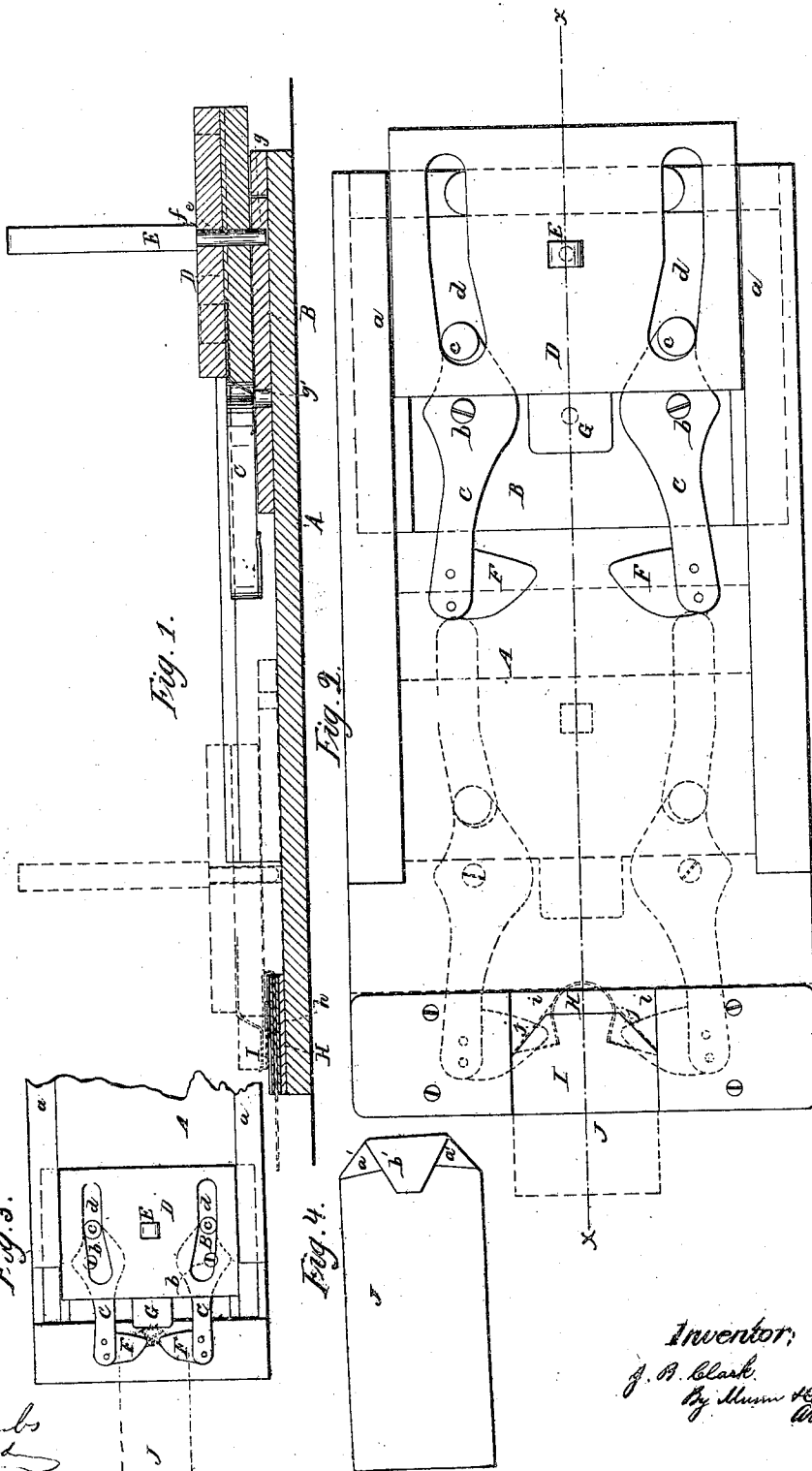


J.B. Clark.
Folding Tag.

N^o 4,0019.

Patented, Sept. 22, 1863



Witnesses:
J. W. Coombs
Geo. W. Reed

Inventor:
J. B. Clark.
By H. W. Reed

UNITED STATES PATENT OFFICE.

JAMES B. CLARK, OF PLANTSVILLE, CONNECTICUT.

MACHINE FOR FOLDING TAGS.

Specification forming part of Letters Patent No. 40,019, dated September 22, 1863.

To all whom it may concern:

Be it known that I, JAMES B. CLARK, of Plantsville, in the county of Hartford and State of Connecticut, have invented a new and Improved Machine for Folding Tags; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a diminished plan or top view of a portion of the same; Fig. 4, a detached view of a tag.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a new and improved machine for folding the ends of tags, in which folded ends the metal eyelets are fitted to receive the strings which secure the tags to the articles designed to receive them.

The invention consists in the employment or use of a stationary folding-plate in connection with movable folding-plates, the latter being attached to slides, and all arranged in such a manner as to effect the desired work in a perfect and expeditious manner.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a horizontal bed-piece, at each side of which there is attached a guide, *a*. These guides extend nearly the whole length of the bed-piece, and between these guides there is fitted a plate, B, to the upper surface of which two arms, C C, are secured by pivots *b*, on which the arms are allowed to work freely. To the back end of each of these arms C there is attached a vertical pin, *c*, and these pins *c* are fitted in slots *d d* in a plate, D, which rests on the plate B, and is allowed to slide freely thereon. The plate D has a hole, *e*, made centrally in it, in which hole the lower end of a handle, E, is fitted loosely, said handle having a tenon, *f*, at its lower end to fit in the plate D, and also into a hole, *g*, in the plate B when necessary. The tenon *f* is shown fitted in both plates in Fig. 1. The slots *d d* are slightly curved at their front parts, as shown in Figs. 2 and 3.

To the front end of each arm C there is attached a metal plate, F, the shape of which is

shown clearly in Figs. 2 and 3. These plates are attached to the under sides of the arms C, and they project inward toward each other, their outer edges being slightly rounded, and their inner ends slightly curved upward.

To the front end of the plate D, at its center there is attached a metal plate, G, which is bent downward so as to be in contact or nearly in contact with the upper surface of the plate B between the arms C C. This plate G has its front edge parallel with the front edge of the plate D, the former having its corners slightly rounded.

On the front edge of the bed piece A there is attached transversely a strip, *h*, on which a metal plate, H, is secured, of rectangular form. This plate H is fitted in a recess at the center of the strip *h*, and the corners of said plate, at its inner end, are bent a little downward, as indicated by the shading at *i i* in Fig. 2. Directly over the plate H there is secured another plate, I, which is considerably longer than the plate H, and has its central part, at its inner edge, notched in V form, as shown at *j j*, to expose the corners *i i* of the plate H, as shown clearly in Fig. 2. In consequence of having the plate H fitted in a recess in the strip *h*, a space is allowed between the plates H and I to admit of the tag being passed between them.

The operation is as follows: At the commencement of the work the two plates B D are at the end of the bed-piece A opposite to that where the plates H I are attached, and the tenon *f* of the handle E is fitted in both of said plates, as shown in Fig. 1. The tag J is then inserted between the plates H and I, and is made to project a little beyond the inner edge of the plate H. The operator then, by means of the handle E, shoves forward the two plates B D until B comes in contact with *h*, and the plates F catch underneath the corners of the tag J and fold them over one side of the V-shaped notches *j j* of the plate I, as shown in red in Fig. 2, the arms C C being kept distended or forced apart in consequence of the pins *c* of said arms fitting in the front parts of the slots *d d* in plate D. When this fold is given the end of the tag, the operator raises the handle E so that the tenon *f* will be out of or free from the lower plate, B. The top plate, D, is then shoved forward alone, and the slots *d d*, acting against the pins *c c* of the arms C,

will force the folding-plates F F toward each other and directly over the central part of the plate I, and the plate G then folds over the end of the tag upon the plates F F, (see Fig. 3.) and the work is finished. The folds produced by the plates F are designated by *a' a'* in Fig. 4, and the fold produced by the plate G is designated by *b'*. The two plates B D are then drawn back, the folded tag released and removed, and the operation repeated as before.

I would remark that the plate B has two holes made in it for the reception of the tenon *f* of the handle E. The tenon *f*, when the two plates B D are first moved, is in the back hole, *g*, so that the front edge of the plate, will be considerably in advance of the upper plate, D; but after the first folds are made and the tenon *f* is raised out of the hole *g*, in order to admit of the plate D being shoved forward to complete the first folds, *a' a'*, and to form the fold *b'* the tenon *f* at the completion of this

movement of plate D is fitted in the forward hole, *g'*, so that both plates B D may be drawn back simultaneously and the tag with them, the tag being released by raising the tenon *f* from the front hole, *g'*, and drawing back the plate D after the plate B is drawn fully back.

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

The stationary folding-plates H I, in combination with the movable folding-plates F F G, the plates F being attached to pivoted arms C on a sliding plate, B, and the plate G attached to a sliding plate, D, the arms C being operated by the slots *d* and pins *e*, when the plate D is moved alone, and all arranged to operate substantially as and for the purpose herein set forth.

JAMES B. CLARK.

Witnesses:

D. W. CRAFTS,
L. A. DAWSON.