Nov. 28, 1944. D. C. SCOTT 2,363,752

JACK SHORE

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Fig. 1.

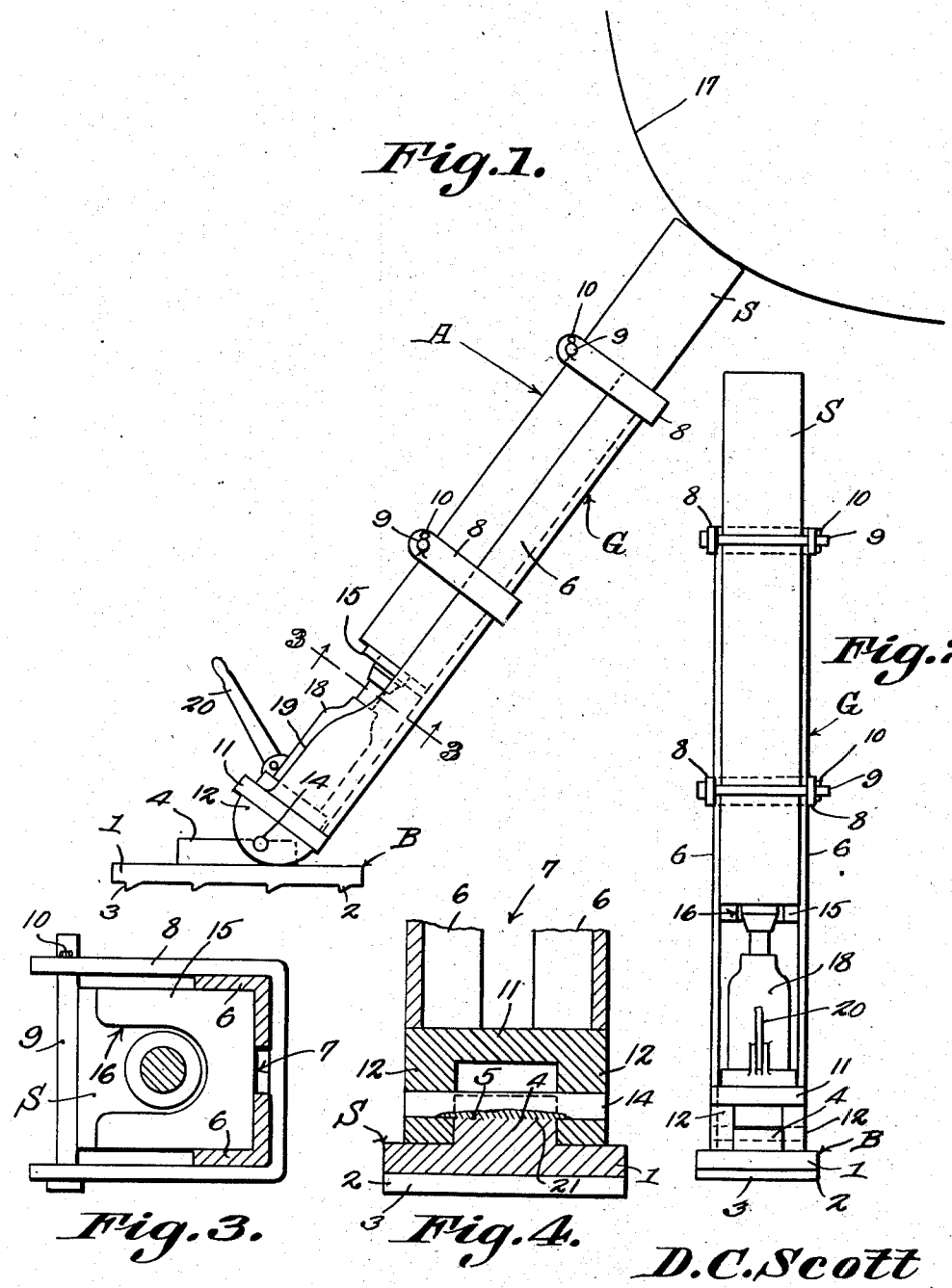


Fig. 2.

Fig. 3.

Fig. 4.

D. C. Scott
INVENTOR.

BY C. A. Knowles.
ATTORNY

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JACK SHORE

Dale C. Scott, Battleground, Wash.

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1 Claim. (Cl. 248—354)

In the building of a vessel, it is customary to hold the bilge plates in place by an inclined jack, the body whereof has the best available support and foothold, a shore or prop being interposed between the bilge plate and the end of the movable member of the jack. It frequently happens that the structure including the jack and the shore will fold or break laterally at the place of engagement between the lower end of the shore and the upper end of the movable part of the jack, injury to operators, and other evil consequences, resulting, especially in view of the fact that the weight of the bilge plate may be so much as two or three tons. Even though the plate may remain in place (being held by other jacks), the failing jack and the corresponding shore are flung aside with a force approaching that of a projectile.

In view of the foregoing, the present invention aims, broadly speaking, to provide novel means for holding the jack and the shore in axial alinement and against folding; to supply an adequate foothold for said means; and to permit the jack and the shore to be swung upwardly and downwardly for vertical adjustment as one piece, it being unnecessary for an operator to give a divided attention to the position of the jack, and to the position of the shore relatively to the jack and the bilge plate.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the present invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawing:

Fig. 1 shows in side elevation, a device constructed in accordance with the invention;

Fig. 2 is an elevation wherein the device is viewed at right angles to the showing of Fig. 1;

Fig. 3 is a transverse section on the line 3—3 of Fig. 1;

Fig. 4 is a vertical section taken through the support.

The adjustable prop forming the subject matter of this application preferably is made of metal throughout, aside from a shore S, which may or may not be formed of metal.

The part of the device to which the reference character A is applied in Fig. 1 will be considered the forward part, descriptive terms being selected accordingly.

The device under discussion includes a base B, comprising a plate 1, having transverse ribs 2 on its lower surface. The forward surfaces of the ribs 2 are marked by the reference numeral 3 and are at right angles to the lower surface of the plate 1, to the end that the ribs may acquire a firm hold on the ground. The plate 1 carries a fixed, upstanding lug 4, supplied in its upper surface with a transverse notch or seat 5.

The letter G marks an elongated, trough-shaped guide which, for lightness, and convenience in manufacture, may comprise oppositely-disposed angle members 6, the base or rear flanges of which are spaced apart as shown at 7.

At their rear ends, and intermediate their ends, the angle members 6 of the guide G are held together, and in spaced relation, by U-shaped yokes 8, which project forwardly beyond the forwardly presented, side flanges of the angle members. In the forward ends of the yokes 8, headed pins 9 are mounted, and are held in place by cotter pins 10. The pins 9 may have a rotary movement in the yokes 8, to facilitate the longitudinal movement of the shore S, hereinafter mentioned.

At their lower ends, the forwardly presented flanges of the guide G are broadened, as shown at 19 in Fig. 1, and are connected by a foot 11, having ears 12, located on opposite sides of the lug 4 of the base plate 1. A pivot pin 14 or the like is mounted in the ears 12 and has rocking movement in the seat 5 of the lug 4.

A partition 15, spaced from the foot 11, is welded at 21, or secured otherwise, in the constituent members 6 of the guide G and projects forwardly beyond the side flanges of those members. In the forward edge of the partition 15, a notch or opening 16 is formed.

The shore S is received for longitudinal adjustment in the guide G, to the rear of the pins 9, and finds an abutment against the partition 15, at the lower end of the shore. The height of the side flanges of the angle members 6 is less than the corresponding dimensions of the shore S.

The numeral 18 marks a jack, of any desired construction, the jack being shown as being operated by a handle 20, although the particular

operating means for the jack is of no consequence. The lower end of the jack rests against the foot 11 of the guide G, and the movable member of the jack extends through the notch 16 in the partition 15 of the guide G, the movable member of the jack engaging the lower surface of the shore 8. The partition 15 and the foot 11 form a jack-receiving chamber of fixed length. The broadening of the side walls of the guide G shown at 19, aids in holding the jack removable in place within the guide. The upper or rear end of the shore S engages the bilge plate 17 of a vessel, to hold the bilge plate in place.

The ribs 2 on the base plate 1 get a good hold on the ground. By operating the jack 18, the shore S is advanced with respect to the bilge plate 17, the shore moving away from the abutment or partition 15, under the actuation of the movable member of the jack 18.

The shore S is so confined within the guide G and associated parts that the structure cannot buckle or break transversely, with the unsatisfactory result pointed out in the fore part of this specification. The partition 15 extends beyond the free, longitudinal edges of the angle members 6, to form a shore-stop of approximately the same area as the lower end surface of the shore S.

While the shore S is in the position shown in Fig. 1, in contact with the abutment of partition 15, the base plate 1 may be advanced to the right in Fig. 1, until contact between the shore S and the bilge plate 17 is acquired, and then the necessary pressure can be put on the shore, by operating the jack 18.

The partition 15 stops the approach of the shore S toward the foot 11 of the guide G, and, therefore, there is always room enough so that the jack 18 may be slid into place within the guide, as shown in Figs. 1 and 2.

Having thus described the invention, what is claimed is:

In an adjustable prop, a trough-shaped guide including oppositely-disposed angle members, each comprising a base flange and a side flange, the inner edges of the base flanges being spaced apart, a shore longitudinally adjustable in the angle members, the height of the side flanges being less than the corresponding dimensions of the shore, a foot forming a connection between the angle members at their lower ends, a partition spaced from the foot and forming a connection between the angle members and cooperating with the foot to define a jack-receiving chamber of fixed length, the partition having an opening through which the movable member of a jack may work against the lower end surface of the shore, the partition extending beyond the free, longitudinal edges of the side flanges, to form a shore-stop of approximately the same area as the lower end surface of the shore, and a yoke forming a connection between the angle members, in spaced relation to the partition, the yoke engaging the shore to retain it in the guide, for longitudinal adjustment.

DALE C. SCOTT.