E. BOCKSHE.

TOOL SUPPORT FOR GRINDERS.

APPLICATION FILED NOV. 15, 1917.

1,275,208. Patented Aug. 13, 1918.

Fig. 1.

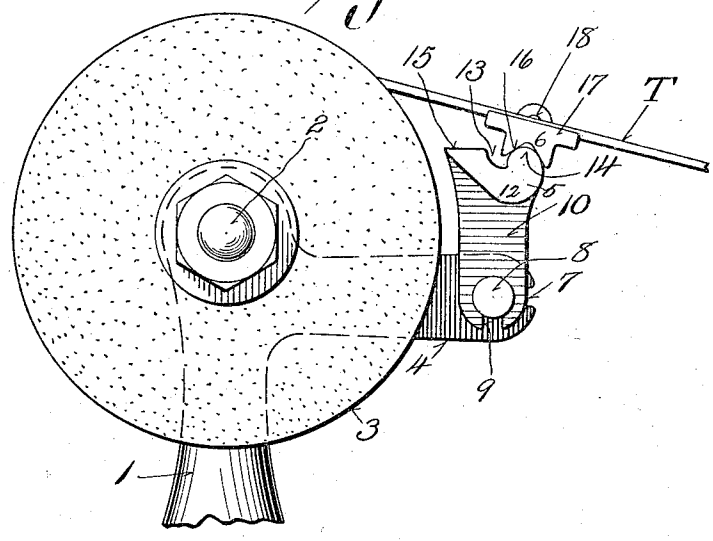
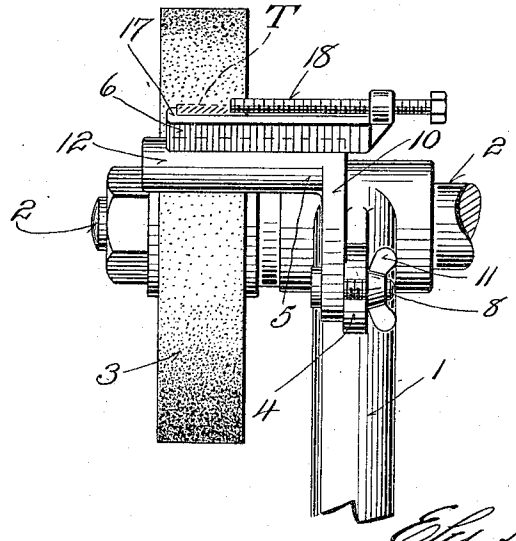


Fig. 2.



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TOOL-SUPPORT FOR GRINDERS.

1,275,208. Specification of Letters Patent. Patented Aug. 13, 1918.

Application filed November 15, 1917. Serial No. 202,165.

To all whom it may concern:

Be it known that I, ELY BOCKSHE, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Tool-Supports for Grinders; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention refers to new and useful improvements in tool holders for use in connection with grinders.

The object of the invention is to provide an improved form of tool holder for use in connection with any ordinary rotative grinding wheel. I am well aware of the fact that there are already devices on the market somewhat similar to the present invention, but their operation is more or less impractical, especially after considerable use. This invention, therefore, has been designed to improve upon the construction of these old tool holders, for instance that shown in U. S. Patent No. 970,351, granted September 13, 1910 to E. B. Pike *et al.*

With this general object in view the invention resides in the novel features of construction, combination and arrangement of parts hereinafter particularly described and claimed and shown in the drawing wherein:

Figure 1 represents a side elevational view of the upper end of a grinding machine showing particularly the rotative grinding wheel and the relation of my invention thereto, and

Fig. 2 is a front elevational view of the parts shown in Fig. 1.

Referring more particularly to the accompanying drawing it will be noted that the numeral 1 designates the supporting standard of a conventional form of grinding machine in the upper end of which is journally mounted a shaft 2 on which is carried a rotative abrading wheel 3. Although the wheel 3 is illustrated as a grinding member, it, nevertheless, may obviously be a buffer, or other form of polisher.

In grinding edge tools such as chisels and the like it is essential that they be held in substantially one position relative to the grinding wheel during the operation of the same thereon. For this reason the tool holders shown in the above mentioned patent and in the present application have been devised. In the present instance, this holder consists of a supporting arm 4 which extends laterally from the upper end of the standard 1, (it may be formed integrally or otherwise connected therewith), a tool holder rest 5, and a tool holder proper 6. The outer end of the arm 4 is provided with an open end slot 7 which receives a clamping bolt 8, the latter also coöperating with the open end slot 9 formed in an arm 10 of the tool holder rest 5. A winged nut 11 disposed on the bolt 8 clamps the two arms 4 and 10 together and holds them in adjusted position.

The tool holder rest also includes a laterally extending bar 12 which is preferably disposed longitudinally of the rotative axis of the wheel 3. The upper face of the bar 12 is longitudinally grooved as at 13, and the material on one side thereof is shaped to form a guide 14 which is semi-circular in cross section. The portion of the bar on the other side of the groove is flat as at 15 to act as a support for any tool which is disposed at an angle to the grinding wheel when being sharpened.

The semi-circular guide portion 14 is adapted to coöperate with the tool holder 6 and is in the form of a bar or plate having a longitudinally extending substantially V-shaped groove 16 cut in its bottom, said groove being adapted to slidably receive the portion 14. The tool holder is also provided with a shoulder 17 and a clamping screw 18 between which a tool T is secured. The bar or plate forming the tool holder 6 is relatively thick to eliminate all possibility of the same becoming warped or bent and the tool engaged face thereof thrown out of parallelism with the guide 14.

By providing a rounded guide portion 14 on the relatively stationary part of the device and a channeled portion on the slidable part, the difficulties which are present in a machine constructed in accordance with the above mentioned patent are eliminated. In other words the grindings and other refuse material cannot throw the tool holder out of proper alinement with the grinding wheel by getting between the engaging surfaces of the tool holder and the tool holder rest. By this simple change a very much improved device has been obtained.

I claim:

The combination with an abrading member, of a tool holder rest disposed adjacent thereto and including a bar having a longitudinally extending central groove in its upper face, the material on one side of said

groove being semi-circular in cross section to form a longitudinal guide, the portion of the bar on the other side of the groove being flat, and a tool holder for coöperation with the rest and comprising a relatively thick plate having a longitudinal substantially V-shaped groove cut in its bottom and extending throughout the length thereof to slidably receive said semi-circular guide, the portion of the plate on one side of said V-shaped groove being disposed in the groove of said bar, and means on the top side of the plate to secure a tool thereto.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin.

ELY BOCKSHE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."