C. F. H. HUFF.

Bit for Carving-Machines.

No. 207,743. Patented Sept. 3, 1878.

Fig. 1.

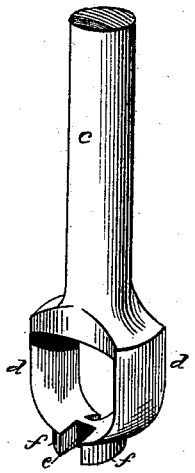


Fig. 2.

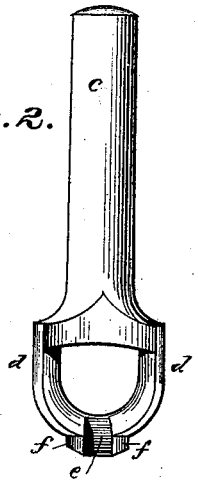


Fig. 3.

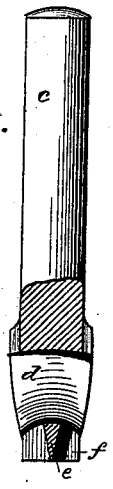
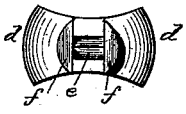


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHAUNCEY F. H. HUFF, OF COVINGTON, KENTUCKY, ASSIGNOR TO J. A. FAY & CO., OF CINCINNATI, OHIO.

IMPROVEMENT IN BITS FOR CARVING-MACHINES.

Specification forming part of Letters Patent No. **207,743**, dated September 3, 1878; application filed July 26, 1878.

To all whom it may concern:

Be it known that I, CHAUNCEY F. H. HUFF, of Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Bits for Molding and Carving Machines, of which the following is a full, clear, and exact description:

This invention relates to bits or cutting-tools to be used on molding and carving machines. Its object is to provide for these machines a very smooth-cutting and light-running carving-bit that shall neither raise the edge of the veneer in cutting veneered stuff nor tend to burn the wood by reason of overheating caused by defective clearance. To this end the improved carving-bit is made out of a solid bar of steel, on one end of which a stirrup-like cutter-head is formed, with cutting-edges on both the side and base bars of the stirrup, adapted to cut in either direction, the opening through the head giving the necessary clearance for the chips, and affording the opportunity of filing the principal cutting-edges on the interior sides so that the exterior sides need not be touched by the file.

In the accompanying drawings, Figures 1, 2, 3, and 4 represent different views of the improved carving-bit.

The same letters of reference indicate like parts in all the figures.

The carving-bit is made of a solid bar of steel, and is composed of a shank, *c*, to be taken hold of by a chuck or driving-spindle socket, and a cutter-head fashioned out of the bar at one end thereof to a stirrup-like form. The side bars *d d* of this stirrup-bit are rounded exteriorly, and are sharpened to cut with either edge. These side cutters are preferably made somewhat tapering, as best seen in Fig. 3, so that they will operate with a shear cut. They are in this instance regularly curved at their lower ends to meet the base bar *e*, and they terminate abruptly in downwardly-projecting lips *f*, the lower or horizontal edges of which are flush with and in the plane of the lower cutting-edge of the base bar *e*. The horizontal cutting-edges of the base bar *e* and lips *f* together constitute an H-shaped base cutter for smoothing the bottom of a panel or carved surface. The exterior vertical faces of the lips *f* are rounded, and their vertical edges on either side are ground or sharpened. The base bar *e* has the form of a knife-edge in cross-section. The contour of the side cutters may, of course, be varied to produce any required molding.

It will be observed that by reason of the opening clear through this stirrup-bit the side cutters can be conveniently sharpened on the interior faces; and the base cutters are also so arranged that they can be readily ground or sharpened.

The clear opening through the stirrup also affords special facilities for the clearance of the chips—a very important matter.

What I claim as my invention, and desire to secure by Letters Patent, is—

The carving-bit, substantially as hereinbefore set forth, composed of a shank, and a stirrup-shaped cutter-head, having side cutters as well as base cutters, for cutting a flat surface.

In testimony whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

CHAUNCEY F. H. HUFF.

Witnesses:

AUGUSTUS BIESEL,
R. R. HITT.