W. Sanderson,

Knife and Fork Handle,

No. 78,834, Patented June 9, 1868.

Fig. 1

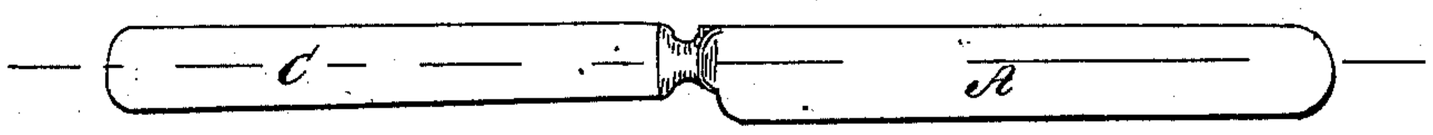


Fig. 2

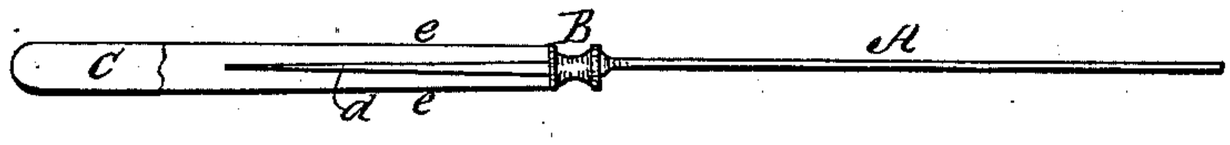


Fig. 3

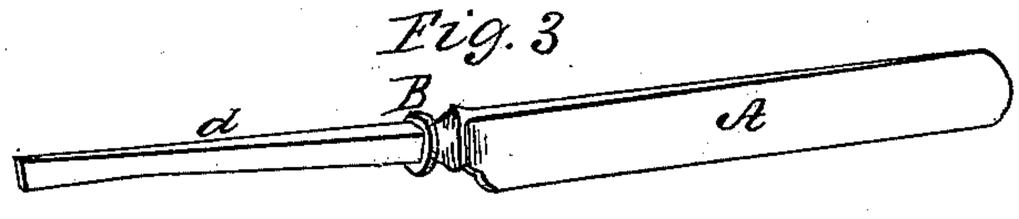


Fig. 4

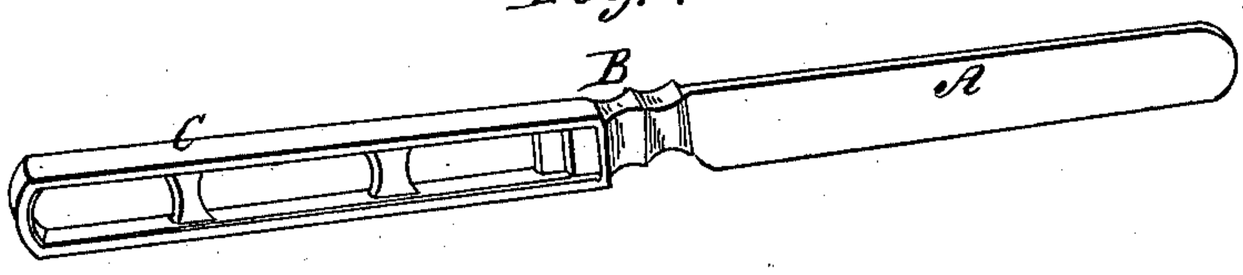
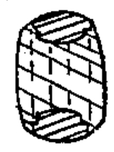


Fig. 5



Witnesses;

John Scott

John J. McIntyre

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WILLIAM SANDERSON, OF NEW YORK, N. Y.

Letters Patent No. 78,834, *dated June* 9, 1868.

IMPROVEMENT IN THE CONSTRUCTION OF HANDLES OF TABLE-CUTLERY.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM SANDERSON, of New York, of New York county, in the State of New York, have invented certain new and useful "Improvements in Manufacture of Knives and Forks;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this application.

My invention relates to a novel method of making the handles of case-knives, forks, and other analogous instruments, and has for its object to provide a means for the manufacture thereof, by which an article equally or more desirable may be produced at a less cost than those heretofore made.

It has been customary, previous to my invention, to make the handles of knives and other instruments, of different materials, such as wood, metal, ivory, bone, hard rubber, &c.; and in forming and uniting the parts it has been the practice generally to either make the knife-blade with a slender tang passing into a cavity in the handle, and riveted to the latter, or with a broad tang, equal in width to the handle, having the handle-pieces secured on each side, in the form of "scales."

In that kind of knife-handles in which the scales are riveted to a broad tang, the former are apt to warp out of shape and crack off, and in that kind in which a small tang runs into or through the handle, the handle and tang are apt to become disengaged, and in both methods of manufacture a considerable amount of manual labor is necessary.

By my invention, I am enabled to produce, at a comparatively small cost, a durable, handsome, and in every way desirable knife or other handle; and my said invention consists in making the handles of knives, forks, &c., by moulding them within dies, under pressure, of any suitable composition, which can be compressed while in a soft state, and which will securely embrace the metallic tang, and afterward become hard and inflexible.

To enable those skilled in the art to make and use my invention, I will proceed to describe more fully my new method of making knife and other handles, referring by letters to the accompanying drawings, in which—

Figure 1 is an elevation of a case or table-knife made in accordance with my invention.

Figure 2 is a longitudinal section of the same, and

Figure 3 a perspective view, showing the metal tang before the handle has been formed or pressed around it.

Figure 4 is a perspective view of a knife, in which the handle is made of a metallic frame, extending from the bolster, and having the composition pressed into and around it.

Figure 5 is a cross-section of the same at *x x*, fig. 4.

In the several figures the same parts are indicated by the same letters of reference.

A is the blade of the knife, B the bolster, and C the handle. In figs. 1, 2, and 3, the knife is formed with a slender tang, *d*, around which the composition-portion, *e*, of the handle is formed within dies, while in figs. 4 and 5 the knife is formed with a metallic frame, *f*, into which the composition is pressed, in the form shown.

The portion *e* of the handle may be made of any suitable composition or compound which can be compressed in a soft state, and which will become hard and sufficiently durable for use, and to stand washing in hot water, and the wear that knives are subjected to. Any compound which will answer the purpose, and be economical enough, may be used to carry out my invention.

I have found that by having the surfaces of the dies, between which the composition-portion of the handle is moulded under strong pressure, made smooth, the handle will, when finished, have a polished appearance. Of course the dies may be made either plain or with an ornamentation, to produce any desired shape and design of handle that may be desired.

If it be found necessary or expedient, in consequence of any burr or seam being left in the composition, where the dies join, the handle may be finished off on a polishing-belt, but I have found by experiment that the handles can be made very perfect and smooth by the dies only, if the latter be made accurately.

It will be understood that the tang *d* should be made of such a shape as to permit the composition com-

pressed around it to hold it securely, and so that it cannot slip or become displaced. When the handle is formed with a metallic frame, *f*, as shown at figs. 4 and 5, it should be so shaped as to permit the composition to interlock firmly, and at the same time be made sufficiently rigid, either by cross-ties *i*, or by having the frame heavy enough to prevent any springing of the metallic portion, and consequent detachment of the composition from the metal.

It may be found expedient to either prepare the shank or frame portion with some chemical, or coat it with some soft metal or alloy in the process of manufacture, to insure a perfect and more lasting union between the said metallic portion of handle and the composition.

Of course my new method of making handles as described, by compressing, within dies and around the metallic portion of the instrument, some suitable composition, may be applied to the manufacture of various handled instruments, and may be carried out under a variety of modifications and circumstances.

I do not wish, therefore, to be understood as limiting my claim of invention to any particularity of form or design, or to any one particular appropriate compound or composition; neither do I wish to be understood as claiming securing the material of the handle to the tang by compression, as that has been done with handles formed of horn or hoof, as shown in English patent, No. 8,533, of 1840; but having explained my invention so that those skilled in the art can practise it,

What I claim as new in the manufacture of knives and forks, and other analogous articles of manufacture, is—

Forming the handles by moulding a suitable composition, under pressure, around the tang or metallic portion of the instrument, substantially as hereinbefore set forth.

In testimony whereof, I have hereunto set my hand and seal, this eleventh day of January, 1867.

WM. SANDERSON. [L. S.]

Witnesses:

C. A. SCOTT,

ANDREW DE LACY.