H. P. Straub,

Millstone Pick

No. 91,284. Patented June 15, 1869.

Fig. 1.

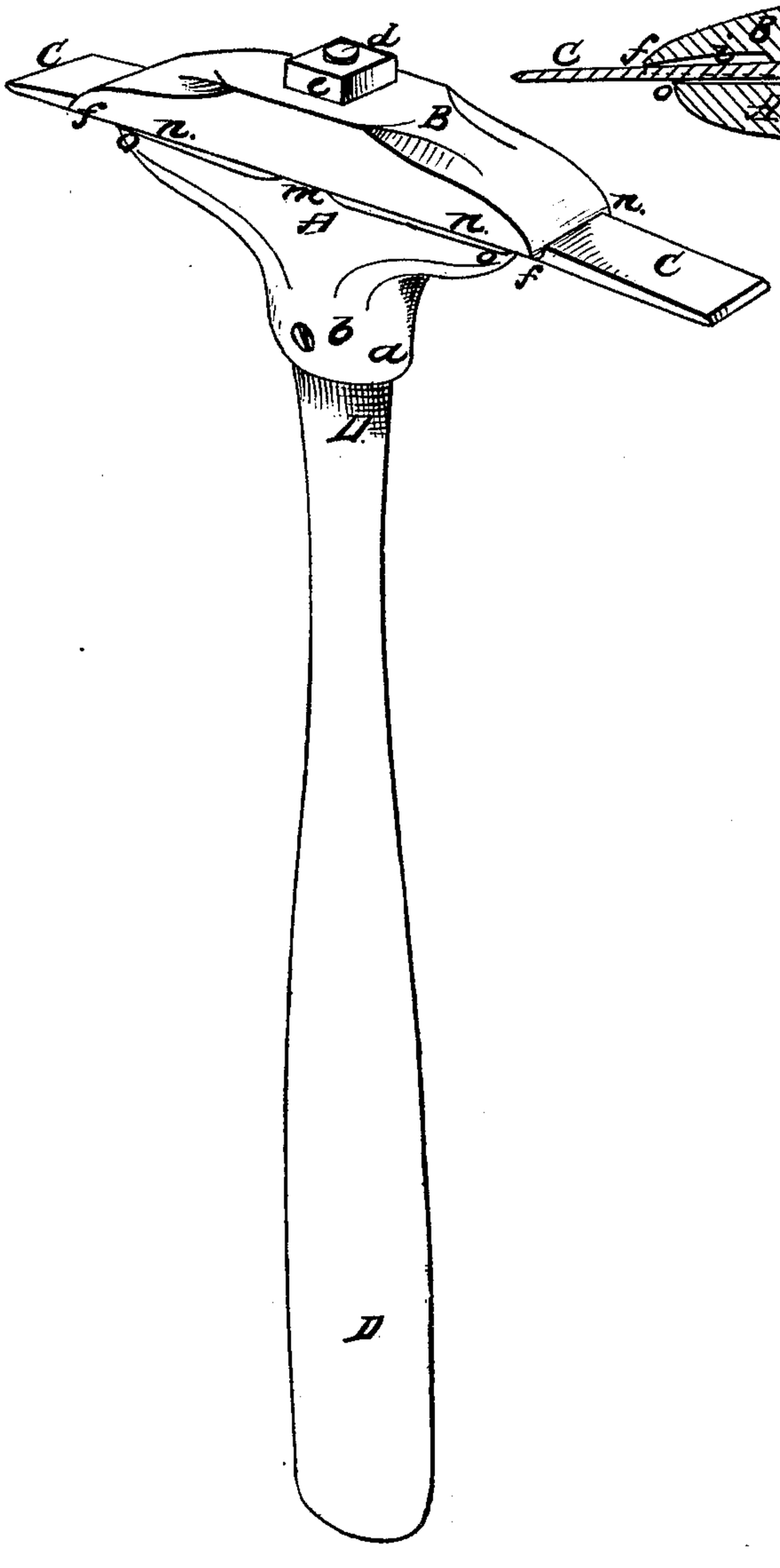
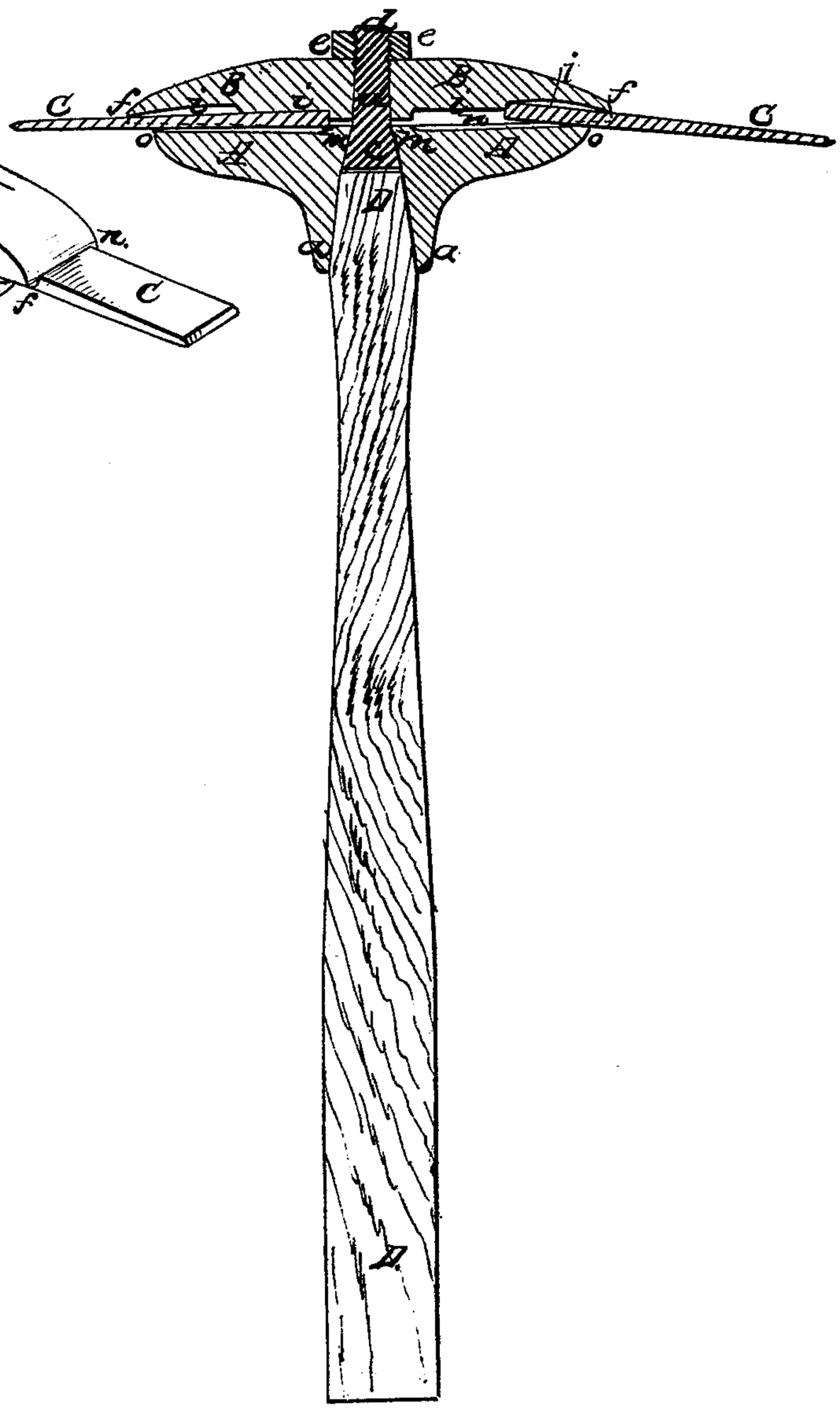


Fig. 2.



Witnesses:

Edmund Mason.

Inventor

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United States Patent Office.

HENRY P. STRAUB, OF CINCINNATI, OHIO.

Letters Patent No. 91,284, *dated June* 15, 1869.

IMPROVED MILLSTONE-PICK.

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 Mill-Picks for Dressing Millstones; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a perspective view of the mill-pick.

Figure 2 represents a section through the same.

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

My invention consists, first, in causing the upper or outer part of the head or jaw of the pick to project over the under or inner part thereof, for the purpose of getting a more forcible "bite" of said jaws or heads upon the adjustable cutting-tools between them.

My invention further consists in making the recesses in the inner portion of the upper head or jaw in different planes, so that as the steel cutters are worn away, and set further out at their heels, the jaws may take better hold upon them than they could do if said recesses were in the same plane as heretofore made.

And my invention finally consists in the device for securing the heads or jaws to each other, and to the handle, so as to hold firmly the bits, points, or cutters.

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

A B represent the two separate parts, which unitedly form the head of the pick, and which clamp and hold the bits, points, or cutters C between them.

The under or inner part of the head A has a socket, *a*, cast in or upon it, into which the handle D is driven, and then, by a set-screw, *b*, or by a pin, key, or otherwise, is securely fastened to it.

The bottom of the socket is formed into a conical, elliptical, or angular form, so as to receive the correspondingly-shaped head *c* of a screw, *d*, in it, and hold it against turning when the nut *e* is run down hard upon it.

This screw *d* projects far enough through the part A of the head to receive the other portion, B, upon it, and, by the nut *e*, draw the two portions firmly upon the bits C, or whatever tool is to be clamped and used with them.

The upper part, B, of the head projects beyond the under part, A, as seen at *f f*, so that said upper portion may bind or clamp more rigidly upon the bit, as will be hereafter explained.

In the under side of the upper part, B, of the head, there are recesses *i i*, which are on different planes, and which, when they receive the heel or rear of the bit, and as shown to the right and left of fig. 2, give said bits a different pitch or inclination, whilst the points or extreme ends *f f* of the head will take firmly against said bits, the upper and longer or projecting end bearing hard against the bit, and by the leverage between it and the shorter head, throw the heel of the bit hard up into the recess *i*, and thus make two points of close impact between the bits and the head, and at remote distances, so that the bits are firmly held to the head.

The shoulders to the recesses receive the impulse of the blow of the bits upon the hard stone, and prevent them from being driven into the head.

When the recesses *i i* are on the same plane, this griping-process cannot be attained, as there is then no tipping of the bits, and consequent biting or clamping between the two points or lines.

The bits, as herein shown, are slightly tapering, but they are not necessarily so.

The usual flanges, *n n*, are made on the edges of the face of the piece B, so as to hold the bits laterally.

When the screw *d* is dropped into the socket *a*, and its head *c* finds its seat therein, so that it cannot turn, the handle D may then be driven into the socket, and the screw *b*, or key or pin, put in, and the whole is securely put together, and a strong and durable attachment of the screw provided.

The face of the under part, A, of the head has a swell at *m*, at its centre, that is, on the same plane with its extreme outer points *o o*, and from these points *o o* to the centre, or to the swell *m*, the surfaces are inclined, which admits of the use of tapering bits, if such are preferred.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent, is—

In millstone-picks, having divided and clamping-heads for holding the bits, points, or cutters, the projecting ends of one part over the other part, so as to avail of the leverage of the projecting one for binding on said bits, substantially as and for the purpose described.

Also, in combination with sectional or divided clamping-heads, for holding bits, points, or cutters, a series of recesses, *i*, on different planes, for the heels of said bits, points, or cutters to take into, when griped between said heads, substantially as described.

Also, in combination with a socket on one of the parts of the head, to receive the handle, a headed screw, dropped into and through said socket, to receive and hold the other part of said head to its mate or fellow, and to the handle, substantially as described.

H. P. STRAUB.

Witnesses:

G. W. C. JOHNSTON,

H. NEWMAN.