(No Model.)

G. W. PECK.

PROCESS OF MANUFACTURING SPOONS, FORKS, KNIVES, OR SIMILAR ARTICLES.

No. 509,094. Patented Nov. 21, 1893.

Fig. 1.

Fig. 2.

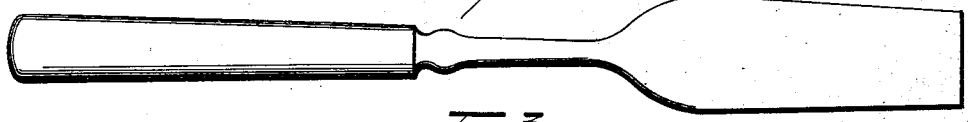


Fig. 3.

Fig. 4.

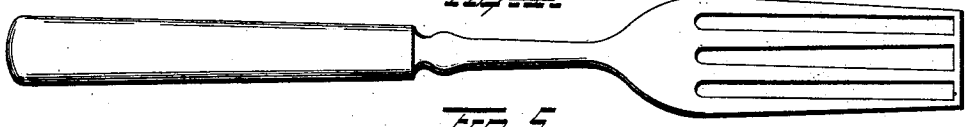


Fig. 5.

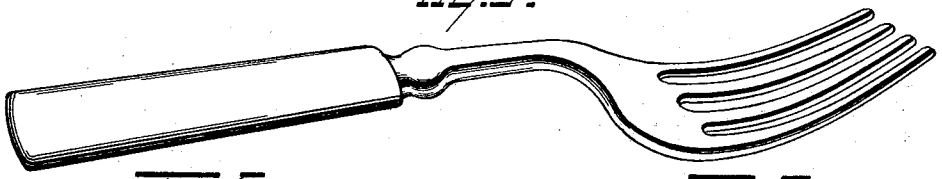


Fig. 6.

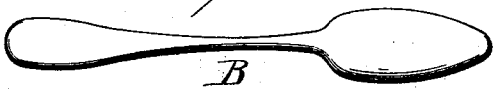


Fig. 7.

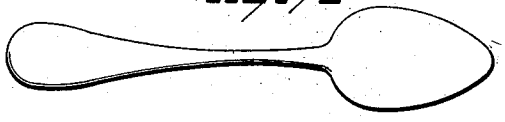
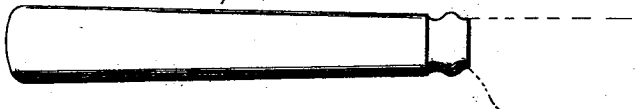


Fig. 8.

Fig. 9.

Fig. 10.



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GEORGE W. PECK, OF NEW HAVEN, CONNECTICUT.

PROCESS OF MANUFACTURING SPOONS, FORKS, KNIVES, OR SIMILAR ARTICLES.

SPECIFICATION forming part of Letters Patent No. 509,094, dated November 21, 1893.

Application filed February 15, 1893. Serial No. 462,464. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PECK, of New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Processes of Manufacturing Spoons, Forks, Knives, or Similar Articles and in Blanks for such Articles; 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.

My invention relates to an improvement in blanks for and processes of manufacturing spoons, forks, knives or similar articles and it consists first, in the blank for the handle of a knife, fork or similar article, the same comprising a cylindrical portion for forming the handle, one end of said cylindrical portion having a rounded portion connected therewith, which when flattened produces the neck of the handle; second, in a blank for a fork or spoon, said blank being of substantially the same length as the completed article, and comprising a cylindrical portion for producing the handle, a tapering cylindrical portion for producing the tines or bowl, and a reduced and tapering intermediate portion for producing the shank.

The invention further consists in the process of manufacturing spoons, forks or similar articles of cutlery, consisting in first making a blank of substantially the length of the completed article and cylindrical in cross-section throughout its length, the blank being made of such varying diameter throughout different portions of its length as will insure the formation of the different parts of the article, then flattening and forming the blank by spreading the metal thereof transversely to its length and also bending and shaping the same.

The invention further consists in the process of manufacturing forks by forming a blank of substantially the same length as the completed article, and cylindrical in cross-section throughout its length, the blank being made of such varying size or diameter throughout different portions of its length as will insure the formation of the different parts of the articles, then flattening the blank by spreading it transversely to its length, then punching out the tines and afterward shaping the blank and rounding the tines.

In the accompanying drawings, Figure 1 is a plan view of a blank of suitable form for making a fork. Fig. 2 represents the blank after it has been flattened in suitable dies. Fig. 3 is an edge view of the blank after it has been flattened. Fig. 4 shows the blank after the tines have been cut. Fig. 5 shows the completed fork. Fig. 6 shows a blank suitable in form for making a spoon. Fig. 7 illustrates the spoon blank after it has been flattened in suitable dies. Fig. 8 shows the completed spoon. Fig. 9 represents a blank suitable in form to produce the handle of a knife. Fig. 10 shows the blank after it has been flattened and pressed or struck up into the form of a completed handle.

A represents a blank which is cylindrical in cross section and is composed of the handle portion *a*, the enlargement *b*, the reduced portion *c*, and the reversely tapered portion *d*. The blank may be produced either by swaging in a wire pointing machine or by rolling between reciprocating dies. In either case the dies will be of such configuration as to result in the production of a blank which will be cylindrical in cross-section throughout every portion of its length, and will be so varied in diameter and form that when it is flattened between suitable dies, it will insure the production of a flattened blank of the proper form. Blank A is placed between suitable dies in a press or in a drop hammer and is transformed into the shape represented in Fig. 2. When thus operated upon it will be observed that the handle and shank are flattened and formed with slightly curved sides and edges while the tine portion is produced with flattened sides and edges. The tines are then cut as shown in Fig. 4. The blank is then placed in suitable dies and is bent into the desired shape and the tines are rounded resulting in the production of the completed fork shown in Fig. 5.

In Fig. 6 B represents a blank suitable in form for making a spoon. The blank is cylindrical in cross section throughout its length, but of such varying size in cross-section that when flattened in suitable dies there will be produced a blank of the form illustrated in Fig. 7. The spoon blank is then subjected

to the action of suitable dies in a press or drop hammer and the blank is transformed into a completed spoon as shown in Fig. 8.

The blank C shown in Fig. 9 is of suitable form for making the handle of a knife, and when flattened in suitable dies is transformed into a solid handle as shown in Fig. 10.

In the process of manufacturing articles in accordance with my improved process any fins or projections formed on the edges of the blank may be trimmed off in suitable dies, or by emery wheels. If it is desired to produce a raised design on the handle or any portion of the article, the blanks may be subjected to the action of special dies for this purpose.

From the foregoing it will be observed that by my improved process I am enabled to obviate the loss and expense incident to the method ordinarily resorted to in the manufacture of forks and spoons. By the well known process now in vogue, the blanks are stamped out of sheet metal which results in a large amount of loss due to the fact that quite a large percentage of the metal is practically wasted as scrap, while by my process there is practically no waste of metal. The metal is first swaged or rolled into a blank, cylindrical in cross-section, just sufficient metal being disposed throughout the different portions of the blank, so that when the latter is flattened in suitable dies, the flattened blank will be of the desired width and thickness at its various portions throughout its length.

The process is especially adapted to and valuable in the manufacture of articles from German silver or white metal, because under the old process the great waste of this metal, which is comparatively high priced, is an important item of expense and loss which item of expense is practically obviated by my improved process.

As it is evident that articles other than those specifically mentioned may be made in accordance with my invention I would have it understood that I do not limit the invention to the manufacture of knives, spoons and forks.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A blank for the handle and neck of knives or other articles of cutlery, said blank being cylindrical in cross-section throughout its length and comprising a straight portion for forming the handle one end of which has connected therewith a reduced and rounded portion, for forming the neck, substantially as set forth.

2. A blank for the manufacture of forks, spoons or similar articles of cutlery, said blank being cylindrical in cross-section throughout every portion of its length, and comprising a straight portion for forming the handle, a tapering portion for forming the bowl or tines, and an intermediate portion of irregular shape in outline for forming the shank, substantially as set forth.

3. In the manufacture of spoons, forks, or other similar articles of cutlery, the process consisting in first making a blank of the length or of practically the length of the completed article and cylindrical in cross-section throughout its length, the blank being made of such varying size or diameter throughout different portions of its length as will insure the formation of the different parts of the article; then flattening and forming the blank by spreading it transversely to its length and bending and shaping it, substantially as set forth.

4. As an improvement in the process of manufacturing forks, consisting in first, forming a blank of the length or of practically the length of the completed fork, and cylindrical in cross-section throughout its length, the blank being made of such varying size or diameter throughout different portions of its length as will insure the formation of the different parts of the article; then flattening the blank by spreading it transversely to its length; then forming the tines by punching, and finally bending the blank and rounding the tines, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE W. PECK.

Witnesses:
LOUIS G. MINER,
MILO L. PECK.