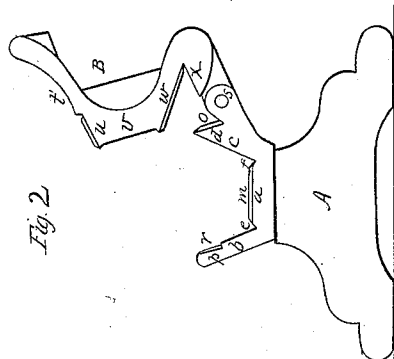
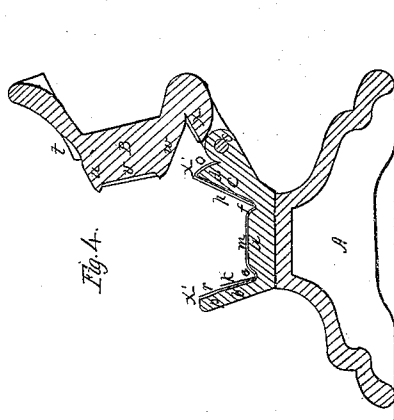
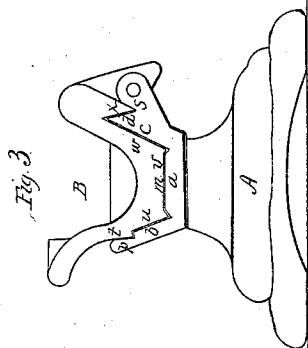
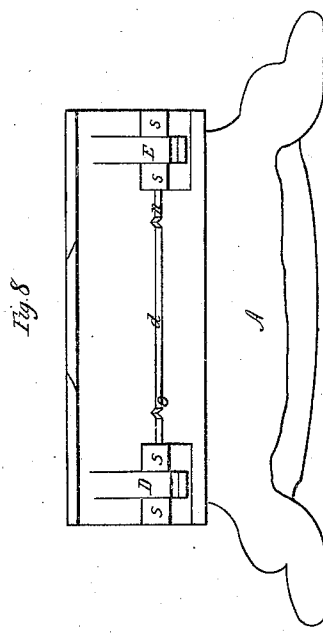
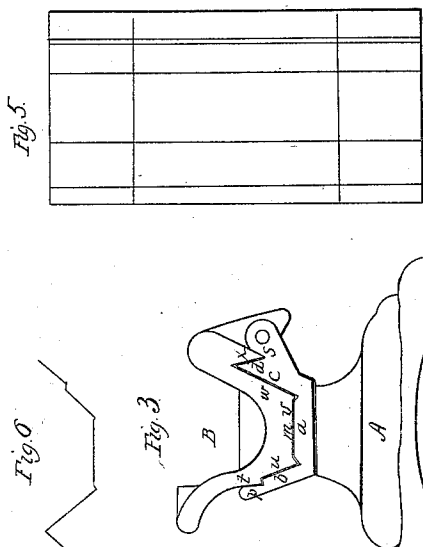
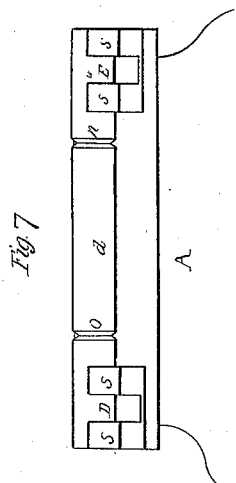
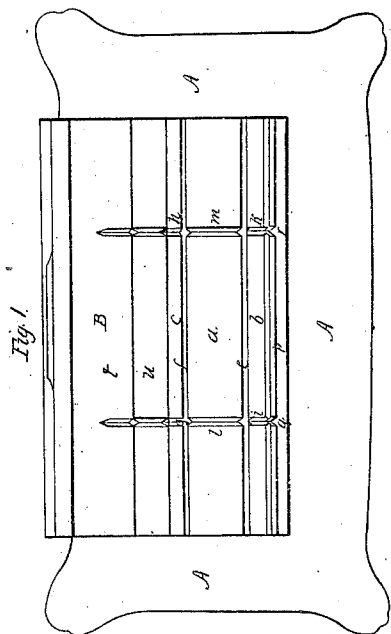


C. A. Cook.
Paper Crimping Mach.
N^o 8,556. Patented Dec. 2, 1851.



UNITED STATES PATENT OFFICE.

CARLOS A. COOK, OF LOWELL, MASSACHUSETTS.

MACHINE FOR CRIMPING PACKAGE-PAPERS FOR SODA POWDERS, &c.

Specification of Letters Patent No. 8,556, dated December 2, 1851.

To all whom it may concern:

Be it known that I, CARLOS A. COOK, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful Machine for Crimping Package-Papers for Soda or other Powder Preparatory to Their Being Filled and Folded; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of the said drawing Figure 1, denotes a top view of my said machine as it appears when open. Fig. 2 is an end view of it under such circumstances. Fig. 3 is an end view of it as it appears when closed. Fig. 4 is a transverse section of it, taken through one set of the projections and indentations which are formed on the inner surface of the top and bottom crimping faces. Fig. 5 is a view of a piece of paper with lines marked on it to exhibit the lines of the folds. Fig. 6, is an edge view of the paper showing the form it has on leaving the machine.

The machine in the first place consists of a plain surface *a*, and two sides or surfaces *b*, *c*, each making an obtuse angle with the first and extending above it, as seen in the drawings. There is also a fourth surface *d*, which is arranged at an acute angle with the surface *c*. A groove *e* or *f* is extended along the angle of each of the two surfaces *a* and *b*, *a* and *c*. There are also two grooves *g*, *h* made transversely in the surface *c*, and at right angles to the groove *f*. Similar grooves *i*, *k*, are also made transversely across the surface *b*, and at right angles to the groove *e*. Between the cross grooves of the plates or surfaces *b* and *c*, projections or ridges *l*, *m*, are made upon the surface *a*, as seen in the drawings.

In the plane of the transverse grooves of the plate *c*, the surface *d* is provided with ridges *n*, *o*, see Fig. 7, which is a rear elevation of the lower half of the machine.

There is also another plane surface *p*, extending above and a short distance back from the surface *b*, as seen in Figs. 2, 4. Such surface is provided with the two ridges *q*, *r*, they being respectively in the planes of the grooves *i*, *k*.

The above constitutes the lower part of the machine with the exception of the supporting feet or base, A, and the parts *s s*, *s s*,

Figs. 2 and 7, of it, which constitute in part the hinge joints by which the top or upper part of the machine is secured to the said lower part.

The upper part of the machine is composed of surfaces *t*, *u*, *v*, *w*, *x*, arranged as seen in the drawing, and formed on the lower side of the top B, and are the counterparts of the operative surfaces of the lower part A. The said surfaces *t*, *u*, *v*, *w*, *x*, are intended to operate in conjunction with the surfaces *p*, *b*, *a*, *c*, *d*, and they are to be provided with grooves and ridges which are counterparts of those of the surfaces *p*, *b*, *a*, *c*, *d*, that is to say where any one of the surfaces *p*, *b*, *a*, *c*, *d*, is provided with a groove such as *i*, or *k*, the surface *t*, *u*, *v*, *w*, or *x*, to act indirectly against it in the process of crimping the paper, is to be provided with a corresponding ridge, and so placed as to enter such groove when the two parts A, B, are closed together, and thus whether the grooves or projections run transversely or longitudinally of the crimping surfaces. Therefore in order to produce impressions transversely of the paper such as will serve to indicate the places where its ends are to be folded over, and such as will cause the longitudinal folds to lay on one another, so as to cause the transverse indentations of one surface to receive within them the transverse projections of the surface laid against it, the crimping surfaces *p*, *b*, *a*, *c*, *d*, *t*, *u*, *v*, *w*, *x*, are provided with the transverse grooves and projections.

In order to prepare or crimp a sheet of paper it being first reduced to the required size, and the machine being opened the paper is laid in the machine and on or in or about the plane of the surface *d*, the red line *x'*, in Fig. 4, denoting a transverse section and such a position of the paper. This being done a person is to apply his hand to the upper part of the machine, (which is hinged at the lower part as seen at D, E, in Fig. 8, which is a rear elevation of the machine as closed) and close such parts smartly down upon the paper, so as to compress it between the upper and lower parts A B. On raising the upper part, the paper will be found to be properly crimped and ready to receive its powder and be folded.

By the particular arrangement of the crimping surfaces at angles with each other,

the paper is crimped in a trough like shape, which renders it very convenient for being filled with a powder.

What I claim as my invention is—

- 5 The combination and arrangement of the surfaces *t, u, v, w, x, p, b, a, c, d*, in the manner substantially as represented in the drawings for the purpose of folding the paper in a trough like shape and in other respects

convenient for being filled with powder and 10 folded together.

In testimony whereof I have hereto set my signature this thirty-first day of May, A. D. 1851.

CARLOS A. COOK.

Witnesses:

CHARLES J. GILLIS,
JULIAN ABBOT.