

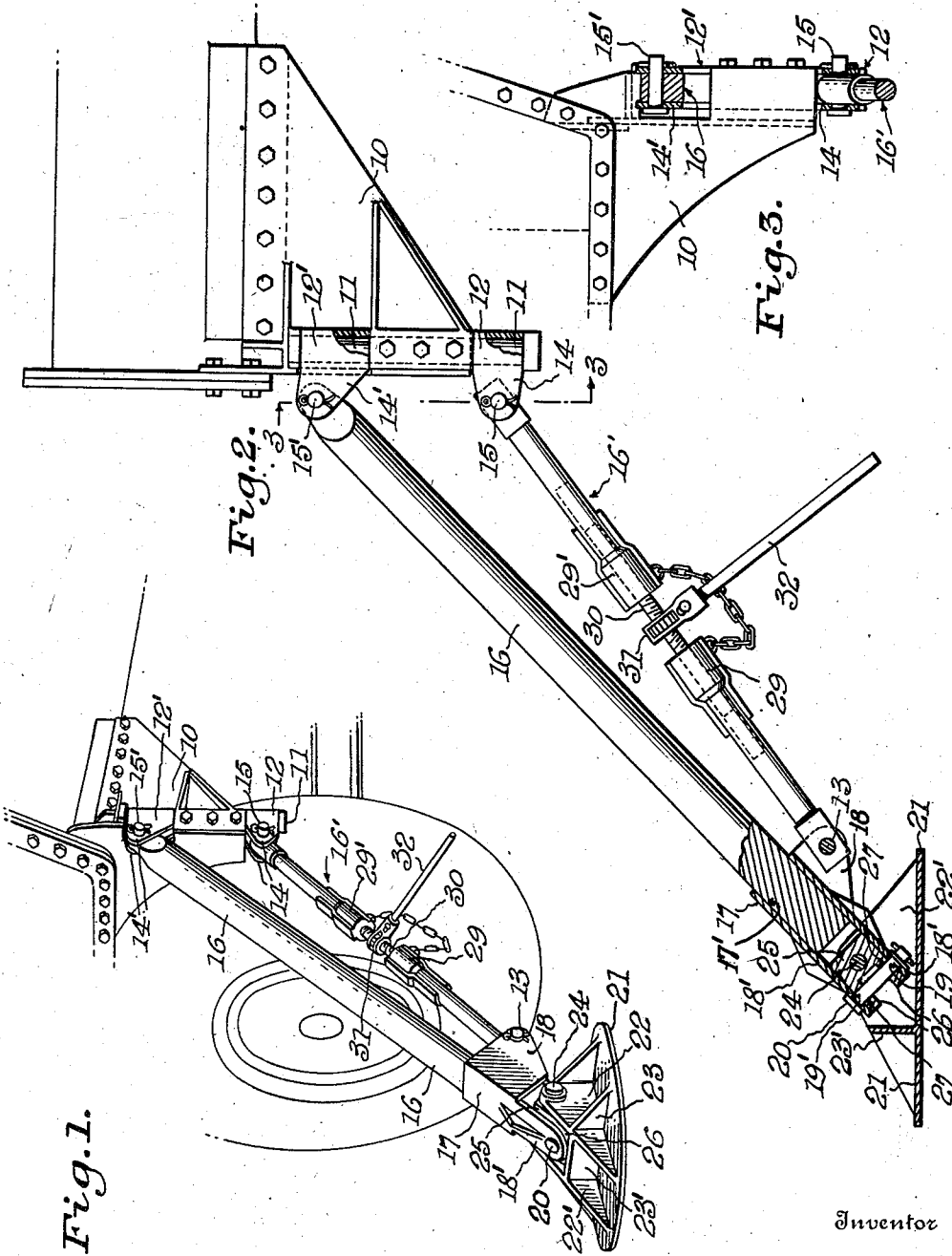
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OUTRIGGER TYPE SUPPORT

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OUTRIGGER TYPE SUPPORT

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The invention described herein may be manufactured and used by or for the Government for governmental purposes, without payment to me of any royalty thereon.

This invention relates to supports and particularly supports of the outrigger class known as pads.

It is an object of this invention to provide an outrigger type support constructed in a manner to be pivotally mounted to a structure.

Another object of this invention is to provide an outrigger type support pivotally mounted to a structure and having means selectively positioning and locking said support in a predetermined position in the vertical plane.

Another object of this invention is to provide an outrigger type support mounted to a structure in a manner such that it is freely pivotable in the horizontal plane and selectively pivotable in the vertical plane.

Another object of this invention is to provide an outrigger type support having a plurality of arms pivotally mounted to a structure and at least one of said arms being selectively extensible to position a foot pivotally mounted on at least one of said arms.

Another object of this invention is to provide an outrigger type support having a swivel mounted foot connected to an arm pivotally mounted to a rotatable member secured to a structure and a cooperating similar arm positioning and locking said foot due to the extensibility of its construction.

A still further object of this invention is to provide a support of the type described that will be simple, easy and economical in construction, and efficient and durable in use.

The foregoing and other objects and advantages of this invention will be more clearly understood from reading the specification in conjunction with the drawings, forming a part thereof, wherein:

Fig. 1 is a perspective view of the support secured to the rear of a vehicle;

Fig. 2 is a side elevation of the support, parts shown in section; and

Fig. 3 is a detailed sectional view taken on line 3—3 of Fig. 2.

In the drawings, wherein like members are given the same reference numeral, a bracket 10 is secured to any suitable structure, such as a trailer frame, material handling vehicle frame, and the like. Supported in the bracket 10 is a vertical pin or shaft 11 which may be mounted rotatably or rigidly in the bracket 10, as illus-

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trated in the drawings. Mounted on the shaft 11 are two spaced and aligned sleeves 12, 12' constructed to rotate freely around the shaft 11 when the shaft is mounted rigidly; and, to rotate with the shaft when it is rotatably mounted. These sleeves 12, 12' are each provided with brackets or ears 14 and 14' respectively constructed to receive pivot pins 15 and 15' and retain the inner ends of the outrigger arm 16 and outrigger adjusting arm 16' pivotally mounted thereon.

A casting 17 is provided on the outrigger support, said casting having a central bore 17' in which is rigidly mounted the outer end of the outrigger arm 16. The casting 17 is also provided with two sets of ears 18 and 18' extending in different planes, with the sets of ears 18 and 18' being provided with aligned apertures 19 and 19' respectively. The outrigger adjusting arm 16' is pivotally connected at its outer end to the set of ears 18 on the casting 17 by means of a pivot pin 20 and is extensible. Hence, when the adjusting arm 16' is extended, the casting 17 is raised, which in turn causes the inner end of the outrigger arm 16 to move about its pivot 15' for raising the outer end of arm 16. A foot 21 of any desired shape, preferably circular, is provided with a pair of upwardly extending spaced parallel plates 22 and 22' having a suitable number of outer stiffener plates 23, and an inner stiffener plate 23' with the inner stiffener plate 23 formed between the parallel plates 22 and 22' to provide a rigid structure. A pivot pin 24 is mounted in apertures formed in the parallel plates 22 and 22' in a manner such that a hanger block 25 which is fitted between the set of ears 18' on the casting 17 is pivotally supported by said pivot pin 24. The hanger block 25 has spaced parallel projections 26 extending outwardly therefrom which are provided with aligned apertures 27 adapted to receive the pivot pin 20 provided in the set of ears 18'.

The extensible arm 16' may be provided with any suitable means for extending and contracting it. An economical, efficient and durable means, however, has been provided in the form of a tightening bolt assembly. This assembly requires that the arm 16' be divided and internally threaded members 29 and 29' secured to contiguous ends of the arm 16'. One of these internally threaded members 29 is provided with right hand threads and the other with left hand threads so that a tightening bolt 30 having right hand threads on one end and left hand threads on the other end may be screwed into said internally threaded members 29 and 29'. A reversible

ratchet crank 31 having a detachable handle 32 is provided on the tightening bolt 30 for selectively turning the bolt to extend or contract the arm 16', and hence raise or lower the foot 21.

The length of the internally threaded members 29 and 29' depends upon the character of the outrigger adjusting arm 16'; if the arm 16' were hollow, a shorter threaded member 29 could be used than if the arm were solid.

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

1. An outrigger support comprising a structure, a bracket mounted on said structure, a vertically extending shaft mounted on said bracket, spaced and vertically aligned sleeves mounted to rotate horizontally on said vertical shaft, an outrigger arm, an outrigger adjusting arm in the same vertical plane as said outrigger arm, horizontally extending pivot pins carried by said sleeves, the inner end of one of each of said arms pivotally mounted on one of each of said pins on said sleeves whereby the outer ends of said arms may be moved vertically upward on and horizontally with said sleeves on said vertical shaft, a foot, a casting pivotally mounted on said foot, said casting including a central bore and two sets of ears, said sets of ears extending in different planes, a hanger block fitted into one of said sets of ears, the outer end of said outrigger arm rigidly mounted in said central bore and the outer end of said outrigger adjusting arm pivotally connected to said other set of ears, and means mounted on and adapted to selectively extend and contract said adjusting arm for raising or lowering the outer end of said outrigger arm.

2. An outrigger support comprising a structure, a bracket mounted on said structure, a vertically extending shaft mounted on said bracket, spaced and vertically aligned sleeves mounted to rotate horizontally on said vertical shaft, an outrigger arm, an outrigger adjusting arm in the same vertical plane as said outrigger arm, horizontal pivot pins carried by said sleeves, the inner end

of one of each of said arms pivotally mounted on one of each of the pins on said sleeves, whereby the outer ends of said arms may be moved vertically upward on and horizontally with said sleeves on said vertical shaft, a foot, a pair of upwardly extending spaced parallel plates and a plurality of stiffening plates formed between said parallel plates on said foot, a casting, said casting including a central bore and two sets of ears extending in different planes, a hanger block fitted into one of said sets of ears, a pivot pin extending through said parallel plates on said foot and said hanger block, whereby said foot is pivoted to said casting, spaced parallel projections extending outwardly from said hanger block and having aligned apertures therein, a pivot pin fitted in said aligned apertures and extending through one of said sets of ears on said casting, the outer end of said outrigger arm rigidly mounted in said central bore of said casting and the outer end of said outrigger adjusting arm pivotally connected to said other set of ears, and means including a tightening bolt and a reversible ratchet crank on the bolt to extend or contract said outrigger adjusting arm for raising or lowering the outer end of said outrigger arm.

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