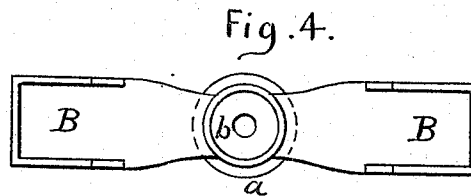
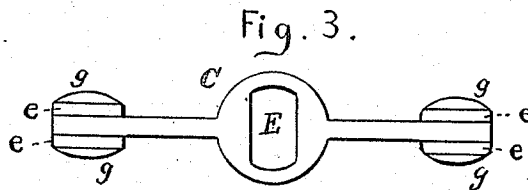
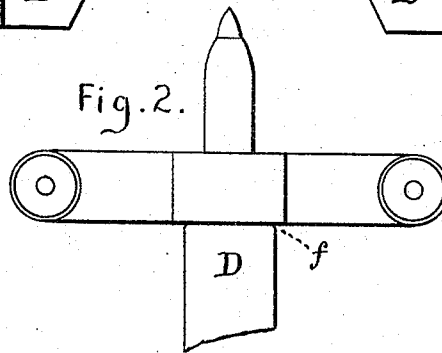
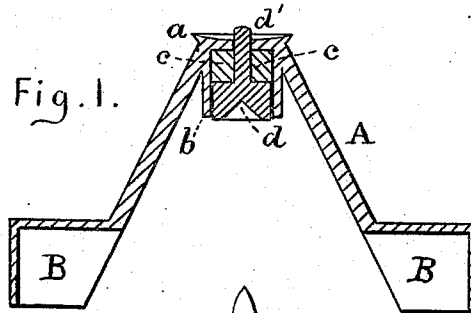


W. S. BACON.
Mill Spindles.

No. 158,192.

Patented Dec. 29, 1874.



Witnesses:
Carroll Webster
W. Read

Inventor:
Wm S. Bacon
by Myers & Co. Attys

UNITED STATES PATENT OFFICE.

WILLIAM S. BACON, OF SULPHUR SPRINGS, OHIO.

IMPROVEMENT IN MILL-SPINDLES.

Specification forming part of Letters Patent No. **158,192**, dated December 29, 1874; application filed October 13, 1874.

To all whom it may concern:

Be it known that I, WILLIAM S. BACON, of Sulphur Springs, in the county of Crawford and State of Ohio, have invented certain new and useful Improvements in Mill-Spindles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to the construction of gearing and driving machinery for mill-stones, more particularly those parts known as the bail and the driver; and consists in providing the upper part of the bail, where it is poised on the spindle, with a steel socket and an elastic cushion, so constructed that the said cushion intervenes between the weight of the upper revolving stone and the spindle, as hereafter shown and described.

In the accompanying drawing, which illustrates my invention and forms a part of the specification herein, Figure 1 represents the bail in section. Fig. 2 is a side view of the driver. Fig. 3 is a plan view of the driver, and Fig. 4 is a plan of the under side of bail.

In the drawing referred to, A designates the bail, having the saucer *a* formed at the top, below which, and made solid therewith, is the seat or receptacle *b*, formed like an inverted cup, for the elastic cushion *c*, and the steel socket *d*, the latter being provided with a small shaft or bolt, *d'*, projecting upward through apertures in the cushion *c* and saucer *a*, as

shown. B indicates the boxes formed at the outward extremities of the bail. C designates the driver, placed upon the spindle D, as shown, the said driver having the oblong aperture E at the center, through which the spindle passes, the latter being somewhat flattened above the shoulder *f* for such purpose. As shown in Fig. 3, the extremities of the driver are provided with elastic cushions *e*, outside of which are placed the metallic studs or guards *g*, these parts being held together by bolts passing through from the studs on one side of the driver to those on the other. The extremities of the driver thus formed extend into the boxes B, formed as shown. The steel socket *d* is loose within the seat or receptacle *b*, and works freely, the small shaft *d'* passing up through the elastic cushion and the saucer *a*, so that when the upper part of the grinding apparatus is poised upon the spindle, as shown in Fig. 1, the elastic cushion intervenes between the weight of the revolving stone and the spindle. This allows an upward yielding in case of any vertical jar.

Having described my invention, I claim—

In a mill, the combination of the bail A, having the saucer *a* and receptacle *b*, the steel socket *d*, elastic cushion *c*, and spindle D, constructed as shown and described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

WILLIAM S. BACON.

Witnesses:

E. VANVOORHIS,
I. F. CARR.