J. D. Frary,

2. Sheets. Sheet 1.

Manf. Cutlery Bolsters.

No. 113,648. Patented Apr. 11, 1871.

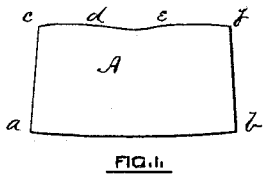
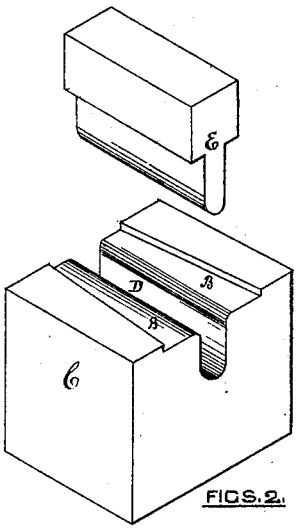


FIG. 1.



FIGS. 2.

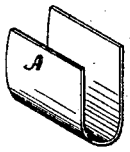


FIG. 3.

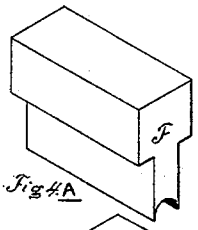
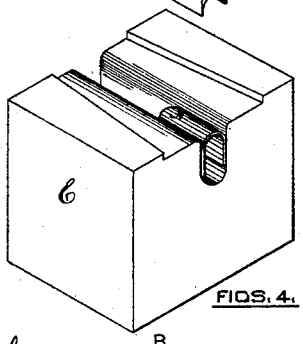


Fig 4A



FIGS. 4.

B

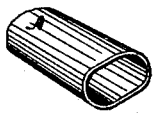


FIG. 5.

WITNESSES.

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2. Sheets. Sheet 2.

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Manf. Cutlery Holsters.

No. 113,648. Patented Apr. 11, 1871.

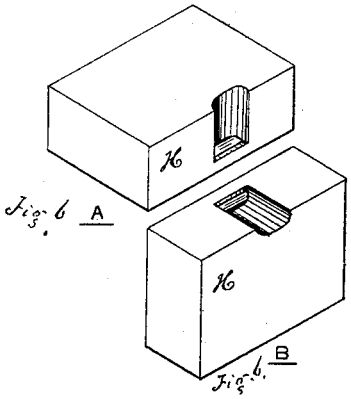

Fig. 6 A

Fig. 6. B

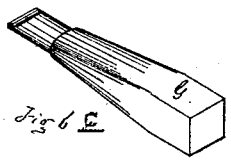

Fig. 6 C

FIGS. 6.

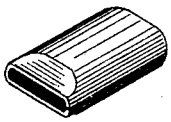

FIG. 7.

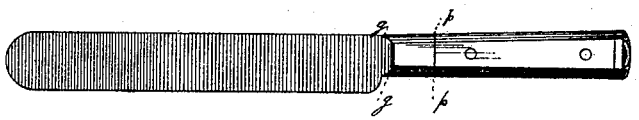

FIG. 8.

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UNITED STATES PATENT OFFICE.

JAMES D. FRARY, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN THE MANUFACTURE OF BOLSTERS FOR CUTLERY.

Specification forming part of Letters Patent No. **113,648,** dated April 11, 1871.

To all whom it may concern:

Be it known that I, JAMES D. FRARY, of New Britain, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in the Manufacture of Bolsters for Cutlery; and I do hereby declare that the following specification, taken in connection with the drawing making a part thereof, is a full, clear, and exact description of the same.

Bolsters for table-cutlery have heretofore most generally consisted of a solid enlargement of the heel of the blade or shank of the fork, so as not only to furnish a metallic cheek for the ends of the handle-scales, but also to give a more sightly appearance to the article, by causing the thin blade or shank at this point to gradually increase in thickness to the thickness of the handle.

In place of solid bolsters forged upon the blade or shank, sheet-metal bolsters having the outward appearance of solid bolsters have been in some instances used. An example of these is found described in the Letters Patent granted to Joseph W. Gardner, March 6, 1860, where two half-bolsters of sheet metal, counterparts of each other, are fastened in place against the shank, the lower end of the blade, and a portion of the scales near their ends, by means of rivets extending through the shank, the scales, and the semi-bolsters.

My invention resides, first, in the means or combination of instrumentalities which I employ to form a sheet-metal bolster for table-cutlery from a single blank or piece of metal, which bolster, when applied to a knife or fork, serves to assist in holding the handle-scales in place like a ferrule, without the necessity of riveting the bolster to the tang; and, secondly, in the improvement in the manufacture of cutlery which results from the combination of such ferrule-bolster with the tang and bead.

In the drawing, Figure 1 represents the form of the blank from which the bolster is to be made. Fig. 2 shows a die-block and former, by means of which the blank A is brought to the shape shown at Fig. 3. Fig. 4 shows a die-block with the blank, in the form shown at Fig. 3, placed in such relation thereto that by means of a plunger, Fig. 4^{A}, it can be brought to the shape shown at Fig. 5. Fig. 6^{ABC} shows counterpart die-blocks and former for swaging the bolster into its final shape, as seen at Fig. 7. Fig. 8 shows a finished knife.

I take a blank, A, of sheet metal, which has been punched from a sheet having its lower side *a b* slightly curved, its top side of a wave line, *c d e f*, and its ends somewhat inclined toward each other. This blank is placed in a wedge-shaped groove or channel, B, in the top of the die-block C, Fig. 2, and so that its middle section will bridge over a cavity or deep channel, D, having a rounded bottom in the die-block.

A former, E, is then made to act upon the middle section of the blank, through the aid of a power-press, in a well-understood way, whereby the blank A is brought to the shape shown at Fig. 3.

The blank Fig. 3 is next reversed in its position in the die-block C, as shown at Fig. 4, and a concave-faced former or plunger, F, Fig. 4^{a}, by the aid of a power-press, changes the form of the blank from that shown at Fig. 3 to that shown at Fig. 5.

A former, G, Fig. 6^{c}, is now inserted in the blank, Fig. 5, and such blank is to be swaged between counterpart dies H H, Fig. 6^{BC}, to the final shape for a hollow bolster or ferrule, Fig. 7.

The bolster is then to be ground and polished in a well-known way, and when the several parts comprising the knife or fork are assembled, the bolster is sprung over the tang in its proper relation to the heel of the blade or shank of the fork, with its front or beveled end abutting against the heel of the blade and its rear end against the shoulders *g p*, Fig. 8, formed by cutting out the tang on each side at its junction with the blade enough narrower than the residue to give room for the thickness of the plate from which the bolster is made.

The knife or fork is lastly to be furnished with handle-scales, with their ends inserted in the bolster and otherwise secured by rivets.

By the means described a very considerable economy is effected in the manufacture of cutlery, and a better device obtained for assisting in holding the scales of the handle in place.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The system of forming and swaging dies, substantially as shown and described, for the purpose of making bolsters for table-cutlery.

2. The improved ferrule-bolster for table-cutlery herein described, formed of a single piece of metal, provided with one partially closed or swaged end, and arranged to spring into suitable recesses cut in the edges of the tang, as and for the purposes set forth.

JAMES D. FRARY.

Witnesses:
HENRY P. CURTISS,
FRED. S. ROBERTSON.