J. NORMAN.

MILL-PICKS.

No. 189,772. Patented April 17, 1877.

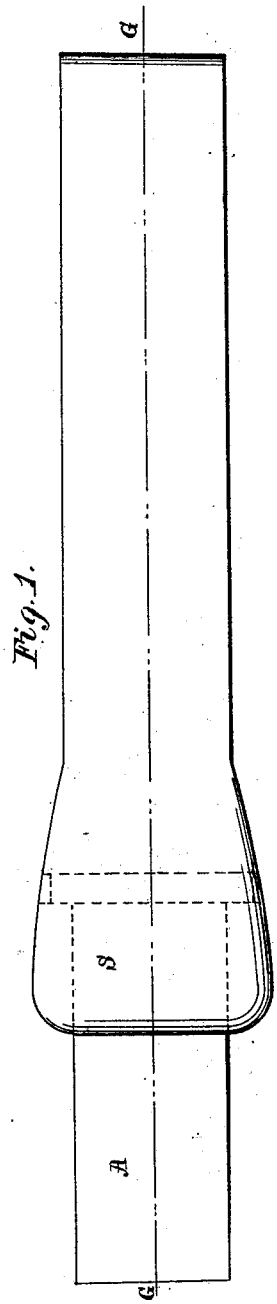

Fig. 1.

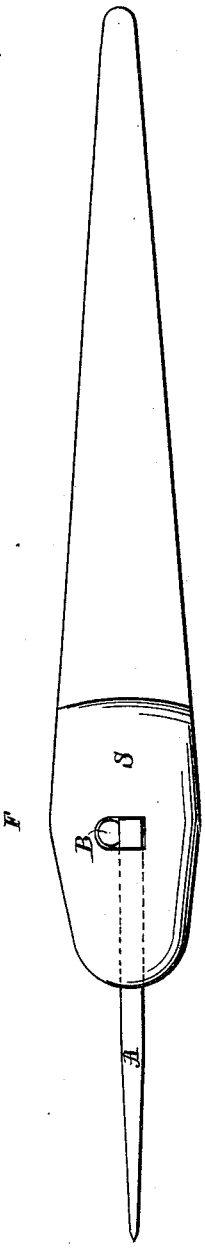

Fig. 2.

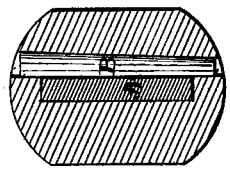

Fig. 4.

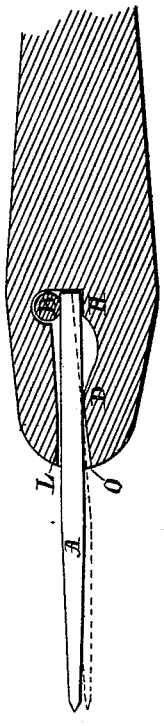

Fig. 3.

Witnesses:

P. Long-Innes

Jas. R. Milner

Inventor:

James Norman.

UNITED STATES PATENT OFFICE.

JAMES NORMAN, OF SPRINGFIELD, MISSOURI.

IMPROVEMENT IN MILL-PICKS.

Specification forming part of Letters Patent No. **189,772**, dated April 17, 1877; application filed November 2, 1876.

To all whom it may concern:

Be it known that I, JAMES NORMAN, of Springfield, county of Greene, and State of Missouri, have invented a certain new and useful Improvement in Blade Mill-Picks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification.

Figure 1 represents a plane or front view of the mill-pick; Fig. 2, an edge or side elevation of Fig. 1; Fig. 3, a longitudinal section through the line G G, Fig. 1, and Fig. 4 a bisection through the line F F, Fig. 2.

My invention has for its object so to construct a blade mill-pick that it can be used in the common socket-handle, as the solid pick, which stock or handle is ordinarily provided with a ring or hole, into which the tapering blade-socket is inserted, and there held while in use, to be in effect equal, and cost less.

The blade-stock proper is formed in one piece, and as nearly solid and close-fitting to the blade as possible, and by using a short stiff blade the weight of the blade-stock is principally thrown above the blade, thereby imparting greater force and solidity to the blow, making a clear better defined cut on the millstone. By so forming the blade-stock, the upper thin end will fit a common socket-handle. The lower end is made heavy and strong, for the twofold purpose of bringing the weight below the handle, and admitting a slot and key-seat being cast or formed therein, the key-seat extending entirely through transversely, for admission of key; and consequently it becomes another object of my invention to so form this blade-slot and key-seat in the blade-stock that the blade shall have a square and central bearing at the top end, and two bearings on each side of the blade, and be secured its entire width by a light key, said key being driven transversely in the blade-stock, and bearing against the upper or free side of the blade, forces it, by the aid of bearing near midway on opposite side of blade, to a bearing directly opposite the key. But my invention will be better understood by referring to the accompanying drawing, on which the same letters denote the same parts at all the figures on the drawings.

S represents the blade-stock, Fig. 1. A is the blade, Fig. 1. O is the slot for blade, Fig. 3; and B the key-seat, for inserting a light key, whereby the blade is firmly secured. On one side of the slot O, Fig. 3, there is formed a bearing, as shown at D, near midway of slot, (having reference longitudinally,) the blade A being inserted in the slot O. Then the key is inserted at B, and by driving the key, the blade A being forced to break over the bearing at D, necessarily forces it to a bearing on opposite side of slot, and further out, as shown at L, Fig. 3. The key also forces the blade A to a firm bearing directly opposite the key, as shown at , Fig. 3. The blade A is thereby brought in line with the center of the blade-stock S, where it has a firm central and solid bearing at the end, as shown in Fig. 3.

In the bisection, Fig. 4, is shown the key in place with reference to its position, and bearign on the blade A the entire width of the blade.

I claim as my invention—

In a millstone-pick, the stock enlarged about the blade-socket, which tapers gradually from said enlargement, as shown, and is provided with key-seat and key B at one side, the whole being arranged so that the blade shall have a square or unbroken bearing at top, and be held in place by the said key, in the manner and for the purposes herein before explained.

JAMES NORMAN.

Witnesses:

JAS. R. MILNER,

ED. W. WADE.