

No. 667,960.

Patented Feb. 12, 1901.

W. TABER.  
CLIPPER GRINDER.

(Application filed Aug. 2, 1900.)

(No Model.)

Fig. 1.

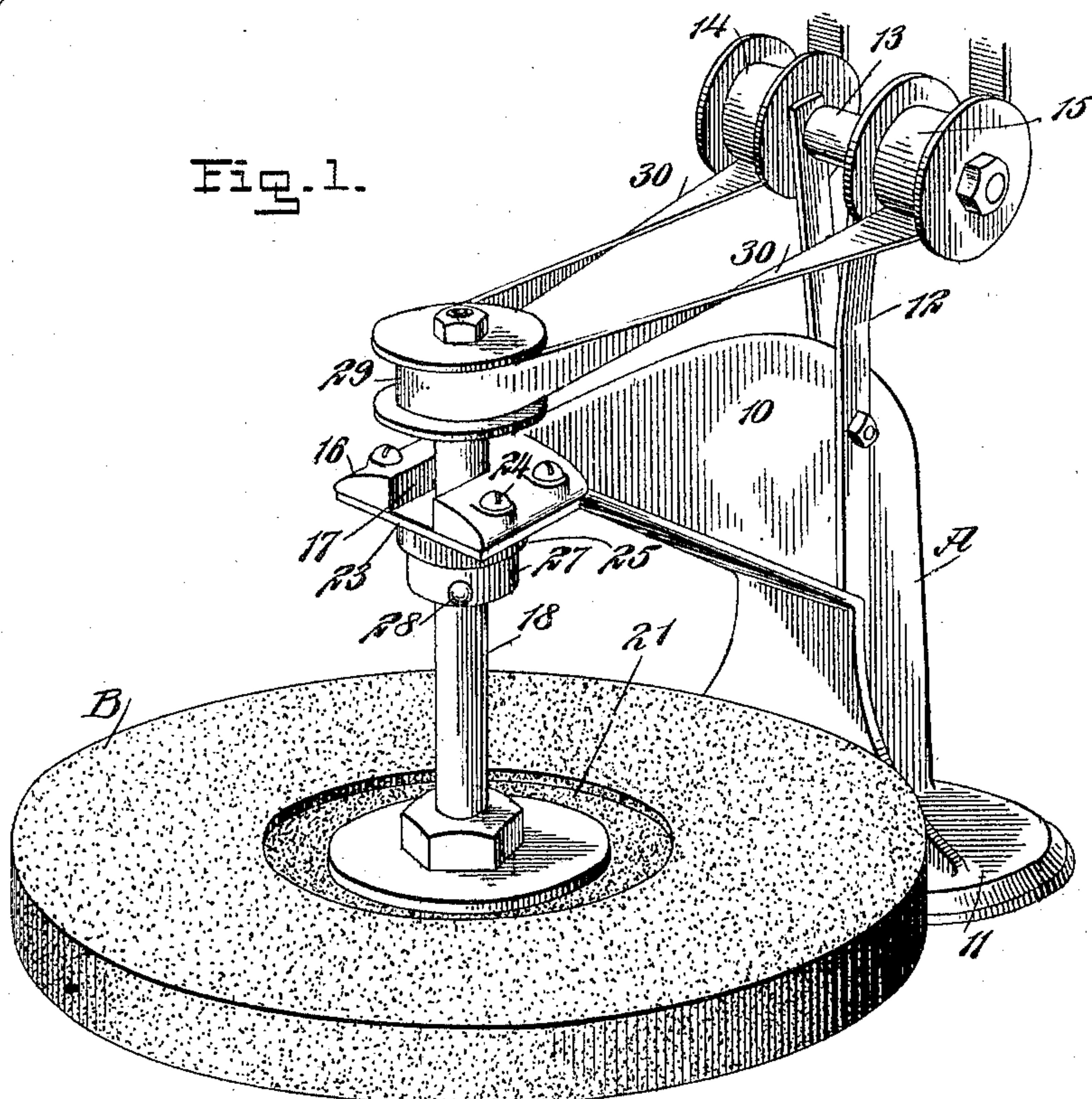
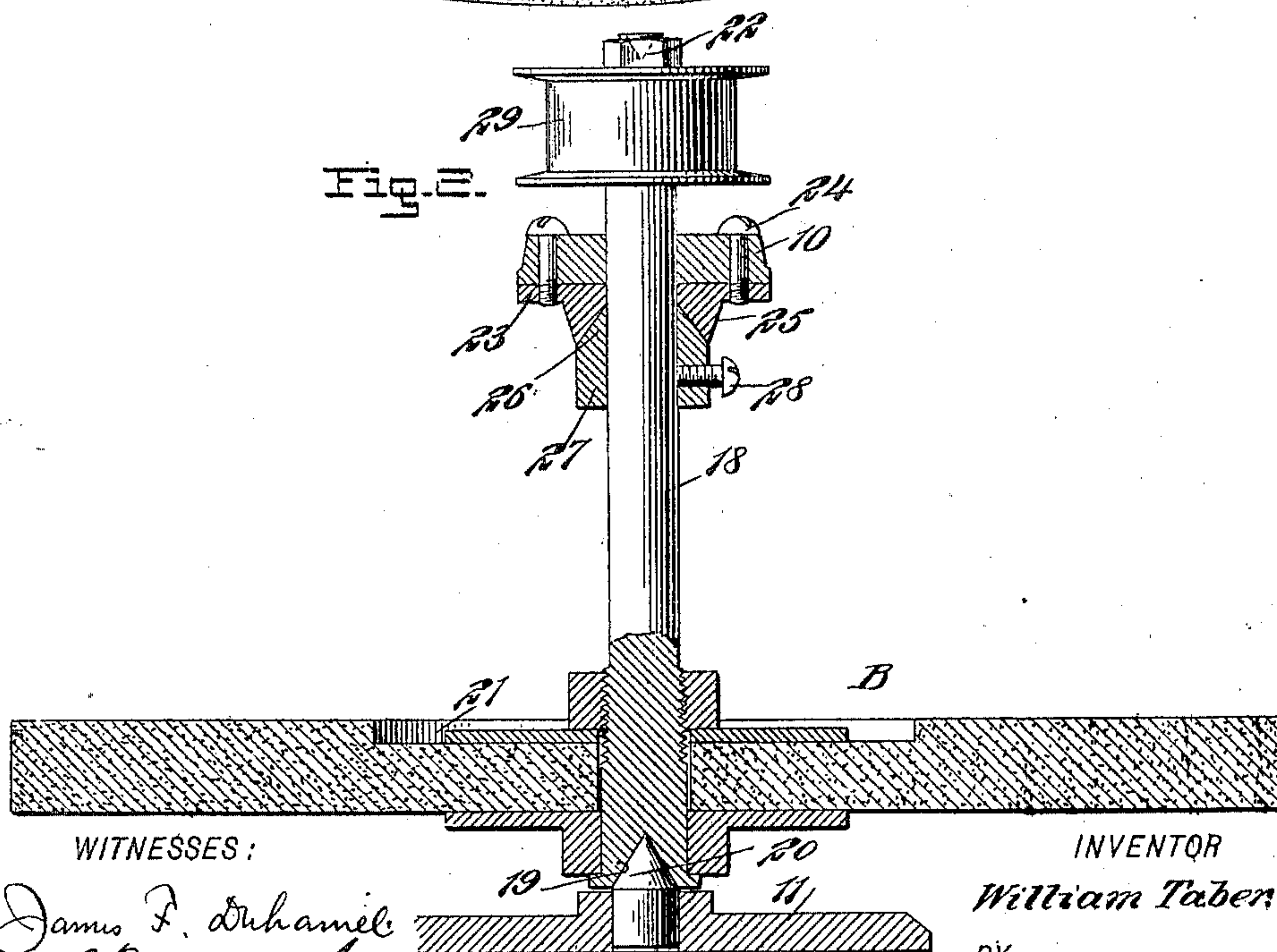


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM TABER, OF POUGHKEEPSIE, NEW YORK.

## CLIPPER-GRINDER.

SPECIFICATION forming part of Letters Patent No. 667,960, dated February 12, 1901.

Application filed August 2, 1900. Serial No. 25,645. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM TABER, a citizen of the United States, and a resident of Poughkeepsie, in the county of Dutchess and State of New York, have invented a new and Improved Clipper-Grinder, of which the following is a full, clear, and exact description.

One purpose of the invention is to so construct a grinding device for the blades of clippers, sickles, and the like that the stone employed will be worn more even or true than ordinarily and to so construct the shaft upon which the stone is mounted or carried that if it be found necessary to turn down or true the stone in a lathe it need not be separated from the shaft.

Another purpose of the invention is to so construct the bearings for the shaft carrying the stone that the shaft may be quickly and conveniently mounted in a suitable frame or removed from the frame.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both figures.

Figure 1 is a perspective view of the improved device, and Fig. 2 is a vertical section taken through the stone and the parts of the device above and below the stone.

A represents a body-frame, which consists of an upright, an upper horizontal arm 10, and a lower horizontal base portion 11, which extends below the arm 10. Standards 12 extend upward from the vertical portion of the body-frame A, and a shaft 13 is mounted to turn in these standards, and the said shaft carries two pulleys 14 and 15, placed at a suitable distance apart. A head 16 is formed at the outer end of the upper horizontal arm 10 of the body-frame A, and this head is provided with a longitudinal slot 17, extending from the front edge of the head to a point usually at the rear of its center. This slot receives the upper end of a shaft 18, the lower end of which shaft is provided with a conical or tapering recess 19, while a corresponding recess 22 is formed in the upper end of the

shaft 18, as shown in dotted lines in Fig. 2. The recess 19 in the lower end of the shaft 18 is adapted to receive the upper conical portion of a plug 20, which either forms a portion of the base member 11 of the body-frame or is attached thereto in any suitable or approved manner, and this plug 20 constitutes the bearing for the lower portion of the shaft, and as the shaft is provided with conical recesses at both of its ends it may be readily placed in a lathe when it is necessary to true the surfaces of the stone B, which is secured in the conventional or in any other manner to the lower portion of the shaft 18. The stone or wheel B is preferably made of emery or other material that is usually employed for grinding metal and sharpening blades.

The blades to be sharpened are placed in engagement with the upper face of the stone or wheel B, which is held in a horizontal position, and said stone or wheel B is provided in its upper face with a central depression 21, and this formation of the stone or wheel B constitutes an important feature of the invention, since two well-defined edges—an inner and an outer one—are thus provided, and when the upper face of a stone thus formed has been brought in engagement with blades to be sharpened the said upper surface of the stone receiving the blades will wear evenly and said surface will not be channeled or hollowed to any appreciable extent, thus obviating the necessity of truing the stone or wheel frequently and insuring a blade of any description submitted to the grinding-surface of the stone being acted upon uniformly throughout its length.

Another important feature of the invention consists in the manner in which the shaft 18 is detachably mounted in the body-frame. Such mounting is accomplished by locating a plate 23 loosely upon the upper portion of the shaft 18 and carrying said plate to an engagement with the bottom of the head 16, to which it is attached by screws 24 or their equivalents. This plate is provided with an extension 25 from its under surface, and the opening in the extension 25, through which the shaft 18 passes, is conical, being much wider at its bottom than at its upper portion,



and the opening in said extension is in registry or alinement with the opening in the plate 23, which also receives the shaft 18.

The upper conical portion 26 of a collar 27 fits into the conical opening in the extension 25 of the plate 23, as illustrated in Fig. 2, and this collar is fastened on the shaft 18 by one or more set-screws 28 or their equivalents. Under this construction it is obvious that when the plate 23 is detached from the head 16 and the collar 27 is loosened and permitted to drop down on the shaft 18 the upper portion of the shaft may be readily removed from the head 16 of the body-frame A, and then the shaft may be conveniently disengaged from its bottom bearing. The shaft is provided with a pulley 29 at its upper end, held thereon in any suitable or approved manner, and a belt 30 is passed around the pulley 29 and in engagement with both of the pulleys 14 and 15 at the rear portion of the body-frame. This belt is operated by suitably-conveyed power and serves to convey rotary motion to the shaft 18, and consequently to the grinding stone or wheel B.

I desire it to be understood that a suitable tool may be made for truing the emery-wheel on a bench without removing it from the spindle, as some shops may not have a lathe of sufficient size to swing a fourteen-inch wheel.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a grinding-machine, a frame having an upper and a lower bearing, the upper bearing being open at one of its ends, a shaft mounted to turn in the said bearings, a plate secured to the upper bearing and loosely mounted on the shaft, the plate having an extension from its under surface provided with a conical opening, and a collar removably attached to the shaft, having a conical surface which enters the conical opening in the extension from the said plate, as set forth.

2. In a grinding-machine, a shaft provided with a conical recess at each end, a conical bearing for the lower end of the shaft, an upper bearing through which the upper end of

the shaft extends, the said upper bearing being provided with a longitudinal slot open at one edge of the bearing, means for detachably mounting the shaft in said upper bearing, and a grinding wheel or stone carried by the shaft, substantially as described.

3. In a grinding-machine, a shaft, a grinding-wheel carried by the shaft, a frame consisting of an upright, a lower horizontal base portion extending beneath the grinding-wheel and provided with a bearing for the lower end of the shaft, and an upper horizontal arm carrying a bearing for the upper portion of the shaft, the said upper bearing being open at one end, and means for detachably mounting the shaft in the upper bearing, as set forth.

4. In a grinding-machine, a shaft, a grinding wheel or stone carried by the shaft, a frame having a base portion provided with a bearing for the lower end of the shaft, the said frame also having an arm provided with a head through which the upper end of the shaft extends and in which the said shaft is detachably mounted, a pulley at the upper end of the shaft above the said head, standards extending upward from the frame, a shaft mounted to turn in said standards, pulleys carried by said shaft, and a belt engaging said pulleys and passing around the pulley on the upper end of the shaft of the grinding-wheel, as set forth.

5. In a grinding-machine, a shaft, a bearing for one end of the shaft, a second bearing for the shaft open at one edge to admit the shaft, means for detachably mounting the shaft in said bearing, and a grinding wheel or stone carried by the shaft and having a central depression in its face, and a flat grinding-surface between the wall of the depression and the periphery of the stone, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM TABER.

Witnesses:

GEORGE OVEROCKER,  
S. G. GUERNSEY.