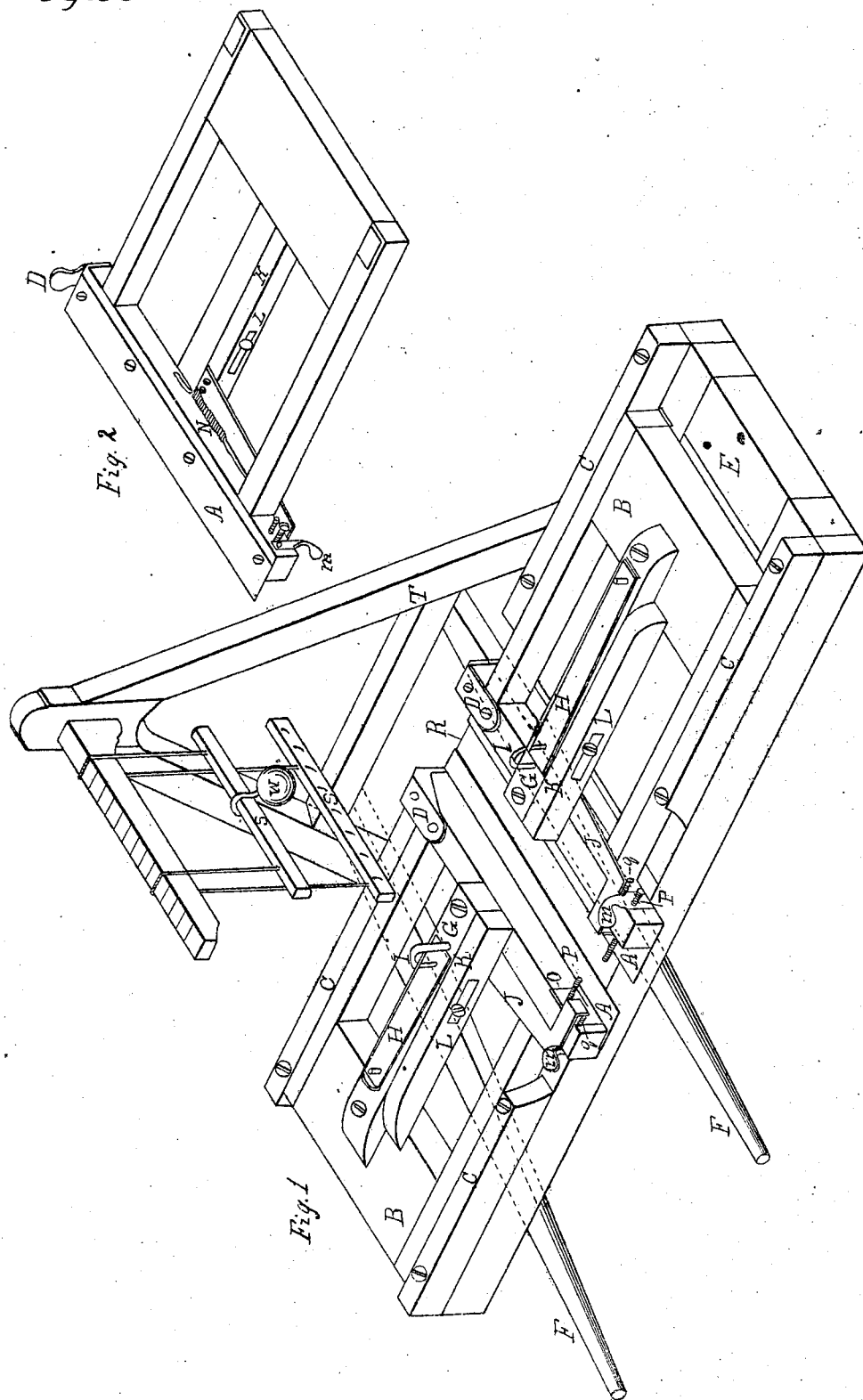


W. Whitaker.
 Plaiting Machine.
 N^o 5923. Patented Nov. 14. 1848.



UNITED STATES PATENT OFFICE.

WELCOME WHITAKER, OF TROY, NEW YORK.

MACHINE FOR PLAITING SHIRTS, &c.

Specification of Letters Patent No. 5,923, dated November 14, 1848.

To all whom it may concern:

Be it known that I, WELCOME WHITAKER, of the city of Troy, and State of New York, have invented a new and Improved
5 Method of Plaiting or Folding Linen or other Cloth for Shirt-Bosoms or other Purposes by Machinery; and I do hereby declare the following to be a full and exact description, the drawings annexed making
10 a part of the specification.

The nature of my invention consists in providing two metallic plates or folders, placed in a parallel position attached to slides, and moving by levers, on ways and
15 so regulated by stops, adjusting and set screws as to let the folders alternately, pass above each other to the desired distance, to give the proper width to the plaits, or having alternately wide spaces to suit the
20 pattern.

To enable others skilled in the art to make and use my said invention I will proceed to give a more particular description of its construction and operation.

25 Drawings referred to Figure I, an isometrical view of the machine; Fig. II, one of the slides bottom upward.

A A, two metallic folders, the principal instrument in folding the plaits; their
30 movement is up and down, as well as longitudinal; and must be uniform and parallel to affect which they are attached (see Fig. II,) by screws to the head piece of the sliding frames B B, which are kept in their
35 places by ways or guides *c, c, c, c*, both in front and rear. The metallic plates or pads projecting downward from the rear end of the head piece, having the same object (viz.) the parallel position of the two folders in all their movements.
40

E, is a strong frame, or bed piece, on the top of which are fastened the aforesaid ways or guides, and against which, on the back the pads D D, have an easy bearing.
45 F, F, the handles or levers (represented by dotted lines, and slightly shaded) passing across, and resting on, the top of the bearers G, G, and are attached by screws to the under sides of the cross pieces of the upright frames T, being, also, attached to the iron straps H H which turn on iron pins at the other end of the bearers. I, I, strong iron hooks, inserted in the bearers, and passing over the levers, and by means of

which the folders and the forward ends of the slides are raised. J, J, the spring stops are made fast to the under side of the sub-slides K K, and are adjusted by the slots L L (see also Fig. 2.)

m, m, are catches to hold the spring stops in their working position and to remove them when not used. N, Fig. 2, a small spiral spring to act on the catch *m*. O, a metal plate or fixed stop near the front end, on the foreside of the head pieces. P P, adjusting screws, by which, and the spring stops, the width of the plaits are regulated. *g, g*, a pair of set screws to make firm the spring stops while in working position. R, the table on which the work is performed, covered with thick cloth, extending from front to rear, and as wide from right to left as the folders can traverse. S, S, two
60 tenter rods, suspended on the arm of the upright frame T, to one of which the edge of the cloth is hooked, and to the other the weight, *w*, is applied, to keep the cloth in a perpendicular position and deliver it smooth and unwrinkled to the folders for plaiting.
75

Operation: The machine being arranged as above described and represented in Fig. I, and the stops adjusting, and set screws regulated for making plaits. I take a piece of linen of proper dimensions and slip one edge under the folder on the left hand, (as I stand between the levers facing the machine) hooking the other edge to the tender rod S, and placing the counter weight *w* on the other rod in such position as will deliver the cloth without wrinkles to the folders, between the edges of which the cloth is suspended in a perpendicular position. I then, with the lever, bring the right hand folder up, just raising it on to the cloth, and sliding it forward, till the adjusting screws, on the right, touches the spring stop on the lift. Then pressing this folder down to hold the cloth; I slip back the folder on the lift, from under the other. Then raising it above and on to the right folder, I slide it on till the adjusting screws, on the left, strikes against the spring stop on the right; and the adjusting screws on the right passes under the spring stop on the left, and thus continue the movements from right to left, and from left to right, alternately, until the pattern is complete. But when the pattern consists of several narrow and one wide plait,
80
85
90
95
100
105

alternately, I proceed to make the narrow
plaits as above; then, by removing the
catches, I raise the spring stops above the
point of contact with the adjusting screws,
5 in which case the fixed plates, on the fore
side of the head piece, will act as stops; and,
as the folder moves over a wider space, the
plait will be wider in the same ratio. The
spring stops are now brought under the
19 catches and the narrow plaits resumed, and,
so on, alternately, till the pattern is com-
plete.

Note: When the left hand folder is on the
top, the end of the right hand adjusting
15 screw, invariably passes under the left hand
stop.

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

1. A single pair of folders together with
the stops, adjusting and set screws, and the 20
several appendages pertaining thereto, nec-
essary to the convenient, parallel and diver-
sified action of the aforesaid folders; all as
above described.

2. I also claim the fixtures by which the 25
cloth is suspended and delivered out during
the operation of plaiting as above described,
and represented in the annexed drawings.

WELCOME WHITAKER.

Witnesses:

ARCHIBALD BULL,
JOHN B. GALE.