

(No Model.)

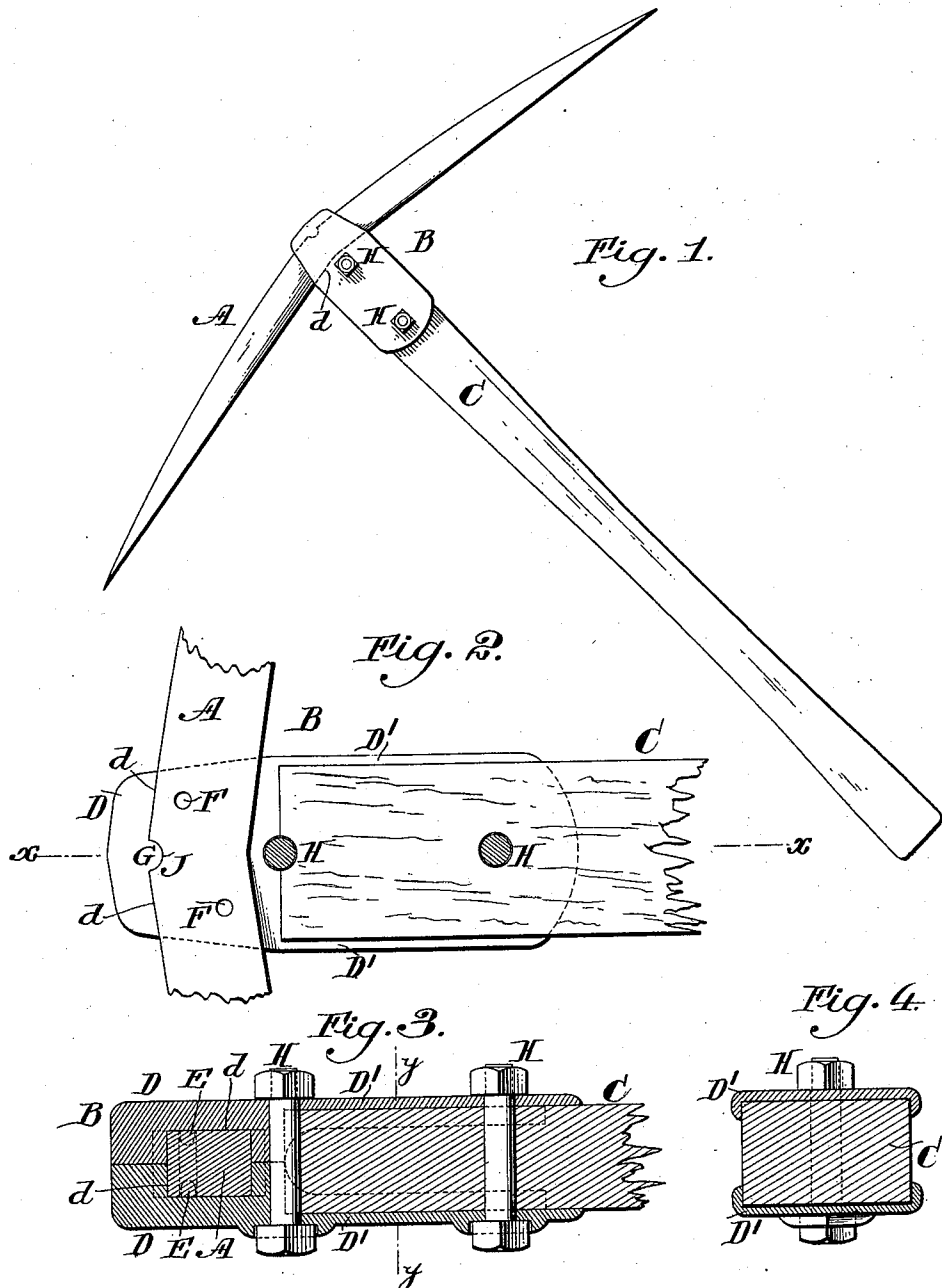
A. P. MILLER, Dec'd.

W. A. MACY, Administrator.

PICK AND CUTTING TOOL.

No. 582,361.

Patented May 11, 1897.



UNITED STATES PATENT OFFICE.

WILLIAM A. MACY, OF HOBOKEN, NEW JERSEY, ADMINISTRATOR OF
AMBROSE P. MILLER, DECEASED, ASSIGNOR TO HARRY MILLER,
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PICK AND CUTTING-TOOL.

SPECIFICATION forming part of Letters Patent No. 582,361, dated May 11, 1897.

Application filed October 19, 1896. Serial No. 609,262. (No model.)

To all whom it may concern:

Be it known that AMBROSE P. MILLER, deceased, formerly of Hoboken, Hudson county, New Jersey, did invent an Improvement in Picks and Cutting-Tools, of which the following is a specification.

The invention has reference to picks and cutting-tools; and it consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

The improvements, while especially adapted to picks, may be employed in connection with cutting-tools where the blades correspond to the steel pick or tool-piece proper. It is also evident that there are various characters of picks, and therefore in describing the invention it has reference generally to this class of tools.

In carrying out the invention the pick or tool-piece proper is formed of a continuous piece of steel, preferably made somewhat V-shaped or angular at its middle. This tool-piece is received in a head formed of two pieces of drop-forgings or malleable-iron castings having angular grooves to receive the central portion of the pick proper. The wooden handle is received between the said castings or forgings forming the head and is securely bolted thereto. In addition to the angular construction for retaining the pick in position in the head the upper portion of the tool-piece may be recessed and receive projections or lugs from the head and may also be retained in position by means of pins extending from the faces of the castings forming the head into the side faces of the tool-piece proper.

The invention will be better understood by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of the improved pick. Fig. 2 is a plan view of that part adjacent to the head with one of the head-plates removed and the clamping-bolts in section. Fig. 3 is a sectional elevation on line $x x$ of Fig. 2. Fig. 4 is a cross-section on line $y y$ of Fig. 3. Fig. 5 is a perspective view of one

of the castings or forgings making up the head.

A is the pick or tool-piece proper. B is the head, and C is the handle.

The head B is formed in two parts D D, which when united upon the handle C and clamped in position by bolts H H firmly grasp the tool-piece A at its middle portion.

The tool-piece A is shown as made angular or somewhat V-shaped at its middle part, and may further be provided at its outer portion and intermediate of its ends with a transverse groove or recess J, and likewise with recesses or holes F, preferably out of alinement. The cutting edges of the pick may be made in any suitable manner adapted to any special purpose to which the tool is to be employed. The two side plates D D of the head are each formed with a groove d at one end made angular or somewhat V-shaped to receive the central or V-shaped portion of the tool-piece A. Furthermore, these grooves may be provided with the projections G at their apices to fit into the groove or recess J of the tool-piece A. The inner faces of the V-shaped grooves of the parts D may be provided with projections or pins E E, which are out of alinement and adapted to fit into the recesses or apertures F F of the tool-piece A. The parts D are further extended toward the handle C and are made recessed so as to receive the handle, to which they are bolted by means of bolts H H. The parts D' are formed with flanges, so as to form a socket in which the handle fits, as is clearly shown in Figs. 2, 3, and 4.

From this construction it will be observed that the entire tool is quickly and securely assembled and is exceedingly strong and durable. By employing the angular or the V-shaped construction at the middle of the tool-piece and in the grooves of the head the liability of displacement of the tool-piece within the head is reduced to a minimum. Furthermore, by employing the projection G a form of abutment is produced which receives the direct thrust of the tool-piece in operation. This general construction of the head enables the ready substitution of another

tool-piece when the one in use becomes worn or when it is desired to change the character of the tool-piece to suit some special new use or work.

5 Having now described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a pick or tool of similar character, the combination of the tool-piece proper made V-
10 shaped at or about its middle by the juncture of two straight portions at an angle to each other, a handle, a clamping-head formed of two similar parts each of which is provided with a transverse V-shaped recess or groove of
15 approximately half the thickness of the tool-piece to receive the said tool-piece, and transverse bolts to unite the two parts of the head directly to the handle and clamp the tool-piece in the head.

2. In a pick or tool of that character, the combination of the tool-piece proper made angular or V-shaped at or about its middle and formed with a transverse notch or recess at the apex of the angular portion, a handle, a
25 clamping-head formed of two parts each of which is provided with an angular or V-shaped recess or groove to receive the tool-piece and a lug or projection to fit the notch or recess of the tool-piece, and bolts to unite
30 the two parts of the head directly to the handle and clamp the tool-piece in the head.

3. In a pick or tool of that character, the combination of the tool-piece proper made angular or V-shaped at or about its middle and
35 formed with transverse holes or apertures in its side faces near the angular portion and provided with a transverse notch or recess at the apex of the angular portion, a handle, a clamping-head formed of two parts each of

which is provided with an angular or V- 40 shaped recess or groove to receive the tool-piece and a lug or projection to fit the notch or recess of the tool-piece and pins or projections extending from the bottom faces of the
45 recesses or grooves to extend into the holes or apertures of the tool-piece, and bolts to unite the two parts of the head directly to the handle and clamp the tool-piece in the head.

4. In a pick or tool of similar character, the combination of an angular or bent tool-piece 50 made with a transverse notch or recess J at its middle and outer edge and continuous on its inner edge, a head-piece formed of two parts each having a groove to receive the tool-piece and a lug or projection G to fit the
55 notch or recess of the tool-piece, a handle, and clamping-bolts passing through the head-piece and handle but not the tool-piece for directly securing the head-piece to the han- 60 dle and clamping the side parts of the head-piece upon the tool-piece without weakening the latter.

5. In a pick or tool of that character, the combination of a tool-piece made absolutely angular or V-shaped at its middle by the
65 juncture of two straight portions at an angle to each other, a head-piece formed of two similar recessed parts which when united form an aperture also made V-shaped to receive the tool-piece, and a handle fitted to the 70 head-piece.

In testimony of which invention I have hereunto set my hand.

WM. A. MACY,
Administrator.

Witnesses:

PALMER CAMPBELL,
GEO. RUNTON.