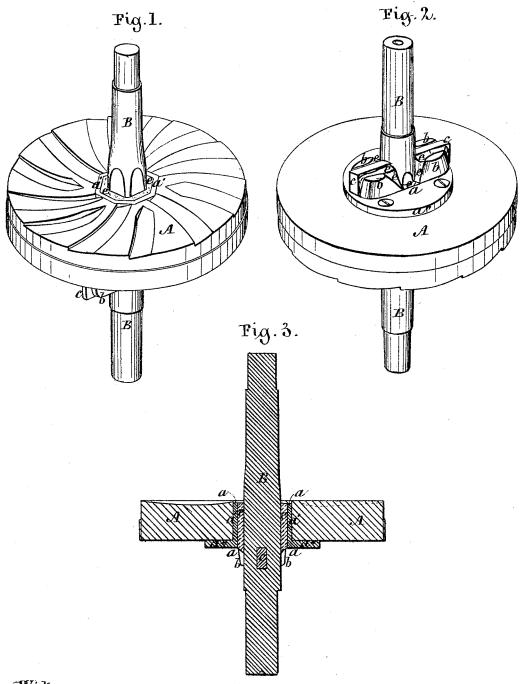
H. P. STRAUB.

 ${\bf Millstone}.$

No. 108,405.

Patented Oct. 18, 1870.



Witnesses.
Huy Willygatt
Edmund Masson.

Menry L. Frick. By A. 13, Stoughton. alty.

United States Patent Office.

HENRY P. STRAUB, OF CINCINNATI, OHIO.

Letters Patent No. 108,405, dated October 18, 1870.

IMPROVEMENT IN HANGING MILL-STONES.

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

To all whom it may concern:

Be it known that I, HENRY P. STRAUB, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented certain new and useful Improvements in Hanging Mill-Stones; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents, in perspective, the stone and spindle united after my invention, and as they appear when set ready for running.

Figure 2 represents a perspective view of the stone and spindle turned upside down, to show the fastening devices underneath.

Figure 3 represents a vertical section through the

stone, spindle, and fastening devices.

Similar letters of reference, where they occur in the separate figures, denote like parts in the drawing.

My invention relates to an improved mode of hanging mill-stones, where the under stone is the runner, and is permanently fastened to the spindle, and consists—

First, in a peculiarly constructed bush or centerpiece for the stone, with a key-seat cast upon its back or underside, and

Secondly, in combination with the bush-key, keyseat and spindle, the uniting of the whole firmly and rigidly by means of molten metal poured in and around them, as will be explained.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawing.

The under stone or runner A, has substantially and permanently built or fitted into its center, an iron

bush or center-piece, a, which consists, substantially, of a boss or sleeve, a', passing through the stone, and a flange, a'', on the back or under side of the stone, and on the back or under side of this flange is cast a key-seat, b.

The spindle B is passed through the opening in the bush or center-piece, and there is considerable space intervening between the bush and spindle.

The key c is then passed through the key-seat, and through the spindle, there being, also, considerable space left between the key and key-seat, which communicates with the space between the bush and the spindle.

The parts being thus made and put together, and the stone and spindle perfectly trued as to each other, molten metal, e, is poured into the space between the bush and spindle, completely filling it, and flowing, also, into, and completely filling the space between the key and the key-seat, thus permanently and durably uniting the parts in their adjusted position.

Having thus fully described my invention, What I claim therein as new, and desire to secure

by Letters Patent, is-

1. In combination with the runner mill-stone A, the iron bush a, built into its center, and having a flange, a', and key-seat, b, on its under side, substantially as and for the purpose described.

2. In combination with the runner mill-stone A, the bush a, spindle B, key c, and packing of molten metal c, as and for the purpose described and represented.

H. P. STRAUB.

Witnesses:

G. W. C. JOHNSTON, J. T. H. NEWMAN.