O. A. WEST.

CHISEL.

APPLICATION FILED JULY 15, 1912.

1,082,379.

Patented Dec. 23, 1913.

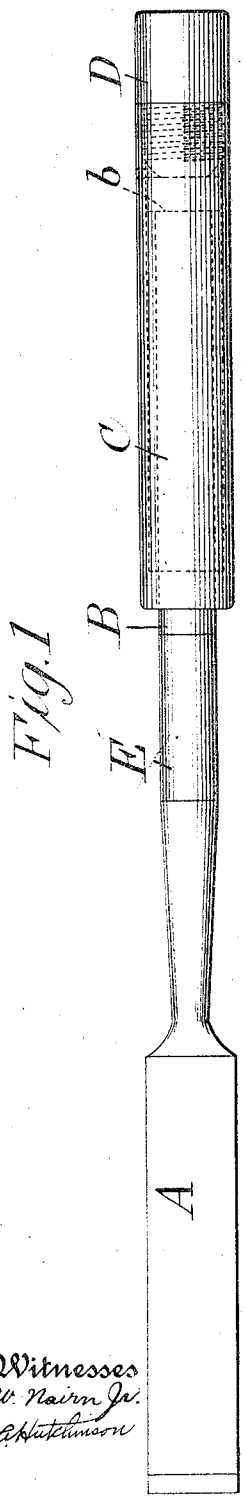


Fig. 1

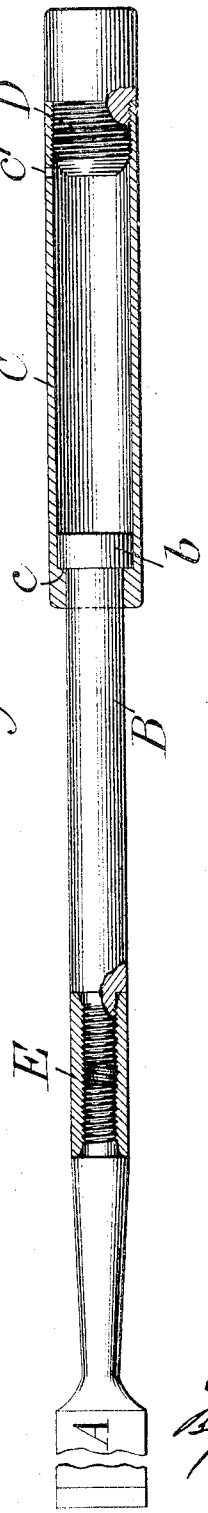


Fig. 2

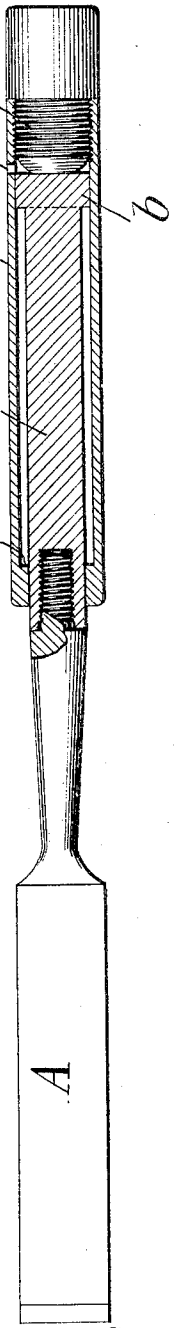


Fig. 3

Witnesses
W. W. Nairn Jr.
Geo. A. Hutchinson

Inventor
Owen A. West
By Julius C. Rowell
his Attorney

UNITED STATES PATENT OFFICE.

OWEN ALVARO WEST, OF SABINA, OHIO, ASSIGNOR OF ONE-THIRD TO JOHN MATHEWS AND ONE-THIRD TO FRANK E. SEARS, BOTH OF THE COUNTY OF CLINTON, OHIO.

CHISEL.

1,082,379. Specification of Letters Patent. Patented Dec. 23, 1913.

Application filed July 15, 1912. Serial No. 709,547.

To all whom it may concern:

Be it known that I, OWEN A. WEST, a citizen of the United States, residing at Sabina, in the county of Clinton and State of Ohio, have invented certain new and useful Improvements in Chisels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to hand driven tools and more particularly to chisels for the use of carpenters and stone masons.

The objects of the invention are to dispense with the mallet or hammer generally used for driving the tool or chisel, and to provide an improved compact self-driven device of the character described.

The invention will first be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and then pointed out in the claims at the end of the description.

In the drawings: Figure 1 is a front elevation of a chisel constructed in accordance with the invention, the hammer member or tubular handle being shown in its retracted position; Fig. 2 is a similar view except that the hammer member is illustrated in section and in its extended position, and the coupling for the bit and extension or piston is also shown in section, and Fig. 3 is a front elevation, partly in section, of a modified form of the invention in which the coupling is omitted.

Referring more particularly to the drawings, A denotes the bit which is detachably connected to an extension or piston B having an enlargement or shoulder *b* at or near its end. Mounted telescopically around said extension or piston is a tubular or recessed handle or hammer member C provided with an internal annular shoulder *c* adapted to engage the shoulder *b* when the hammer member is extended, whereby the latter is retained upon said extension or piston but is capable of being reciprocated thereon. The outer end of the hammer member or handle is preferably provided with a weighted head D which may be in the form of a plug screwed into the end of the tubular handle so as to engage the end of the piston or extension on the inward stroke of the hammer member. The tubular handle or hammer member may be provided with a vent opening *c'* for relieving the pressure of air therein as it is reciprocated on the piston. The weighted head D is preferably made with a reduced inner end portion *d* which comes in contact with the end of the hammer member B. The vent opening *c'* is arranged opposite this reduced portion *d* of the head. Escape of air from the interior of the hammer member will never be cut off by the piston member for the reason that the latter will be stopped by the reduced portion of the head before the opening is closed by said piston member.

As illustrated in Figs. 1 and 2, the bit may be connected to the extension or piston by a coupling E which may be tubular in form and internally threaded to receive correspondingly threaded studs on the ends of said connected parts. This coupling may be dispensed with, however, and the bit attached directly to the extension or piston in any suitable manner, such as is shown in Fig. 3. In this instance the piston or extension B' is provided with a socket to receive the stud on the bit.

It will be readily understood that in operation the reciprocation of the tubular handle or hammer member with one hand, while the bit is held in proper position with the other hand, will have substantially the same driving effect upon the tool as a mallet or hammer. The advantages of having the driving or hammer member attached to the tool, so that the carpenter or mason need only carry and handle a single device instead of a hammer or mallet in addition to the tool, will be immediately appreciated by those skilled in this art. It will also be noted that the detachable connection between the bit and extension or piston permits an interchange of bits without replacing the other parts of the device. Moreover, inasmuch as the piston member is of greater length than the recess in the hammer member, the coupling E may serve as a handle which may be grasped for guiding the tool without danger of the hand being struck by said hammer member when the latter is reciprocated, the line appearing on the surface at the joint between said coupling and piston member indicating where the hand may be safely placed.

While the invention has been illustrated and described as applied to a chisel, it is obvious that other forms of bits or tools usu-

ally driven by hand may be used instead of the chisel with the same beneficial results.

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

1. The combination with a bit having a piston member detachably secured thereto, of a tubular hammer member telescopically mounted on said piston member, means to prevent the separation of said members when extended, and a removable cap at the outer end of said hammer member having a reduced inner end which serves as a stop for the piston head in advance of an air vent, such vent being provided in the tubular member adjacent to said reduced end.

2. In a tool, the combination with a bit having an extension, of a tubular hammer member telescopically mounted on said extension, and a detachable cap fitted in the end of said hammer member and provided with a reduced inner end portion adapte . to engage the extension of the bit, said hammer member also having a vent opening arranged opposite said reduced inner end portion of the cap for the purpose specified.

In testimony whereof I affix my signature in the presence of two witnesses.

OWEN ALVARO WEST.

Witnesses:

J. L. PARRETT,

JAMES W. CUSTIS.