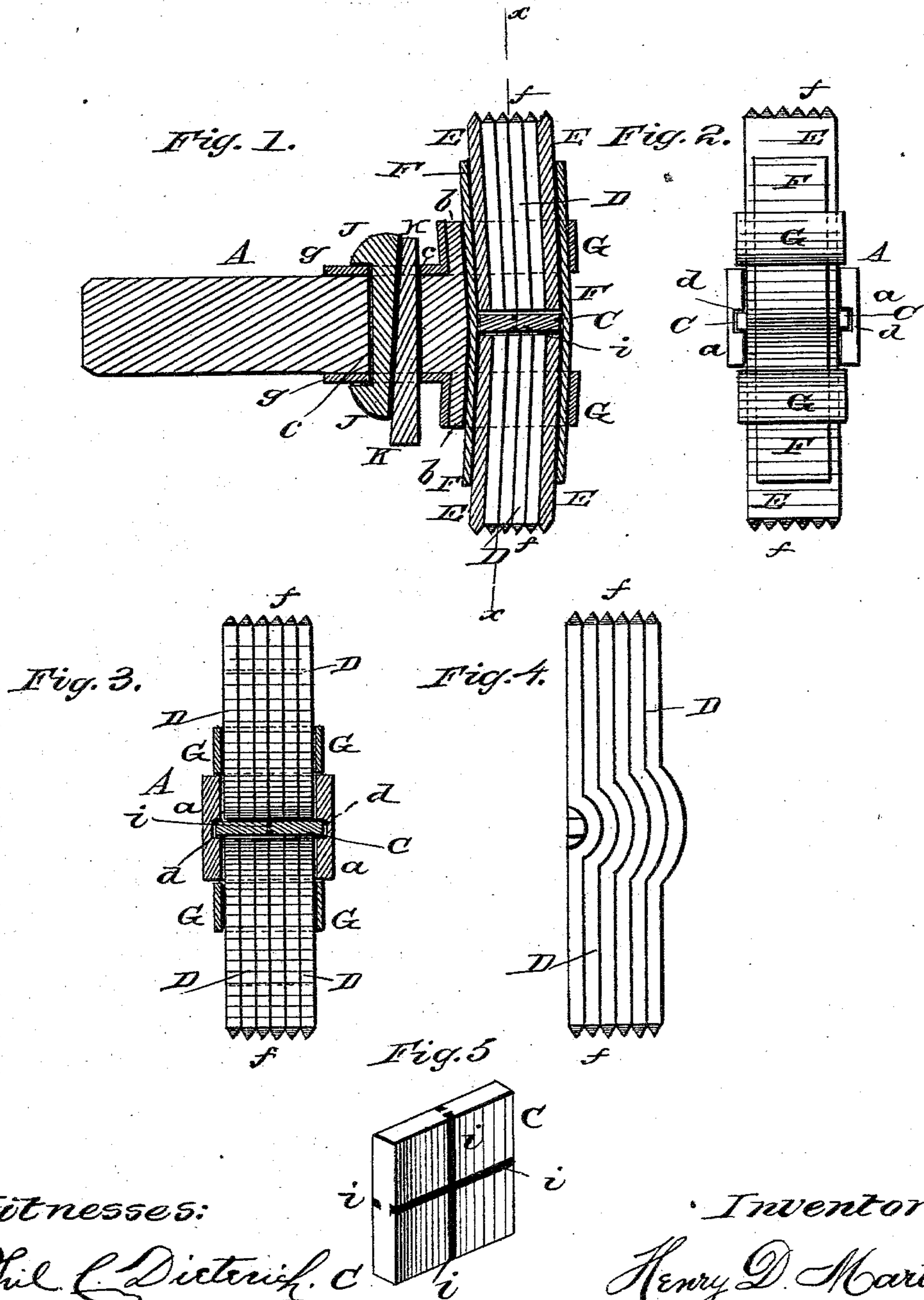


(No Model.)

H. D. MARTIN.
BUSH HAMMER.

No. 281,092.

Patented July 10, 1883.



Witnesses:
Phil. C. Dietrich. C.
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UNITED STATES PATENT OFFICE.

HENRY D. MARTIN, OF YPSILANTI, MICHIGAN.

BUSH-HAMMER.

SPECIFICATION forming part of Letters Patent No. 281,092, dated July 10, 1883.

Application filed February 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, H. D. MARTIN, of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Bush-Hammers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a section taken vertically and longitudinally through the handle and head of my improved bush-hammer, having the cutting-points secured into it. Fig. 2 is a top view. Fig. 3 is a cross-section taken vertically in the plane indicated by the dotted line *x x* on Fig. 1. Fig. 4 shows points having bent shanks, and Fig. 5 is a detail view.

This invention relates to hammers which are denominated by stone-cutters "bush-hammers," and which are designed for shaping or facing stone preparatory to polishing the surfaces; and the nature of my invention consists in the combination of clamping devices for the gang of points with a hammer-handle having jaws for receiving said devices, whereby the points can be firmly and readily secured in their places with great facility, and with equal facility removed for the purpose of sharpening or substituting other points, all of which will be fully understood when taken in connection with the annexed drawings.

A designates the handle of the hammer, which is cast malleable iron or of wrought-iron, and which is constructed with parallel jaws *a a*, back flanges, *b b*, and a rectangular recess, *c*, through it, immediately in rear of the flanges *b b*. The inner sides of the two jaws *a a* have grooves *d d* formed in them, adapted to receive an end abutting-plate, C, for a gang of cutting-points, D, and plates E E, on the lower ends of which latter are formed suitable cutting-points, *f*. All of the points *f* are preferably pyramidal shape, and their shanks or stems are preferably rectangular in cross-section.

F F are end plates which are passed between the jaws *a a*, the diaphragm or abutting-plate C, the flanges *b b*, and two rectangular clamps, G G, which latter are applied, respectively, on the top and bottom of the hammer-head, and

constructed with shanks *g g*, having oblong rectangular holes through them, as shown in Fig. 1. When the pointed shanks are all adjusted in the hammer-head, as shown in the drawings, these shanks are rigidly confined in their places by means of a tapered gib, J, and a wedge, K, passed through the holes made through the extension of the clamps G G and the hole *c* through the handle of the hammer. By driving the wedge K home the gib is set in its place, and at the same time the pointed shanks are rigidly confined. It will be seen that the flanges *b b* are both pitched backward, and that the plates E E are also bent, so that the front and back sides of the receptacle for the pointed shanks are downwardly-flaring.

I make grooves in the bottom side of the abutting-plate C, into which I fit fins *i*, arranged at right angles to each other. These plates or fins *i* are designed to serve as divisions for the butts of the smallest straight-pointed shanks, to allow these butts to be spread and to be more firmly held in their places when the wedge K is driven into its place.

It will be seen by reference to the drawings, Figs. 2 and 4, that I may use cutting-points which have straight rectangular shanks, or that these shanks may be curved at the middle of their length; or I may use broad flat shanks having a number of cutting-points on them. When the curved shanks are used, I dispense with the abutting-plate and use cutting-points on both ends of each shank.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bush-hammer consisting of jaws *a a*, formed on a handle, flanges *b b*, clamps G G, and a gib and wedge fastening, all constructed and adapted to operate substantially in the manner and for the purposes described.

2. The combination, in a bush-hammer, of the jaws *a a* and flanges *b b*, formed on a handle, the removable abutting-plate C, having fins on it, removable plates F F, clamps G G, and a wedge-fastening, all constructed and adapted to operate substantially in the manner and for the purposes described.

3. The combination, in a bush-hammer, of the jaws *a a*, formed on a handle, with the

clamps G G and the gib and wedge fastening therefor, all constructed and adapted to operate substantially in the manner and for the purposes described.

- 5 4. The combination of the cutting-points having bent shanks with the jaws *a a*, formed on a handle, the clamps G G, and a gib and wedge fastening, all constructed and adapted to operate substantially in the manner and for
10 the purposes described.

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

HENRY D. MARTIN.

Witnesses:

FRANK JOSLYN,
J. E. POST.