(No Model.)

A. J. SWEENEY & T. A. MYERS.

SUPPORT FOR ARTICLES WHILE BEING GROUND.

No. 455,418. Patented July 7, 1891.

Fig. 1.

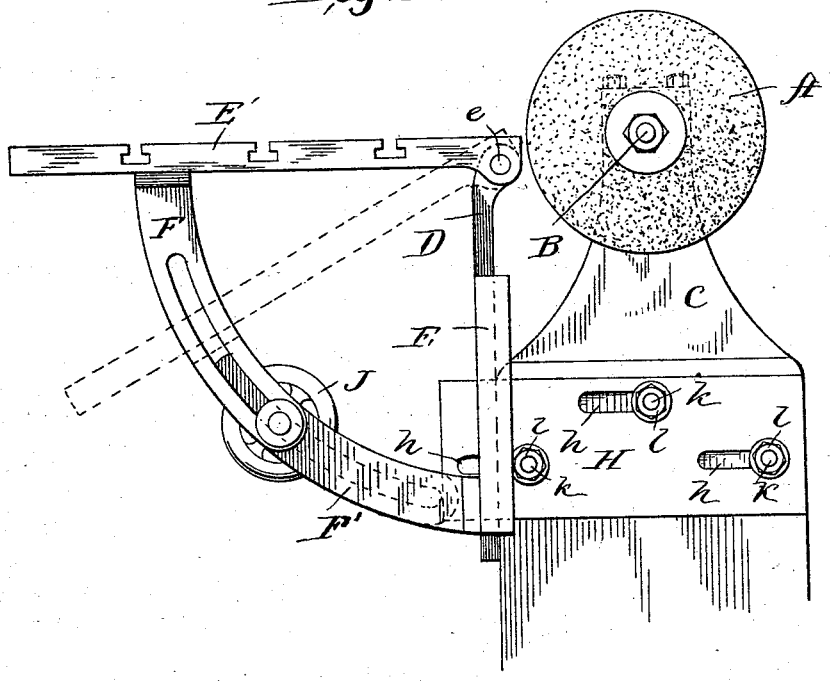
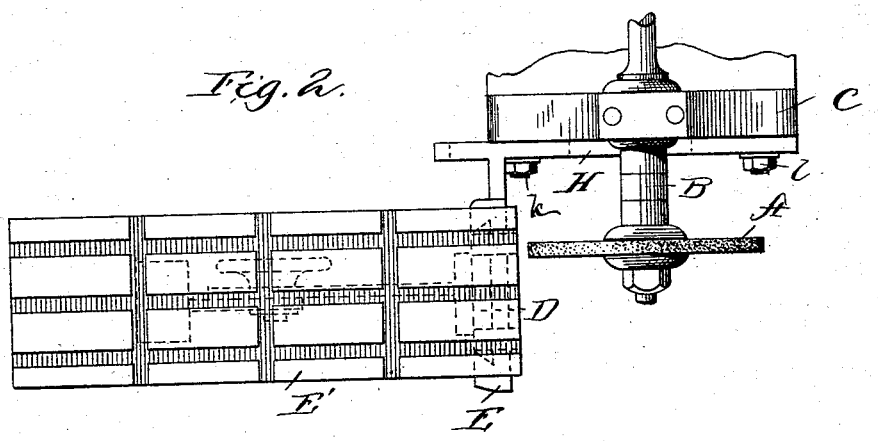


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

ANDREW J. SWEENEY AND THEODORE A. MYERS, OF WHEELING, WEST VIRGINIA.

SUPPORT FOR ARTICLES WHILE BEING GROUND.

SPECIFICATION forming part of Letters Patent No. 455,418, dated July 7, 1891.

Application filed April 25, 1890. Serial No. 349,447. (No model.)

To all whom it may concern:

Be it known that we, ANDREW J. SWEENEY and THEODORE A. MYERS, citizens of the United States of America, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Supports for Articles while being Ground, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention is an attachment or support to an angle-grinder. It is designed for the purpose of holding tools or other articles against a rotary grinding-wheel at any desired angle and at the same time to move the tool or other article in a vertical plane or in a plane tangential to the grinding-wheel while maintaining the same angle in relation to the tool.

Our invention is shown in the accompanying drawings, in which Figure 1 represents the apparatus in side elevation, and Fig. 2 in plan view.

In the drawings, A represents an emery-wheel, such as those in ordinary use. It is mounted upon a shaft B, which has its bearings in a standard C set upon any suitable table, either alone or as a part of a face or angle grinder or other kind of machine. In a plane parallel with the axis of the grinding-wheel is arranged a standard D. It is mounted in a guide-plate E so as to slide in the same plane above mentioned. In the machine shown this is a vertical plane, which is most convenient. Pivoted on the upper end of this standard is a platen E′. It is shown as grooved to receive devices of ordinary construction for holding the articles to be ground to the face of the platen. Fixed in the central line of the platen, on the under side thereof, is a segmental arm F, formed on a curve struck from the center of the pivot *e* of the platen. A like arm F′ is attached to the lower end of the standard D. The arm F is slotted, as shown in Fig. 1, and is arranged to overlap and lie side by side with the arm F′ in contact, and they are held by an ordinary jam-nut, which is provided with a handle J for convenience in loosening and tightening. The platen may be set at any angle desired, according to the kind of groove or face which may be desired to be ground on the tool or other article operated upon. The tool being held upon the platen, the standard is moved up and down, and thus the edge or face of the tool is moved in a straight line past the grinding-surface, thus causing the wheel to grind on a straight line.

It will be understood that the face of the wheel is of the shape desired for the edge or face of the tool. The plate E, having the guides for the standard D, is carried by a plate H, which is adjustably and removably attached to the standard of the grinding-wheel, and by this plate the whole device may be applied to wheels and standards of ordinary construction and already in use.

The plate H is provided with slots *h* and is fitted to be placed against the end of the standard or table of the grinding-wheel and to be held thereto by means of bolts *k* and nuts *l*. By this construction the platen may be set nearer to or farther from the center of the shaft B to adapt it to different sizes of wheels. As shown, the standard D is in the form of a plate, but this may be varied to suit different circumstances.

We claim as our invention—

In combination with a grinding-wheel, a tool-holder having vertical movement in a plane tangential to the periphery of the said wheel, whereby the tool is moved in a straight line over the grinding-surface, substantially as described.

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

ANDREW J. SWEENEY.
THEODORE A. MYERS.

Witnesses:
GEO. W. ECKHART, Jr.,
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