No. 818,933. PATENTED APR. 24, 1906.

B. F. BELLOWS.

GRINDSTONE ATTACHMENT.

APPLICATION FILED AUG. 22, 1905.

Fig. 1.

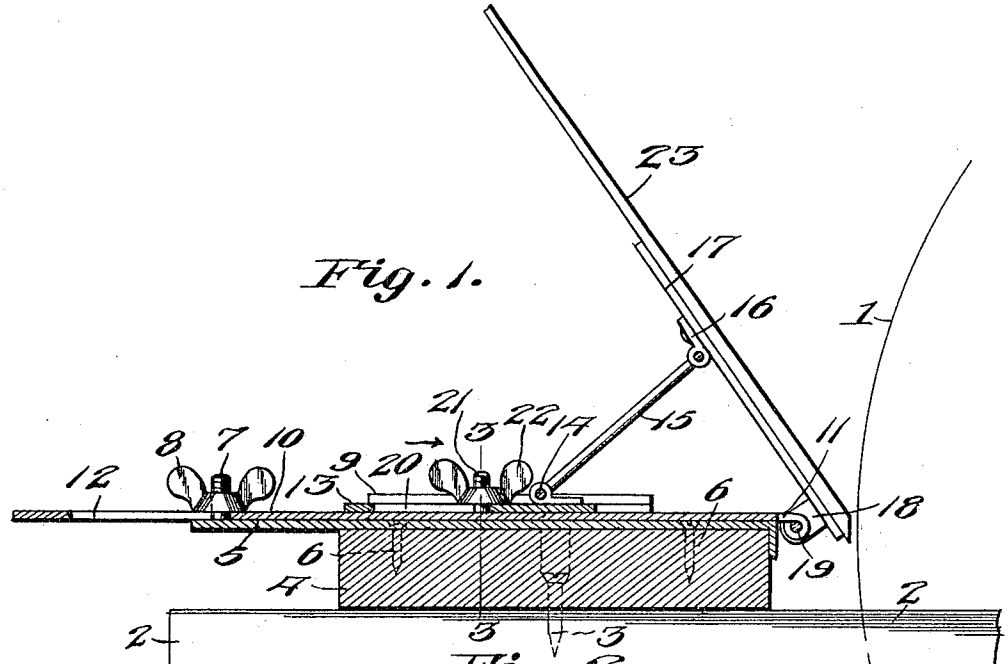


Fig. 2.

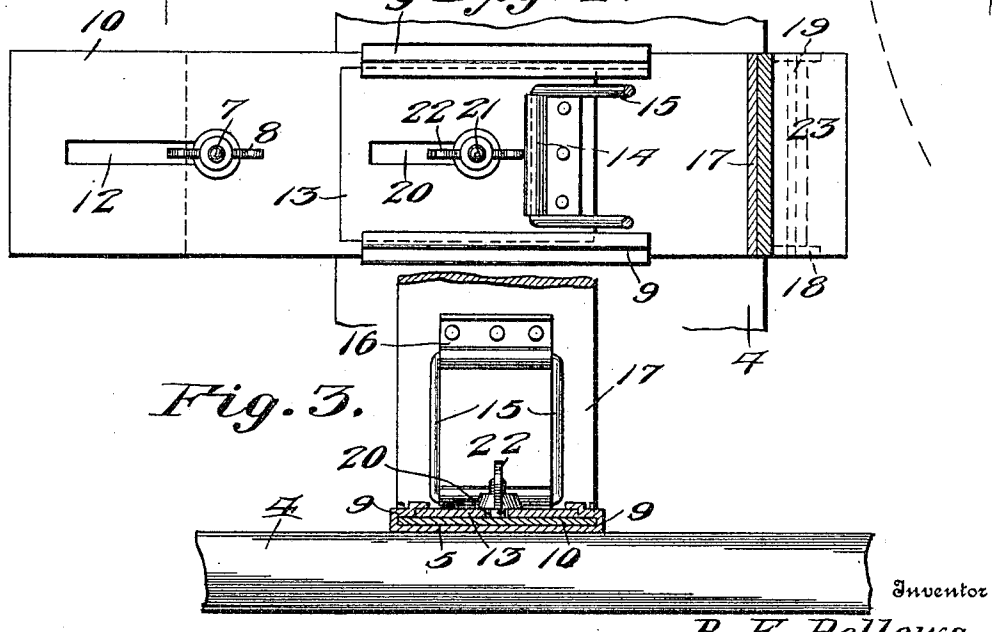


Fig. 3.

Witnesses

Frank B. Hoffman.

D. J. Elmore.

Inventor

B. F. Bellows

By Victor J. Evans

Attorney

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

BENJAMIN F. BELLOWS, OF SIOUX CITY, IOWA.

GRINDSTONE ATTACHMENT.

No. 818,933. Specification of Letters Patent. Patented April 24, 1906.

Application filed August 22, 1905. Serial No. 275,283.

To all whom it may concern:

Be it known that I, BENJAMIN F. BELLOWS, a citizen of the United States, residing at Sioux City, in the county of Woodbury and State of Iowa, have invented new and useful Improvements in Grindstone Attachments, of which the following is a specification.

This invention relates to grindstone attachments designed for holding tool-blades in position to be ground, and has for its objects to produce a simple, inexpensive device of this character which may be readily installed for use, one wherein the table or platen may be conveniently and accurately adjusted for maintaining the blade thereon at the proper angle and the parts securely locked in adjusted positions, and one by the use of which one person may perform the operations of presenting the work to the grindstone and actuating the latter.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of a detail holder embodying the invention. Fig. 2 is a top plan view of the holder. Fig. 3 is a detail view, partly in section, the section being taken on the line 3 3 of Fig. 1.

Referring to the drawings, 1 designates a grinding wheel or stone and 2 its frame, these parts, which are conventionally shown herein, being of the usual or any preferred construction and material and adapted in practice to perform their ordinary functions.

Detachably secured to the frame 2 by means of a screw or other fastening member 3 is a base-block 4, preferably composed of wood and having applied to its normally upper face a metal base-plate 5, detachably held in place by means of screws or other fastening members 6, there being fixed to the rear end of said plate 5 a clamping member or screw 7, equipped with a thumb-nut 8. The plate 5 is provided around its longitudinal side edges and at a suitable point between its ends with inturned engaging portions or flanges 9 for a purpose which will presently appear.

Arranged for longitudinal sliding movement on the plate 5 and beneath the flanges 9 is an adjustable plate or slide 10, provided at its forward end with hinged portions or ears 11 and near its rear end with a longitudinal guide opening or slot 12, designed to receive the screw 7 and permit adjustment of the slide toward and from the active face of the grinding-wheel 1, it being apparent that the slide may be fixed in adjusted positions by means of the clamping-nut 8.

Disposed for sliding movement on the upper face of plate 10 is a second longitudinal plate or slide 13, engaged at its side edges beneath the flanges 9 and provided adjacent its forward end with a perforated bearing-ear 14, in which is journaled one end of a substantially rectangular connecting element or link 15, having its other end journaled in a bearing-ear 16, fixed on a movable table or platen 17, provided at its forward end with ears 18, which, together with the ears 11, receive a pintle 19 for pivoting the platen to the main slide 12, there being formed in the second slide 13 a longitudinal guide opening or slot 20, adapted to receive a screw 21, fixed to the slide 12 and provided with a clamping member or nut 22, by means of which the slide 13 may be fixed in adjusted position.

In practice, supposing the attachment to be secured in place by the frame 2, the main slide 12 may by releasing the thumb-nut 8 be adjusted for properly positioning the forward or lower end of platen 17 relative to the grinding-wheel, after which the slide is fixed against movement and the second or auxiliary slide 13 adjusted for varying the inclinations of the platen, it being understood that to adjust slide 13 the thumb-nut 22 is released and that upon movement of the slide such movement will be transmitted to the platen 17 through the medium of the connecting element or link 15. After the platen has been properly adjusted the tool or blade 23 to be ground is placed thereon and may be conveniently held for properly presenting the end which is to be sharpened to the grinding-wheel 1. It is to be observed in this matter that through the use of my attachment the tool may be held in proper position with one hand and the wheel 11 operated with the other, whereby one person may perform the entire operation of grinding the tool.

From the foregoing it is apparent that I produce a simple device admirably adapted for the attainment of the ends in view, it be-

ing understood that minor changes in the details herein set forth may be resorted to without departing from the spirit of the invention.

Having thus fully described my invention, what I claim is—

In a device of the class described, a base-plate having flanges, a longitudinally-adjustable slide engaged beneath said flanges, a movable platen operatively engaged with the slide and adapted for arrangement at an inclination, a second slide engaged beneath the flanges, a connecting element disposed between and pivotally engaged with the second slide and platen, and means for fixing the slides against movement.

In testimony whereof I affix my signature in presence of two witnesses.

BENJAMIN F. BELLOWS.

Witnesses:
F. J. TRIPP,
HARRY S. SNYDER.