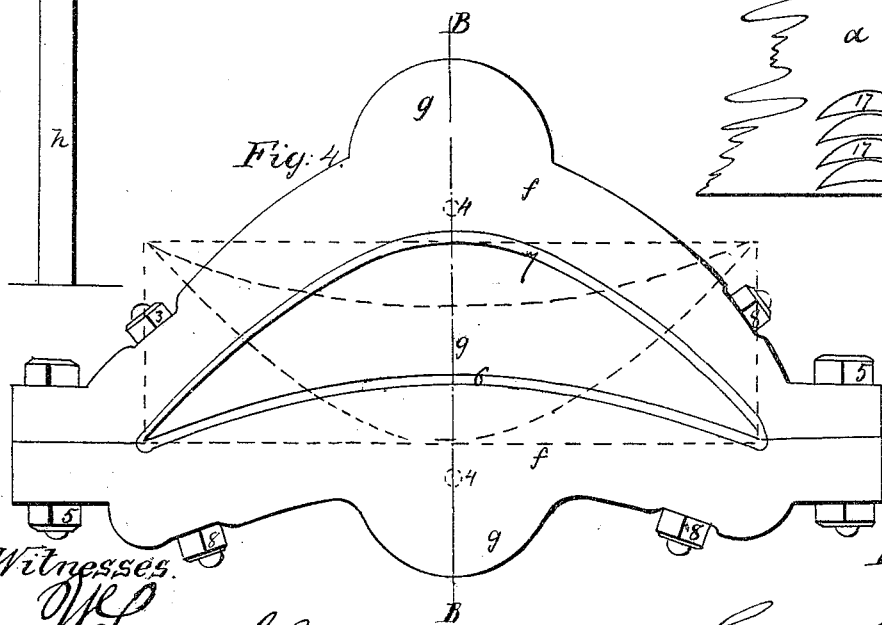
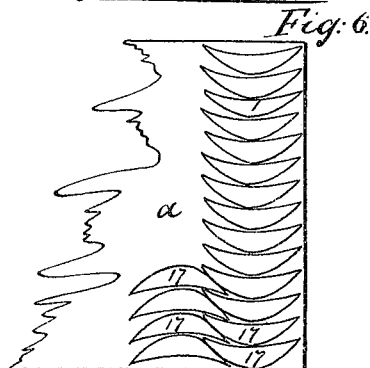
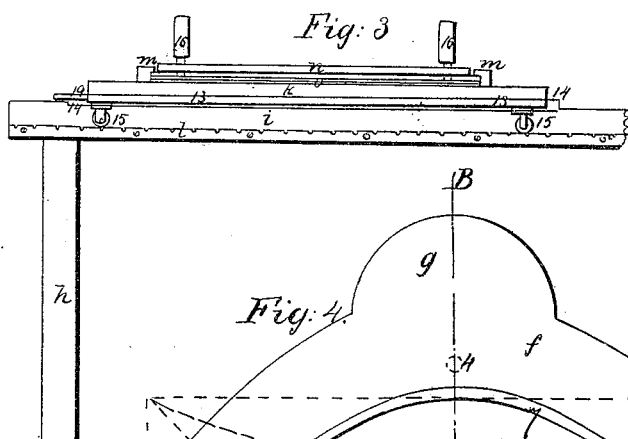
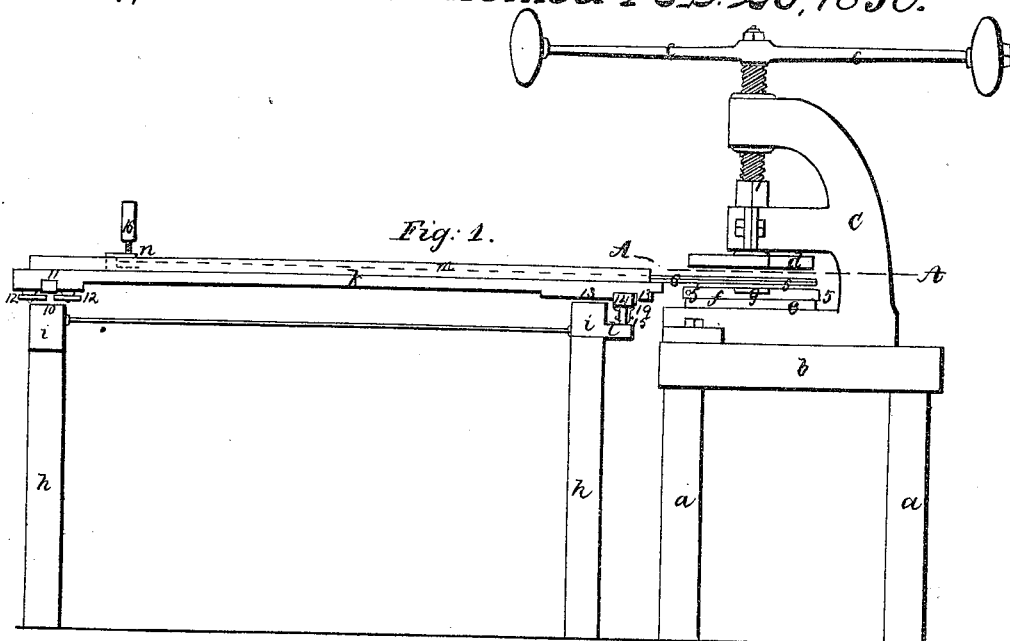


Mach. for Cutting Cap Fronts.
No 7,114. Patented Feb. 26, 1850.

N^o 7, 114.

Patented Feb. 26, 1850.



Witnesses.

W. L. Perrell
Lieutenant W. Perrell

Inventor

George Burges

G. Burges, s.s. *Sheet 2, 2 Sheets.*

Mach. for Cutting Cap Fronts.

N^o 7,114.

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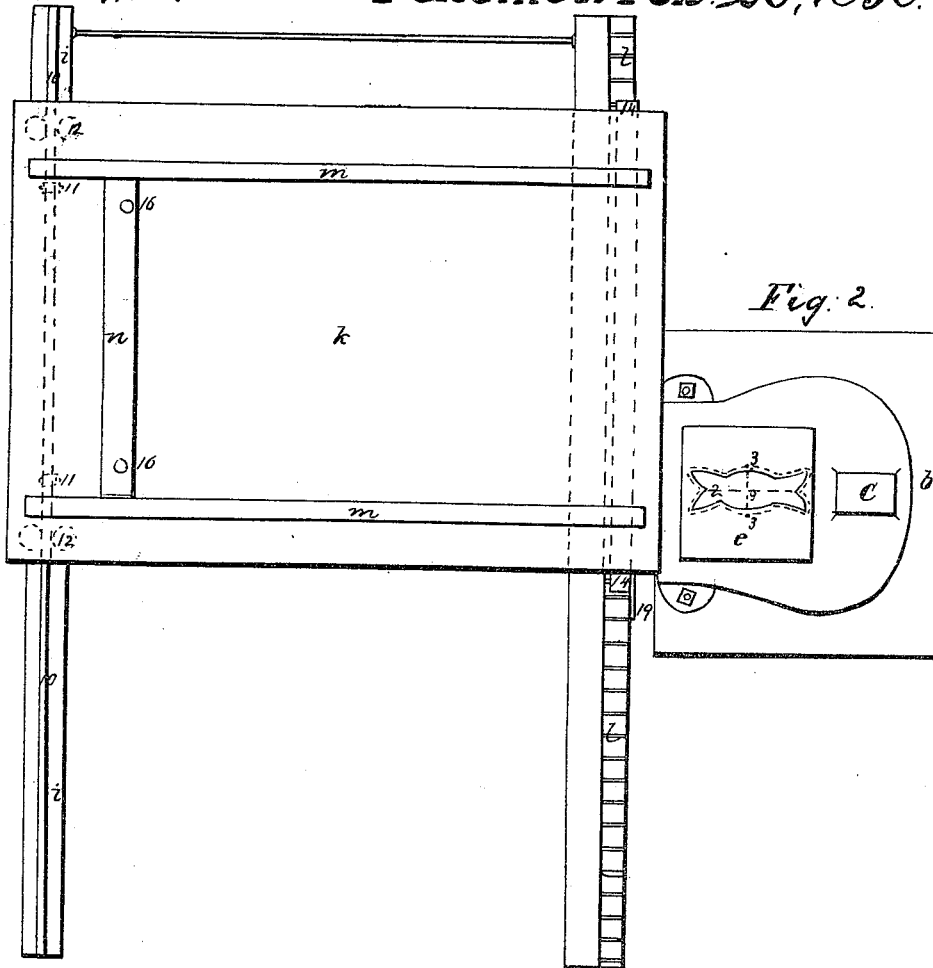


Fig. 2.

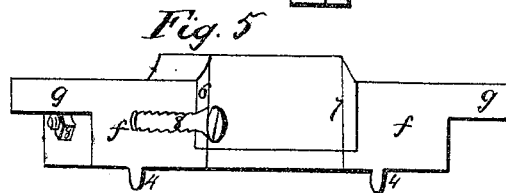


Fig. 5.

Witnesses.

W. Legrell
Samuel H. Sewall

Inventor.

George Burges

UNITED STATES PATENT OFFICE.

GEORGE BURGESS, OF NEW YORK, N. Y.

MACHINE FOR CUTTING CAP-FRONTS.

Specification of Letters Patent No. 7,114, dated February 26, 1850.

To all whom it may concern:

Be it known that I, GEORGE BURGESS, of the city of New York and State of New York, cap-front manufacturer, have invented and made and applied to use certain new and useful improvements in the application and combination of well-known mechanical means with parts invented or improved by me for the purpose of cutting or forming cap-fronts of paper, leather, or other material, which improvements effect the cutting of one or more of such fronts at each movement of the mechanism, thereby saving time, labor, and material when compared with any former process for this purpose, for which improvements I seek Letters Patent of the United States, and that the said improvements and the construction and operation of the same are fully and substantially set forth and shown in the following description and in the drawing annexed hereto, wherein—

Figure 1., is a side elevation of a machine, complete, and ready for use; Fig. 2., is a plan, with the parts above the line, A., A., Fig. 1., removed; Fig. 3., is an end elevation of the platform, to hold the material to be cut, with the pressing parts removed; Fig. 4., is a plan of the cutting block, or knife, in larger size; Fig. 5., is a section through line B, B., of Fig. 4., and Fig. 6., is a plan showing, that the fronts are cut in a manner to economize the material, one point of each front, in the second row, being cut from the point left in the material, by the cutting of the first row; and in like manner, with each succeeding row; the marks of reference apply to the same parts, in all the figures.

In these *a.*, *a.*, are legs, supporting the bed, *b.*, of a common fly press standard, *c.*, which press may be any competent mechanical means, to give the required pressure, but is shown here, as formed with arms and balls *c.*, *c.*, on a screw 1., which gives motion to the square press rod which carries the follower *d.*, the shape of which is shown by the dotted lines around the hole 2, Fig. 2.; *e.*, is a fixed bed, beneath the center of the screw 1., and has a hole 2., see Fig. 2., formed large enough to pass the largest sized front, and of a shape to pass a front, whether the points come either way from the center of the hole, that is, if they point to the right, they may be changed to point to the left; on the bed *e.*, at cross

lines from the point *g.*, at right angles to the length of the hole under the center of the screw 1., and at equal distances each way from the vertical center, are two holes, 3., 3., set outside of the hole 2., these holes 3., 3., receive guide pins 4., 4., on the under side of the two part frame *f.*, *f.*, fastened together, and of the shape, and in the position, shown in Figs. 4., and 5., and of a size proportioned to the size of the front; this frame carries the convex blade *b.*, to cut the concave side of the front, and the concave blade 7., to cut the convex side of the front; these blades are secured by bolts, 8., to the frame *f.*, the edges of the knives 6., and 7., project sufficiently above the surface of the block or frame, to cut through whatever thickness is required to be used at one time. On the edges of the block *f.*, are two ears *g.*, *g.*, to facilitate handling.

It will be seen, by the dotted lines in Fig. 4., that the pins 4., 4., place the block with the point 9., under the center of the screw, 1., whether the knives are in the position shown by the full or dotted lines, and that an even pressure will be given by the press, on the edges of the blades, to cut the material that is to be supplied, as follows: *h.*, *h.*, are legs, supporting the longitudinal frame *i.*, which has a square iron rod 10., on its upper side; *k.*, is the bed to receive the material, supported by rollers 11., 11., see dotted lines, in Fig. 2., over the rod 10., and guided by two pairs of rollers 12., 12., taking the sides of the bar 10., so that the bed *k.*, travels on, and is guided by the bar 10., at this end; the other end is supported by rollers 15., on a bar 14., which bar is in a groove formed by and between two battens 13, 13, Fig. 1. On the under side of the bed *k.*, the rollers 15., rest on the bar *l.*, which is secured on the frame *i.*, this bar *l.*, has notches, or indentations, into which the rollers 15., set, and the distance, between the centers of each two notches, is to be the width required to be cut out of the material, for each front. On the bed *k.*, are two grooved battens *m.*, *m.*, and a cross batten *n.*, running under and between the battens *m.*, made with a foot piece and top, forming a deep groove into which the material *o.*, is entered, and clamped by screws 16.

The operation of the parts is as follows: The sheets of material, being secured together by the battens *n.*, and screws 16, are

to be slid along until the ends of the material come to the farther end of the knives 6, and 7, and the rod 14, is to be so adjusted in the groove in which it runs, that the edges of the material will cover the knives, at the time the rollers are in the notches in the bar *l*; the rod 14, is then to be secured in place, by a wedge, or screws 19. The operator then passes a piece of thick leather, lead, or other material, under the follower *d*, and with his hand, gives the arms *c, c*, a rapid rotation, and pressure, until the material is cut through by the knives 6, and 7, so as to cut out a cap front 17, from each sheet, as shown in Fig. 6, the arms *c, c*, are then to be turned back, and the material, and bed *k*, drawn on, so that the rollers 15, fall into the next notch on the bar *l*, and another front is to be cut out of each sheet, as before; which all fall through the hole 2, into a box, or other receptacle beneath, which operation is to be proceeded with, until the whole width of the sheet has been passed over. The cutting block *f*, is then to be reversed, and the clamp batten *n*, with the material, slid out the requisite distance, which distance may be denoted by marks on the bed *k*, the bar *l*, so adjusted that the points, made in the material, by the row cut, shall form points for the fronts to be cut from the next rows, as seen in Fig. 6, and the operations are to be proceeded with, as before. It will be seen, that the operation of cutting is facilitated, and the material is saved, by thus reversing the knife. And also, that the material is adjusted and supplied to a gaged amount, and is also easily moved, each time, by

hand, through the construction of the bed *k*, and parts attached.

Although I have herein described and shown a screw press, to give the required power to cut the material, a toggle joint, or lever, or other mechanical means, may be substituted; and the bed *k*, may be moved the required distance, each time, by a screw, or ratchet, or lever, although I prefer, and use, the means shown herein.

I do not claim any one part used herein, separately, as all are well known; but

What I do claim as new, and of my own invention, and desire to secure by Letters Patent, is—

1. The construction and application of the frame *f*, with the blades 6, and 7, and guide pins 4, 4, taking holes in the bed *e*, to work in either direction from the center, all these parts being constructed and operating, substantially as described and shown.

2. And I claim, in combination with the foregoing, the bed *k*, fitted with supporting guide rollers 11, and 12, and adjusting bar 14, with rollers 15, moving over the bar *l*, and taking the indentations, to adjust the position of the material, over the cutter blades 6, and 7, the whole constructed and operating substantially as described and shown.

In witness whereof I have hereunto set my signature this twenty-seventh day of December one thousand eight hundred and forty-nine.

GEORGE BURGESS.

Witnesses:

W. SERRELL,
LEMUEL W. SERRELL.