(No Model.)

F. L. WHITTY.

ROLLS FOR FORMING TABLE KNIVES.

No. 346,138. Patented July 27, 1886.

Fig. 1.

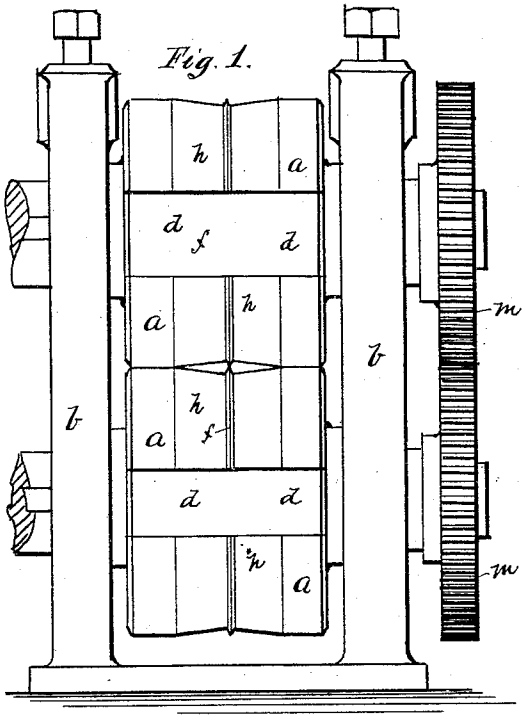


Fig. 2.

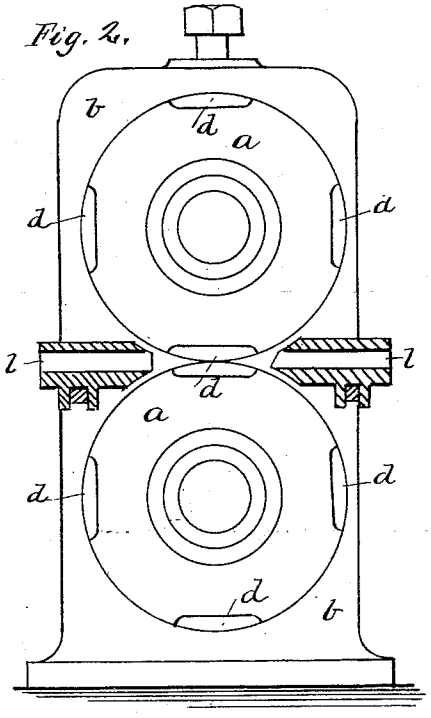


Fig. 3.

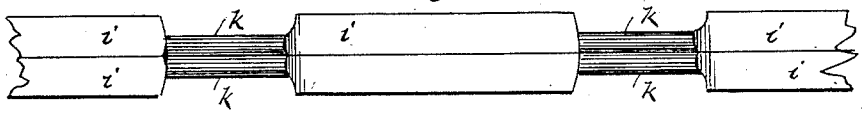
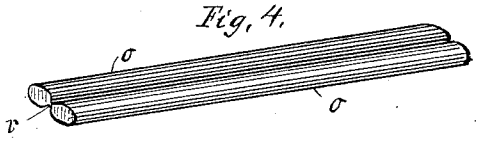


Fig. 4.



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ROLLS FOR FORMING TABLE-KNIVES.

SPECIFICATION forming part of Letters Patent No. 346,138, dated July 27, 1886.

Application filed April 15, 1886. Serial No. 199,039. (No model.)

To all whom it may concern:

Be it known that I, FRANK L. WHITTY, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rolls for Rolling Table-Knives; 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in rolls for rolling table-knives, the object being to provide a means whereby table-knives may be shaped or formed in a rapid and simple manner and comparatively small initial cost; and with this end in view my invention consists in a pair of rolls provided with one or more transverse recesses for forming the handles of the knives, one or more beveled grooves for shaping the blades of the knives, and a sharp angular projection on each roll, separating the beveled grooves for dividing or separating the knives when finished, and certain other details of construction, as will be more fully described hereinafter.

In the accompanying drawings, Figure 1 is a front elevation of my improved rolls for rolling table-knives constructed in accordance with my invention. Fig. 2 is an end elevation of the same with one side of the housing removed therefrom, the better to show that portion of the rolls for forming the handles of the knives. Fig. 3 is a plan view of several unseparated knives, such as they appear after passing through the rolls. Fig. 4 is a perspective view of the blank oval rods prior to passing through the rolls.

To put my invention into practice, I provide a pair of rolls, *a*, and secure the same in a housing, *b*, of suitable size and form of construction, after the manner now in common use. Across these rolls *a*, in the direction of their length, I form one or more shallow recesses, *d*, of a width equal to the length of the handles of the knives, the intervening spaces between these recesses *d* being the exact length of the blade of the knife. At the center of the rolls *a*, I form a sharp angular projection, *f*, extending from one recess *d* to the other, and on either side of this are formed beveled or tapering grooves *h*, extending from the angular projections *f* to the surface of the rolls *a*, and from one recess *d* to the other. These tapering grooves *h* correspond to the shape of the blade of a table-knife, *i*, tapering from the handle *k* to the point of the blade *i*, and from the back of the same to the front or edge. Suitable guides, *l*, are placed at the front and rear of the rolls to properly direct the metallic rods *o* in and to the same.

To the neck of the rolls *a*, projecting from one side of the housing *b*, are attached gear-wheels *m*, of equal diameter and meshing with each other, which secures the rolls in place and serves to bring the recesses *d* opposite each other.

The blanks *o* (see Fig. 4) are prepared previous to passing the same through the rolls *a*, and consist in two oval rods, *o*, secured together and integral therewith by a light web, *r*.

The operation is as follows: Power being applied to the lower roll, *a*, rotates the same, together with the one above, by means of the gear-wheels *m*. The blanks *o* are inserted in the guide-box *l* at the front of the rolls *a*, and, caught by the same, are drawn through the rolls. Certain portions of the oval rods *o* which pass through the recesses *d* remain intact and form the handles *k* of the knives. That part of the rods *o* passing through the beveled or tapering grooves *h* forms the blade *i* of the knife by pressing the metal sidewise until the entire grooves *h* are filled. The angular projections *f* separate the two rods *o*, the one from the other. The knives thus formed and divided are separated, the one from the other, at the point of one blade, *i*, or at the butt of the handle *k* of the other.

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

1. In a pair of rolls such as described, the combination, consisting of the rolls *a*, geared together and secured in proper bearings, having a sharp angular projection, *f*, formed about same, the tapering or beveled grooves *h*,

and one or more transverse recesses, *d*, formed in the rolls *a*, extending in the direction of their length, and suitable guide-boxes, *l*, for directing the blanks in and to the rolls, substantially as set forth.

2. In a pair of rolls, *a*, for rolling table-knives, the combination consisting of the rolls *a*, provided with a sharp angular projection, *f*, extending from one groove or recess *d* to the other, the tapering grooves *h*, for forming the blades of the knives, and a means for securing the rolls *a* in the housing *b*, as and for the purpose set forth.

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