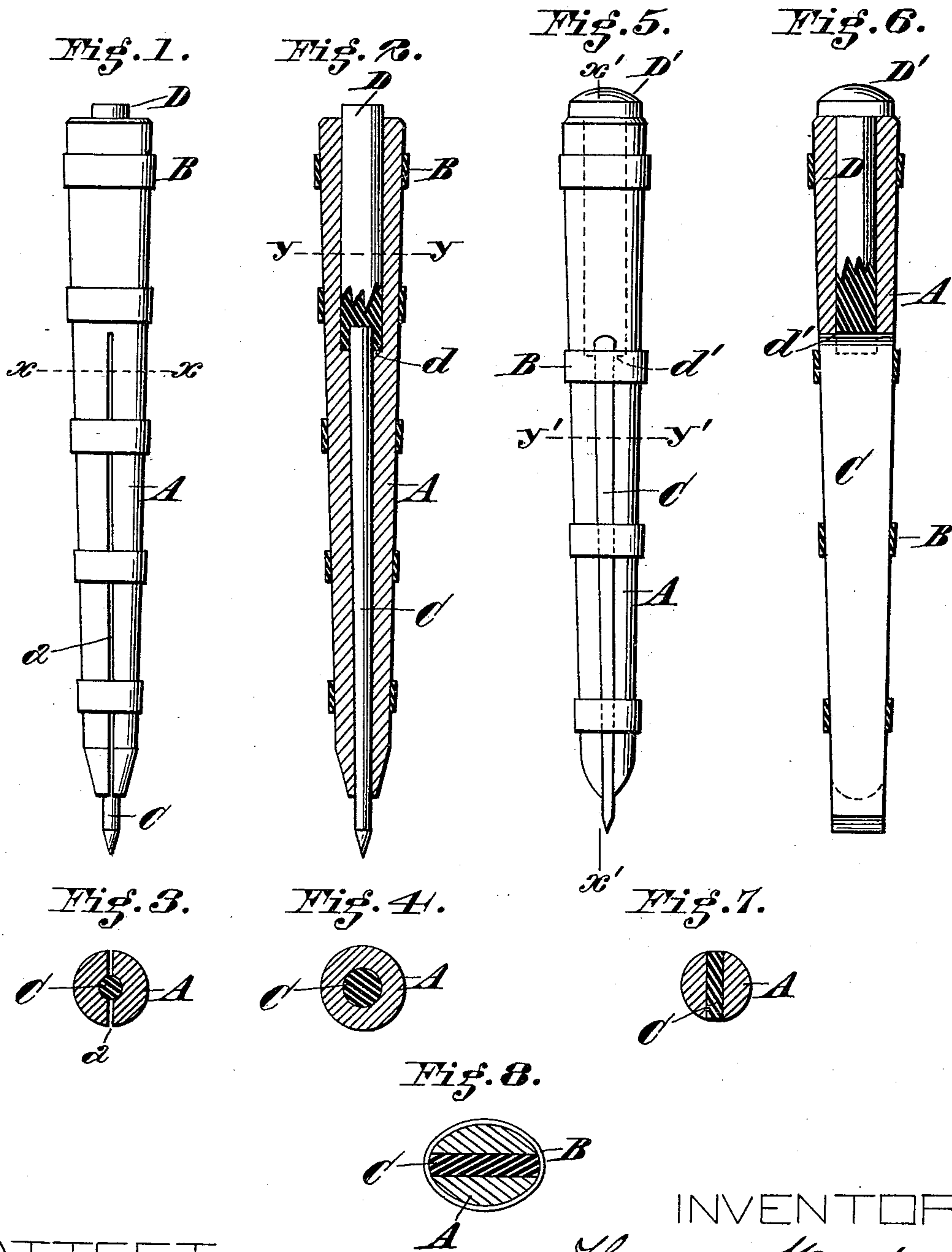


(No Model.)

T. WOODS.
STONE CUTTER'S CHISEL.

No. 329,872.

Patented Nov. 3, 1885.



ATTEST

Joseph L. Lottell
Chas. E. Kissick

INVENTOR

Thomas Woods,
by John E. Jones,
his Attorney.

UNITED STATES PATENT OFFICE.

THOMAS WOODS, OF NICHOLASVILLE, KENTUCKY.

STONE-CUTTER'S CHISEL.

SPECIFICATION forming part of Letters Patent No. 329,872, dated November 3, 1885.

Application filed May 4, 1885. Serial No. 164,397. (No model.)

To all whom it may concern:

Be it known that I, THOMAS WOODS, a citizen of the United States, residing at Nicholasville, in the county of Jessamine and State of Kentucky, have invented certain new and useful Improvements in Stone-Cutters' Chisels, of which the following is a specification.

My invention relates to a stone-cutter's chisel or tool and it consists in the combination with a suitably-tempered steel bar or rod composing the chisel-bit, of a longitudinally bored or slotted wooden stock and a battering-head projecting beyond the top of said stock, the bit being adapted to be protruded from said stock and successively sharpened when worn by cutting away the wood composing said stock, all as hereinafter fully described.

In the accompanying drawings, Figure 1 is an elevation of my improvement, showing an etching tool or bit mounted in a bored and slitted wooden stock with rings or ferrules thereon for firmly securing the bit in place and preventing the splitting of the wooden stock. Fig. 2 is a central vertical section of the same, showing the hammering-head in position in the top of the tool, part of it being broken and in section to show the socket. Fig. 3 is a transverse section on line xx , Fig. 1. Fig. 4 is a similar view on line yy , Fig. 2. Fig. 5 is an elevation of my improvement, showing a flat steel chisel mounted in a slotted wooden stock with ferrules thereon. Fig. 6 is a central vertical section of the tool on line $x'x'$, Fig. 5, showing the flat face of the chisel-bar in elevation and its hammering-head in sectional elevation. Fig. 7 is a transverse section on line $y'y'$, Fig. 5, showing the tool as being round in cross section throughout.

Fig. 8 is a similar view showing the tool as being elliptical in cross-section at that portion in its length covered by the chisel-bar.

A represents the stock or handle of the tool, which is preferably made of wood, and tapered from its head to the cutting end. It is centrally bored, and is provided a portion of its length from said cutting end up with a narrow slit, a .

B B are ferrules fitting upon the stock, and C is a bar or rod of tempered steel composing the cutting-bit of the tool.

In Figs. 1, 2, 3, and 4 I have shown the bit as being a round and tapering one, and

driven into the central bore of the stock with its point projecting slightly therefrom. The bore at the head or hand part of the stock is of larger diameter in cross-section than in the remainder of the stock, to accommodate a battering-pin, D, which receives the blow of the workman's hammer or mallet. A socket, d , may be provided at the lower end of pin D, to fit upon the top of round bit C, which projects slightly upward beyond the narrow bore of the stock. When the bits C are of flat chisel shape, as shown in Fig. 5, 6, 7, and 8, they are set into slots of like configuration made in the stock.

I have shown the chisel-bit in Figs. 5 and 6 as being tapered both in the width and thickness, which is of the preferred form, as it fits more snugly in its coincident slot in said stock.

The battering-pin in Figs. 5 and 6, for the flat cutting chisel, is provided with a head, D' , at its upper end, for receiving the blows of the hammer, and a transverse slot, d' , at its lower end, for engaging the top of the chisel-blade.

It is obvious that the bits C could be continued upward to project beyond the top of the stock and the battering-pins dispensed with; but I prefer the use of a battering-pin in connection with the stock and bit, as it economizes in the use of material composing the bit, and it can be repeatedly used with other bits when their predecessors have been worn away.

In fitting the parts of my tool together when the round bit is used, the ferrules are first tightly driven into their proper relative positions on stock A. Then the bit is driven into place in the bore of the stock with its point projecting a suitable distance therefrom for service. Then the battering-pin is driven firmly in place into its receptacle at the top of the stock. In fitting the parts together when a flat bit is used, the bit is first placed in its slot in the stock, with the battering-pin driven in place above it, and then the ferrules are firmly set into position on the stock to prevent its splitting.

In the operation of my tool the blows of the mallet or hammer have a tendency to tighten the ferrules on the stock, and thereby securely bind all the parts together. When

the bit becomes dulled by use, it is sharpened by grinding, and as the material thereof wears away by said use and grinding, the ferrules are removed one by one from the lower end of the stock upward, and the wood cut away sufficient to permit a portion of the bit to project from the stock. When the lowermost ferrule does not closely approach the lower end of the stock, so as to hold the wood tightly on the bit, a ferrule somewhat larger than the one previously removed may be driven on.

I claim—

1. In a stone-cutter's chisel, the combination, with a cutting-bit or tool, C, of a wooden incasing handle or stock, A, said bit being adapted to be protruded from said stock and successively sharpened by suitably cutting away the lower end of the stock, substantially as herein set forth.

2. In a stone-cutter's chisel, the combination, with bit C, and incasing-stock A, made

of wood or other similar material, of the battering-pin D, driven into place in the upper part of the bore of said stock immediately above bit C, substantially as herein set forth. 25

3. In a stone-cutter's chisel, the combination, with bit C and the wooden incasing handle or stock A, of the ferrules B, substantially as herein set forth.

4. The combination, in a stone-cutter's chisel, of the bit C, wooden incasing stock or handle A, battering-pin D, driven into place at the head of said stock, in the bore thereof, immediately above the bit C, and the ferrules B, substantially as herein set forth. 30

In testimony of which invention I have hereunto set my hand. 35

THOMAS WOODS.

Witnesses:

FRANK DEERING,
DEWITT C. SHELLEY.