2 Sheets—Sheet 1.

H. W. BASSETT.

DIES FOR SPOON-BLANKS.

No. 191,639. Patented June 5, 1877.

Fig. 1

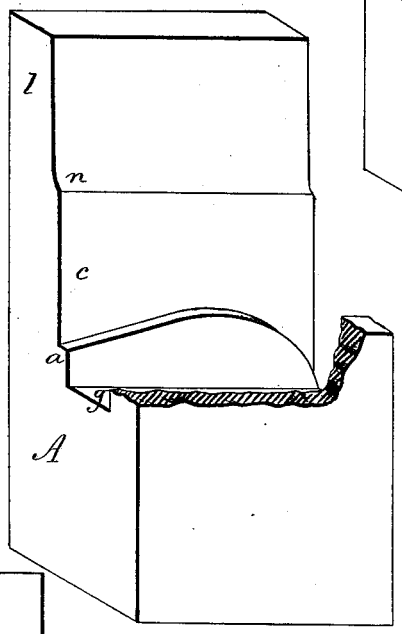


Fig. 2

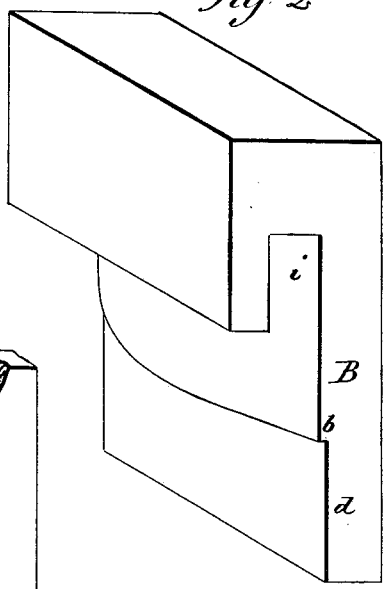


Fig. 3.

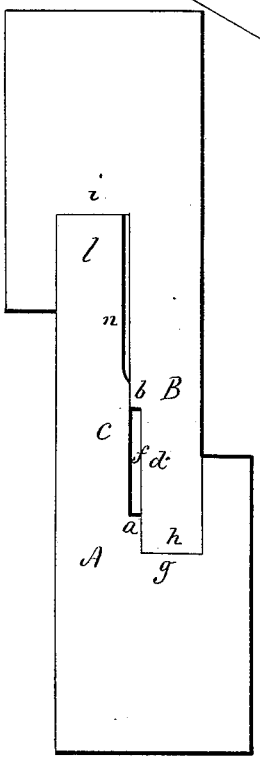


Fig. 4

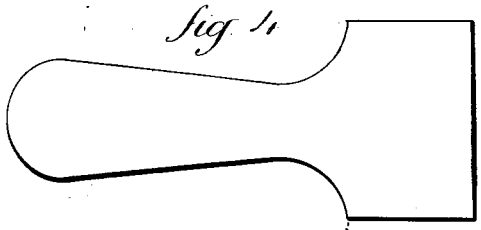
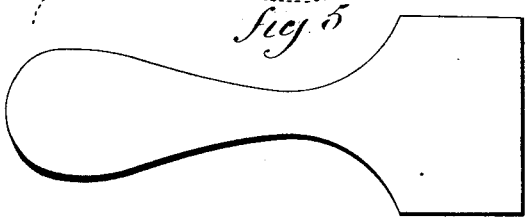


Fig. 5



Witnesses.
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2 Sheets—Sheet 2.

H. W. BASSETT.

DIES FOR SPOON-BLANKS.

No. 191,639. Patented June 5, 1877.

Fig 6.

Fig. 7.

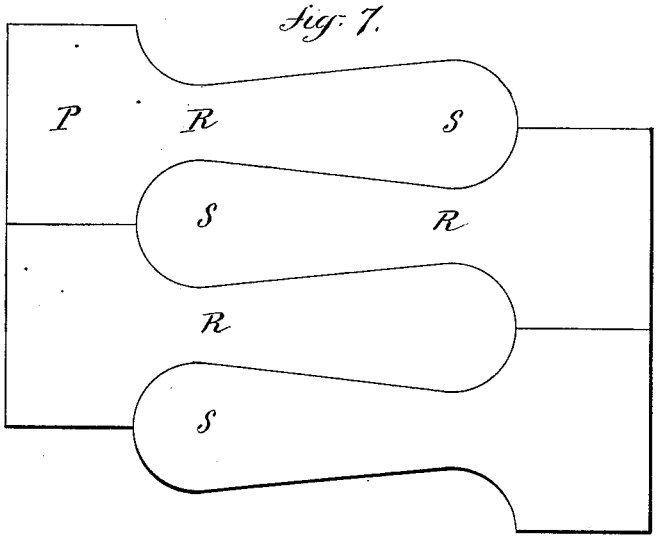


Fig 8

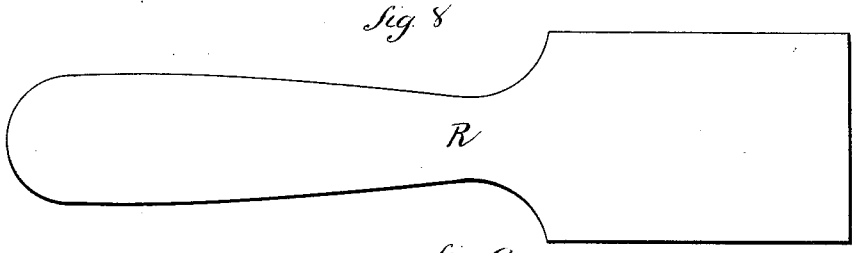
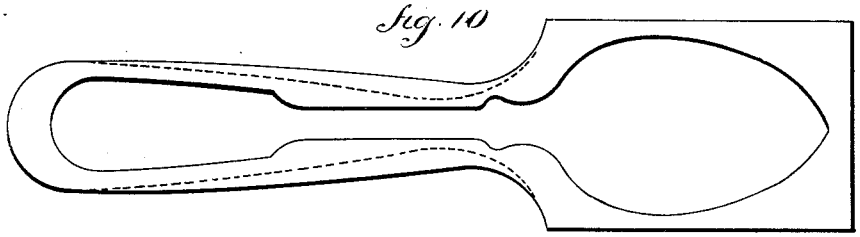


Fig. 9

Fig. 10



Witnessed.
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UNITED STATES PATENT OFFICE.

H. WILLIAMS BASSETT, OF WALLINGFORD, CONNECTICUT, ASSIGNOR TO HALL, ELTON & CO., OF SAME PLACE.

IMPROVEMENT IN DIES FOR SPOON-BLANKS.

Specification forming part of Letters Patent No. **191,639**, dated June 5, 1877; application filed March 30, 1877.

To all whom it may concern:

Be it known that I, H. WILLIAMS BASSETT, of Wallingford, in the county of New Haven and State of Connecticut, have invented a new Improvement in Dies for Drawing Spoon and Fork Handles; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the lower part, and Fig. 2 a perspective view of the upper part of the die; Fig. 3, a side view of the two when closed together; Fig. 4, the blank prepared for introduction to the die, and Fig. 5, the blank as it comes from the die; Figs. 6 to 10, diagrams illustrating previous construction.

This invention relates to an improvement in a die to be used in the manufacture of spoons, forks, and similar articles, the object being to avoid the scrap incident to the usual method of manufacture; and it consists of the dies in the form shown in the accompanying drawings, and hereinafter described.

A is the lower part and B the upper part of the die. On the lower part there is formed a shoulder, *a*, in thickness corresponding to the thickness of the blank, and on the upper part a corresponding shoulder, *b*. The longitudinal shape of these shoulders corresponds to the form of the edge of the blank to be produced. Upon the back of the lower shoulder the surface *c* rises in a vertical line, and from the shoulder *b* a similar surface, *d*, extends downward, and so that when the two parts are together, as in Fig. 3, a cavity, *f*, is formed, which in shape corresponds to the blank to be produced, and in order to hold the parts in the proper relative position vertically, a groove, *g*, is formed in the lower die and the upper die extended downward below the shoulder *a* to form a tongue, *h*, to enter the said groove, and a similar groove, *i*, in the upper die and similar tongue *l* on the lower die to interlock the two parts, as seen in Fig. 3, so as to prevent transverse movement or spread of the dies in consequence of the compression of the metal between the two shoulders *a b*; hence the force of the die will be imparted to drawing the blank lengthwise only and not permit a thickening of the blank.

To avoid friction between the vertical meeting surfaces of the die, one or both faces above the working point are recessed, as seen at *n*.

The blank is cut from metal of the required thickness, and of the form seen in Fig. 4, which is substantially of the usual form but considerably shorter. This blank is placed on the shoulder of the lower die, and then the upper die struck or pressed thereon forces the metal to extend longitudinally and to produce the blank, as seen in Fig. 5, which is of substantially the usual length for the blanks for forks and spoons. The blank is then drawn down thinner, both ways from the narrow portion, in the usual manner and to the usual extent, and the fork or spoon cut from that blank.

In Fig. 4 is seen the usual form of blank. These are cut, as seen in Fig. 7, successively from a strip, the edge of one corresponding to the edge of the next, so that a simple shear-cut, extending from edge to edge of the blank, separates one and forms the edge of the next blank. As the bowl portion P is necessarily of a certain defined width—that is, sufficiently broad for the bowl—the remaining portion is divided between the narrower part R of the handle and the broader part S. These blanks are then rolled out, as seen in Fig. 8, and to produce the required longitudinal thickness, seen in Fig. 9, the metal at the thickest part being the normal thickness of the metal from which the blank is cut; hence the blank at the point R retains its original width; then from this blank the spoon-blank proper is cut, as seen in Fig. 10.

By drawing out the handle portion, as described, by these dies, the blank is produced, as seen in Fig. 5, of substantially the usual length, as seen in Fig. 7, with an equal thickness throughout, but greatly reduced at the narrower portion. Then, when subjected to the same drawing out as in the usual blank,

it will assume the form indicated in broken lines, Fig. 10; hence there will be an amount of metal saved equal to the reduction shown from the original blank in Fig. 10 to that of the broken lines, same figure.

I claim—

The dies substantially as herein described, consisting of the shoulder *a* and face *c* on the one part, and corresponding shoulder *b* and face *d* on the other part, and operating together, substantially as specified.

H. WILLIAMS BASSETT.

Witnesses:
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