

L. MILLAUX.  
MANUFACTURE OF BUTTONS.

No. 193,537. .

Patented July 24, 1877.

Fig-1= Fig-2= Fig-3=

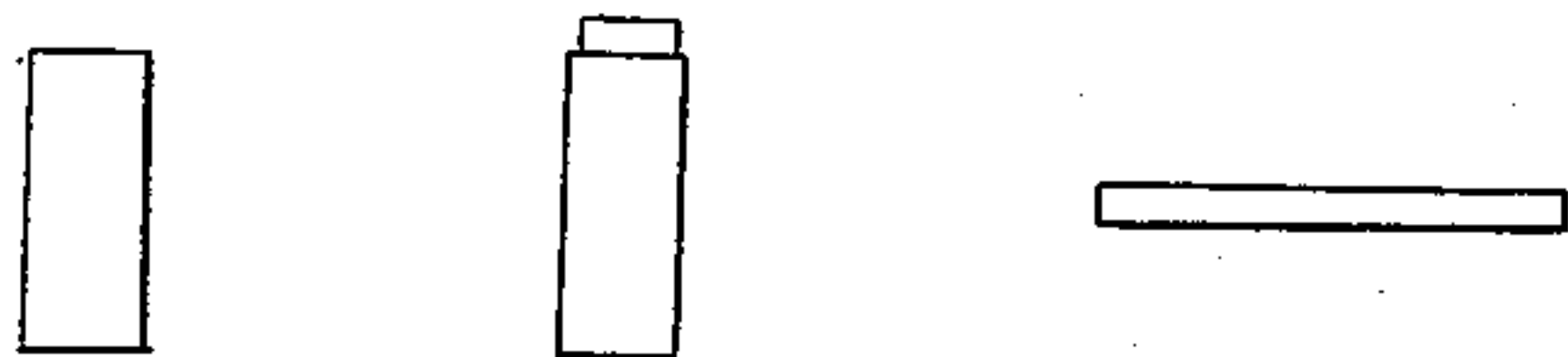


Fig-4= Fig-5=



Fig-6=

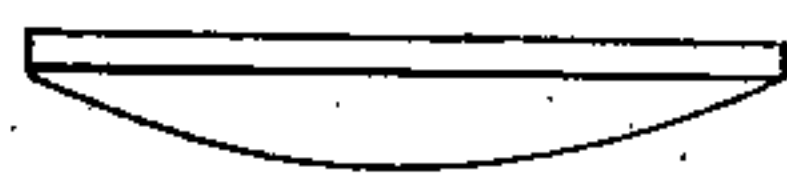


Fig-7=

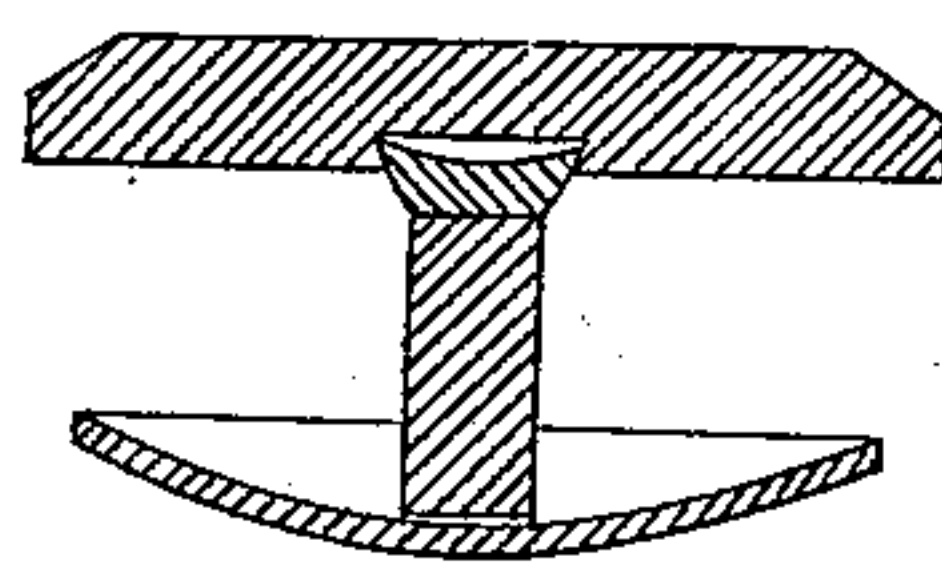


Fig-8=

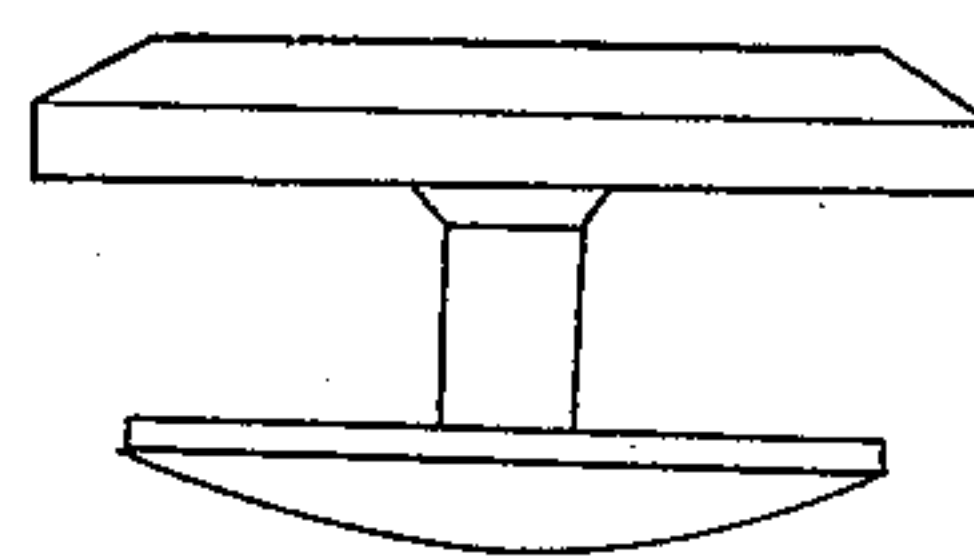


Fig-9=

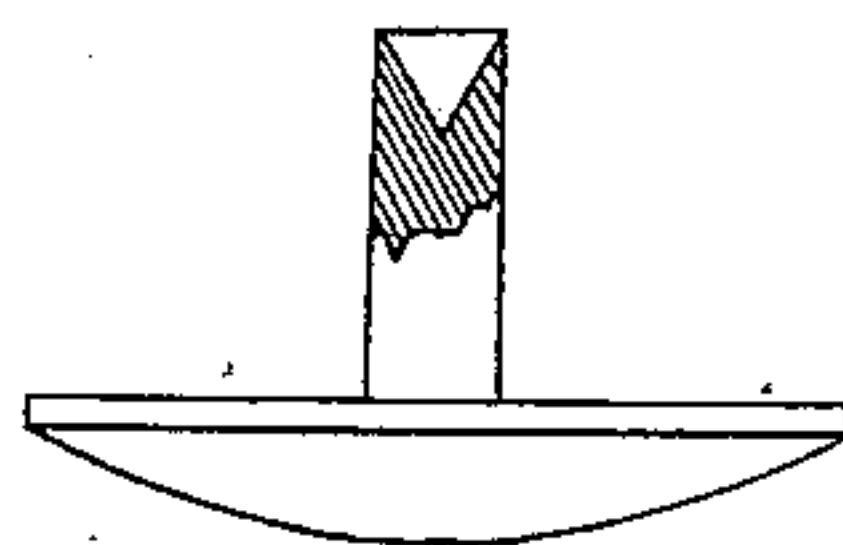


Fig-10=

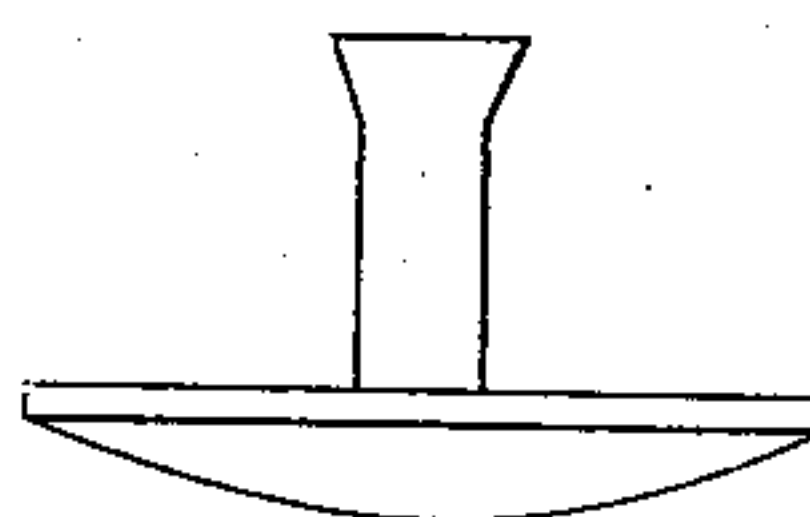
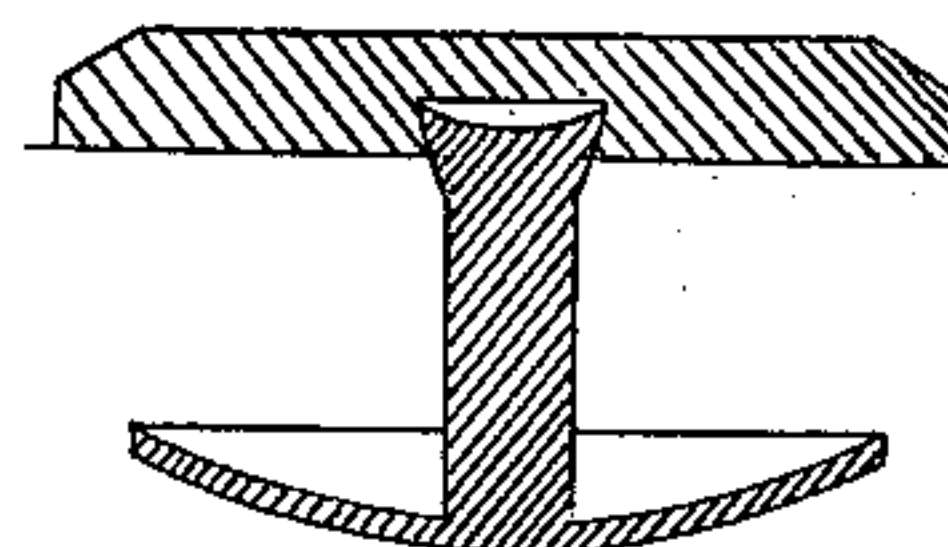


Fig-11=



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# UNITED STATES PATENT OFFICE.

LUDOVIC MILLAUX, OF WATERBURY, CONNECTICUT.

## IMPROVEMENT IN MANUFACTURE OF BUTTONS.

Specification forming part of Letters Patent No. **193,537**, dated July 24, 1877; application filed June 13, 1877.

*To all whom it may concern:*

Be it known that I, LUDOVIC MILLAUX, of Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Button-Backs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain improvements in button-backs; and the invention consists in the peculiar construction and arrangements hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and arrangement.

The accompanying drawing forms a part of this specification.

The method heretofore practiced in forming button-backs is briefly set forth in the following:

Figure 1 represents the wire shank, which is cut in suitable lengths. Fig. 2 represents said shank provided at one end with a shoulder; Fig. 3, a disk cut from sheet metal; Fig. 4, said disk struck into cup shape. Fig. 5 shows the shank and cup soldered together. Fig. 6 denotes the back disk, which is stamped from sheet metal. Fig. 7 shows the back disk and shank soldered together, also the back connected to the face or front of the button. This is accomplished by forming a recess in the under side of the button-face, and setting the cupped end of the shank into said recess, then spinning or striking it down in place. Fig. 8 represents the button complete.

It will be observed that seven operations are required to complete this button. The difficulty of securely connecting these parts together, and, when the back is being connected to the front, the liability of weakening the parts by the operation, will also be seen.

These objections I have overcome by producing a button-back made of one piece,

which is described as follows: Fig. 9 represents the back as it comes from the machine. To form this back I take wire of the requisite size and length, and place one end in a solid die. The other end is, by a suitable press or stamping-machine, provided with a header having a recess or countersink of suitable form, swaged or pressed into a disk of the desired shape. The recess in the end of the shank is made by a suitable punch in forcing the back out of the solid die after the disk has been formed. To form the cup the shank is placed between two half dies or clamps, which are provided with a recess having the upper end countersunk to give the required shape to the cup. The recessed end of the shank is then spread out with a pointed or square-end punch, or any other suitable means, as shown in Fig. 10, when the back is completed. The back is then connected to the face or front in any of the well-known ways, such as hereinbefore described, also shown in Fig. 11.

It will therefore be seen that instead of seven operations, (shown in Figs. 1, 2, 3, 4, 5, 6, and 7,) required by the old method to complete the button, I produce the same article, or rather a very much better and cheaper article, in three operations. (Shown in Figs. 9, 10, and 11.)

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

As an improvement in the manufacture of buttons, a button back and shank struck up from a single piece of metal, one end of the shank formed with a cup-shaped recess, adapted to enter the back of the face-disk of the button, as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

LUDOVIC MILLAUX.

Witnesses:

E. J. MANVILLE,  
D. N. DANIELS.