

D. & S. KAAUMOANA.
ADJUSTABLE TOOL HOLDER.
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1,048,173.

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Fig. 2.

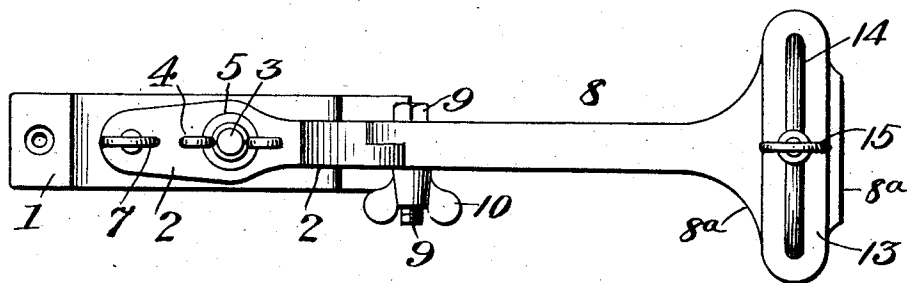
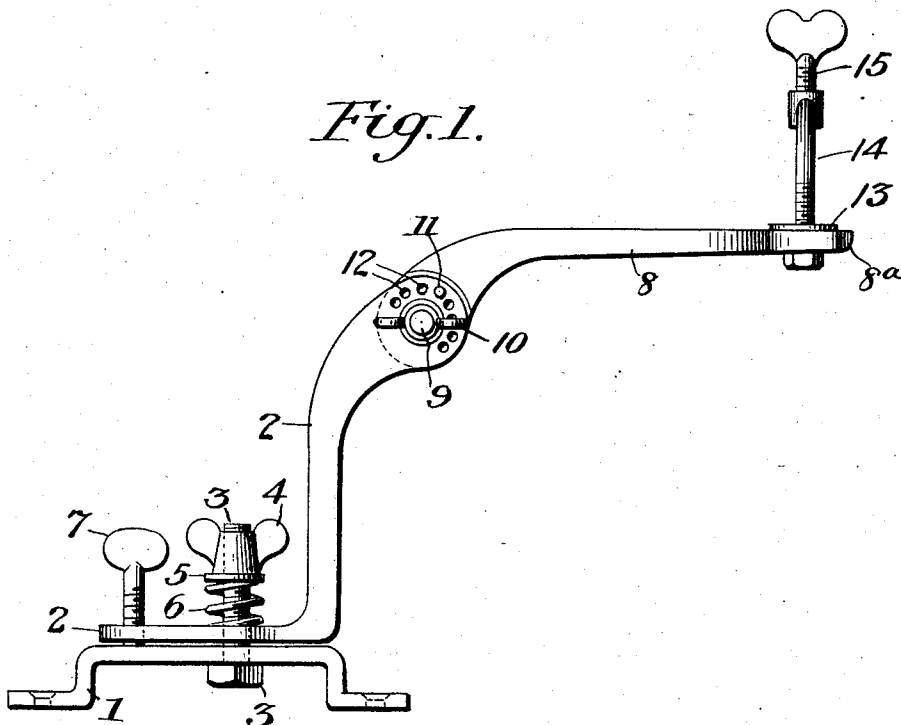


Fig. 1.



Witnesses.

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UNITED STATES PATENT OFFICE.

DAVID KAAUMOANA AND SAMUEL KAAUMOANA, OF HONOLULU, TERRITORY OF HAWAII.

ADJUSTABLE TOOL-HOLDER.

1,048,173.

Specification of Letters Patent.

Patented Dec. 24, 1912.

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To all whom it may concern:

Be it known that we, DAVID KAAUMOANA and SAMUEL KAAUMOANA, citizens of the United States, residing at Honolulu, in the
5 county of Honolulu, Territory of Hawaii, have invented certain new and useful Improvements in Adjustable Tool-Holders; and we do hereby declare the following to be a full, clear, and exact description of the
10 invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to tool holders, and particularly to an adjustable holder for
15 holding plane-irons, chisels and the like, while being ground. In holders heretofore employed for this purpose, the pressure of the blade or knife against the grindstone is applied by the operator.

20 The object of this invention, however, is to produce a holder of this character which not only can be easily adjusted so that the blade or knife to be ground is set at the proper angle to the revolving stone
25 or wheel, but which can also be adjusted so that any desired amount of pressure of the blade or knife against the stone or wheel will be applied automatically. The device therefore includes, means for gripping the tool
30 to be ground, means for adjusting the position of the tool to be ground with respect to the grindstone or wheel, and means for applying and maintaining any desired amount of pressure of said tool against said
35 stone or wheel.

The invention contemplates, a base plate attachable to the frame of the wheel or grindstone, two arms adjustably connected
40 together, means for clamping the blade or knife to be ground to the upper arm, and flexible or yielding means for adjustably connecting the lower arm to the base plate.

With these ends in view, the invention consists in the novel construction and arrangement of parts as herein fully described
45 and claimed.

The following is a specific description of one form of the invention, reference being had to the accompanying drawings, forming
50 a part of this specification, in which—

Figure 1 represents in side elevation a preferred form of our invention. Fig. 2 represents a plan view of the same.

Referring to the drawings, 1 represents
55 the base plate or support, which is easily

attached by wood screws or bolts either directly to the frame of the grindstone or wheel or to a board secured to said frame. The lower arm 2 is flexibly or yieldingly connected to the base plate 1 by the bolt 3,
60 provided with a wing nut 4, a washer 5 and with a spiral spring 6 interposed between the washer 5 and the arm 2. The bolt 3 passes through a hole in the base plate 1 and a hole in the arm 2. The rear end of
65 the lower arm 2 is tapped to receive the thumb screw 7, the end of which abuts the top of the base plate 1. The lower arm 2 may turn horizontally about the bolt 3.

The upper arm 8 is adjustably clamped to
70 the lower arm 2, by means of the bolt 9 provided with the wing nut 10, in order that the position of the upper arm with respect to the lower arm may be altered at will, thus providing adjustment of the upper arm in
75 a vertical plane. The connection between the upper and lower arms may be made in various ways to insure stability, for example, the upper arm 8 may be provided with a pin 11 adapted to fit in any one of
80 a series of holes 12 in the lower arm 2 arranged in a circle about the bolt 9. The outer end 8^a of the upper arm 8 is broadened out, and is preferably covered with a piece of leather 13 or the like. A yoke 14, provided with a thumb screw 15, is attached
85 transversely above the outer end 8^a.

The base plate 1 having been firmly secured to the frame of the grindstone or wheel, the blade or knife to be ground is
90 clamped under the yoke 14 by means of the thumb screw 15 against the piece of leather 13 or the like which prevents the tool thus clamped from slipping. The upper arm 8 is adjusted with respect to the lower arm 2
95 by means of the wing nut 10, so that the blade or knife to be ground is brought into proper contact with the wheel or grindstone. By turning the thumb screw 7 the rear end of the lower arm 2 may be raised or lowered,
100 thereby tilting the lower arm 2 forward or backward and consequently lowering or raising the outer end 8^a of the upper arm 8 and the tool clamped thereto. The tension of the spring 6 may be adjusted by
105 turning the wing nut 4, so that more or less pressure is exerted by said spring upon the lower arm 2, thus causing the tool being ground to bear yieldingly upon the grindstone or wheel to a greater or less degree. 110

It will now be noted that with our device the tool to be ground is firmly gripped and its position with respect to the grindstone or wheel is adjusted, that the pressure of
 5 contact between the blade or tool and the grindstone or wheel may be varied at will, that any desired pressure may be automatically maintained between the tool and grind-
 10 stone or wheel, and that after making the adjustments it is therefore unnecessary for the operator to devote any time to the device while the tool is being ground.

We claim:—

1. A tool holder comprising a support,
 15 means mounted on said support to hold a tool to be ground, said means adapted to be adjusted to position the tool with respect to the grinding means, and adjustable means
 20 tending to keep said first-named means seated on said support to maintain any desired pressure of the tool against the grinding means.

2. A tool holder comprising a base-plate, two arms adjustably connected, means for
 25 clamping the tool to be ground, and a yielding connection between one of said arms and the base-plate tending to keep said arm seated on the base-plate and to thereby yield-
 30 ingly retain the tool in contact with the grinding means.

3. A tool holder comprising a base-plate, two arms, means for clamping the arms to-

gether, means for securing the tool to be ground to one of the arms and yielding
 means tending to keep the other of said
 35 arms seated on said base-plate thereby retaining the tool in yielding contact with the grinding means, said yielding means being adjustable to regulate its effect on keeping
 40 said arm seated.

4. A tool holder comprising, a base plate,
 two arms, means for adjustably connecting
 said arms, a yoke provided with a thumb
 screw for clamping the tool to be ground
 to one of said arms, a bolt through the base
 45 plate and the other arm, and a spring interposed between the nut of said bolt and said arm.

5. A tool holder comprising, a base plate,
 two arms provided with means for adjust-
 50 ably connecting same, a yoke with screw for clamping the tool to be ground to one of the arms, a bolt connecting the other arm with the base plate, a spring between the nut of
 55 said bolt and the arm, and a screw through the arm adapted to abut the base plate.

In testimony whereof we affix our signatures, in presence of two witnesses.

DAVID KAAUMOANA.
 SAMUEL KAAUMOANA.

Witnesses:

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 P. H. BURNETTE.