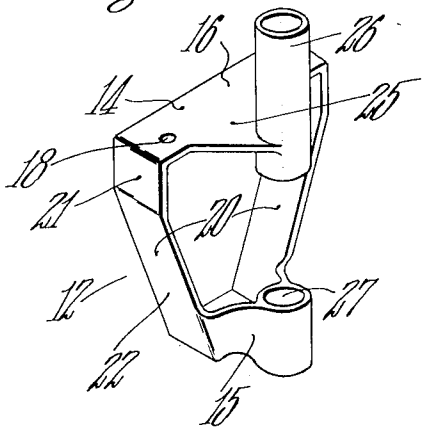
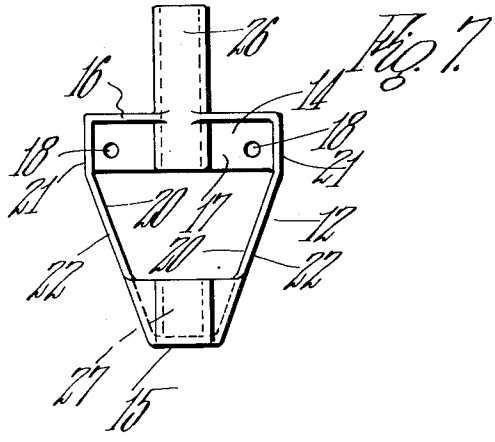


Fig. 7.



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UNITED STATES PATENT OFFICE.

RICHARD T. GIFFORD, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO EDWARD N. WHITE, J. LEWIS WYCKOFF, AND JAMES M. EATON, ALL OF HOLYOKE, MASSACHUSETTS, TRUSTEES, DOING BUSINESS AS COWAN TRUCK COMPANY.

PLATFORM SKID.

Application filed September 5, 1922. Serial No. 586,209.

To all whom it may concern:

Be it known that I, RICHARD T. GIFFORD, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Platform Skids, of which the following is a specification.

The present invention relates to transferable load-supporting platforms which are commonly known as platform skids and are used in connection with systems of trucking wherein elevating trucks are employed to transport said platforms and the goods supported thereon.

One object of the invention is to provide a transferable load support of the platform skid type having increased load-carrying capacity and in which the load may be compactly arranged and conveniently and safely handled.

Another object of the invention is to provide a transferable load support of the general character above referred to in which a plurality of loads of material may be supported in closely adjacent but segregated relation.

In accordance with these objects, one feature of the present invention consists in the provision, in a transferable load support, of a plurality of load-supporting platforms, and means for supporting these platforms one above another in spaced relation for the purpose of separately supporting a plurality of loads.

A further object of the invention is to provide a transferable load support comprising a plurality of load-supporting platforms adapted to be detachably assembled in superposed relation to constitute a sectional or extensible load support the capacity of which may be increased by the assembly of additional sections therewith or reduced by the removal therefrom of one or more of the sections.

A further object is to provide a transferable load support having a plurality of superimposed load-supporting platforms wherein the several platforms are each provided with end gates constructed and arranged to support the platform above them.

A still further object of the invention is to provide, in a platform skid having removable end gates, devices for supporting said gates which are so constructed and arranged as not to interfere with the transportation of the skid in congested areas and are thus free from liability of being injured.

Further objects of the invention will appear in connection with the following description of the preferred embodiment thereof illustrated by the accompanying drawings, in which:—

Fig. 1 is a view, in side elevation, of a sectional or extensible load support constructed in accordance with the present invention;

Fig. 2 is an end elevational view thereof;

Fig. 3 is a detail sectional view of a corner portion of one of the upper load-supporting platforms showing one of the brackets or socket members which receive the platform supporting posts;

Fig. 4 is a perspective view of the fixture or socket member shown in Fig. 3;

Fig. 5 is a top plan view thereof;

Fig. 6 is a perspective view of one of the legs which support the lowermost platform; and

Fig. 7 is a side elevational view of the leg shown in Fig. 6.

Referring to the drawings, the transferable load support therein illustrated comprises a series of rectangular load supporting platforms 8 which are firmly supported one above another. Each platform 8 may be constructed of a plurality of transverse load-supporting members, such as the planks indicated at 9 in Fig. 1, or if found more desirable each platform may be formed from a single piece of suitable material. The planks 9 may be arranged in abutting edge-to-edge relation, or they may be spaced relatively to one another. As shown, the planks 9 rest upon angle-bar tie members 10 which are disposed parallel to each other and extend lengthwise of the platform. The platform planks 9 are secured to the tie members 10 by means of bolts or rivets 11 (Fig. 3) the heads of which are countersunk in said planks, while the shanks of the bolts extend through the horizontal flanges of the tie members 10. Preferably the tie members 10 of the lowermost plat-

form are arranged with their horizontal flanges extending outwardly from their vertical flanges while the tie members of the other platforms are arranged with their horizontal flanges extending inwardly from their vertical flanges.

The lowermost of the load-supporting platforms is supported from the floor by means of legs 12 which are located adjacent the four corners of the platform. Each leg 12 is preferably made of a single casting shaped as illustrated in detail in Figs. 6 and 7. As shown, the leg castings comprise upper or sill portions 14 and lower or foot portions 15. The sill portions 14 are formed with upper ledges 16 and depending web plates 17 which are adapted to lie against the horizontal and vertical flanges, respectively, of the angle-bar tie members 10 and are rigidly secured to said flanges by means of suitable bolts or rivets which extend through apertures 18 in said sill portions and ledges. The foot portions 15 are parallel to the ledges 16 and are connected with the sill portions by means of side flanges 20 consisting of upper parallel portions 21 and downwardly converging lower portions 22.

The legs 12, in addition to supporting the lower platform from the floor, are constructed to receive upright posts 24 which rise through suitable apertures in the platform and serve to support another platform above the lower one. To this end the ledge 16 of each leg is extended, as shown at 25 in Fig. 6, to support a sleeve portion 26 which is adapted to project upwardly through an aperture in the platfrom and to provide a guide and bearing for one of the corner posts 24. The foot 15 is also provided with a recess or socket 27 to receive the lower extremity of said post. Thus it will be seen that by passing the posts 24 through the sleeve-like bearing portions 26 of the feet 12 and by seating the lower extremities of said posts in the sockets 27 the posts will be firmly supported while in use and may be readily removed from the platform when desired. It is important to note that by making the sockets 27 in the feet 15, as above described, the side flanges 20 of the legs 12 are released of all load-supporting strains and the load is supported directly from the floor.

The posts 24 at each end of the platform may be connected by one or more horizontal cross-bars 28 so that the ports and cross-bars together constitute an end gate which functions to prevent the load from falling off from the platform. If desired, the posts 24 may be connected by bars which extend lengthwise of the platform and thus serve, in conjunction with said posts, to provide side gates for the platform.

To increase the load-carrying capacity of the support without enlarging the size of the platform already described, one or more additional platforms may be provided which are adapted to be superimposed above the lower platform. As shown, each of these supplementary platforms is provided with four brackets or fixtures 30 which are located adjacent the corners of the platform and are adapted to perform the double function of detachably securing the platform which carries them to the posts rising from a lower platform and to support another series of posts which may serve to support an upper platform and which may be connected by cross-bars so as to provide end or side gates for the platform carrying said fixtures.

Each fixture 30, as best shown in Figs. 3, 4 and 5, comprises a sill consisting of an upper ledge 32, which is adapted to lie against the lower face of the horizontal flange of one of the tie-members 10 of one of the supplemental platforms, and a web portion 33 which depends at right angles from said ledge 32 and is adapted to lie against the inner face of the vertical flange of said tie member. Extending from the lower edge of the web portion 33, in parallel relation to the ledge 32, is a lower ledge 34. The two ledges 32 and 34 support a cylindrical portion 36 in which is formed two axially alined sockets 37 and 38, the socket 37 opening at the lower side of the fixture and being adapted to receive the upper ends of one of the posts rising from a lower platform while the socket 38 opens at the upper side of said fixture and is adapted to receive and support a post which may in turn be employed to partially support an upper platform. To strengthen and stiffen the whole fixture, a reinforcing web 39 connects the upper and lower ledges 32 and 34 and also connects the socket portion 36 with the web portion 33. The fixtures 30 are rigidly secured to the platform which carries them by means of suitable bolts or rivets 40, one set of bolts extending through the web portion 33 and the vertical flange of the respective tie member 10, as indicated at 40 in Fig. 3, while another set of bolts extend through the upper ledge 32 and the horizontal flange of said tie member. Preferably certain of the bolts 11 which are employed to secure the platform to the tie member 10 are extended through the ledge 32, as shown in Fig. 3, and thus serve also to secure the fixtures 30 to the platform.

The fixtures 30 are so arranged that when the platform which carries them is placed directly above another platform, the sockets 37 and 38 in each of said fixtures will be substantially in axial alinement with the posts 24 rising from the lower platform. Preferably the lower sockets 37 in the fixtures 30 are provided with tapering side walls, as clearly shown in Fig. 3, to assist

in registering said sockets with the posts of a lower platform and in forcing said sockets over the upper ends of said posts. The upper sockets 38 are of such a diameter that the posts to be carried thereby will fit tightly therein and said sockets are deep enough to insure that said posts will be firmly supported.

The above described construction provides, in a practical form, a sectional or extensible platform skid type of transferable load support wherein the extensible or supplemental platforms may be readily placed in position or easily and quickly removed when desired. The guide or bearing portions 26 of the legs 12 and also the socket portions 38 of the fixtures 30, being arranged to extend upwardly through the platforms,—provide linings or bushings for the reception of the supporting posts whereby the platforms themselves, which are preferably made of wood, are protected from injury in the use of said posts. The fixtures 30 and the legs 12 are so arranged that they do not project beyond the rectangular outlines of the platforms and thus they are protected from injury and will not interfere with the transporting of the load support. When three or more platforms are employed, the corresponding supporting posts of all platforms above the lowest will be maintained in axial alinement and the weight of the loads on said platforms will be supported independently of the lowest platform and transferred directly to the floor without imposing any strain upon the side members of the legs 12 which support the lowest platform.

The invention having been described, what is claimed is:—

1. A transferable load support having, in combination, a load-carrying platform, angle-bar tie members secured thereto, supporting legs for said platform secured to said tie members, post-supporting means formed integral with said legs, and a removable end gate having posts detachably fitting into said post-supporting means.

2. A transferable load support having, in combination, a load-carrying platform, angle-bar tie members secured thereto, supporting legs for said platform secured to said tie members, post-supporting means formed integral with said legs comprising a lower socket portion and an upper guide portion, and a removable end gate having posts fitting into said socket and guide portions.

3. A transferable load support having, in combination, a load-carrying platform, angle-bar tie members secured thereto, supporting legs for said platform fitting in the angle of said tie members and secured to both flanges thereof, post-supporting means formed integral with said legs comprising a lower socket portion and an upper guide portion, and a removable end gate having posts fitting within said socket and guide portions.

4. A transferable load support having, in combination, a load-carrying platform, angle-bar tie members secured thereto, supporting legs for said platform each formed with an upper sill having angularly disposed webs for attachment to both flanges of one of said tie members and side portions converging downwardly to a horizontal foot, post-supporting means formed integrally with the sill and foot of each leg, and a removable end gate having posts fitting into said post-supporting means.

5. A transferable load support having, in combination, a load-carrying platform, angle-bar tie members secured thereto, supporting legs for said platform, each formed with an upper sill having angularly disposed webs for attachment to both flanges of one of said tie members and side portions converging downwardly to a horizontal foot, removable end gates having upright posts adapted to be removably secured to said platform, post-supporting means formed integrally with said legs comprising a socket portion in said foot for receiving the lower extremities of said posts and a sleeve portion in said sill for guiding and laterally supporting said posts, a second load-supporting platform adapted to be disposed above the first platform, and means on the second platform for receiving the upper ends of said posts to relatively locate said platforms.

6. A transferable load support having, in combination, a plurality of superposed load-supporting platforms, means for supporting the lowermost of said platforms in elevated position to permit the introduction of an elevating truck beneath the same, removable end gates carried by each of said platforms and adapted to support the platform immediately above it, each end gate supported platform having means to be detachably secured to the respective end gate therebeneath.

7. A transferable load support having, in combination, a plurality of superposed load-supporting platforms removable, end gates for each of said platforms each comprising upright posts secured together and adapted to detachably support one end of the platform immediately above the same, legs for supporting the lowermost platform in elevated position, post-supporting means associated with each platform for receiving the lower ends of the posts of the respective end gates, and socket members carried by the upper platforms for detachably receiving the upper ends of the posts of the end gates immediately beneath said platforms so that the latter will be supported by said posts.

8. The combination with a transferable load-supporting platform having legs for

supporting the same in elevated position, of post-supporting means formed integral with said legs, posts detachably supported therein, and an upper load-supporting platform detachably supported on said posts.

9. The combination with a transferable platform comprising load-carrying means and angle-bar members secured thereto, of supporting legs for said platform secured to said angle-bar members said legs having post-supporting sockets formed therein, removable posts fitting into said sockets, and an upper platform having socket members supported on said posts.

10. A transferable load support having, in combination, a lower load-supporting platform, legs for supporting said platform in elevated position, a plurality of removable posts rising from said platform and supported by said legs, an upper load-carrying platform, angle-bar tie members secured to said upper platform, brackets secured to said tie members, means formed integral with said brackets for detachably supporting said upper platform on the upper ends of said posts, a plurality of removable posts rising from said upper platform and adapted to detachably support a third platform, and means formed in said brackets for receiving the lower ends of the last mentioned posts and for detachably supporting the same.

11. The combination with a transferable lower load-supporting platform, of supporting legs therefor, removable end gates for said platform comprising upright posts secured together rising from said legs, a series of removable upper load-supporting platforms, angle-bar tie members secured to said platforms, brackets secured to said tie members, said brackets having post-supporting means formed integral therewith, posts detachably supported in said post-supporting means, and means integral with said brackets for detachably supporting one platform above the other on said posts.

12. A transferable load support having, in combination, a load-carrying platform angle-bar tie members secured thereto, supporting legs for said platform secured to said tie members, post-supporting means formed integral with said legs comprising a lower socket portion and an upper guide portion, said lower socket portion being constructed and arranged to rest directly upon the floor so as to support said posts without imposing any side strains upon said legs, and a removable end gate having posts fitting into said socket and guide portions.

13. A transferable load support having in combination, a lower load supporting platform having legs for supporting said platform in elevated position and a plurality of posts rising from said platform, an upper load carrying platform having removable end gates thereon, brackets secured to said upper platform, each bracket having a lower socket portion for detachably engaging the upper end of said posts and an upper socket portion for supporting said end gates therein.

In testimony whereof I have affixed my signature.

RICHARD T. GIFFORD.