The present invention relates to improvements in platform supporting means for derricks and the like. More particularly it is an improvement of the platform supporting means shown and described in United States Letters Patent 2,084,300, dated September 28, 1937, to Ether S. Moore.

The object of my invention is to provide a platform supporting means by means of which the platform may be raised and lowered in the derrick, said platform supporting means having means for adjusting the plane of the platform in order to compensate for the slope of the derrick legs.

Another object of my invention is to provide a platform supporting means comprising vertical frame members, horizontal frame members, and a platform mounted on said horizontal members so that the platform may be raised and lowered in the derrick, said platform supporting means having means for adjusting the plane of the platform by changing the distance between the horizontal frame members.

My invention has many other objects, advantages, and features, some of which, with the foregoing, will be set forth at length in the following description where I shall outline one form of my invention, which I have selected for illustration in the drawings accompanying and forming a part of the present specification.

Referring to the drawings:

Figure 1 is a perspective view of a derrick, with parts broken away, showing one installation of my invention.

Figure 2 is a front elevation of the platform supporting means.

Figure 3 is a side elevation of the platform supporting means.

Figure 4 is an enlarged fragmentary view of the means for supporting the horizontal frame members.

Referring to the drawings, the numeral 10 indicates the legs of a derrick, 11 the girdles, and 12 a ladder.

The platform generally indicated by the numeral 14 is mounted in the derrick by means of a supporting frame generally indicated by the numeral 15 which enables the platform to be moved from one side of the derrick to the other and to be raised and lowered in the derrick.

The supporting frame 15 comprises vertical frame members 16 and 17 and horizontal frame members 18 and 19 and is so constructed that the platform 14 may be easily both raised and lowered in the derrick, and moved from one side of the derrick to the other.

As an instance of this arrangement, the frame members 16, 17, 18 and 19 may be tubular in form.

The vertical frame members 16 and 17 are each provided with an upper hanger 20 which is adapted to be lowered over a girth 11 and secured thereto by means of bolts.

Secured to each of the members 16 and 17 is a bracket 21 provided with vertical slots 22 in order to allow for the usual differences in distance between girdles in different derricks. The brackets 21 may be secured to the girdles 11 by any suitable means, for example by means of J-bolts 23 extending through slots 22, thereby securing the frame members 16 and 17 to the girdles 11. The members 16 and 17 are also provided with a plurality of holes 24.

The ends of the horizontal frame members 18 and 19 are provided with sleeves 25 and 26 which are adapted to be raised over the lower end of the members 16 and 17 to the desired position, after which they are held in position by inserting bolts 27 through the holes 24 nearest thereto, and then lowering the horizontal members 18 and 19 so that the sleeves 25 rest on the bolt heads 20 and the nuts 29.

Means are also provided for adjusting the plane of the platform in order to compensate for the slope of the derrick legs 10. As an instance of this arrangement, rods 30 and 31 provided with right-handed threads are connected to rods 32 and 33 respectively, provided with left-handed threads by means of turnbuckles 34. As the turnbuckles are rotated, the distance between the horizontal frame members is changed, thereby changing the plane of the platform 14.

The platform 14 and the means of mounting said platform on the members 18 and 19 may both be similar to the means shown in the above-mentioned Moore patent. As shown in said patent, the side members 35 of said platform are connected to the horizontal members 18 by means of sleeves 36 and the lower ends of the braces 37 to the horizontal member 19 by means of sleeves 38. The platform 14 may be provided with an extensible tread 39 slidably carried by the platform and freely movable toward and from the center of the derrick as shown and described in detail in said Moore patent.

Although the several parts may be assembled in the derrick, I prefer to assemble all of the parts together and then raise the platform as a unit to the desired position in the derrick, so
that all that remains to be done after the unit is raised to the desired position is to secure the hangers 20 and the J-bolts 23 to the girths 11.

From the foregoing description taken in connection with the accompanying drawings, the uses, advantages, and operation of my invention will be readily understood by those skilled in the art to which the invention appertains. While I have described the form of my invention which I now consider to be the best embodiment thereof, I desire to have it understood that the form shown is merely illustrative and that the invention is not to be limited to the details disclosed herein, but is to be accorded the full scope of the appended claim.

I claim:

In a derrick, vertical frame members adapted to be secured to the derrick, horizontal frame members adapted to be secured to said vertical frame members and to be raised and lowered on said vertical frame members, a platform having sleeves slidable substantially horizontally on said horizontal frame members and adapted to be moved substantially from one side of the derrick to the other, and means for adjusting the plane of said platform by changing the distance between said horizontal frame members.

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