

O. E. CLARK.
PNEUMATIC TOOL HANDLE MOUNTING.
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1,177,682.

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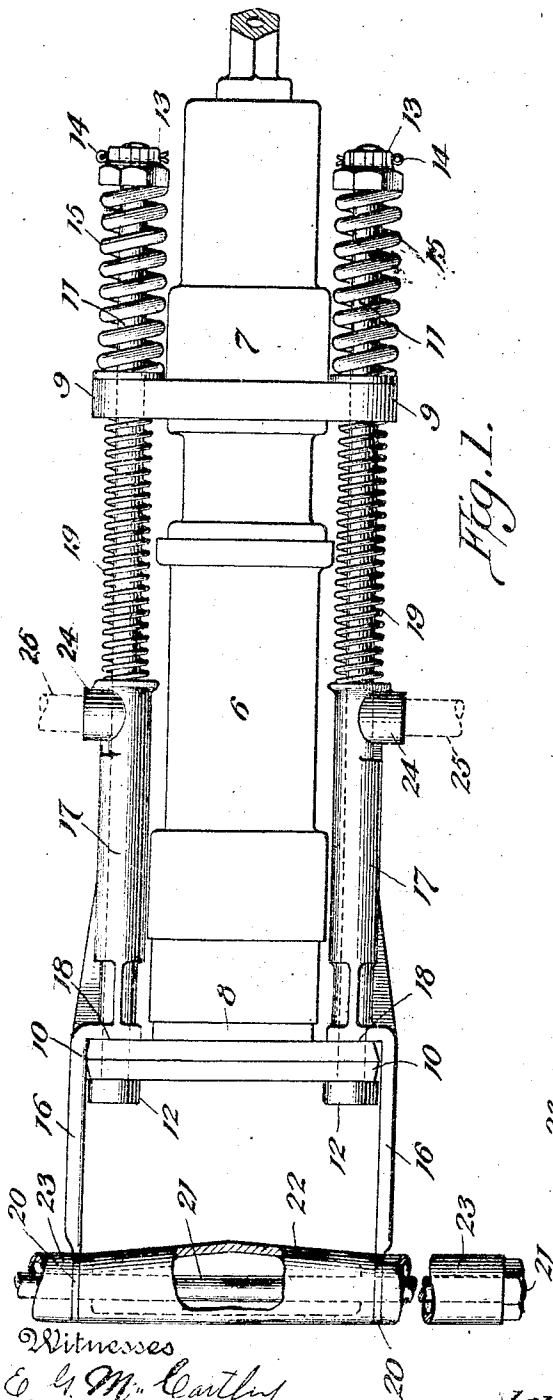


Fig. 1.

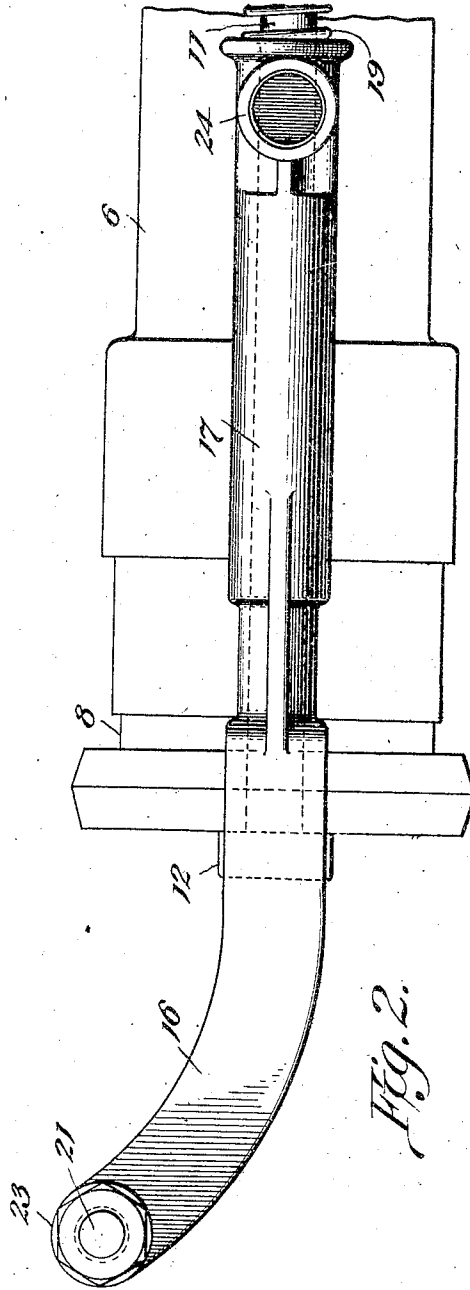


Fig. 2.

Witnesses
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by

Inventor,
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[Signature]

Attorney

UNITED STATES PATENT OFFICE.

OMAR E. CLARK, OF DENVER, COLORADO, ASSIGNOR TO THE DENVER ROCK DRILL MANUFACTURING COMPANY, OF DENVER, COLORADO, A CORPORATION OF DELAWARE.

PNEUMATIC-TOOL HANDLE-MOUNTING.

1,177,682.

Specification of Letters Patent.

Patented Apr. 4, 1916.

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To all whom it may concern:

Be it known that I, OMAR E. CLARK, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented new and useful Improvements in Pneumatic-Tool Handle-Mountings, of which the following is a specification.

The present invention relates to pneumatic tools, and more particularly those employed for rock drilling purposes.

The primary object of this invention is to provide a handle mounting which is simple and practicable, and will absorb the shocks and jars due to the operation of the motor, thereby preventing to a material degree their transmission to the operator, and making it possible to use a more powerful motor than is practicable if a fixed handle is employed.

An embodiment that has proven satisfactory is illustrated in the accompanying drawings, wherein:—

Figure 1 is a plain view of a motor equipped with the novel handle. Fig. 2 is a side elevation of a portion of the same on an enlarged scale.

Similar reference numerals designate corresponding parts in all the figures of the drawings.

In the embodiment illustrated, the motor which may be of any desired character, comprises a barrel 6 having a front head 7 and a rear head 8, these heads being provided with diametrically opposite outstanding ears 9 and 10, through which the usual side bolts 11 pass, said side bolts constituting means for holding the parts in assembled position, as will be readily understood. In the embodiment disclosed, the side bolts have heads 12 at their rear ends that bear against the ears 10 of the rear head 8 of the motor, their front ends projecting a considerable distance beyond the ears 9, and having nuts 13 threaded thereon and held against accidental detachment by cotter pins 14. Interposed between the nuts 13 and the ears 9, are springs 15.

The handle, in the embodiment disclosed, includes side members or arms 16 having sleeves 17 at their front ends that are longitudinally disposed with respect to the side members, but are inset, forming stop shoulders 18. These sleeves are slidably mounted on the side bolts 11 between the ears 9 and

10. They are normally and yieldingly held in their rearmost position by coiled springs 19 located on the side bolts 11 between the front ends of said sleeves and the rear facts of the ears 9, the springs 19 being of lighter material than the springs 15. As a result, the shoulders 18 are normally abutted against the ears 10. The rear ends of the side members or arms 16 have eyes 20, through which is passed a holding bolt 21, and on this holding bolt is located the hand grip which comprises a central section 22 disposed between the arms 16, and constituting a spacer therefor and end sections 23 located outside the eyes 20. The sleeve 17 may also be provided with transversely disposed coupling nipples 24, into which hand grips, indicated at 25, may be threaded or otherwise secured.

The operation of the device, it is thought, will be readily understood. In rock drilling-work, particularly in sinking, the operator presses downwardly upon the motor, and in the present embodiment, this is accomplished by pressing down upon the hand grip. This compresses the springs 19 to some extent, thereby separating the shoulders 18 from the ears 10. As a result, the vibration of the motor is absorbed in and by the spring 19, thereby relieving the operator from the jar and vibration to a very material degree.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention, will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction, may be resorted to without departing from the spirit or scope of the invention.

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

1. The combination with a motor, including a barrel and heads, of a side bolt for securing the heads on the barrel, and a handle for the motor slidably mounted on the side bolt.

2. The combination with a motor, including a barrel and heads, of a side bolt for securing the heads on the barrel, a handle for the motor slidably mounted on the side bolt, and a spring bearing against the handle for resisting its sliding movement.

3. The combination with a motor, including a barrel, heads, and oppositely disposed side bolts for holding the heads in position on the barrel, of a handle for the motor having side members slidably mounted on the side bolts, and yielding means for opposing the sliding movement of the handle.

4. The combination with a motor, including a barrel, heads therefor, and oppositely disposed side bolts for securing the heads in position, of a handle having side members slidably mounted on the side bolts, and springs upon the side bolts in advance of the side members and bearing against the same for resisting their forward movement on said side bolts.

5. The combination with a motor, including a barrel, heads for the barrel, and side bolts for securing the parts in position, of a handle yoke slidably mounted on the side

bolts, and springs bearing against the handle yoke for resisting its movement.

6. The combination with a motor, including a barrel, heads for the barrel, and oppositely disposed side bolts for securing the parts in position, of a handle yoke having side arms provided with terminal sleeves slidably mounted on the side bolts, and coiled springs located on the side bolts and interposed between the front heads and the sleeves for resisting the forward sliding movement of the said sleeve and handle.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

OMAR E. CLARK.

Witnesses:

WILLIAM H. LEONARD,
JESSIE TURNER.