

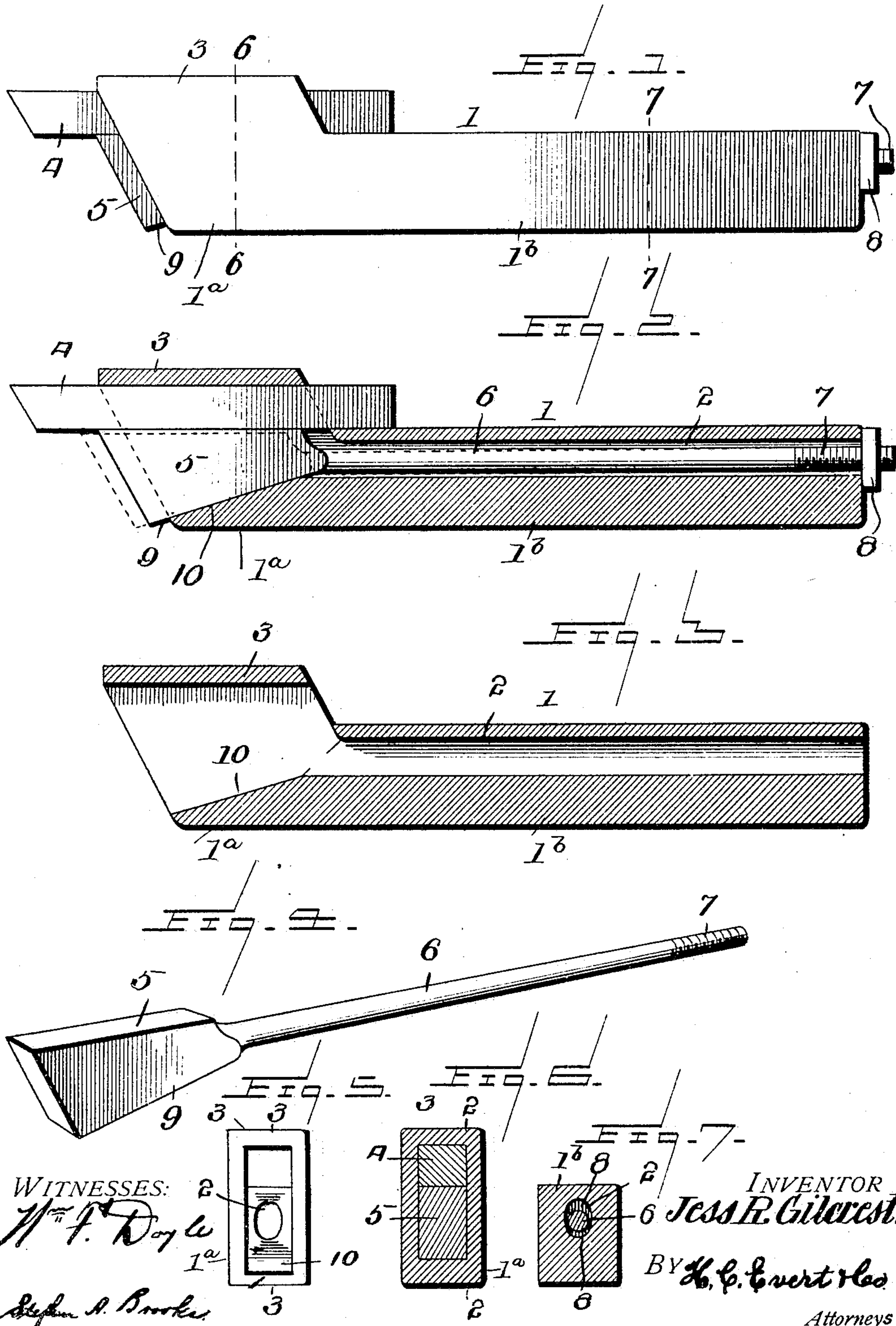
No. 766,144.

PATENTED JULY 26, 1904.

J. R. GILCREST.  
TOOL HOLDER.

APPLICATION FILED OCT. 22, 1902.

NO MODEL.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JESS R. GILCREST, OF TORONTO, OHIO.

## TOOL-HOLDER.

SPECIFICATION forming part of Letters Patent No. 766,144, dated July 26, 1904.

Application filed October 22, 1902. Serial No. 128,230. (No model.)

*To all whom it may concern:*

Be it known that I, JESS R. GILCREST, a citizen of the United States of America, residing at Toronto, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Tool-Holders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in tool-holders for the holding of self-hardening steel or other kinds of steel tools employed in machines designed to reduce the size of metals of various kinds.

The object of the invention is to provide a tool-holder of this type especially adapted for use in lathes, planers, and other metal-working machines and adapted to adjustably hold the tool with an even bearing-surface on the top and bottom, whereby the tool is rendered as solid as an ordinary forged-steel tool.

A further object of the invention is to construct a tool-holder of this type which will be extremely simple in its construction, having but few parts, and therefore not liable to become out of order.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described and specifically claimed.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout the several views, in which—

Figure 1 is a side elevation of my improved tool-holder. Fig. 2 is a longitudinal section thereof, taken on the line 2 2 of Fig. 6. Fig. 3 is a longitudinal section of the shell or casing, taken on the line 3 3 of Fig. 5. Fig. 4 is a perspective view of the securing-wedge. Fig. 5 is an end elevation of the shell or casing. Fig. 6 is a transverse section of the tool-holder, taken on the line 6 6 of Fig. 1. Fig. 7 is a transverse section of the tool-holder, taken on the line 7 7 of Fig. 1.

My improved tool-holder comprises a shell or casing 1, provided with a hollow head 1<sup>a</sup> and a long handle 1<sup>b</sup> in line with the head 1<sup>a</sup>, and which in practice is substantially rectan-

gular in cross-section, though this shape of the shell or casing is not essential, as it may be of any cross-sectional form desired. The shell or casing is provided throughout its length with an opening 2, which may be rectangular, square, round, or other approved form and in practice is preferably made through the tool-holder at a point adjacent to the upper face thereof. The tool-holder is of a greater width at its forward end than in the main body portion thereof, forming the hood or keeper 3, which lies on a plane parallel with and above the upper face of the main body of the holder, this hood or keeper 3 being open at both ends to receive the tool 4 to be held, the latter projecting through the hood and resting at its rear end upon the upper face of the shank or body portion of the tool-holder. In the pocket at the forward end of the tool-holder, which receives the tool 4, there is also received a securing-wedge 5, which has a shank 6 extending through the opening 2 and provided at its rear end with a threaded portion 7, adapted to receive the tightening-nut 8, which bears against the rear end of the shank or body portion of the tool-holder, and thus draws the wedge 5 within the pocket as the nut is tightened. The lower edge 9 of the wedge is at an incline and operates upon the inclined edge 10, formed on the tool-holder within the pocket which receives the tool and the securing-wedge 5.

In the present illustration I have shown the shank 6 cylindrical in form, yet it will be observed that the same may be constructed of a square or rectangular cross-section and merely have the outer or rear end thereof provided with the threaded portion to receive the tightening-nut 8.

It will be observed that the upper edge of the wedge 5 is on a straight line and engages throughout its length with the lower edge of the tool 4, the upper edge of said tool 4 being also engaged by the inner face of the hood or keeper 3 throughout the length of the latter, and consequently when the wedge 5 is drawn inwardly by the tightening of the nut 8 the entire upper edge of the wedge is bound against the tool 4, serving to most securely



hold the same between the wedge and hood or keeper 3. The wedge 5 is preferably made inclined at its outer end, as shown, in order to not interfere in any manner with the operation of the tool, as will be obvious to those skilled in the art.

It will be observed that the tool being held throughout the greater portion of its length and resting at its end upon the upper face of the tool-shank is securely held and made as rigid as the ordinary forged-steel tool. By simply loosening the nut 8, and thereby loosening the wedge 5, the tool may be readily adjusted and again tightened in position. The tool being clamped tightly between the hood and keeper 3 and the wedge makes it impossible for any cuttings or dirt to get between the tool and holder, and as a consequence the tool is easily adjusted. The tool being in engagement with the upper edge of the wedge throughout the length of the latter, the wedge is acting as the support for the tool, insuring the firm holding of the same in position.

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

1. A tool-holder comprising a casing constructed with a head and a long handle located in line with the head, an opening extending the whole length of the head and handle, an inclined lower edge within the head, and a hood located above the head in a plane parallel with the upper face of the handle and open at both ends, a securing-wedge, having an inclined lower edge adapted to slide upon the inclined lower edge within the head and provided with a shank extending through the

opening of the head and handle and having a screw-threaded rear end, and a tightening-nut working upon the screw-threaded rear end of the shank against the end of the handle, the wedge being adapted to support a tool parallel with the upper face of the handle and the inner face of the hood in a position such that its rear end may be projected through the hood and alongside of the handle.

2. A tool-holder comprising a casing constructed with a head having an inclined forward end and a long handle located in line with the head, an opening extending the whole length of the head and handle adjacent to the upper face of the latter, an inclined lower edge within the head, and a hood located above the head in a plane parallel with the upper face of the handle and open at both ends, a securing-wedge having an inclined forward edge, and an inclined lower edge adapted to slide upon the inclined lower edge within the head and provided with a shank extending through the opening of the head and handle and having a screw-threaded rear end, and a tightening-nut working upon the screw-threaded rear end of the shank against the end of the handle; the wedge being adapted to support a tool parallel with the upper face of the handle and the inner face of the hood with its rear end projecting through the hood and resting upon the upper face of the handle.

In testimony whereof I affix my signature in the presence of two witnesses.

JESS R. GILCREST.

Witnesses:

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OSWALD JUHLING.