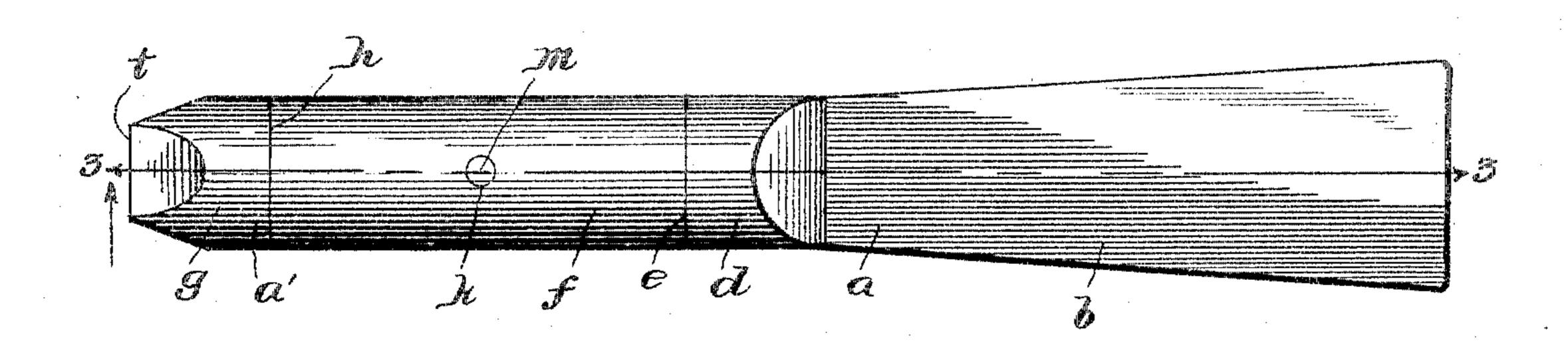
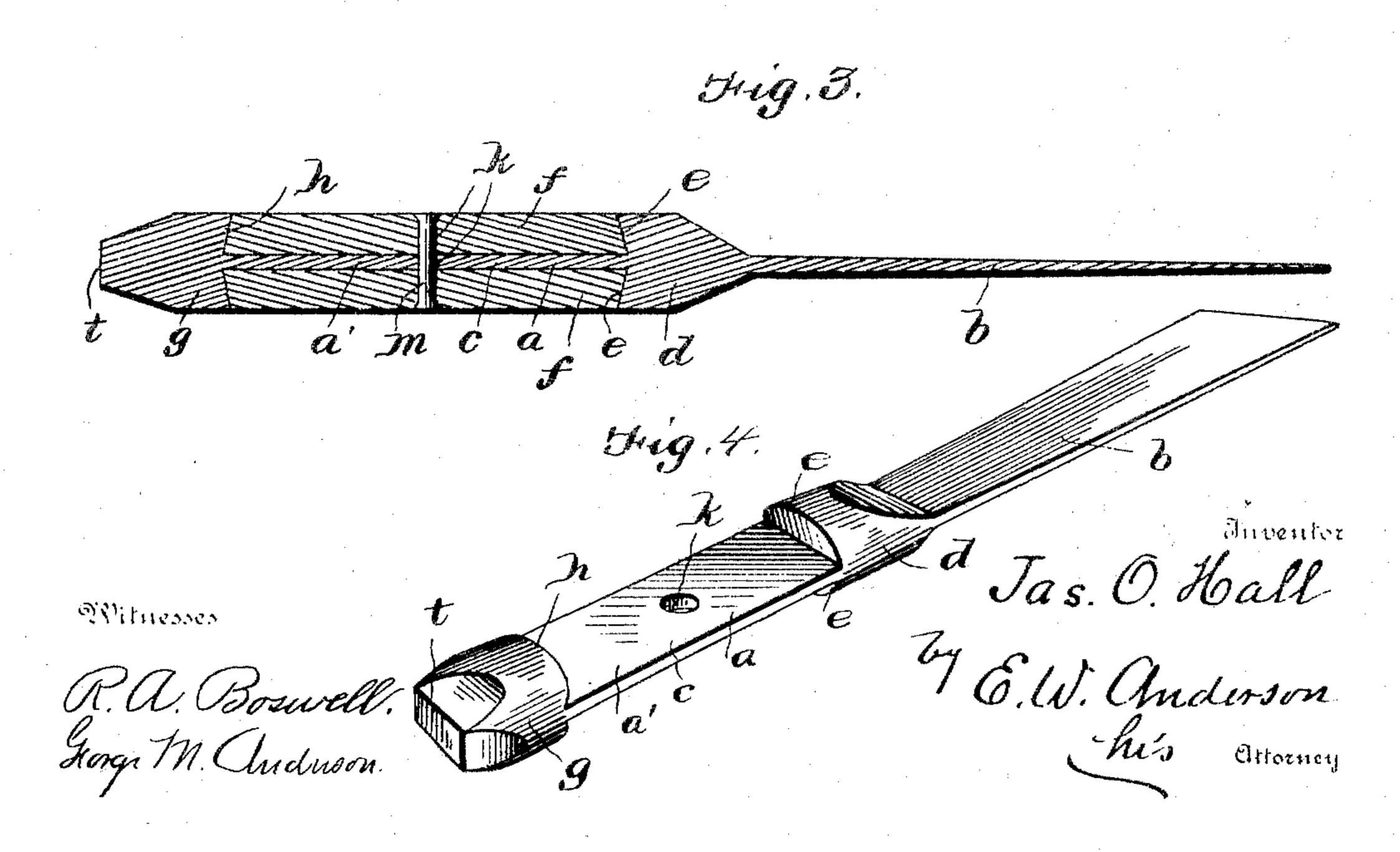
J. O. HALL. PUTTY KNIFE. APPLICATION FILED JAN. 21, 1904.

NO MODEL.

Bank Brand Brand Brand Brand



Jug. L.



UNITED STATES PATENT OFFICE.

JAMES O. HALL, OF PHŒNIX, ARIZONA TERRITORY.

PUTTY-KNIFE.

SPECIFICATION forming part of Letters Patent No. 777,411, dated December 13, 1904.

Application filed January 21, 1904. Serial No. 189,987. (No model.)

To all whom it may concern:

Be it known that I, James O. Hall, a citizen of the United States, and a resident of Phœnix, in the county of Maricopa and Territory of Arizona, have made a certain new and useful Invention in Putty-Knives; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view of my knife. Fig. 2 is a side view of the same. Fig. 3 is a section on the line 3 3, Fig. 1. Fig. 4 is a perspective view of the knife frame or skeleton.

The invention has relation to putty-knives for the use of glaziers; and it consists in the novel construction and combinations of parts, as hereinafter set forth.

The object is to provide a glazier's tool which will be found useful in that portion of his work which takes up the most of his time—

25 that is to say, in setting panes of glass in window-sashes.

In the accompanying drawings, illustrating the invention, the letter a designates the skeleton of the knife, consisting of the handle por-3° tion a and the truncated blade b, the sides of which are gradually divergent from its root to the broad working edge. The blade is therefore isometric and the corners of its working edge are acute and annularly similar. 35 The blade is usually a little shorter than the handle portion. The parts a and b are formed in one piece, and the web c of the handle portion is about as thick as the root of the blade, the latter becoming thinner toward its broad terminal edge in the usual manner. At the junction of the knife with the handle portion is formed on each side a lug or enlargement d, having at the middle of the instrument a plane low-beveled shoulder z, joining the blade 45 at a low angle of usually about one hundred and fifty degrees. The other end of the lug is at right angles, or nearly so, to the web, forming an abrupt shoulder c, against which

one end of the filler-piece f of the handle abuts when in position. At the other end of the 50 web is formed the boss g, having on each side an abrupt shoulder h at right angles, or nearly so, to the web and designed to abut against the other end of the filler-piece of the handle. A perforation is provided at k through the 55 web for the rivet m, which secures the fillerpiece of the handle in position. The boss g. at the end of the handle is formed with four bevel-faces, meeting angularly or cornerwise, so that its end portion has a truncated pyrami- 60 dal shape, terminating in a plain rectangular hammer-face at right angles to the axial line of the handle, as indicated at t. This hammer-boss being solid with the web, the shoulder-lugs, and the blade, the skeleton is 65 designed to make the tool firm and weighty, so that it will serve an excellent purpose in fastening the small points and tacks which glaziers use in position, the bevel of the boss being sufficient to enable the tool to reach 70 readily into the angles of the sash. The shoulder-lugs and the hammer-boss are of about the same length, being about one-third the length of the web between them, and the low obtuse bevels of the shoulder-lugs reduce their weight 75 in comparison with that of the boss, so that the tool has its center of gravity in the handle portion near said lugs and is well balanced for shifting in reversing its position in the hand. By means of these bevel-lugs the blade 80 portion is braced and strengthened at its root.

In using the instrument to apply the putty the low plane bevel of the shoulder-lug provides a smooth broad bearing at a suitable angle for the end of the pressure-finger designed 85 to obviate the painful effect on the delicate nerves of protracted contact with salient projections.

The handle is designed to be straight between its beveled end portions, but is of 90 rounded contour, so that its adjustment in the hand is very easy, whether such adjustment be axial or longitudinal, and in reversing the instrument by manipulation between the fingers the broad bevels of the middle shoulder-95 lugs serve an excellent purpose.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The putty-knife, having entire the short isometric truncated blade, the handle-web, the low-bevel shoulder-lugs and the four-bevel end boss terminating in the rectangular hammer end at right angles to the axis of the handle,

and in connection therewith, the lateral fillerpieces of said handle, substantially as specified. 10

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

JAMES O. HALL.

Witnesses:

E. E. Powers, Wm. G. Lentz.