

J. M. HANCE.
 TOOL SHARPENING HOLDER.
 APPLICATION FILED JULY 18, 1912.

1,047,126.

Patented Dec. 10, 1912.

Fig. 1.

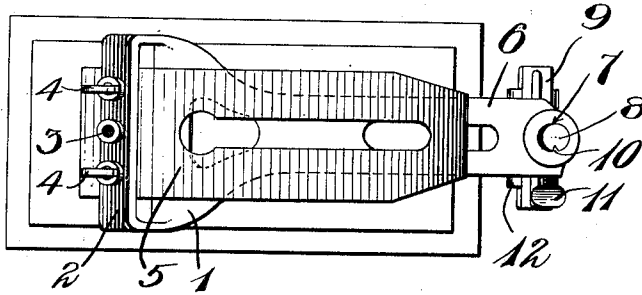


Fig. 2.

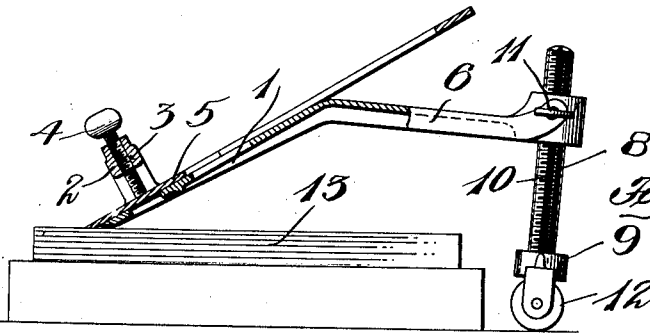


Fig. 3.

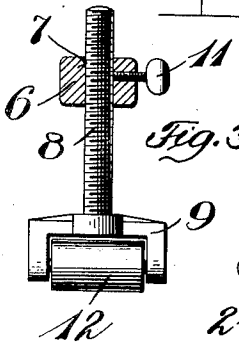


Fig. 5.

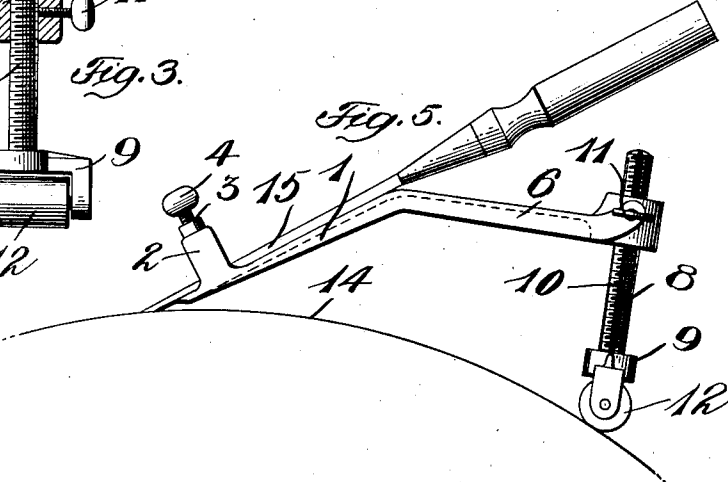
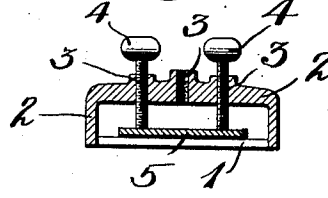


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

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TOOL-SHARPENING HOLDER.

1,047,126.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH M. HANCE, a citizen of the United States, residing at New Britain, Hartford county, State of Connecticut, have invented certain new and useful Improvements in Tool-Sharp-
5 ners, of which the following is a full, clear, and exact description.

The present invention relates to holders for cutting tools and specifically to one designed for use in connection with various forms of sharpening surfaces and affording means for adjustment to suit varying conditions as well as combining simplicity and
10 strength of structure with a wide range of use. These and other advantages will appear from the more detailed description following taken in connection with the accompanying drawings forming part thereof and illustrating a preferable embodiment of the invention.

In these drawings, Figure 1 is a top plan view of the holder having a plane cutter mounted therein and in operative position on a flat sharpening surface. Fig. 2 is a side elevation, partly in section, of the parts shown in Fig. 1. Fig. 3 is an end elevation of the holder supporting and guiding carriage. Fig. 4 is a transverse sectional view taken through the bracket carrying the tool
20 planting screws. Fig. 5 is a side elevation of the holder having a chisel mounted therein and in operative sharpening position on a grind stone.

Referring to the drawings by numerals: the main body of the holder is preferably formed as an integral structure, such as an iron casting, and embodies a downwardly inclined portion 1 of skeleton form serving
30 as a tool seat and having an upstanding bracket 2 extending transversely thereover and spanning the tool seat, this bracket being provided with a plurality of threaded bores 3 therein extending longitudinally of the bracket and adapted to receive clamping
45 screws 4 whose lower ends, when screwed down, will engage a cutting tool, such as the plane cutter 5, and clamp the same on its seat 1. In the drawings I have shown three
50 spaced threaded bores so that wide as well as narrow cutting tools may be clamped on the cutter seat of the holder. The spacing and number of these bores, however, may be varied within the practical accomplishment
55 of the object recited. From the upper and

rear end of the inclined seat portion 1, the main body portion extends substantially horizontally in the form of an integral arm 6. At its farther or rear end, forming the rear end of the body portion, this arm is
60 formed with a threaded bore 7. The threaded standard 8 of a supporting carriage 9 engages with this bore and because of its threaded engagement therewith is enabled to rest on a base and support the tool
65 holder with the edge of the cutting tool carried thereby inclined at various angles relative to a sharpening surface with which it may cooperate. In order to securely lock the supporting carriage in its adjusted position
70 relative to the arm 6, I preferably form one or more grooves 10 longitudinally of its threaded standard 8 and provide the arm 6 at its farther end with a thumb screw 11
75 threaded into the extremity of the arm to extend transversely therethrough and into the bore 7 so that it may be moved to bring its inner end into engagement with a groove
10 to lock the standard 8 against adjustment-destroying movement. The carriage 9
80 carries at its base a suitable roller 12 which forms an anti-friction bearing and support therefor. In Figs. 1 and 2 I have shown this roller resting on a base and the tool frame and tool cooperating with a flat
85 sharpening surface, such as an oil stone 13. In such a construction, when the roller carriage has been adjusted to support the cutting edge at the proper angle to the oil stone surface, the tool holding frame may be
90 freely moved back and forth, thereby moving the cutting edge of the tool back and forth over the stone and at the proper angle thereto. In Fig. 5 I have illustrated this
95 same construction of holder applied to a grindstone 14 of the circular revolving type, the threaded standard 8 being adjusted to incline the cutting edge of a chisel 15, for instance, carried by the holder, at the proper
100 angle for sharpening. The roller 12, of course, rests on the edge of the grindstone and is revolved as the stone revolves.

From the foregoing it will be evident that I have provided a tool holder capable of a
105 wide range of use in connection with various sizes of cutting tools, and provided with adjustable supporting means affording angular adjustment of the body and tool and
affording a support for the tool holder capable of free rectilinear motion to sharpen
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the same on a plane surface, and also adapted to properly position and support the tool upon a curved rotating surface as well as adapted for use under various other
5 conditions of work.

I have described and illustrated a preferable embodiment of the invention, but desire it understood that the structure thereof is susceptible of modification within the spirit
10 of the invention and the scope of the appended claims.

What I claim, therefore, and desire to secure by Letters Patent is:

1. In a device of the character described,
15 in combination, an integral body having a tool seat thereon and provided with tool clamping means adjacent thereto, a support for said body portion adjustable relative thereto, and means for locking said support
20 in adjusted position.

2. In a device of the character described, in combination, an integral body having an inclined portion forming a tool seat and provided with tool clamping means adjacent thereto, and a support for said body
25 portion adjustable relative thereto whereby the angle of inclination of a tool edge relative to a sharpening surface may be varied.

3. In a device of the character described,
30 in combination, an integral body portion provided with a downwardly inclining tool seat at one end thereof, tool clamping means adjacent said seat, and a supporting carriage for said body portion connected there-
35 to adjacent its opposite end.

4. In a device of the character described, in combination, an integral body provided with a downwardly extending tool seat at one end thereof and having a threaded bore
40 formed therein adjacent its opposite end, tool clamping means adjacent said seat, and a supporting carriage having a standard in adjustable threaded engagement with said bore and having an anti-friction supporting
45 bearing at its base.

5. In a device of the character described, in combination, a main body portion having a downwardly inclining portion at its forward end forming a tool seat provided with

a bracket extending transversely of and
50 overstanding said seat, a plurality of clamping screws mounted in said bracket and adapted to engage and clamp a tool on said seat, said body portion having a threaded
55 bore formed therein adjacent its rear end, a carriage provided with a supporting roller at its lower end and having an upwardly extending standard threaded to adjustably engage the threaded bore of said body portion, and means carried by said body portion
60 for locking said standard in adjusted position.

6. In a device of the character described, in combination, an integral body portion comprising an arm and a downwardly inclining portion extending therefrom to form
65 a tool seat, and an independent support adjustably connected to said arm.

7. In a device of the character described, in combination, an integral body portion
70 comprising an arm, a downwardly inclining portion ending therefrom and provided with a tool seat thereon and with a bracket overstanding and spanning said tool seat, clamping means mounted in said bracket and
75 adapted to be adjusted to engage and clamp a cutting tool on said seat, a supporting carriage in adjustable engagement with said arm and means for locking said carriage in adjusted position relative thereto.
80

8. In a device of the character described, in combination, a main body having a downwardly inclining portion at its forward end forming a tool seat and provided with a
85 bracket extending transversely of and overstanding said seat, a tool clamping member carried by said bracket and adapted to engage and clamp a tool on said seat, said body having a threaded bore formed therein adjacent its rear end, and a supporting carriage provided with a roller at its lower end
90 and having an upwardly extending standard threaded to engage the threaded bore of said body portion.

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Witnesses:

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