

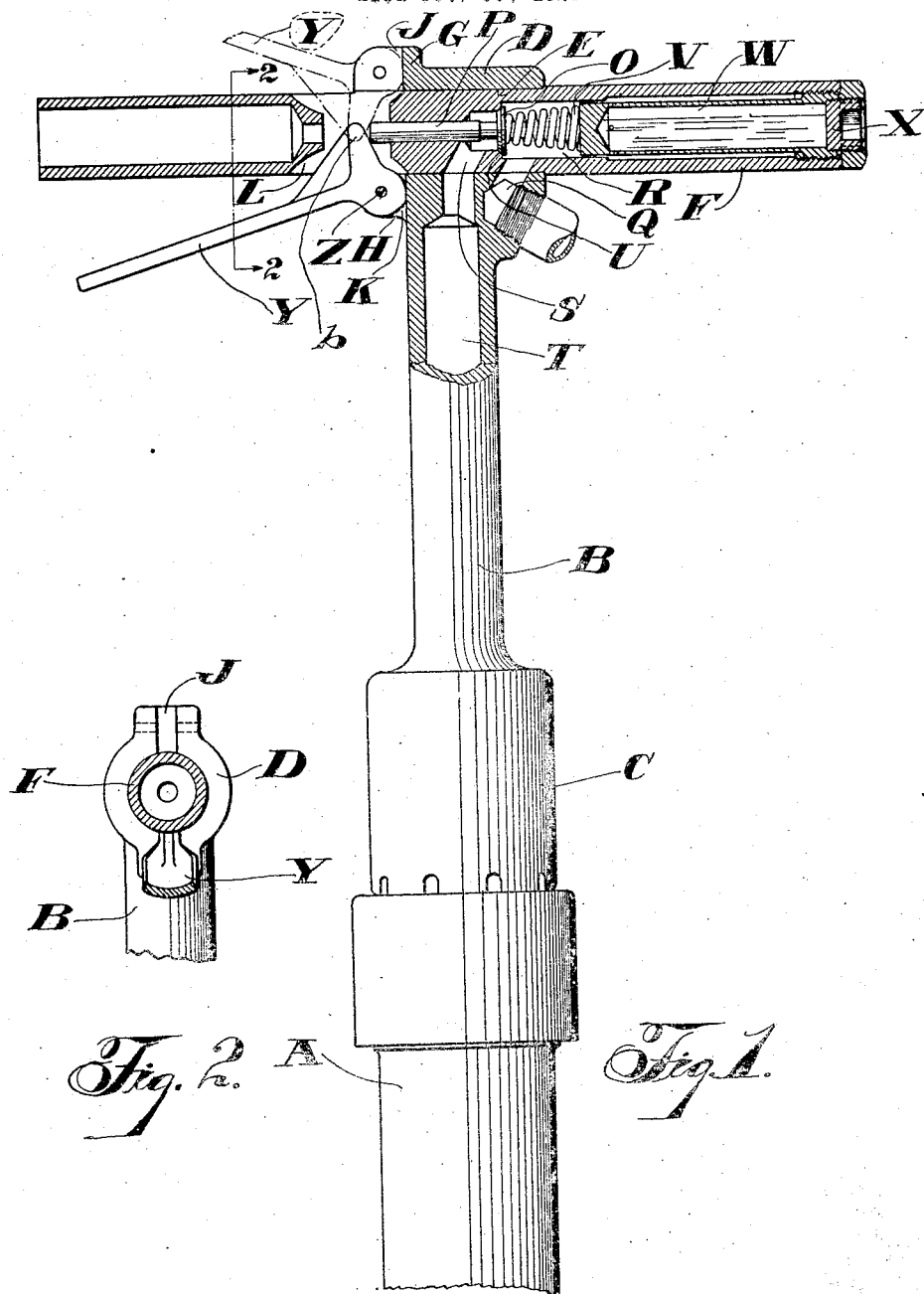
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HANDLE FOR PNEUMATICALLY OPERATED TOOLS

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HANDLE FOR PNEUMATICALLY-OPERATED TOOLS.

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This invention relates to pneumatic tools, and more particularly to handles for guiding such tools.

Handles for guiding pneumatically operated tools as for instance, concrete breakers and clay diggers and the like, are usually provided with throttle valves arranged in such a manner that the operator may control the throttle while with the same hand grasping the handle. The position of the lever for operating the throttle valve is a matter of personal preference, some operators preferring the lever below the handle and others above.

It is an object of this invention to enable the throttle valve operating lever to be placed in either of such positions without removing the handle.

Other objects will be in part obvious and in part pointed out hereinafter.

In the drawing forming part of this specification and in which similar reference characters refer to similar parts,

Figure 1 is a view in elevation of a pneumatically operated hammer tool provided with a handle shown in longitudinal vertical section and constructed in accordance with the practice of the invention, and

Figure 2 is a cross section through the handle taken along the line 2—2 of Figure 1 looking in the direction of the arrows.

Referring to the drawings, the invention is shown as applied to a tool of the well known clay digger type, only the rear end of the barrel or cylinder A of said clay digger being shown. The handle comprises a stem B terminating in an enlarged portion C adapted to be suitably attached to the barrel A of the clay digger. At the end of the stem B opposite the portion C the stem is formed with a head D having a transverse bore E within which a bar F is adapted to be press fitted.

The head D is provided with a pair of bosses G and H having slots J and K respectively, cut or otherwise formed therein and diametrically opposite each other with respect to the center of the bore E. The bar F is likewise provided with a slot L extending through the bar and in line with the slots J and K. Preferably, the slot L lies generally in the plane of the stem B so that the slot J may be said to be above and the slot K below the transverse bar F as viewed from the operator's position. A

throttle valve O having a stem P extends longitudinally of the bar F which is hollow at both ends.

Motive fluid is supplied to the tool through a threaded aperture Q formed in the head D of the stem B whence it enters a chamber R in the hollow bar F. The flow of motive fluid from the chamber R to a passage S leading to the bore T of the stem B is controlled by the valve O cooperating with its seat U. Normally the valve O is held on its seat by a coil spring V interposed between the head of the valve O and an oil reservoir W screwed in place within the chamber R and closed by means of a plug X.

The valve O is controlled by means of a throttle lever Y which may be pivotally supported as by means of a pin Z in either the slot J or the slot K. As indicated in the drawing, if the lever Y is mounted in the slot K the lever is situated so as to be controlled from below the bar F and likewise when mounted in the slot J the lever Y is controlled from above the bar F. The lever Y is intended to be mounted in either of such positions depending upon the operator's preference. The lever Y is provided with a valve engaging portion b preferably extending at an angle to the main length of the lever Y and adapted to project into the slot L of the bar F to engage the stem P of the valve O. If it be desired to change the throttle lever Y from one of its operative positions to the other, the pin Z may be driven out to permit withdrawal of the lever Y. The lever Y may then be placed in the other of the slots J or K and the pin Z be replaced as the pivotal support for the lever.

Thus, by the above construction are accomplished among others, the objects hereinbefore referred to.

I claim:

1. A handle for a pneumatically operated tool, comprising a stem having a head bored transversely, a hollow cross bar extending through said head, said bar having a slot extending therethrough adjacent said head, a throttle valve having a stem extending longitudinally in said bar and into said slot, and a throttle lever adapted to be attached to said head at either of opposite sides of said bar and said lever extending into said slot to engage said valve stem.

2. A handle for a pneumatically operated

tool, comprising a stem having a head bored transversely, said head having bosses slotted diametrically across said bore, a bar press fitted into the bore of said head and provided with a slot extending therethrough in line with the slots in said bosses, a throttle valve having a stem extending longitudinally in said bar and projecting into the slot of said bar, and a throttle lever adapted to be pivotally mounted in either slot in said head and extending into the slot in said bar to engage the stem of said throttle valve.

3. A handle for a pneumatically operated tool comprising a stem having a head bored

transversely, said head having a boss slotted diametrically across said bore, a bar press-fitted into the bore of said head and provided with a slot extending thereinto in line with the slot in said boss, a throttle valve having a stem extending longitudinally in said bar and projecting into the slot of said bar, and a throttle lever pivotally mounted in said slot in said head and extending into the slot in said bar to engage the stem of said throttle valve.

In testimony whereof I have signed this specification.

FRANCIS A. JIMERSON.