

(No Model.)

E. S. BENNETT.

LEVELING MECHANISM FOR TANK AND DREDGE PLATFORMS.

No. 516,785.

Patented Mar. 20, 1894.

Fig. 1.

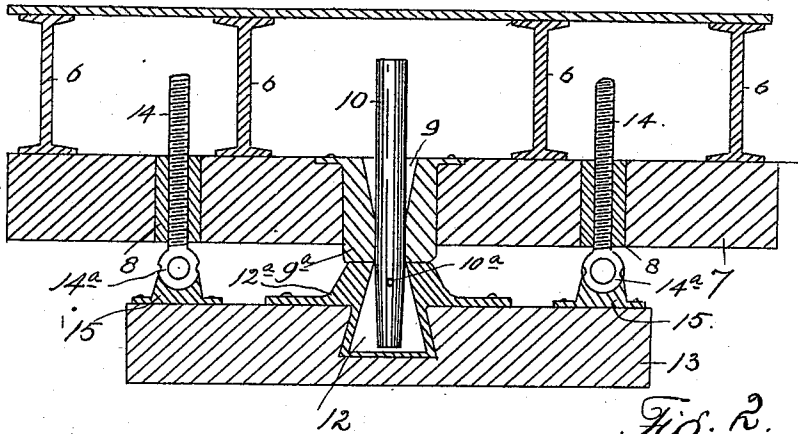
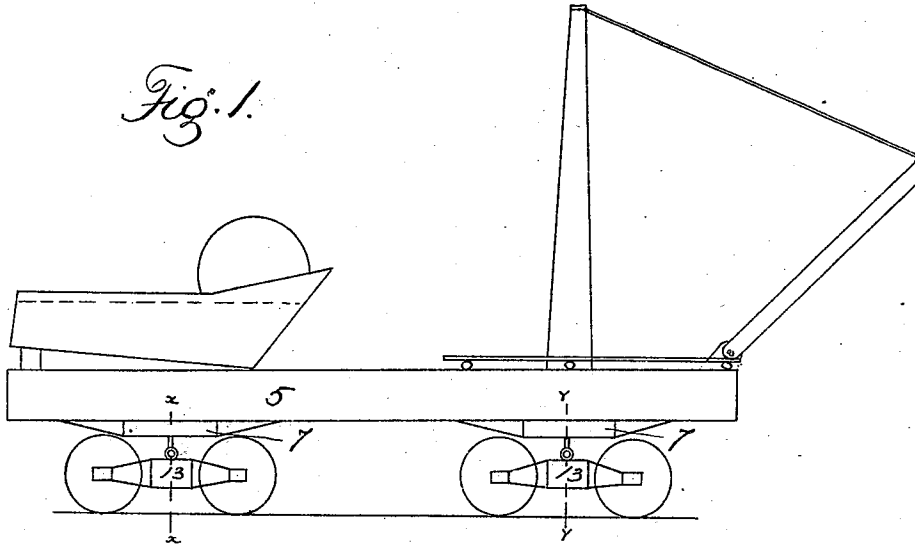


Fig. 2.

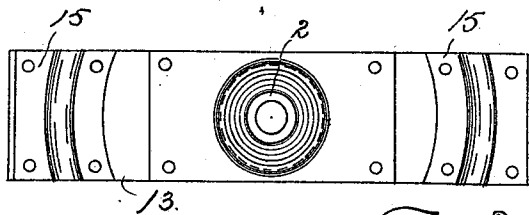


Fig. 3.

WITNESSES:

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LEVELING MECHANISM FOR TANK AND DREDGE PLATFORMS.

SPECIFICATION forming part of Letters Patent No. 516,785, dated March 20, 1894.

Application filed December 12, 1892. Serial No. 454,951. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS S. BENNETT, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Leveling Mechanism for Tank and Dredge Platforms; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to an improved leveling means specially designed for use in connection with the platform upon which amalgamating tanks and dredge mechanism are supported. It often happens in the use of mechanism of this class that the track upon which the supporting trucks for the platform rest is laid upon the ground, the surface of which has an inclination either laterally or longitudinally or both with reference to the track direction. Under these circumstances if the supporting platform for the dredge and amalgamating tank conforms to the track or ground surface inclination, the water in the tank will often overflow at one side or end, while it is correspondingly low at the opposite side or end. It will be readily observed that this condition is very unsatisfactory, causing the work to be carried on at a great disadvantage. The working of the dredge is also imperfect upon an inclined platform since the dredge boom will move too rapidly in the downward direction, while its movement in the opposite direction is correspondingly impeded. Hence the object of my present invention is to overcome these difficulties, and my improved mechanism whereby I attain this end, consists of the features, arrangements and combinations hereinafter described and claimed, and the same will be fully understood by reference to the accompanying drawings in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a side elevation of a platform mounted upon trucks and supporting an amalgamating tank and dredge mechanism. Fig. 2 is a transverse vertical

section taken on the lines $x-x$, and $y-y$, Fig.

1. Fig. 3 is a plan or top view of the transverse beam connecting the side trucks. 55

Similar reference characters indicating corresponding parts or elements of the mechanism in the several views let the numeral 5 designate a platform supported upon I-beams 6, said beams being in turn supported upon the end cross beams 7 which are provided with the interiorly threaded sockets or stationary nuts 8, one on each side of the central aperture or socket 9 through which passes a king pin 10, its lower extremity entering a socket 12 formed in the beam 13 of the truck-frame. Opening 9 and socket 12 are shaped to permit the pin 10 to occupy an inclined position with reference to the planes of beams 7 and 13. Hence said aperture and socket are suitably enlarged to accomplish this purpose. 60 They are also provided with collars 9^a and 12^a whose engaging surfaces are formed correspondingly concave and convex. On opposite sides of pin 10 and engaging the nuts 8 are the bolts 14 having enlarged rounded heads 14^a engaging the elongated arc-shaped, concave bearings 15 with which the upper surface of beams 13 are provided. The bearings 15 are elongated and curved to permit the truck beams 13 to turn freely upon the king pin 10. This king pin may be prevented from jumping out of its socket by the use of a removable locking pin 10^a. The heads of the bolts 14 are provided with apertures for the insertion of a bar whereby the bolts may be turned in either direction as may be desirable or necessary for the purpose of adjustment of the platform 5. 65 70 75 80 85

The operation of the mechanism will be readily understood. If the track is inclined longitudinally only, that is, in the direction of the platform's length the rear bolts 14 must be turned to elevate the rear end of the platform. Hence these screws would be so turned as to increase the space between beams 7 and 13 by elevating the former. Or the forward screws 14 might be adjusted to lower the front end of the platform, or the regulation of the platform might be accomplished by the adjustment of both sets of screws, whereby the front end is lowered and the rear end raised. Again if the track is inclined laterally or across the direction of its length only the two 90 95 100

screws on one side, one front and one rear, are adjusted to raise one side or lower the other. Instead of turning screws 14 to adjust the platform, the same object might be accomplished by locating the heads of the screws in cylinders and forcing water or air into the cylinders and beneath said heads which then form their pistons, and constitute so many hydraulic or pneumatic "jacks," which may be operated in any suitable manner. These jacks are not shown, as it is evident that they would be the equivalents of the screws for the purpose specified.

Having thus described my invention, what I claim is—

The herein described platform adjusting or leveling mechanism consisting of the combination with the platform and truck cross beams of the central king pins and the adjusting bolts located on either side thereof and having their lower extremities in engagement with curved bearings secured to or formed in the truck cross beams, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ERASTUS S. BENNETT.

Witnesses:

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