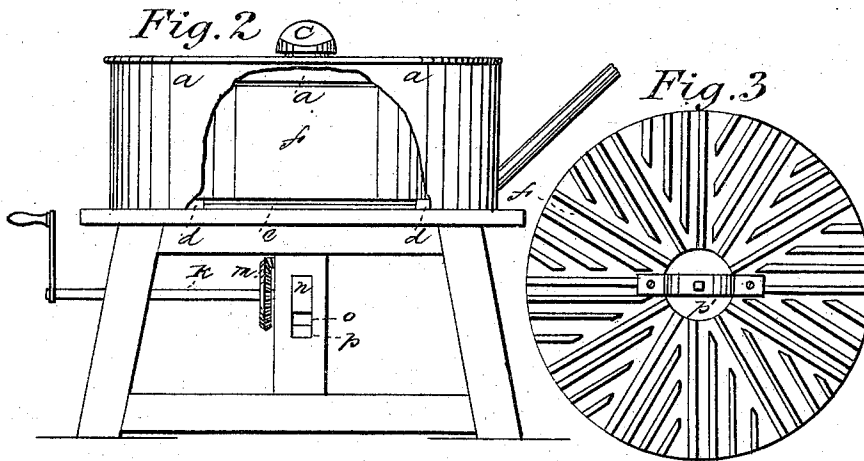
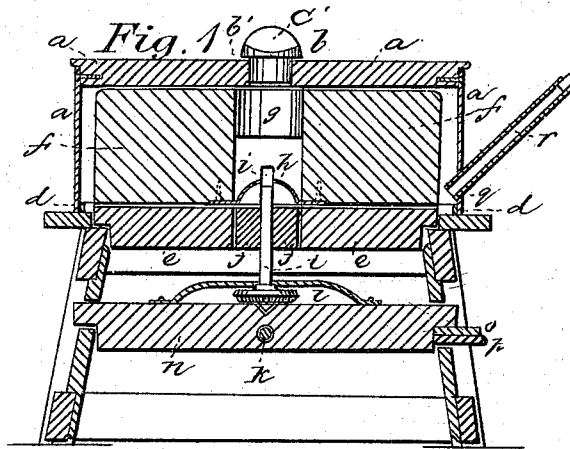


BRALEY, SCHMITT & SCHMITT.

Millstone Dress.

No. 106,540.

Patented Aug. 23, 1870



Witnesses:

Henry J. Arel
Henry Johnston

Inventors:

J. S. Braley, J. A. Schmitt & P. I. Schmitt

by Theodore Mungen
their Attorney

United States Patent Office.

JOEL S. BRALEY, JOHN A. SCHMITT, AND PHILLIP L. SCHMITT, OF UTICA,
MISSOURI.

Letters Patent No. 106,540, dated August 23, 1870.

IMPROVED METHOD OF PUTTING FACE-DRESS ON MILLSTONES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, JOEL S. BRALEY, JOHN A. SCHMITT, and PHILLIP L. SCHMITT, of Utica, in the county of Livingston and State of Missouri, have invented a new and useful Process for Putting the Face-Dress upon Millstones, of which the following is a specification.

Nature and Objects of the Invention.

Our invention relates to the process of sharpening or putting a face-dress upon millstones by attrition, by running the stones with their faces together, while encased in an air-tight covering, the object of the process being to remove the gloss or polish which forms upon the grinding surface of the stones when in use, and to put upon them or give them the sharp, gritty surface required for grinding wheat.

Description of the Drawings.

Figure 1 is a section of a set of millstones or burs provided with our air-tight covering.

Figure 2 is a view of a set of burs provided with our air-tight covering, the covering being broken so as to exhibit a portion of the burs and the hoop or rim which surrounds them.

Figure 3 is a view of the face of the upper bur.

General Description.

The covering *a* consists of a broad hoop, fitted with a head.

b is a hole in the top center of the covering *a*.

c is a plug, used for closing the hole *b*.

d is a narrow hoop or rim, which surrounds the lower bur *e*.

g is a plug, used for closing the hole in the center of the upper bur *f*.

h is the bail or curved piece of iron, which connects the upper bur with the shaft *i*.

j is the packing or boxing in the center of the lower bur, through which the shaft *i* passes.

The shafts *i* and *k*, with their beveled wheels *l* and *m*, work in the bridge-tree or beam *n*.

The wedges *o* and *p* are used to adjust the beam *n* for the purpose of setting the burs. A screw is commonly used for this purpose.

q is a small hole in the side of the covering through which the tube *r* is thrust, to ascertain when the burs are dressed.

Operation of the Invention.

Adjust the beam *n*, so that the faces of the burs *f* and *e* come in contact, that is, so that the bur *f* rests upon the bur *e*. Insert the plug *g* into the hole in

the center of the bur *f*. Place the covering *a* over the burs fitting it tightly over the hoop or rim *d*. Insert the plug *c* into the hole *b* in the top center of the covering *a*, and close the small hole *q* in the side of the covering. In this manner the air is excluded from between the burs.

Start the burs to running at the usual speed. The revolutions of the burs when empty and in contact remove particles of stone-dust. The air being excluded ignition cannot take place. There is no current of air to carry the stone-dust out, as the flour is carried out when the air is admitted. The stone-dust being thus retained within the burs, serves to grind off the gloss or polish, and leaves the sharp, gritty surface required for grinding wheat.

The common methods of obtaining the face-dress by the use of the diamond or pick is attended with great labor, and requires considerable time and no small degree of skill, and even then it is not equal to this process.

From five to twenty minutes is long enough time in which to dress the burs. The exact length of time depends upon the condition of the burs before the operation.

To ascertain when the burs are dressed or sharpened, thrust one end of the tube *r* through the small hole *q*, until it touches the bars where their faces meet. Take the other end of the tube in the teeth, and it will be readily ascertained by the touch when the burs are even and sharp.

Claims.

What we claim as our invention is—

1. The process of sharpening or putting a face-dress upon millstones by attrition, by running them with their faces in contact when *in vacuo*, or in an air-tight covering, in the manner and for the purpose specified.

2. The combination of the plug *g*, rim *d*, and air-tight covering *a*, having the holes *b* and *q*, and plug *c*, substantially as and for the purpose hereinbefore specified.

In testimony that we claim the foregoing process of putting the face-dress upon millstones, jointly and as above described, we have hereunto set our hands and seals this 18th day of December, 1869.

JOEL S. BRALEY. [L. S.]
JOHN A. SCHMITT. [L. S.]
PHILLIP L. SCHMITT. [L. S.]

Witnesses:

GEORGE SMITH,
HENRY H. CHAPMAN.