

C. McSHERRY.
ATTACHMENT FOR PNEUMATIC HAMMERS.
APPLICATION FILED DEC. 9, 1907.

963,924.

Patented July 12, 1910.

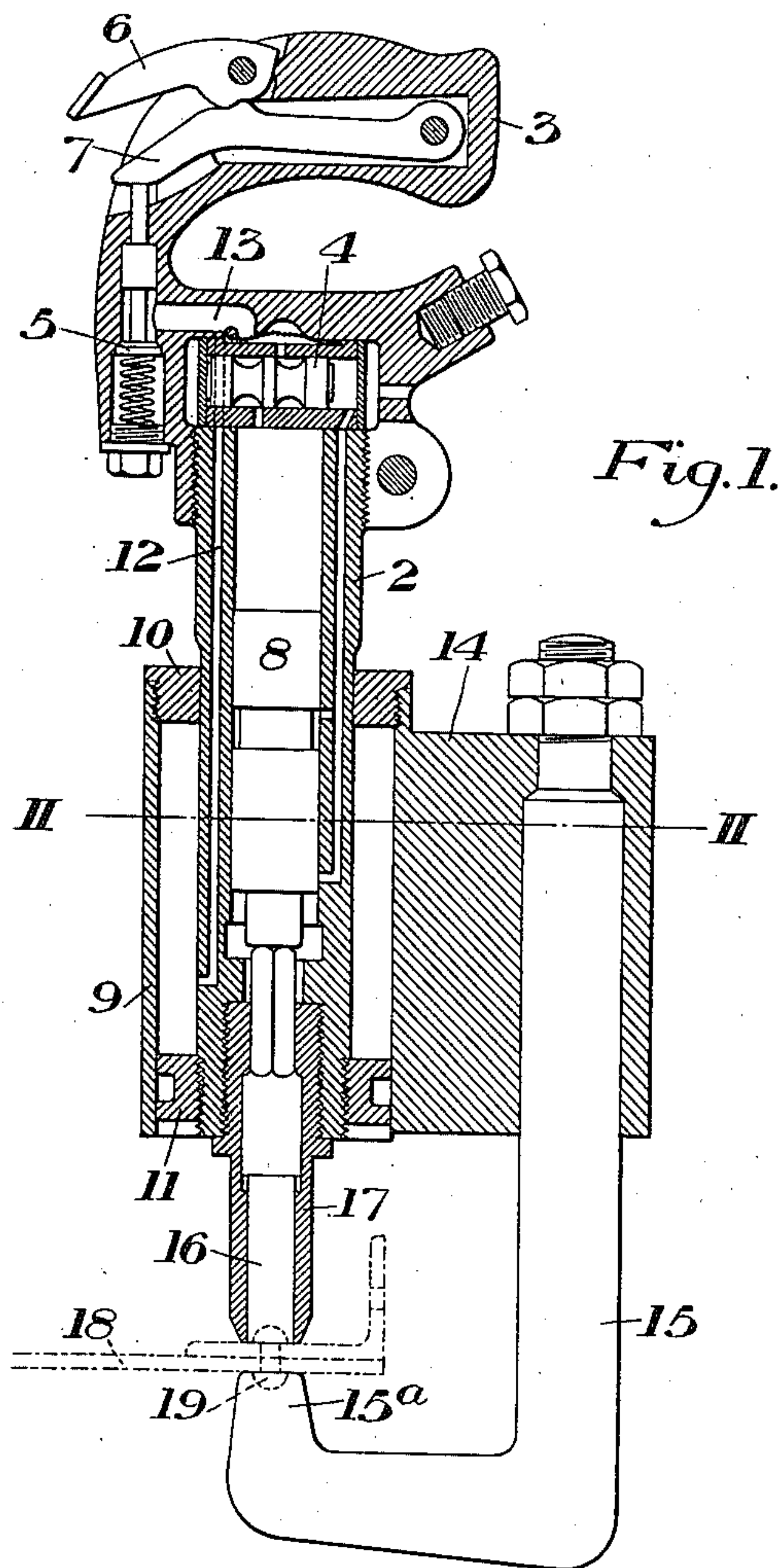


Fig. 1.

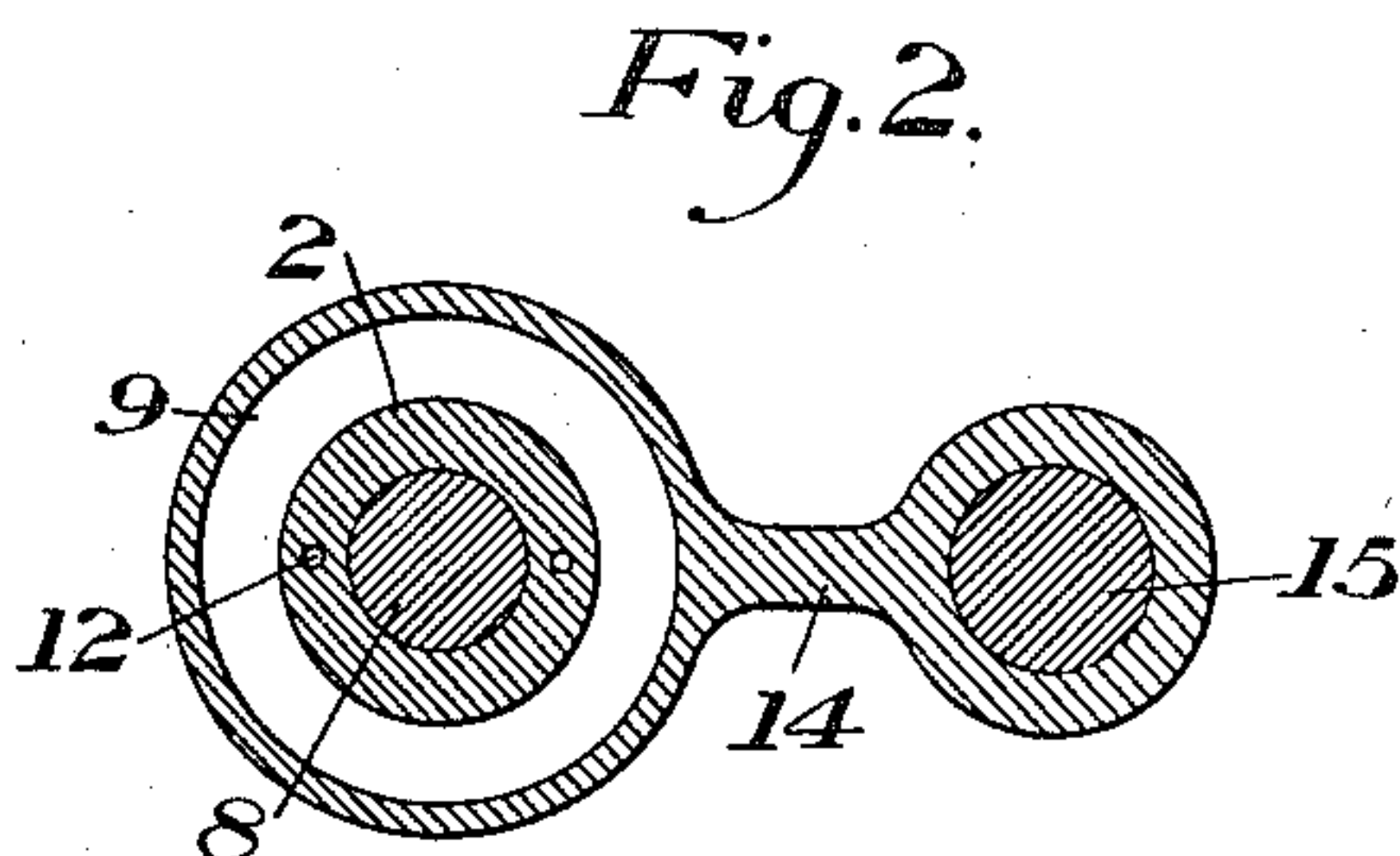


Fig. 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES McSHERRY, OF PITTSBURG, PENNSYLVANIA.

ATTACHMENT FOR PNEUMATIC HAMMERS.

963,924.

Specification of Letters Patent.

Patented July 12, 1910.

Application filed December 9, 1907. Serial No. 405,694.

To all whom it may concern:

Be it known that I, CHARLES McSHERRY, of Pittsburg, Allegheny county, Pennsylvania, have invented a new and useful Attachment for Pneumatic Hammers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of a pneumatic hammer showing my improvement; and Fig. 2 is a section on the line II—II of Fig. 1.

My invention has relation to pneumatic hammers, and is designed to provide hammers of this character with an anvil, or work-holding, attachment which will form an efficient and convenient means for holding the work in proper relation to the tool, and which will act as an anvil or abutment for receiving the blows of the tool upon the work.

The precise nature of my invention will be best understood by reference to the accompanying drawings, in which I have shown one form of my invention, and which will now be described, it being premised, however, that various changes may be made therein by those skilled in the art without departing from the spirit and scope of my invention as defined in the appended claims.

In these drawings, the numeral 2 designates the cylinder of a pneumatic hammer of a well-known type, 3 the handle, 4 the controlling valve, 5 the inlet valve which is operated by the hand lever 6 through the intermediate lever 7, and 8 is the plunger. These parts need not be described in detail, since they are well known in the art, my invention having nothing to do with the particular construction and character of the hammer itself, being capable of use in connection with pneumatic hammers of various types.

Placed concentrically around the cylinder 2 is an auxiliary cylinder 9 having a head 10 secured thereto and a piston 11 which is screwed or otherwise secured to the lower end portion of the cylinder 2, and upon which the cylinder 9 is arranged to move. 12 is an admission port, which leads into this cylinder 9. In the present instance, I have shown this port as being formed in the wall of the cylinder 2, communicating at its upper end with the inlet port 13, which leads to the controlling valve 4. The cylin-

der 9 has a laterally projecting arm 14, in which is secured the shank portion of a holding up tool or anvil 15, which extends down and below the end of the hammer, and terminates at its free end in the anvil portion 15^a.

16 designates the rivet set or other tool, which is actuated by the blows of the plunger 8 of the hammer, and which is guided in the sleeve or sheath 17 which is secured in the lower end of the cylinder 2.

18 indicates the work, and 19 one of the rivets which has been headed by the tool.

The operation will be readily understood. When the hand lever 6 is operated to admit air to the cylinder 2, air is at the same time admitted within the cylinder 9 through the port 12. This moves the cylinder 9 upwardly on the cylinder 2 and pulls the anvil 15 into engagement with the under side of the work, as shown in Fig. 1.

The advantages of my invention will be apparent to those familiar with the use of pneumatic hammers. The attachment can be applied to the hammer at a comparatively small cost, and obviates the necessity for providing in each case a special abutment or support for the work and the heads of the rivets. Inasmuch as the movement of the holding-up tool or anvil is controlled by the same valve mechanism which controls the operation of the hammer, no special manipulation of the tool is required, but as soon as the hammer is applied to the work and operated the holding-up tool or anvil is automatically brought into working position.

It will be obvious that many changes can be made in the details of the construction and arrangement. Thus, instead of forming the port 12 in the wall of the cylinder, a separate air pipe or passage can be connected with the air supply for the purpose of feeding the cylinder 9; the general construction and arrangement of the hammer itself may be varied, and the mode of attaching the holding-up tool or anvil to the auxiliary cylinder may also be changed, without departing from my invention.

I claim:—

1. An attachment for a pneumatic tool, comprising an auxiliary cylinder having a cylinder head slidably mounted on the cylinder of the pneumatic tool, a cylinder head secured to the end of the pneumatic tool the auxiliary cylinder being arranged to move

over the last cylinder head, an anvil in line with the operating tool of the pneumatic tool, and a shank connected to the auxiliary cylinder and the anvil; substantially as described.

2. An attachment for a pneumatic tool having a pressure supply chamber, an auxiliary cylinder having a cylinder head connected thereto and slidably mounted on the cylinder of the pneumatic tool, a cylinder head secured to the end of the pneumatic tool, the last mentioned cylinder head being arranged so as to allow the auxiliary cylin-

der to slide thereon, an anvil in line with the operating tool of the pneumatic tool, a shank connecting the auxiliary cylinder and the anvil, and means to supply pressure to the auxiliary cylinder from the pressure supply chamber of the pneumatic tool; substantially as described.

In testimony whereof, I have hereunto set my hand.

CHAS. McSHERRY.

Witnesses:

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