

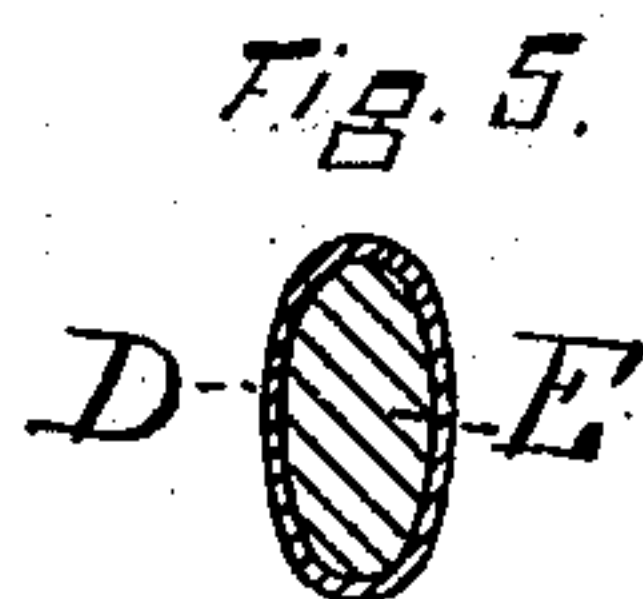
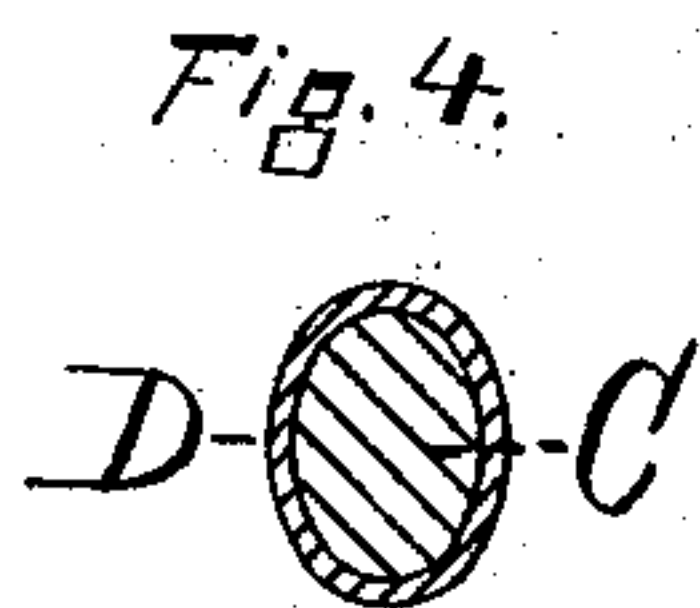
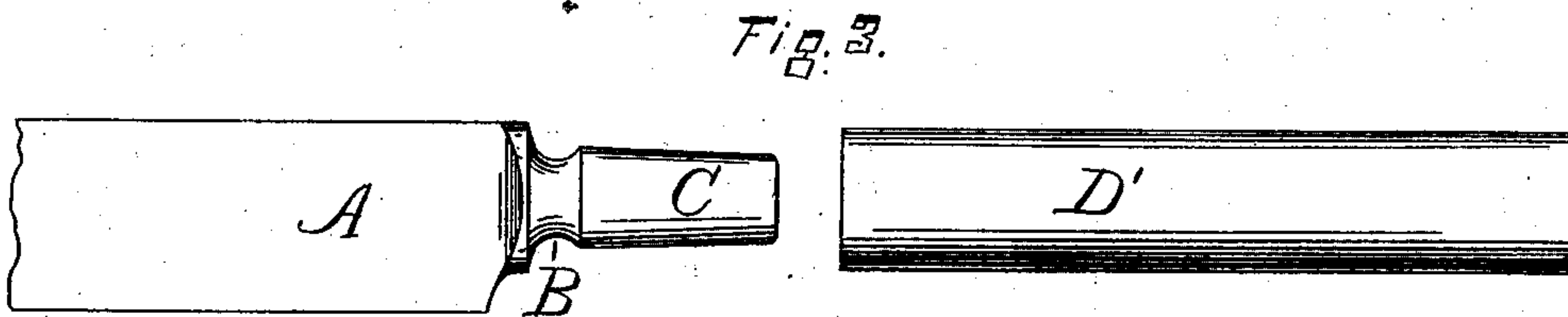
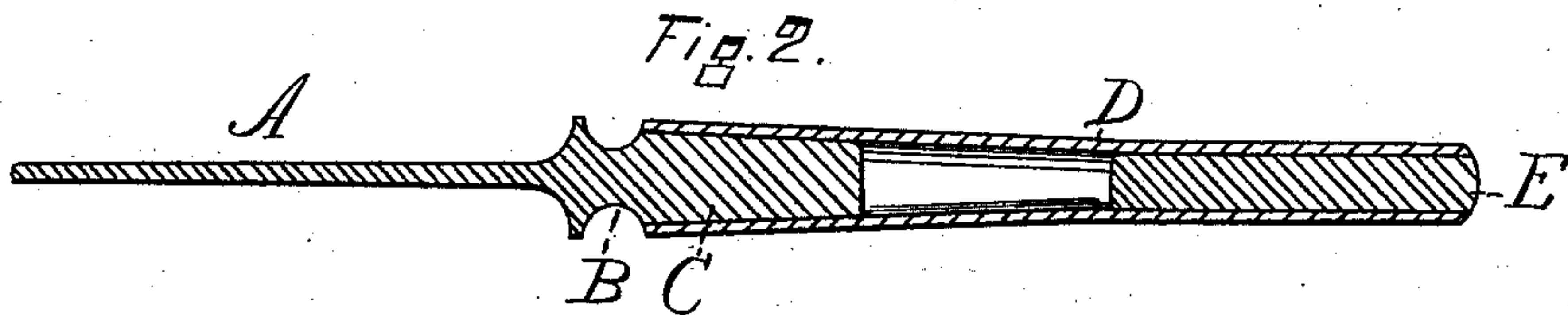
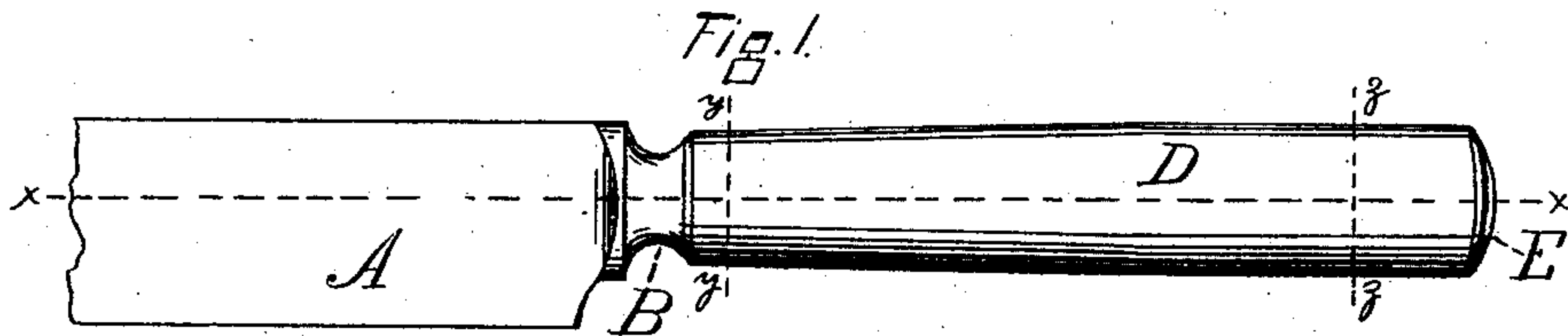
(No Model.)

H. C. HART.

KNIFE.

No. 281,361..

Patented July 17, 1883.



Witnesses.

John Edwards Jr.  
Arthur Shepard.

Inventor.

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atty

# UNITED STATES PATENT OFFICE.

HUBERT C. HART, OF UNIONVILLE, CONNECTICUT.

## KNIFE.

SPECIFICATION forming part of Letters Patent No. 281,361, dated July 17, 1883.

Application filed March 20, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, HUBERT C. HART, of Unionville, in the county of Hartford and State of Connecticut, have invented certain new and  
5 useful Improvements in Table-Knives, of which the following is a specification.

My invention relates to improvements in table knives and forks.

In my improved knife the handle is formed  
10 from an oval tube plugged up at the butt-end, and having a tapering stub forced into the other end to shape the handle and to firmly unite the handle and blade.

My invention resides in the handle consisting of the tapering stub and the tubular shell  
15 secured thereon, said shell being secured upon said stub, with the end of the shell at the junction, with its inner surface flush with the side of the bolster-groove, and with the uniting-seam in that surface of the groove which stands  
20 at an angle to the sides of the handle; and the objects of my invention are to reduce the cost of manufacture, to produce a light and durable article, and to properly balance the handle. I attain these objects by the construction  
25 illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of said knife-handle as attached to a knife. Fig. 2 is a longitudinal section of the same on line *xx* of  
30 Fig. 1. Fig. 3 is a side elevation of a knife and a length of tubing suitable for the handle. Fig. 4 is a transverse section of the handle on line *yy* of Fig. 1, and Fig. 5 is a like view of the same on line *zz* of Fig. 1.  
35

The blade A, bolster B, and stub C may be formed in any ordinary manner of making knives; but I prefer to form them from one solid piece of metal. The stub C is oval in  
40 cross-section, as shown in Fig. 4, and tapering from the bolster toward its end, as shown in Figs. 2 and 3.

The hollow handle or shell D is formed from a section or short length of a seamless tube, oval in cross-section and substantially straight  
45 from end to end, as shown at D', Fig. 3, the same being a tube ready for the reception of the stub C. The stub C is forced into the end of the tube D', or the tube forced upon the  
50 stub, with sufficient power to cause the stub

to spread and thicken the tube from side to side, so as to make its sides taper toward the butt, while the edges of the tube are contracted at the same time and made to taper in the opposite direction, all as shown in Figs. 1 and 2.  
55 This result is caused by making the stub of greater thickness and of less width than the original form of the shell into which it is forced, as shown by a comparison of Figs. 4 and 5, of which the latter shows the original form of the  
60 shell. The shell may be thus forced on until its end is flush with the back side of the groove in the bolster, or a little more than flush, after which the end of the shell is dressed off to make it match the bolster, as shown. In order to  
65 thus finish the bolster, no part of the stub should be larger than the end of the shell can be made to receive. The stub and shell thus forced together are firmly held in place by friction, so that they require no other fastening.  
70

In the butt-end of the shell I force a plug, E, for the double purpose of closing the end and to weight said end so that it will overbalance the blade—the same as in a solid steel or iron handled knife. The diameter of this plug  
75 is no greater than will fill snugly the opening in the butt-end of the shell, so that it fills said opening without covering the metal around it. After driving in this plug the ends of the shell and plug together may be dressed off round-  
80 ing, to give the desired finish.

The bolster and shell can be finished much cheaper in the manner hereinbefore described than can a handle in which the end of the shell is forced up to a shoulder formed on the part  
85 which enters said shell. The double taper of the shell gives it the appearance of a solid forged handle.

I am aware that knife-handles have been made hollow by soldering two half-shells together. They are also described in patents as struck up from sheet metal, with a solid end; also, as made from pieces of tubes, with a cap or shouldered plug driven into and soldered on the end, and by soldering a stub into one  
90 end of a tubular shell, all of which prior art is hereby disclaimed.

The knife-handle hereinbefore disclaimed as formed "by soldering a stub into one end of a tubular shell" contains a shoulder between  
100



the end of the tubular shell and the bolster-groove, the end of said shell being fitted up against said shoulder. So far as I know, every prior knife or fork whose handle was formed of a tubular shell has had the bolster end of that shell fitted to and abutting against a shoulder, thereby leaving the uniting-seam exposed on the sides of the handle. In such a construction the shell must be loosely fitted to the stub or part upon which it is placed, in order that the shell may be repeatedly removed to dress off its end and properly fit it against the shoulder, as it is evident that parts so constructed cannot have either the shoulder or end of the shell which abuts against it dressed off to make a proper fit after said parts are put together. For this reason the stub has been made to only loosely fill the shell, so that it can be removed for dressing off as often as may be necessary to fit its end properly up against the shoulder, and after this fitting it is secured by solder. If the stub were made to fill the shell so tightly as to be held in place by friction, and when once in place it should not be removed, a poor fit with an open seam between the shoulder and end of the shell would generally be the result. To properly fit a shouldered stub and end of a shell in cutlery-handles is at best an expensive job.

By my improvement the seam between the stub and shell is formed in the bolster-groove, and in a surface which stands substantially at right angles to the sides of the handle, instead of being in the side surface of the handle, and consequently it is in a less sightly place. If

the end of the shell does not properly fit the stub when its end reaches the proper point, it can be crowded farther upon the stub until it does properly fit, and its end can be dressed off flush with the sides of the groove after it is secured in place. There is never any necessity for removing the shell after it is first put on the stub, and consequently it can be forced or driven on hard enough to make it stay in place without any subsequent soldering or other fastening. In short, my improvement brings the seam into a less unsightly place, insures a closer seam, and enables the work to be done much more expeditiously and at far less cost.

I claim as my invention—

As a new article of manufacture, the herein-described table-cutlery handle, consisting of the tapering stub and the tubular shell secured thereon, the diameter of said stub upon the handle end of the bolster-groove being no larger at any point than the inside diameter of the shell, said shell being secured upon said stub, with the end of the shell at the junction with its inner surface flush with the side of the bolster-groove, and with the uniting-seam in that surface of the groove which stands at an angle to the sides of the handle and at a distance from said sides equal to the thickness of the shell, substantially as described, and for the purpose specified.

HUBERT C. HART.

Witnesses:

CARLOS L. MASON,  
CARLOS V. MASON.