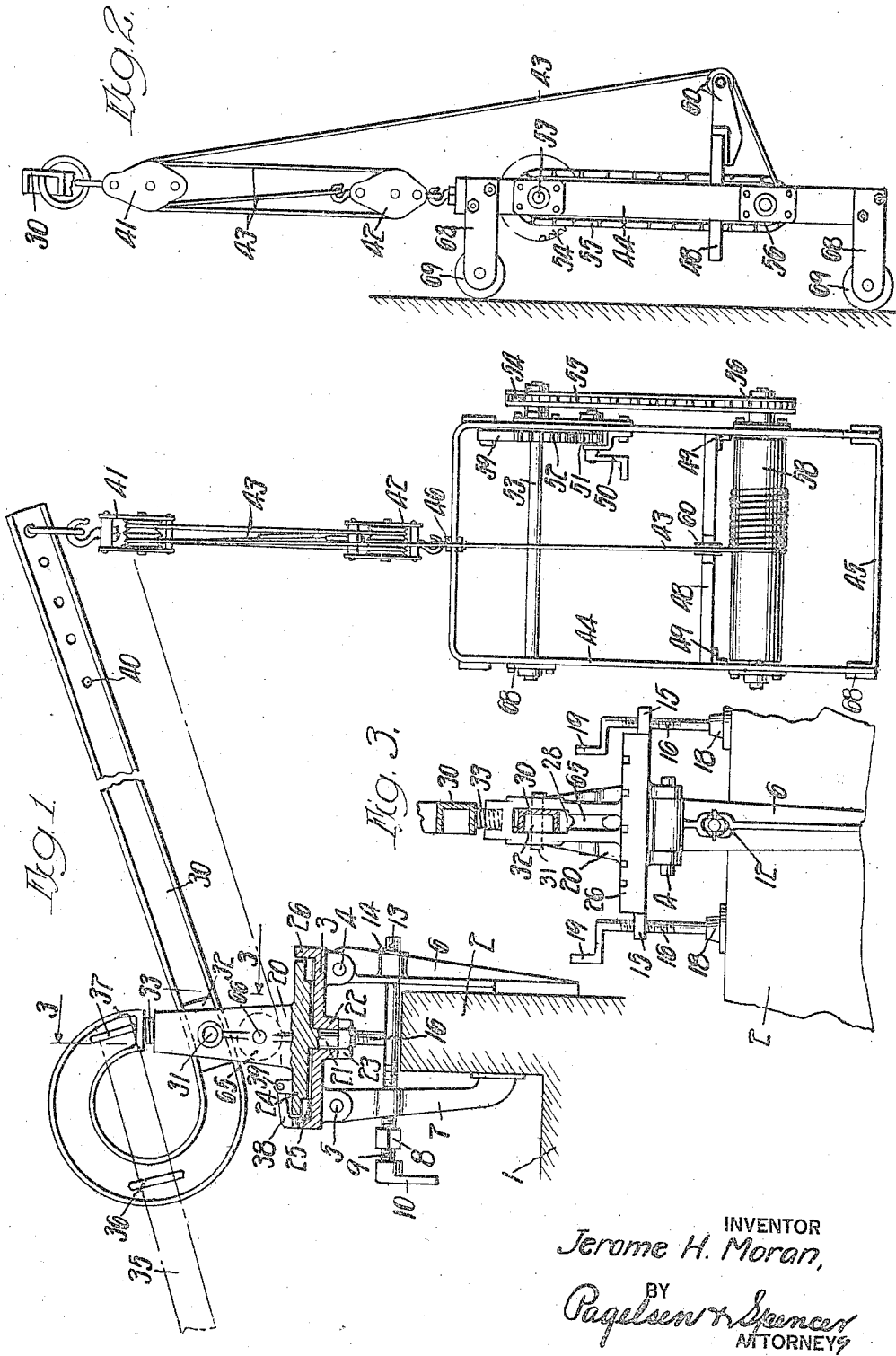


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DAVIT.
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DAVIT.

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To all whom it may concern:

Be it known that I, JEROME H. MORAN, a citizen of the United States and residing at Montrose, in the county of Genesee and State of Michigan, have invented a new and Improved Davit, of which the following is a specification.

The permanent rails of grain and ore carrying boats such as are used on the Great Lakes are commonly but a few inches in height, and the present invention relates to a davit which may be readily attached to or detached from the frame and serve the purpose of supporting a painter's chair or other object. To this end it consists in a base arranged to be clamped upon the rail and to itself constitute a support for a rotatable post in which is pivotally mounted a short vertically swingable boom; it also consists in means whereby the base is prevented from tilting longitudinally in respect to the rail; in means whereby the outer end of the boom is allowed to deflect to a predetermined angle and is then cushioned; in a boom having its rear end shaped to contact with a spring socketed in the upper end of the post for limiting the deflection of the boom; in a chair arranged to travel up and down the side of the boat and to be actuated by an operator sitting in the chair; also the various details of construction shown, described and claimed.

In the drawings, Figure 1 is a transverse section of the rail showing the davit swung outwardly with the chair suspended thereon, parts of the base of the davit being broken away. Fig. 2 is a view of the chair swung in against the side of the boat, all of the davit except the end portion of the boom being omitted. Fig. 3 is a section on the line 3-3 of Fig. 1.

The floor of the boat appears at 1 and the rail 2, which may be of any suitable construction, projects upwardly from the floor a short distance and normally receives a series of detachable posts (not shown), the upper ends of which are joined by a longitudinally extending cable. In the use of the device a sufficient amount of cable is removed and a base 3, to which are pivoted at 4 and 5, respectively, the outer and inner clamping plates 6 and 7, is secured in place by applying a wrench to the squared portion 8 of the clamping bolt 9, although a handle 10 may be provided for this purpose. In this connection it will be understood that one of the clamping plates, preferably

the outer, is slotted as indicated at 12 (Fig. 3), and that the clamping plate 9 is provided with a pin 13 between which and the plate 6 a washer 14 is interposed. The outer clamping plate preferably extends down some distance below the toe of the inner plate. At points substantially in a longitudinal central plane of the rail the base plate is provided with lugs 15 (Fig. 3) in which are threaded clamping screws 16 having feet 18 (that bear upon the upper surface of the rail) and actuating handles 19. Thus the base plate may be readily secured in position upon the rail and may be adjusted so that its upper surface lies in a substantially horizontal plane.

Mounted to rotate about a vertical axis centrally to the base 3 is a post 20 which may be provided with a threaded stud 21 that passes through a perforated boss 22 depending from the base. A nut 23 affords a convenient means for retaining the post upon the base. The post has a flange 24 that rests upon rollers 25 or other suitable anti-friction elements and the base is preferably provided with a circumferential up-standing flange 26 which serves in a measure to center the post.

The post is slotted transversely at 28 to receive a boom 30 which may be of channel iron section as shown and which is pivoted to swing vertically about a pin 31 that extends across the slot from side to side, the boom being preferably provided with a filler plate 32 to afford a broad bearing. At its inner end the boom may be curved upwardly, outwardly and downwardly into alinement with the axis of the post, and the latter may be socketed to receive a compression spring 33 whereby the boom is cushioned and limited in its tilting movement. A hand lever 35 for manipulating the boom may be detachably connected to the rear end of the latter by being inserted in socket-forming U-bolts 36 and 37 which project therefrom in an obvious manner. It will be understood that the boom is but a few feet in length and therefore may be manipulated (for the purpose of swinging a chair or other suspended object over the rail) by an attendant without difficulty. A latch 38 pivoted at 39 between lugs on the upper face of the flange 24 may be received in any one of a series of notches in the flange 26 to prevent the boom from swinging about a vertical axis.

Suspended from any one of the holes 40

in the outer end of the boom by means of the blocks 41 and 42 and the tackle 43 is a painter's chair, the substantially rectangular framework of which may be formed of bar stock; for example, it may include the U-shaped bar 44 and the connecting piece 45, properly riveted or bolted together, and its upper end may be centrally connected to the block 42 by means of an eye-bolt 46. Extending across between the sides of the frame is a seat 48 that may rest directly on angle clips 49, and at a point within convenient reach of the attendant sitting upon the seat, is a crank 50 which, together with the pinion 51, gear 52 (on the shaft 53 that extends across the frame from side to side), sprocket wheel 54, chain 55 and sprocket wheel 56, may be utilized to drive a drum 58 upon which one end of the tackle may be wound. A dog 59 pivoted on the frame and engaging with the teeth of the gear 52 affords a convenient means for preventing unwinding. It will be noticed that the tackle passes over a guide 60 before reaching the drum 58, and is thereby deflected out of the way of the user on the seat. The tackle may, however, be extended beneath the pulley 65 mounted on the pivot 66 in the slot in the post 30 and be actuated by an attendant standing on the floor. The frame is provided with detachable legs 68 which carry rollers 69 that ride up and down against the side of the boat and thereby maintain the user at proper distance therefrom.

It is obvious that the davit may be used for other purposes than that of supporting a painter's chair, for example, it may be attached to the cornice of a building, and the word "davit" found in the claims is to be interpreted accordingly. The details of construction may be changed within considerable limits in some respects without departing from the spirit of the invention, and I do not, therefore, wish to be limited except as indicated by the subjoined claims.

I claim:—

1. A davit comprising a base plate arranged substantially in a horizontal plane, spaced clamping arms depending from the base plate, said arms being adapted to embrace a support and bear against the sides thereof, means for causing the arms to grip the support, a pair of screw threaded members depending from the base plate in a plane at substantially right angles to the common plane of the clamping arms, said members being adapted to engage the upper face of the support, and an upstanding post mounted on the base plate.

2. A davit comprising a base plate ar-

anged substantially in a horizontal plane, spaced clamping arms depending from the base plate, said arms being adapted to embrace a support and bear against the sides thereof, means for causing the arms to grip the support, load supporting means mounted on the base plate and rotatable about a substantially vertical axis, means for preventing the load supporting means from rising from the base plate, and adjustable means arranged to engage the upper face of the support on opposite sides of the axis about which the load supporting means may rotate, whereby the base plate may be braced.

3. A davit comprising a base plate arranged substantially in a horizontal plane, said base plate having a central perforation, means for clamping the base plate on a narrow upstanding support, means for tilting the base plate in the vertical longitudinal plane of the support, load carrying means mounted on said base plate, said load carrying means being rotatable about a vertical axis through the perforation and said load carrying means including means depending through the perforation for retaining the load carrying means on the base plate.

4. A davit comprising a post, a boom mounted thereon to swing about a horizontal axis, and resilient means interposed between said boom and the upper end portion of the post whereby the movement of the boom in such direction as to lower the outer end thereof is cushioned.

5. A davit comprising a post, a boom mounted thereon to swing about a horizontal axis, the rear end of said boom being arranged to approach the post as the outer end of the boom moves to lowermost position, and resilient means interposed between said rear end of the boom and the upper end portion of the post.

6. A davit comprising a post and a boom mounted thereon to swing about a horizontal axis, the rear end of the boom being extended upwardly and forwardly sufficiently to bring the post within its path as the outer end of the boom is swung to lowermost position, whereby the movement of the boom is limited.

7. A davit comprising a post and a boom mounted thereon to swing about a horizontal axis, the rear end of the boom extending considerably beyond the pivot, socket forming means carried by said rear end of the boom, and a detachable hand lever arranged to be received in said socket whereby the boom may be manipulated.

JEROME H. MORAN.