July 4, 1944.

G. E. BRACKETT

2,352,600

EXTENSION JACK

Filed Nov. 12, 1941

Fig. 1.

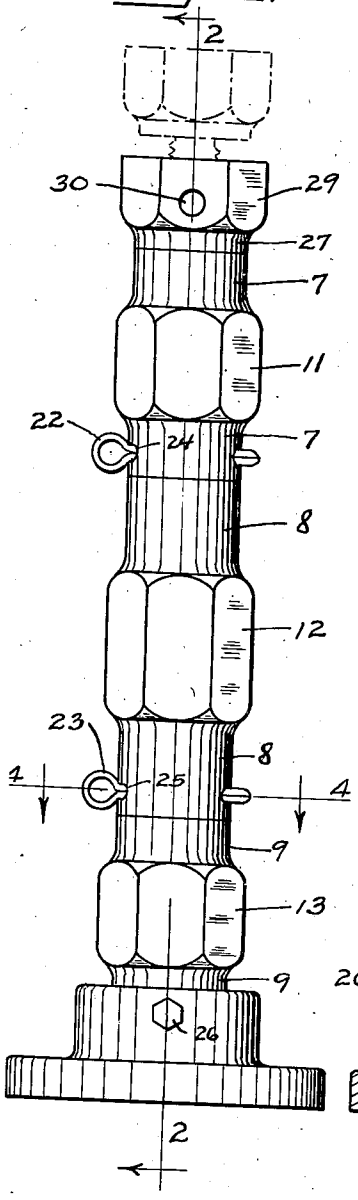


Fig. 2.

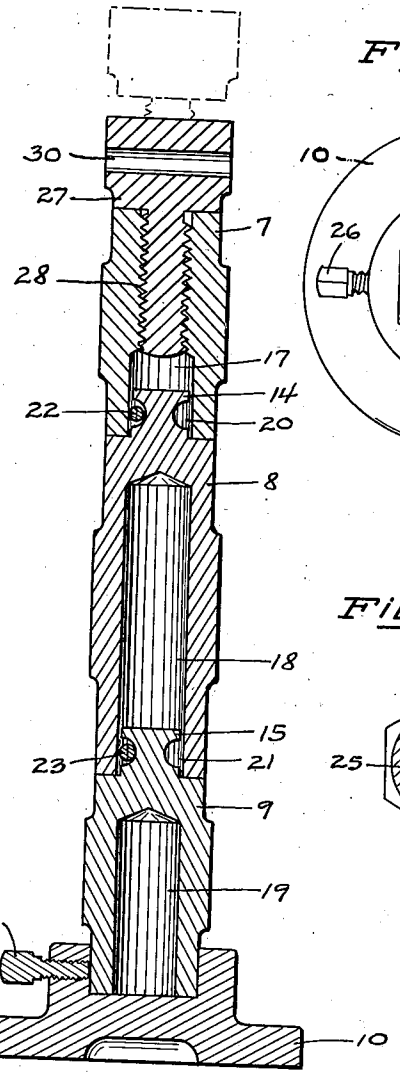


Fig. 3.

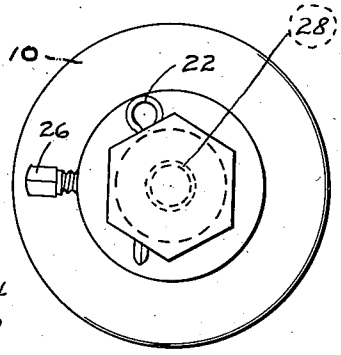
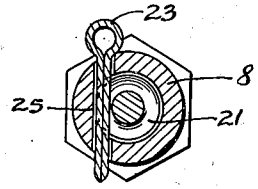


Fig. 4.



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2,352,600

EXTENSION JACK

George E. Brackett, San Mateo, Calif.

Application November 12, 1941, Serial No. 418,733

1 Claim. (Cl. 254—98)

This invention relates to improvements in extension jacks that are used for jacking up heavy bodies such as engines, pumps and other types of machinery when doing repair work.

A disadvantage in the average jack used for such work is the fact that the standard, or column, has a fixed length making it necessary for the repair man to possess a large number of different length jacks in order to properly perform the different kinds of work required.

An object of the present invention is to improve that type of jack by forming the standard or column out of a plurality of extension members, the ends of which telescope into each other and are supported onto each other thus providing a substantial column for the jack that can be readily changed to different lengths.

Another object of the invention is to provide an interchangeable foot piece that can be quickly attached to any one of the extension members that form the column.

Another object of the invention is to provide an efficient fastening means for holding the extension members together by providing a circumferential groove around the upper portion of one of the members and a cotter pin through the corresponding member that is adapted to extend through the groove, and holds the members together.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawing:

Fig. 1 is a longitudinal vertical side elevational view of one form of the improved jack involving the invention;

Fig. 2 is a longitudinal vertical sectional view taken through lines 2—2 of Fig. 1 looking in direction of the arrows;

Fig. 3 is a top plan of the jack;

Fig. 4 is an end sectional plan view taken through line 4—4 of Fig. 1, looking in direction of the arrows, the foot piece being removed.

Referring in detail to the drawing and to the different parts thereof, the numerals 7, 8, and 9, designate three extension members of different lengths and the numeral 10 an interchangeable foot piece that is adapted to fit onto any one of said extension members. Each of the extension members 7, 8, and 9, is preferably formed circular at the upper and lower end portions thereof, and is formed hexagon at the central portion, as shown at 11, 12, and 13, respectively, in Fig. 1. The diameters of the uppermost end portions of the extensions 8 and 9 are reduced as shown at 14 and 15, and are formed symmetrical and are adapted to telescope into the circular holes 17 and 18, that are provided into the extensions 7 and 8 respectively. The extension 9 has a circular hole 19 that is symmetrical with said holes 17 and 18. Each of the extensions end portions 14 and 15 has a circumferential groove as shown at 20 and 21. A pair of cotter pins 22 and 23 are provided and projected through the holes 24 and 25, and through the grooves 20 and 21 as shown in Figs. 1, 2 and 4. This construction affords a very simple means for holding the extension members together and eliminates much time that would otherwise be required to connect and disconnect the same. The interchangeable foot piece 10 is capable of being mounted onto any one of the extension members 7, 8, and 9, and is provided with a set screw 26 for securely holding it in place. The extension members can also be held together by a set screw if desired.

The jack is provided with a suitable lifting head 27 that is formed with a threaded extension 28, a hexagon portion 29 and a hole 30, that extends therethrough as shown in Figs. 1 and 2. The threaded extension 28, of the head 27, screws into the extension member 7 and is adapted to be raised or lowered by being revolved, the hole 30 providing an opening into which a suitable rod can be inserted to facilitate the revolving of the lifting head when it is desired to operate the jack. Figs. 1 and 2 shows in dot and dash outline how the lifting head raises when revolvable movement is imparted thereto.

From the foregoing it will be readily seen that the improved jack is a very useful and practical article and can have any suitable number of extension members that will give it any length desired. The foot piece 10 can be mounted directly onto the extension members 7 to give the jack the minimum length and likewise a greater number of extension members can be provided than shown, and the foot piece 10 mounted onto the lowest extension to give the jack the maximum length.

It is to be understood that the form of my invention herewith shown and described are to be taken as preferred examples of the same and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claim.

Having thus described my invention, I claim:

An extension member of the character described comprising an adjustable standard, a lifting head threadedly supported therein, said standard consisting of a plurality of extension

members detachably connected together and interchangeable one with the other and capable of providing variable heights, the adjacent end portions of said interchangeable extension members having a cooperating male and female joint, an annular groove in the male portion of each joint, an aperture through the female portion of each joint and positioned to coincide with said annular groove on the male portion, and a pin extending through the aperture and groove to fasten each joint together.

GEORGE E. BRACKETT.