No. 860,092. PATENTED JULY 16, 1907.

T. F. HOPKINS.

DEVICE FOR OPERATING GRINDSTONES.

APPLICATION FILED JAN. 3, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

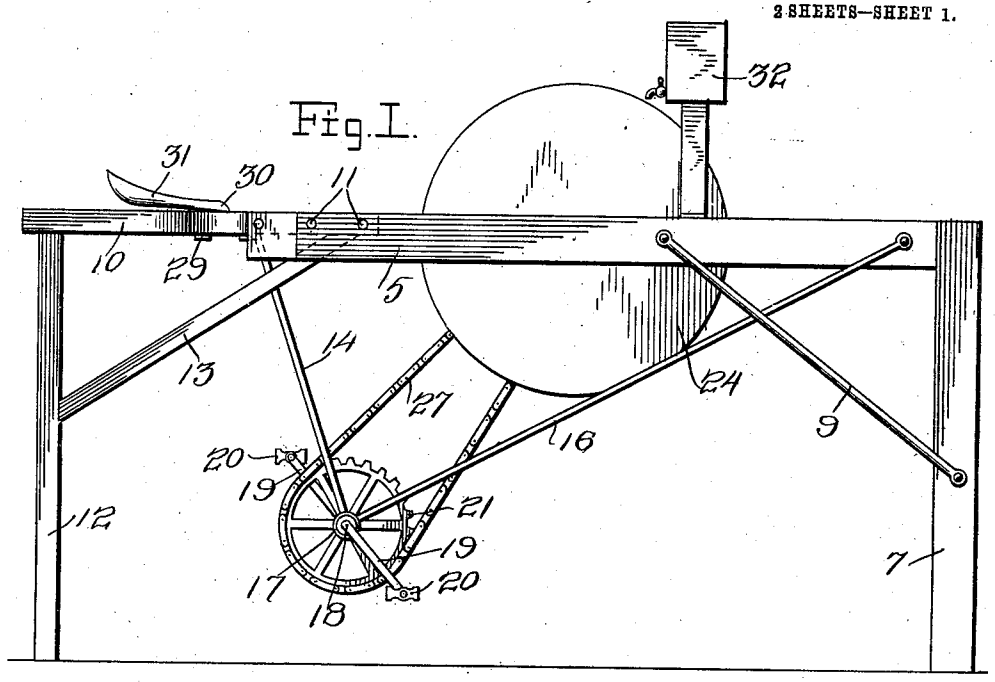
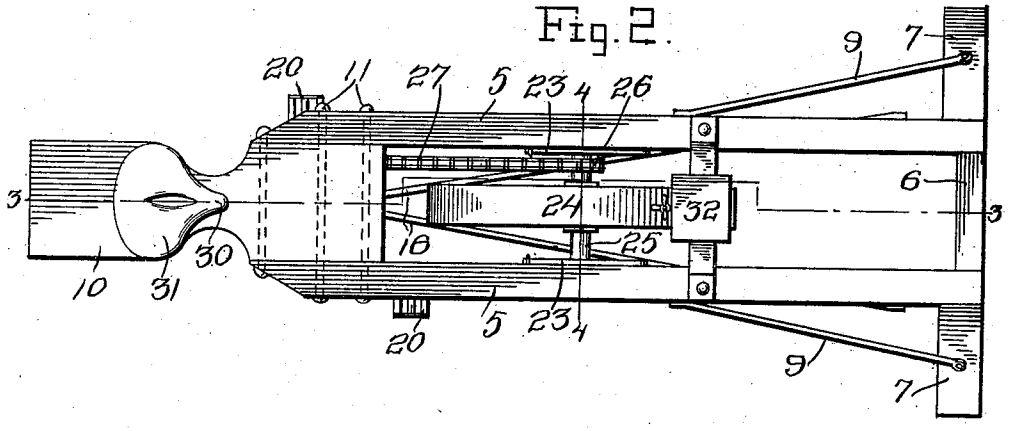


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

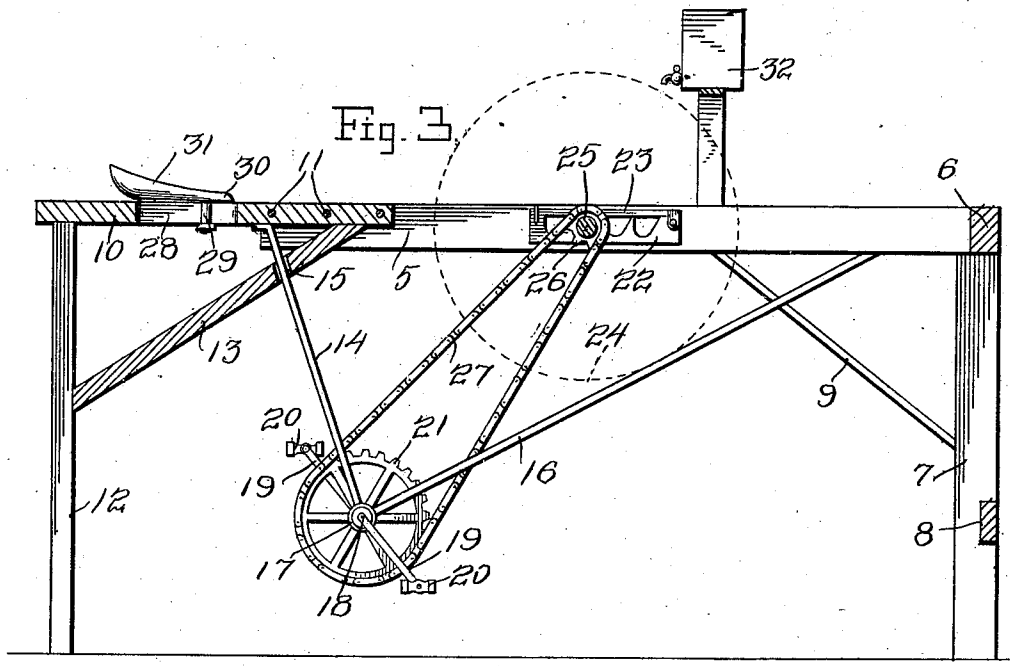
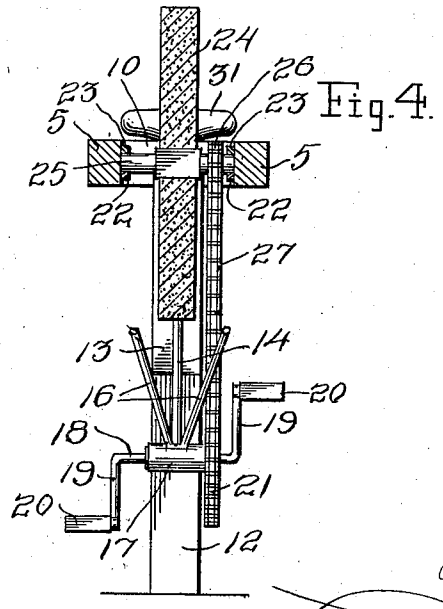


Fig. 4.



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UNITED STATES PATENT OFFICE.

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DEVICE FOR OPERATING GRINDSTONES.

No. 860,092. Specification of Letters Patent. Patented July 16, 1907.

Application filed January 3, 1906. Serial No. 294,423.

To all whom it may concern:

Be it known that I, THOMAS F. HOPKINS, a citizen of the United States, residing at Puxico, in the county of Stoddard, State of Missouri, have invented certain new and useful Improvements in Devices for Operating Grindstones; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to grind stones and more particularly to foot power grind stones and has for its object to provide a stone which will be simple in arrangement and which may be produced at a comparatively low figure.

Another object is to provide a stone including an adjustable seat.

Other objects and advantages will be apparent from the following description.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the present invention. Fig. 2 is a top plan view. Fig. 3 is a longitudinal section on line 3—3 of Fig. 2. Fig. 4 is a cross section on line 4—4 of Fig. 2.

Referring now to the drawings, the present invention comprises spaced parallel sills 5 disposed horizontally and connected at their rearward ends by means of a cross piece 6. Downwardly divergent legs 7 are secured to the rearward ends of the sills and have a cross brace 8, upwardly and forwardly extending brace rods 9 being also secured to the legs 7 and to the sills. Between the forward ends of the sills, there is disposed a horizontal board 10 which is secured in position by transverse bolts 11 and this board extends forwardly beyond the sills and has secured to its forward end a supporting leg 12, this leg being connected with the rearward end of the board 10 by means of a diagonal brace 13. A rod 14 is secured to the board 10 and extends downwardly and rearwardly therefrom through an opening 15 in the brace 13, this rod 14 being connected at its lower end by a pair of upwardly and rearwardly extending rods 16 by means of a crank hanger 17, these rods 16 being connected with the sills 5 adjacent to the rearward ends thereof. A crank shaft 18 is journaled in the crank hanger and carries cranks 19 provided with pedals 20, and the crank shaft carries a sprocket 21.

A pair of notched bars 22 are secured horizontally upon the inner faces of the sills 5 and latch rods 23 are provided and are pivoted to the sills for movement into and out of position to close the notches, the latter being directed upwardly. A grind stone 24 is disposed with the ends of its axles 25 in a pair of the notches of the bars, the notches of the two bars registering and the axle is arranged for interchangeable engagement in the several registering pairs of notches and may thus be shifted longitudinally of the sills. The axle carries a sprocket wheel 26 which is connected with the sprocket wheel 21 by means of a chain 27, the bars 22 lying rearwardly of the sprocket wheel 21, and the shifting of the axle thus results in variation of the tension of the chain.

The board 10 is longitudinally slotted, as shown at 28, and a clamping bolt 29 is slidably engaged in this slot and is engaged at its upper end in the nose 30 of a saddle 31 which rests upon the board. The saddle is thus movable longitudinally of the board, as will be understood and the clamping bolt may be operated to hold it at different points of its movement.

A water tank 32 is located in position to discharge upon the stone 24.

What is claimed is:

In combination, a pair of spaced horizontal sills; a horizontal bar secured to the inner face of each sill and having its upper edge provided with a series of notches, the notches of the two bars registering in pairs; a driving shaft located below the sills and forwardly of said bars; a sprocket wheel mounted upon said shaft, and pedals for operating it; a driven shaft adapted to carry a grindstone and having its opposite ends in interchangeable engagement in said notches; a sprocket wheel mounted on said driven shaft; a chain connecting said sprocket wheels; and a latch rod pivoted to each sill adjacent the bar secured thereto, and adapted to be moved into and out of position to cover the notches in said bar to retain the shaft ends in place therein.

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

THOMAS F. HOPKINS.

Witnesses:
ALBERT KELL,
C. CLUBB.