

T. E. WARREN.
 BUR FOR DRESSING GRINDING STONES.
 APPLICATION FILED JAN. 22, 1912.

1,037,692.

Patented Sept. 3, 1912.

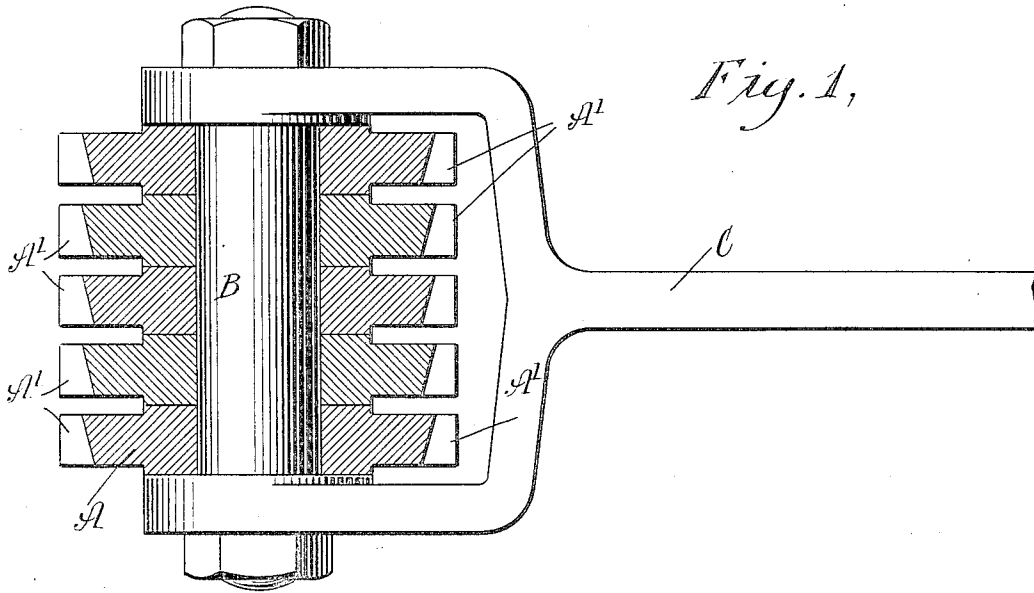


Fig. 1,

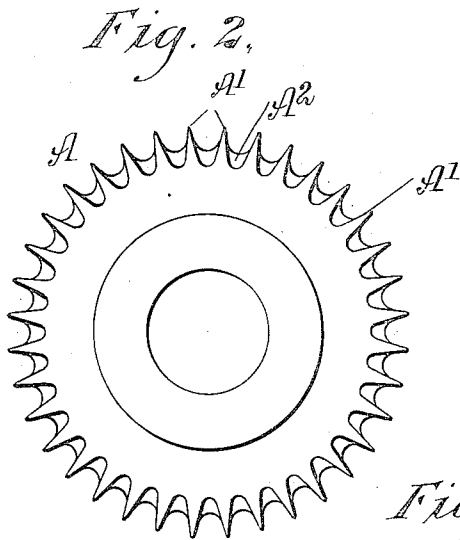


Fig. 2,

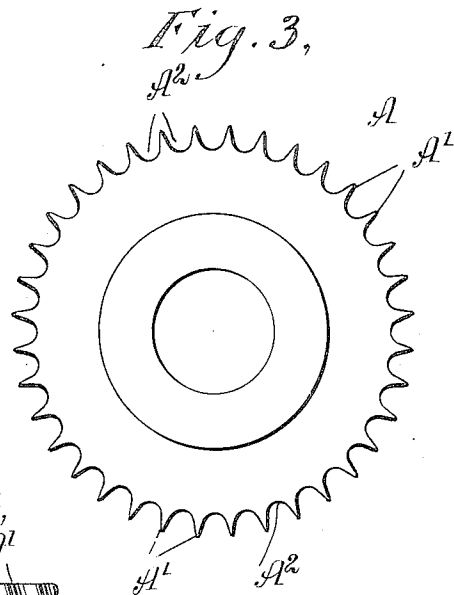


Fig. 3,

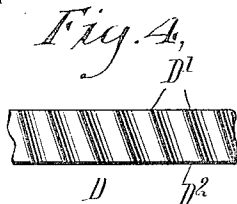


Fig. 4,

Fig. 5,

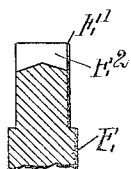
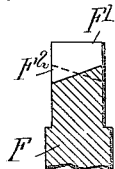


Fig. 6,



WITNESSES

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THOMAS EDWIN WARREN, OF TICONDEROGA, NEW YORK, ASSIGNOR TO TICONDEROGA MACHINE WORKS, OF TICONDEROGA, NEW YORK.

BUR FOR DRESSING GRINDING-STONES.

1,037,692.

Specification of Letters Patent.

Patented Sept. 3, 1912.

Application filed January 22, 1912. Serial No. 672,670.

To all whom it may concern:

Be it known that I, THOMAS E. WARREN, a citizen of the United States, and a resident of Ticonderoga, in the county of Essex and State of New York, have invented a new and Improved Bur for Dressing Grinding-Stones, of which the following is a full, clear, and exact description.

The invention relates to means for burring wood pulp grinders, and its object is to provide a new and improved bur for dressing, roughing or, as usually termed in mill practice, sharpening or burring grinding stones, and arranged to provide a clearance for the dust or small particles removed from the peripheral face of the grinding stone, and to render the teeth of the bur exceedingly strong and durable.

For the purpose mentioned, the bur is provided with spaced teeth forming between them a clearance, the bottom of which is inclined for the ready escape of the dust cut off from the peripheral face of the grinding stone.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional plan view of a plurality of burs mounted to rotate in a holder; Fig. 2 is a face view of the exit side of the bur; Fig. 3 is a like view of the opposite side of the bur; Fig. 4 is a plan view of a modified form of a bur having angular teeth; Fig. 5 is a cross section of a modified form of a bur provided with a clearance, the bottom of which is inclined downwardly and outwardly from the middle of the bottom of the clearance; and Fig. 6 is a cross section of a modified form of a bur having successive clearances inclined in opposite directions.

As shown in Fig. 1, a series of burs A are mounted to turn on a spindle B arranged on a holder C for presenting the teeth A' of the burs to the peripheral face of the grinding stone to be dressed and sharpened. The teeth A' of each of the burs A are of greater depth on one side of the bur than on the other side thereof to form clearances A² between adjacent teeth, each clearance having an inclined bottom to facilitate the escape of the dust or other particles cut off from the peripheral face of the grinding stone by

the outer sharpened edges of the teeth A'. It is understood that the sharpened edges of the teeth A' engage the peripheral face of the grinding stone to be dressed and sharpened, and the dust and fine particles ground or cut off from the said peripheral face of the grinding stone pass between adjacent teeth and into the clearances A² and down the inclined bottoms thereof, to finally drop off the face of the bur to keep the teeth A' perfectly clean.

By reference to Fig. 1, it will be noticed that adjacent burs are spaced apart to permit dust or fine particles to readily pass off a bur.

By reference to Fig. 2, it will be noticed that the base of each tooth at the longer side thereof is wider than the base at the shorter side of the tooth and hence each tooth is exceedingly strong and durable and not liable to break when the bur is in use.

The bur D shown in Fig. 4 is provided with teeth D' having their cutting edges inclined relative to the faces of the bur, but the clearances D² are the same as above described relative to Figs. 1, 2 and 3.

In the modified form shown in Fig. 5, the bur E is provided with spaced teeth E' having clearances E² between them, the bottom of each clearance E² being inclined outwardly and downwardly from the middle of the bottom to both faces of the bur E.

As shown in Fig. 6, the bur F is provided with teeth F' having clearances F² between them, the bottoms of successive clearances being inclined alternately in a downward and outward direction from opposite faces of the bur.

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

1. As an article of manufacture, a bur for burring or dressing the peripheral faces of grinding stones, consisting of a wheel having a peripheral portion of reduced width, provided with spaced teeth forming between them clearances, the bottom of each clearance being inclined for the ready escape of the particles cut off from the peripheral face of the grinding stone.

2. As an article of manufacture, a bur for burring or dressing the peripheral faces of grinding stones, consisting of a wheel having a peripheral portion of reduced width, provided with spaced teeth of a greater

depth at one side of the wheel than on the other side to form clearances between adjacent teeth, each clearance having an inclined bottom extending from one face of the wheel to the other face thereof to permit the escape of the particles removed by the teeth of the wheel from the peripheral face of the grinding stone.

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

THOMAS EDWIN WARREN.

Witnesses:

B. B. LOCKE,
C. H. ZEH.