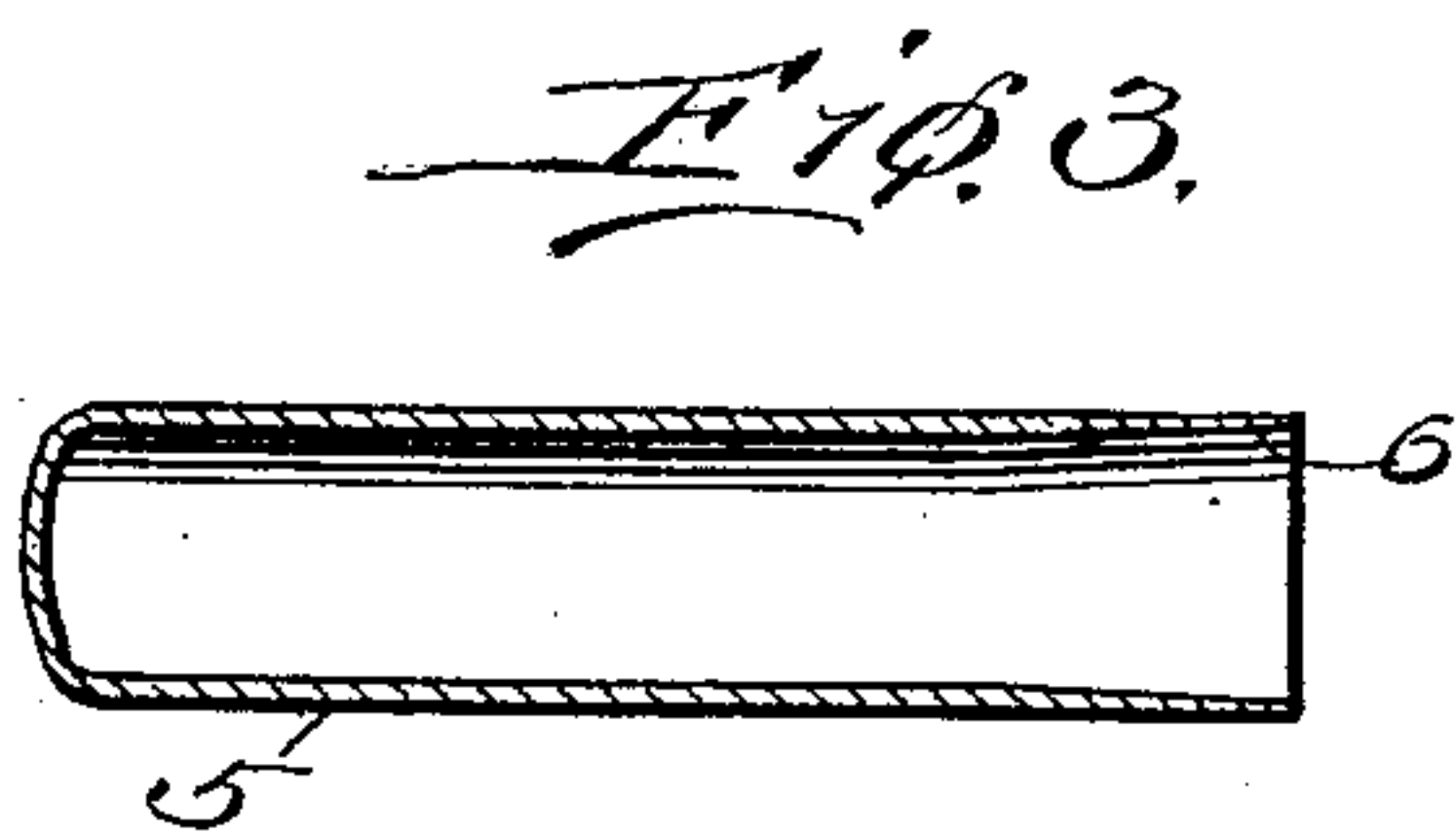
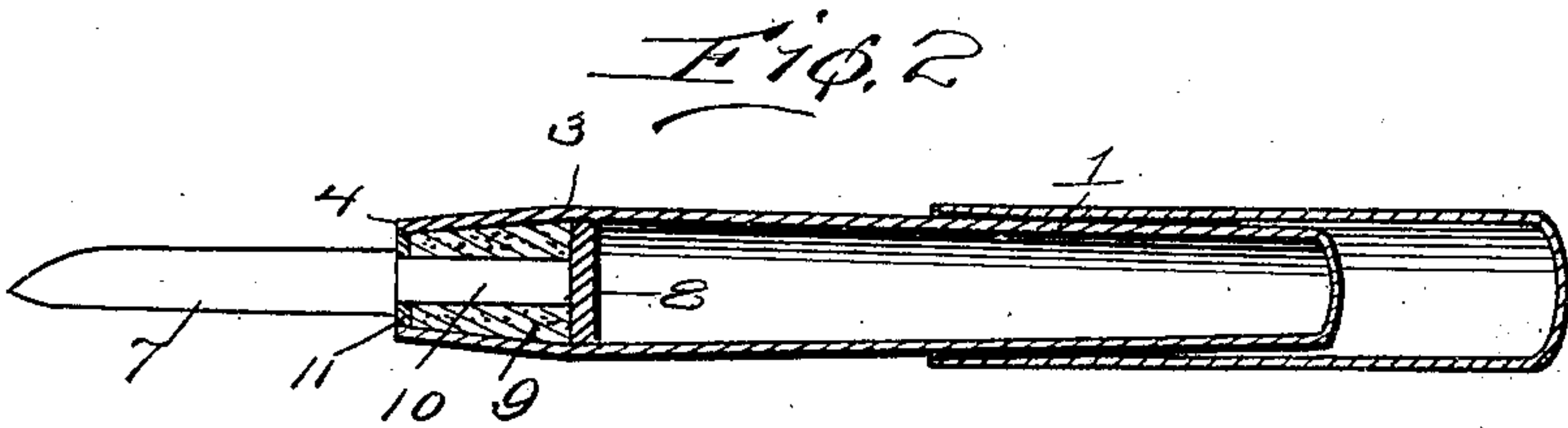
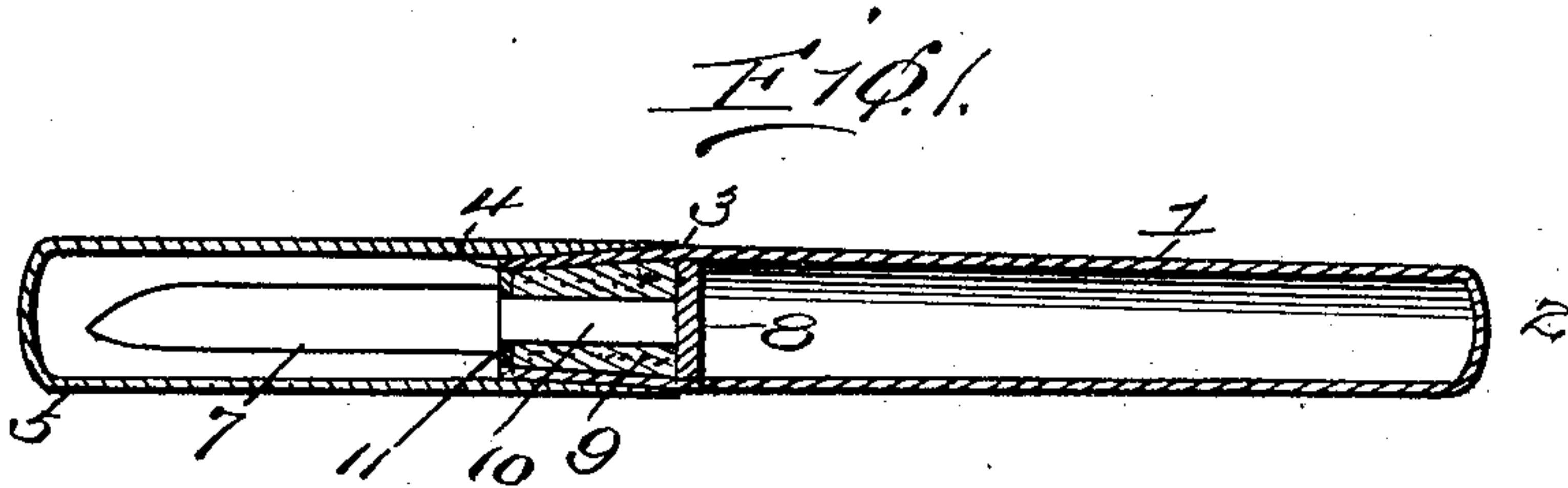


S. M. BICKFORD.
KNIFE.

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925,278.

Patented June 15, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

SAMUEL M. BICKFORD, OF PITTSBURG, PENNSYLVANIA.

KNIFE.

No. 925,278.

Specification of Letters Patent.

Patented June 15, 1909.

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To all whom it may concern:

Be it known that I, SAMUEL M. BICKFORD, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Knives; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in tools, and particularly the combination of a cutting tool, handle and cover so arranged as to afford protection for the cutting tool and easy access to the tool when the same is desired to be used.

The object in view is the provision of a cutting tool arranged in a handle and provided with a cover that is adapted to engage the handle and protect the cutting tool but permit ready removal for permitting access to the tool, the cover being made of such a size and structure as to be adapted to fit over the end of the handle of the tool and to be held thereon by friction.

A further object in view is the arrangement and construction of a cutting tool and handle, together with means for securing the cutting tool to the handle.

With these and other objects in view the invention comprises certain novel constructions, combinations and arrangement of parts as will be hereinafter more fully described and claimed.

In the accompanying drawings: Figure 1 is a longitudinal vertical section through an embodiment of the invention. Fig. 2 is a longitudinal vertical section through an embodiment of the invention with the cover for the tool removed and replaced on the handle. Fig. 3 is a longitudinal section through the tool cover.

Referring to the drawing by numerals, 1 indicates a hollow handle that is beveled from the end 2 to an enlargement at point 3. The handle 1 is also beveled from end 4 to point 3, the bevels from end 2 to point 3 and end 4 to point 3 being in opposite directions so as to accommodate a cap 5. Cap 5 is slightly beveled at 6 in order to more accurately fit the bevel arranged between end 4

and point 3. By this construction of handle the interior thereof is of greatest diameter at point 3. This is necessary in applying a cutting tool 7 to the handle. In securing the cutting tool 7 to the handle a partition or stop 8 is forced into the handle and is adapted to be positioned at point 3 or slightly beyond point 3 as shown in Figs. 1 and 2. The material of which partition 8 is composed is preferably of some slightly flexible material, as for instance leather, so that it may be forced in at end 4, and allowed to expand when it has reached point 3. After the partition has expanded any further movement thereof will cause the same to engage the interior walls of handle 1 and will consequently resist any further inward movement. Cement 9 is then placed in handle 1 on top of partition 8. The tang 10 of tool 7 is then forced through the cement until washer 11 has been forced into the end of handle 1, washer 11 having been previously placed over the tang. Washer 11 is adapted to fit tightly into the end of handle 1 and to engage the cement 9 and slightly compress the same. By this action the cement is forced tightly around the end of the tang 10 and will firmly hold the same in position as after the cement sets it will resist any outward movement of the tool 7. The frusto-conical shape of the cement is one of the main features in resisting the outward movement of the knife and the natural adhesion of the material will also assist in preventing any removal thereof, and also of tool 7. By this construction and arrangement tool 7 is firmly and rigidly held in position in handle 1 and yet handle 1 is hollow for almost its entire length and will therefore present a comparatively light instrument. It will be observed that the cap 5 will thoroughly protect tool 7 when engaging the beveled portion lying between end 4 and point 3 as shown in Fig. 1, but when the instrument is in use the cap 5 may be placed over end 2 and by the beveled construction of the handle will reach almost to point 3 and be firmly held in position by friction.

What I claim is:

In an instrument of the class described, the combination of a hollow handle formed with an enlarged portion, the hollow inclining from each side of the enlarged portion, a

partition in said handle arranged at the enlarged portion, a tool inserted in said handle between the end thereof and said partition, and a cement filling positioned around the
5 end of said tool and filling the handle from said partition to the end thereof for firmly holding said tool in position.

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

SAMUEL M. BICKFORD.

Witnesses:

H. WARD, Jr.,
B. G. MELUS.