No. 705,410. Patented July 22, 1902.

J. JORGENSEN.

BUR FOR MILLS.

(Application filed May 25, 1901.)

(No Model.)

Fig. 1

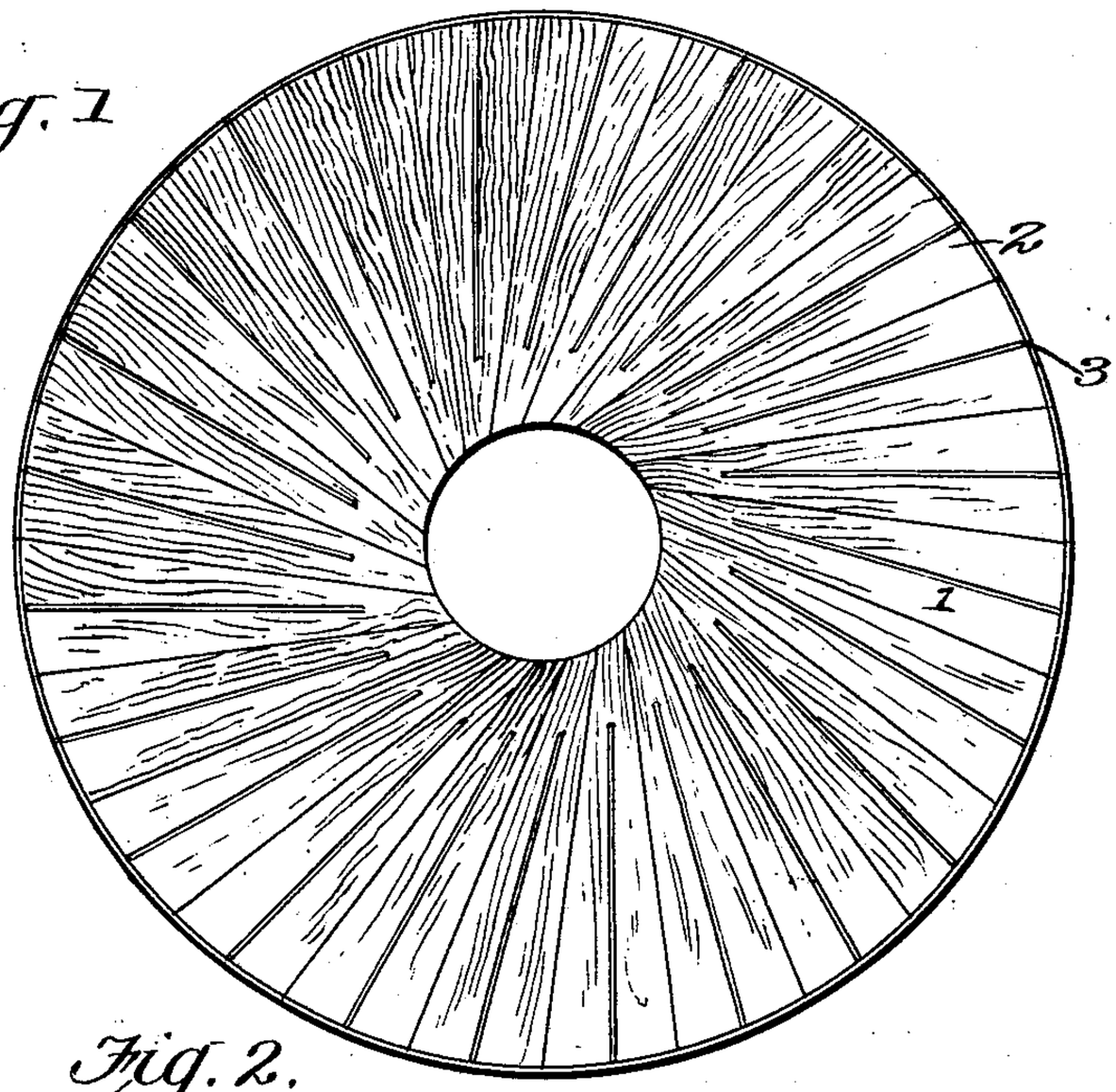


Fig. 2.

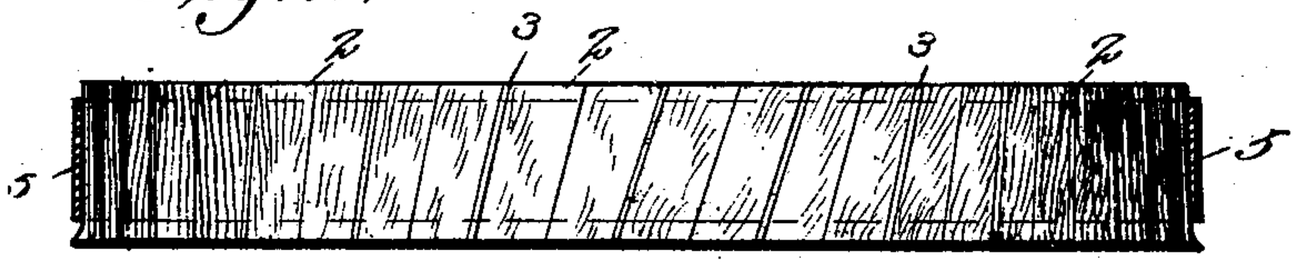


Fig. 3.

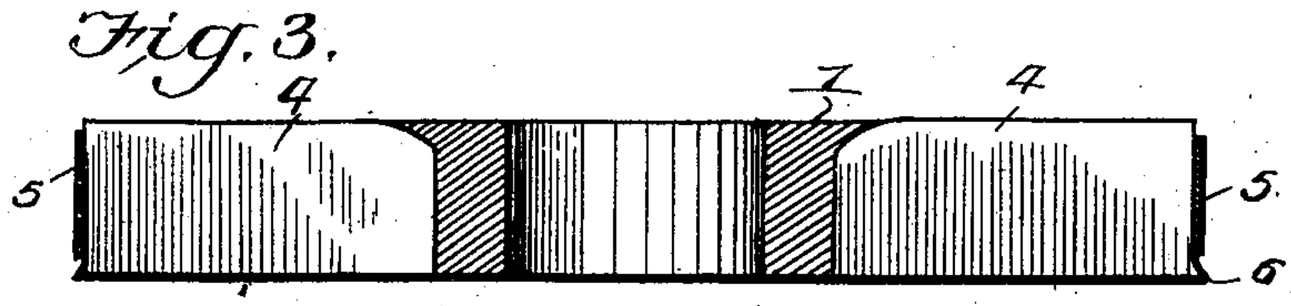
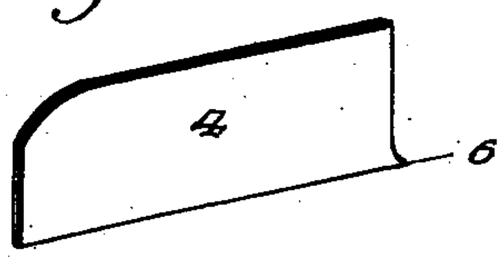


Fig. 4.



Witnesses
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JORGEN JORGENSEN, OF OMAHA, NEBRASKA.

BUR FOR MILLS.

SPECIFICATION forming part of Letters Patent No. 705,410, dated July 22, 1902.

Application filed May 25, 1901. Serial No. 61,957. (No model.)

To all whom it may concern:

Be it known that I, JORGEN JORGENSEN, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented new and useful Improvements in Burs for Mills, of which the following is a specification.

This invention relates to improvements in burs for mills.

The object of the present invention is the provision of a bur embodying in its construction certain relation of elements and arrangement of the parts that the bur will be self-sharpening; and, furthermore, the invention aims to provide a bur of greater life than those ordinarily employed.

A further object of the invention is to provide a bur for mills which is of extremely simple construction, inexpensive in manufacture, and extremely durable and efficient in use.

With these and other objects in view, which will appear as the nature of the improvements is better understood, the invention consists in the novel construction and combination of parts, as will be hereinafter fully described, illustrated, and claimed.

In the drawings, Figure 1 is a top plan view of a bur constructed in accordance with the present invention. Fig. 2 is a side elevation thereof, the binding-ring being in section. Fig. 3 is a transverse sectional view of the bur. Fig. 4 is a detail perspective view of one of the grinding-plates.

Referring to the drawings, the numeral 1 designates the grinding-bur formed of a series of tangentially-arranged sector-shaped inclined sections 2, preferably formed of hard wood, but in lieu thereof the same may be formed of soft iron. These sections are provided with inclined grooves 3, extending from the periphery of the bur inwardly to a point near the axis of the same. Arranged within these grooves are plates 4, preferably formed of metal, and owing to the particular inclination of the grooves 3 the upper or outer edges of the plates 4 are presented for action upon the grain to be ground, providing grinding-ribs. In order that the plates 4 may be effectually held within the grooves 3 and the sections 2 held together, a binding-ring 5 surrounds the same. The plates 4 are thus firmly held within the grooves, and in order to prevent the downward movement of the binding-ring 5 the ribs are provided at their outer ends and lower edges with outwardly-projecting nibs 6.

It will be seen that by the inclination of the grooves 3 the edges of the plates 4 are presented as teeth to the grain to be ground, and when the edges are worn flat, presenting the wood or soft iron to the grain, the latter begins to wear away, thereby presenting the edges of the plates to the grain as they were originally. The bur is thus self-sharpening, and it is unnecessary to remove the same from the mill for sharpening purposes, as is the case with the ordinary burs.

While the form of the invention herein shown and described is what is believed to be a preferable embodiment thereof, it is obvious that the same is susceptible of various changes in the form, proportion, and minor details of construction, and the right is therefore reserved to vary and modify the invention as falls within the spirit and scope thereof.

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

A grinding-bur comprising a series of tangentially-arranged sector-shaped sections having inclined grooves extending inwardly from the periphery to a point near the axis of the bur, plates carried in said grooves whereby their upper edges are presented to form ribs, a binding-ring holding said ribs and sections in place, and nibs projecting from the outer ends and lower edges of said ribs to hold said binding-ring in place.

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

JORGEN JORGENSEN.

Witnesses:
FRANK MERRILL,
NEWEL S. GIBSON.