

J. A. HESS.
CUTTING TOOL.
APPLICATION FILED JAN. 15, 1908.

905,876.

Patented Dec. 8, 1908.

Fig. 1.

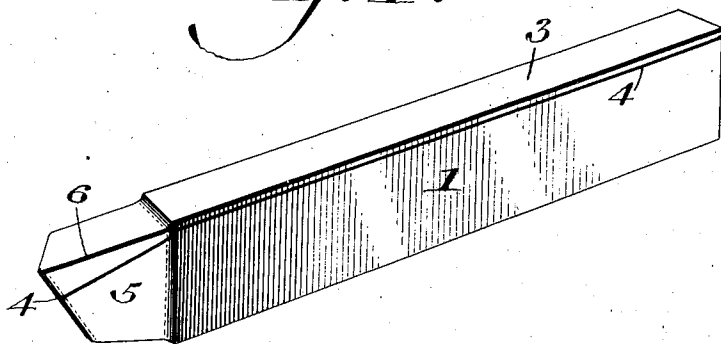


Fig. 2.

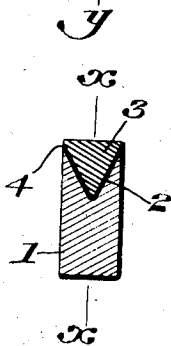
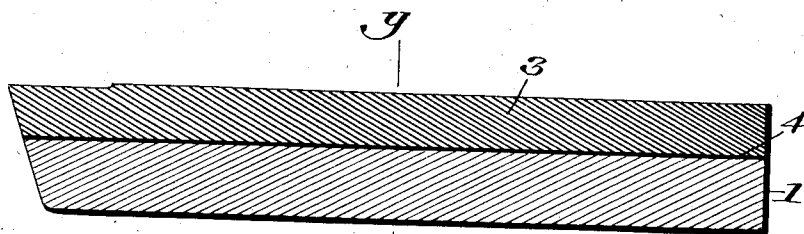


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN A. HESS, OF PHILADELPHIA, PENNSYLVANIA.

CUTTING-TOOL.

No. 905,876.

Specification of Letters Patent.

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Application filed January 15, 1908. Serial No. 410,933.

To all whom it may concern:

Be it known that I, JOHN A. HESS, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Cutting-Tool, of which the following is a specification.

My invention relates to a new and useful cutting tool and consists in forming the cutting edge of high speed steel or alloy steel, while the body of the tool is formed of ordinary Bessemer steel or open hearth steel.

It further consists of other novel details of construction, all as will be hereinafter fully set forth.

Figure 1 represents a perspective view of a tool embodying my invention. Fig. 2 represents a longitudinal sectional view thereof on line $x-x$, Fig. 3. Fig. 3 represents a sectional view on line $y-y$, Fig. 2.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings: I have found in practice that in tools now in use on the market which are constructed wholly of high speed steel or alloy steel that the nose of the tool is apt to break at the depth of the cut and my invention was designed to overcome this objection at the same time providing an equal cutting edge.

In the drawings I have shown a construction for carrying out my invention but it will be evident that changes may be made therein which will come within the scope of my invention and I do not, therefore, desire to be limited in every instance to the exact construction herein shown and described, but wish to make such changes as may be necessary.

1 designates the body of the tool the upper portion of which is cut away, forming a V-recess 2 therein, said body being formed

of the ordinary Bessemer or open hearth steel which is not only cheap but is of such a character that it does not break nor bend. In this V-recess I place preferably a triangular piece of metal 3 which is formed of high speed steel or alloy steel, which is suitable and necessary to provide a suitable cutting edge and which is a high priced steel. Between the different metals I place a brazing compound 4 of any suitable material and braze the two pieces together forming practically a solid tool. The nose 5 is formed on a tool, the cutting edge 6 of which, as will be seen from Fig. 1, being formed on the high speed or alloy steel 3 and because of the triangular shape of this piece, as the tool wears down and the high speed or alloy steel will always present sufficient service to form the cutting edge 6, thereon.

While I have shown in the drawings, a roughing tool, my invention is adapted for use on other tools such as a square nose cutting-off tool, a side tool, either right or left, or a square or V-thread turning tool.

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

1. In a tool, a metallic body, and a body formed of high speed or alloy steel suitably secured within said body and having a cutting edge extending to a side edge of said metallic body.

2. In a tool, a metallic body, and a body formed of high speed or alloy steel suitably seated within and connected with said body, extending above the top of said metallic body and having a cutting edge extending to a side edge of said metallic body.

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Witnesses:

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