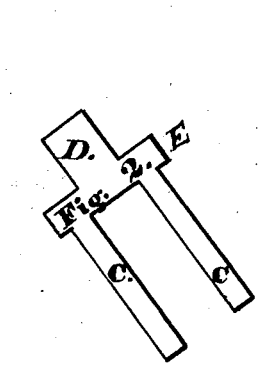
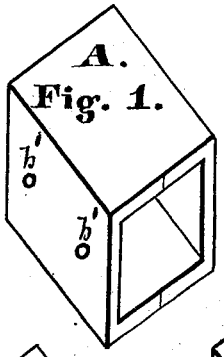
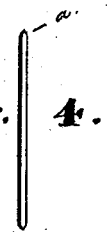
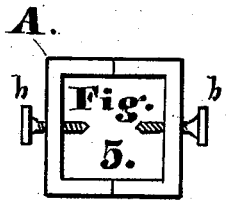
M. McANLY.
Chuck.

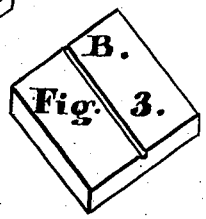
No. 207,882. Patented Sept. 10, 1878.

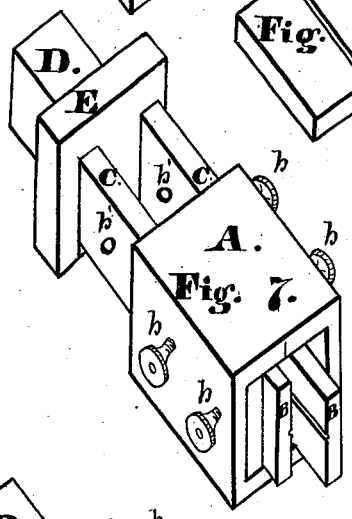


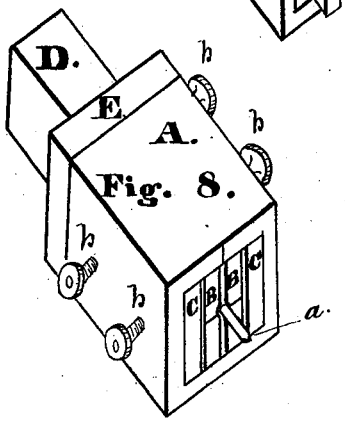












WITNESSES.

J. J. Hayden.
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INVENTOR.

Milton McAnly
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Atty

UNITED STATES PATENT OFFICE.

MILTON McANLY, OF FORESTON, ILLINOIS.

IMPROVEMENT IN CHUCKS.

Specification forming part of Letters Patent No. **207,882**, dated September 10, 1878; application filed February 8, 1878.

To all whom it may concern:

Be it known that I, MILTON McANLY, of Foreston, in the county of Ogle and State of Illinois, have invented certain new and useful Improvements in Chucks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being made to the accompanying drawing, in which—

Figure 1 is a perspective view of the collar. Fig. 2 is a view of the support or base in connection with the two fixed arms and the cube attached. Fig. 3 represents one of the parallelograms or plates. Fig. 4 represents a shaft, drill, or equivalent, to be inserted between the parallelograms. Fig. 5 is an end view of the collar. Fig. 6 is a side view of collar. Fig. 7 is a view of the chuck, showing the relative arrangement of all the several parts; and in Fig. 8 the same is shown in a different position and with the drill or shaft inserted.

Like letters of reference indicate like parts.

In Fig. 2, E is the base-plate or support, whence the two fixed arms C C extend. The square collar A (see Fig. 1) is made of sufficient dimensions to slide over these arms, and fits flush with the four edges of the base-plate E. The sides of this collar A are of the same thickness and length as the arms and parallelograms. Said parallelograms B B are fitted into the collar, touching it with their edges and lying flat-sided against the arms.

In the arms C C and in the two sides of the collar A there are corresponding screw-holes *b'*, in which the thumb-screws *b* work, and which thumb-screws impinge on the parallelograms B B, pressing them together and against the bit or shaft or whatever may be placed between them. An angular groove is cut in the middle of one of the sides of each of the two parallelograms, for the reception and better holding of that which may be inserted between them. These grooves are in opposite directions to the center of the collar, which is marked across its outer edges, to assist the eye in adjusting the parallelograms to the true center, or to aid in placing them away from the center to any distance. With the proper graduation-marks they may be adjusted with mathematical accuracy to the smallest fractional part of an inch, thereby rendering this chuck peculiarly adapted for work requiring such accuracy.

All of the parts of my chuck are constructed on the principle of squares and right lines, and in such way as to admit of very little friction. It is also evident that, the collar A being square, and also the edges of the parallelograms and arms fitting into it being squared, there is but very small chance of the said parallelograms turning or slipping away from their exact position in the center of the chuck.

In the construction of the parts of the chuck steel is used.

This chuck may also be attached to other chucks by placing the cube D in the square center formed by the jaws of the chuck or their equivalent. On account of its being susceptible of such accurate adjustment, it will be readily appreciated by jewelers and others using lathes for fine and delicate work.

Having thus described my invention, what I claim, and desire to secure to myself by Letters Patent, is—

1. In a chuck, the combination, with the collar A and grooved parallelograms B B, of the base-plate E, provided with the arms C C and cube D, substantially as and for the purposes herein shown and described.

2. The herein-described chuck, consisting of the collar A, base-plate E, provided with the fixed arms C C, and the adjustable grooved parallelograms B B, substantially as and for the purpose specified.

MILTON McANLY.

Attest:

NATHAN W. FITZGERALD,
J. C. WILDMAN.