May 1, 1962 H. B. FULLER 3,032,333

WORK HOLDER FOR OUTBOARD MOTORS

Filed Jan. 2, 1959

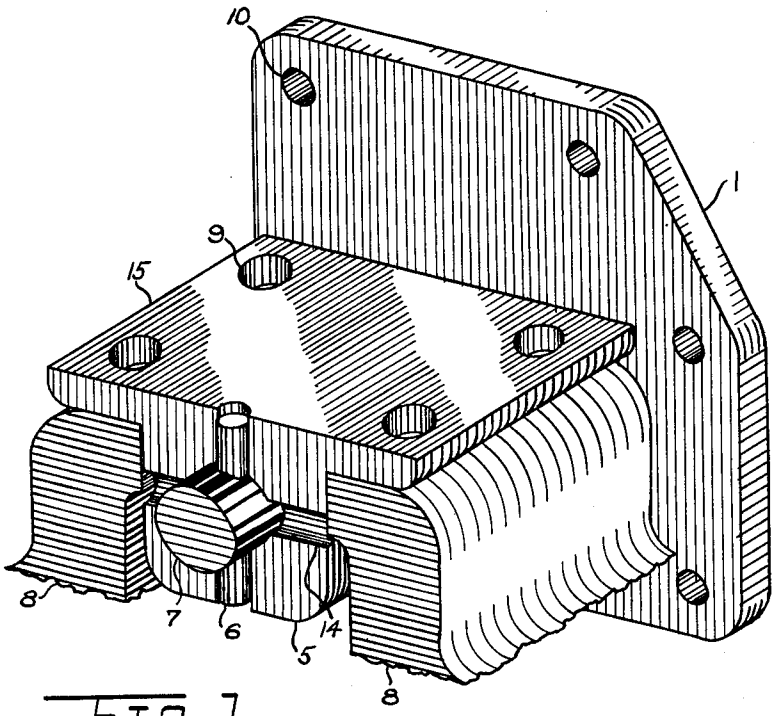


FIG. 1.

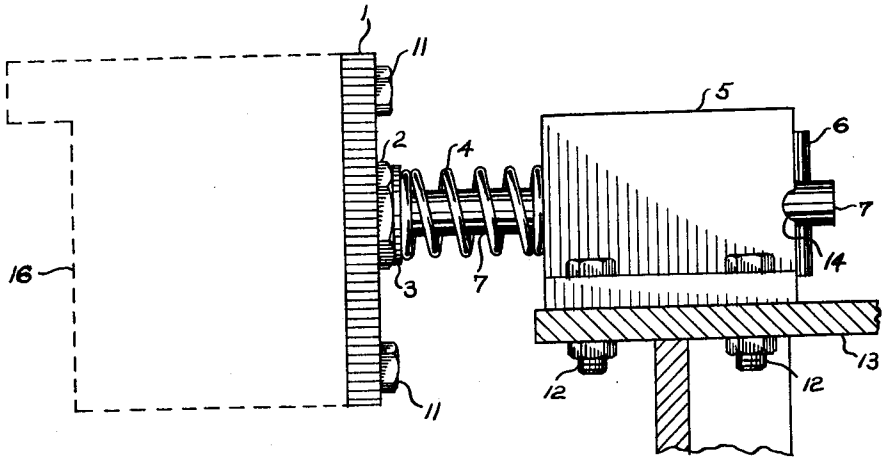


FIG. 2.

INVENTOR.

Harold B. Fuller

BY

United States Patent Office

3,032,333
Patented May 1, 1962

3,032,333

WORK HOLDER FOR OUTBOARD MOTORS

Harold B. Fuller, 3601 Dartmouth Ave., Tampa, Fla.

Filed Jan. 2, 1959, Ser. No. 784,540
1 Claim. (Cl. 269—67)

This invention relates to a work holder used to facilitate outboard motor repairs by supporting the work during repair.

In past years many outboard motor repair shops have been in need of a work holder to support outboard motor power head assemblies during repair. Until this time there has been no work holder adaptable to outboard motor power head assembly repairs after the power head assembly has been removed from the support bracket on which it normally operates. An important object of this invention is to supply a means for this support while repairs are taking place.

Another object of this invention is to supply a means of rotating the power head assembly on the supporting work holder to permit all sides of the assembly to be easily reached when required.

Another object of this invention is to make available a work holder which is easily portable and may be made ready for use by being supported by several different means.

Another important object of this invention is to supply a means of changing the work holder to permit repairs on many different shapes of power head assemblies and lock them in any of the 360 degrees of rotation.

FIGURE 1 is a perspective of the work holder as mounted in a bench vise or other clamping device with the lower portion of the clamping device broken away.

FIGURE 2 is a side elevation of the work holder mounted on a work bench with portion of the bench broken away and a typical power head assembly mounted on the work holder.

In this invention I provide a mounting block **5** which may be used in the jaws **8** of a clamping device or mounted on a work bench **13** by means of the bolts **12** passing through the holes **9** in the flanges **15** of the mounting block.

Passing through the mounting block is a shaft **7** through which passes a pin **6** at one end. The opposite end of the shaft is threaded to which is applied the lock nut **2** and the mounting plate **1** which is also threaded. Next to the lock nut is placed a washer **3** and the spring **4** is compressed around the shaft between the washer and the mounting block. To the mounting plate is mounted the

power head assembly **16** by means of the bolts **11** passing through the holes **10** of the mounting plate.

When working on various power head assemblies it becomes necessary to change the mounting plate to fit the different hole configurations. The mounting plate may be changed by turning the lock nut so it will move away from the plate. The plate is then free to rotate and be removed. The new plate is placed on the shaft by rotating and locked in place by moving the lock nut toward the plate until it is tight. The plate may also be locked in any position in this manner.

It is also necessary to work on the power head assemblies at many different angles. It is readily accomplished by means of rotation of the plate. Applying a force on the power head assembly and plate toward the pin compresses the spring and forces the pin out of the slots **14** and permits the shaft to turn freely in the block. Rotation is stopped by removing the force on the plate permitting the spring to expand and the pin to engage in several slots. The number of degrees of each stop may be regulated by the number of slots placed on the back of the mounting block into which the pin may engage.

In view of the above description I claim:

A work holder comprising a mounting block having front and rear parallel faces, means on said mounting block for mounting the same on a support, a shaft rotatably mounted in a bore in said mounting block, the axis of said bore extending perpendicular to the front and rear faces of the mounting block and being centrally located with respect to said faces; the rear face of said mounting block having a plurality of angularly related radially extending slots formed therein extending outwardly from the bore and in communication therewith for angularly positioning the shaft within the bore, a pin extending through one end portion of the shaft and adapted to be seated selectively in said slots, a mounting plate secured to the other end portion of the shaft and spring means extending between the mounting plate and the front face of the mounting block biasing the shaft in a direction to urge the pin to seat in preselected slots.

References Cited in the file of this patent

UNITED STATES PATENTS

1,471,992	Wigness et al.	Oct. 23, 1923
1,600,134	Peterson	Sept. 14, 1926
2,270,203	Saunders	Jan. 13, 1942
2,470,487	Hollis	May 17, 1949
2,707,819	Silliman	May 10, 1955