S. D. Carpenter. Sheet 1. 2 Sheets

Mach. for Directing Newspapers.

No. 17194. Patented May 5. 1857.

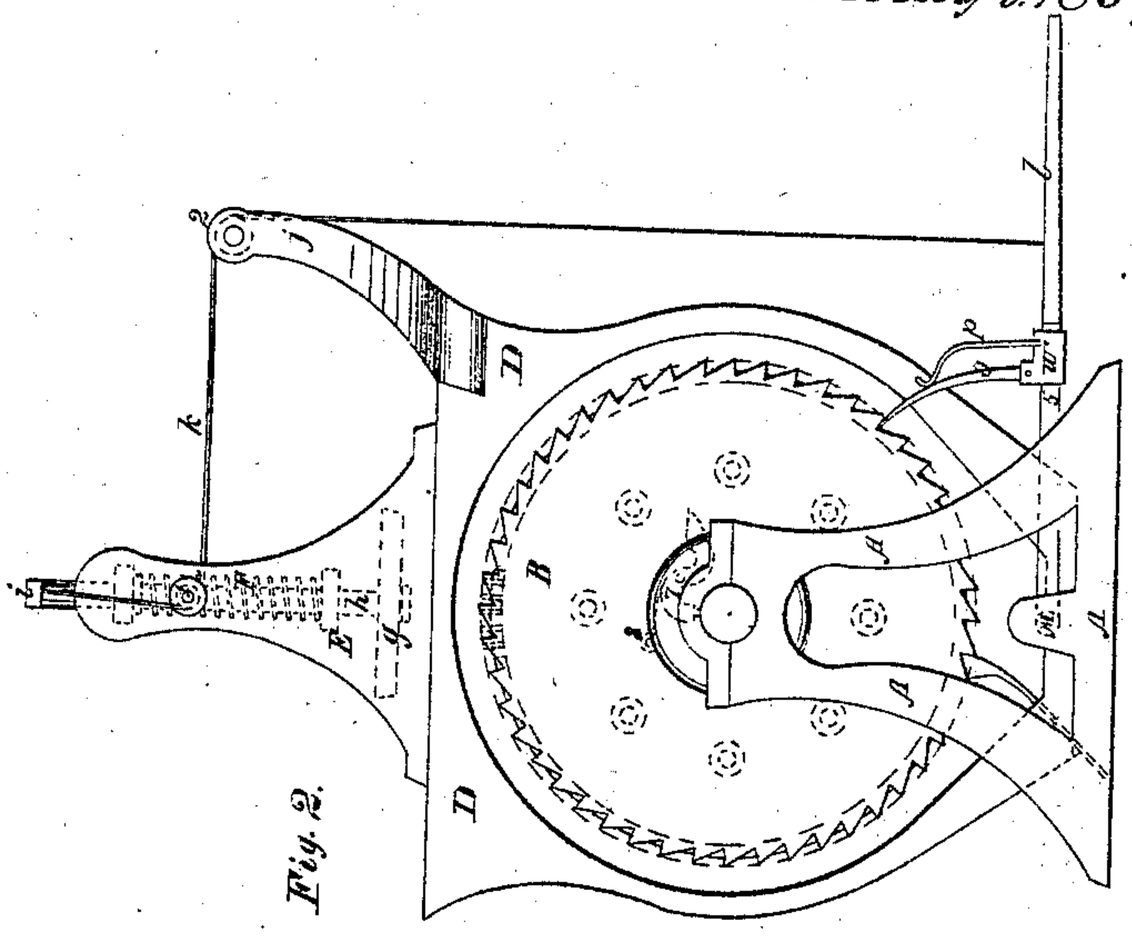

Fig. 2.

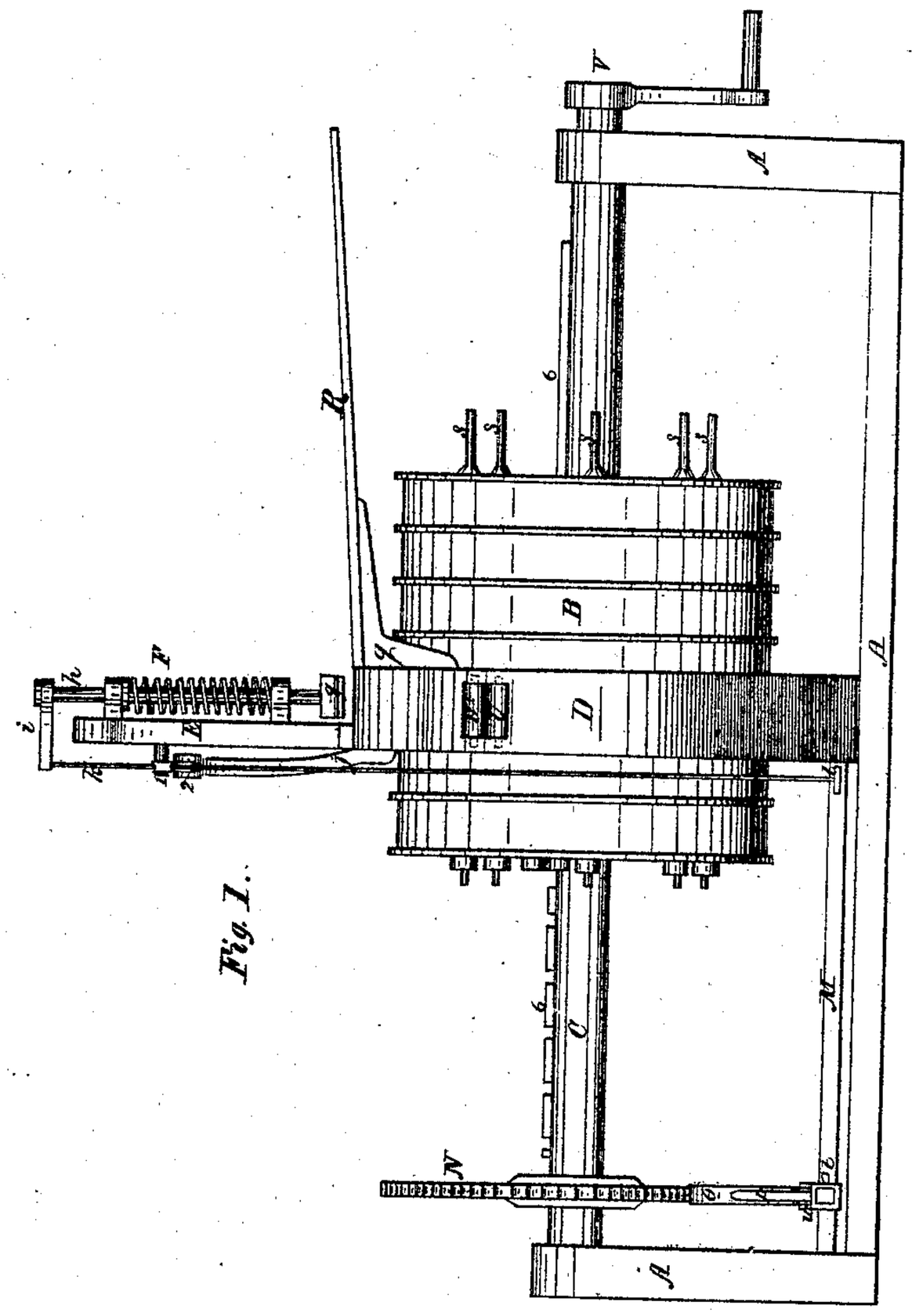

Fig. 1.

S. D. Carpenter. Sheet 2. 2 Sheets

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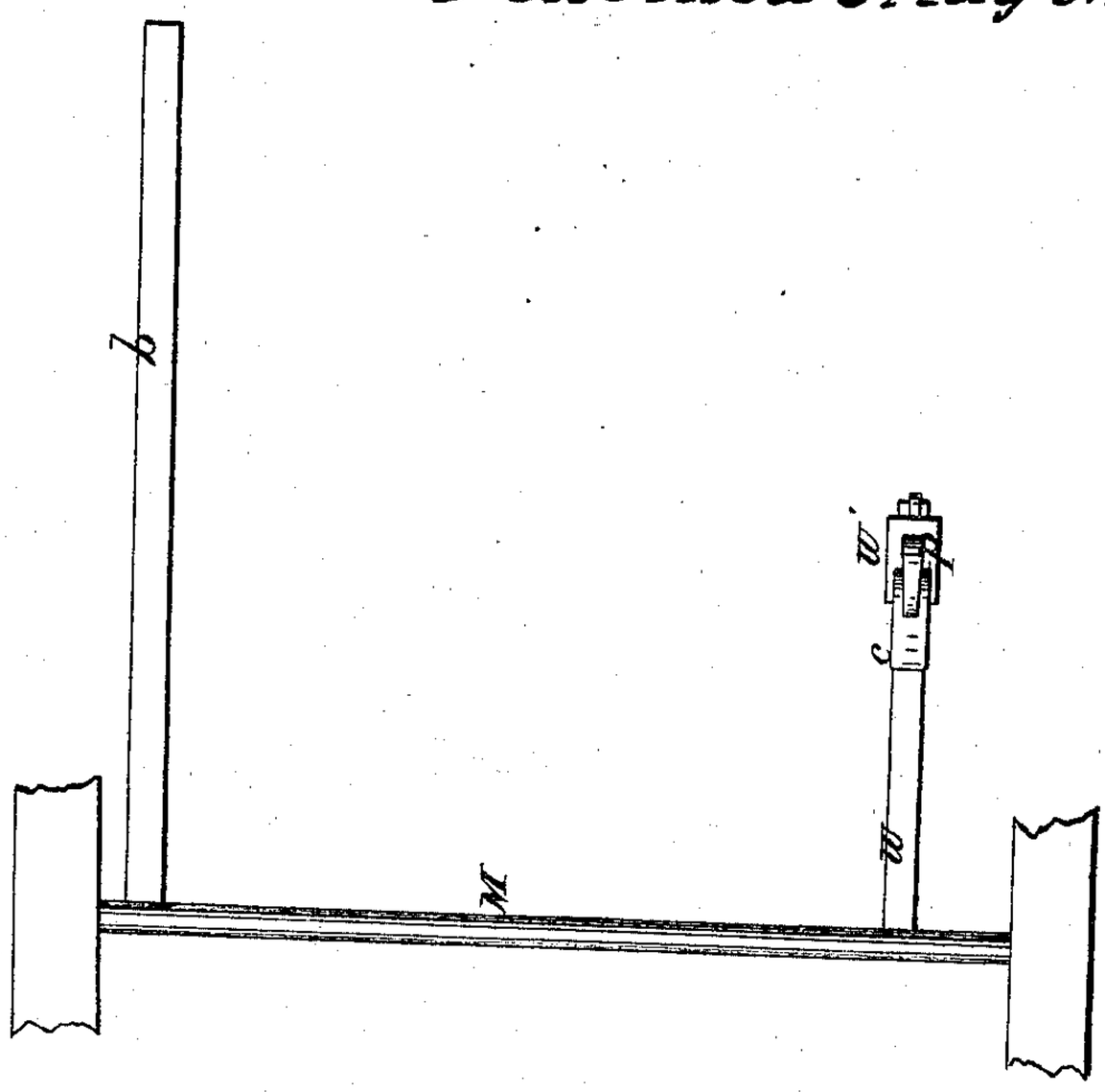
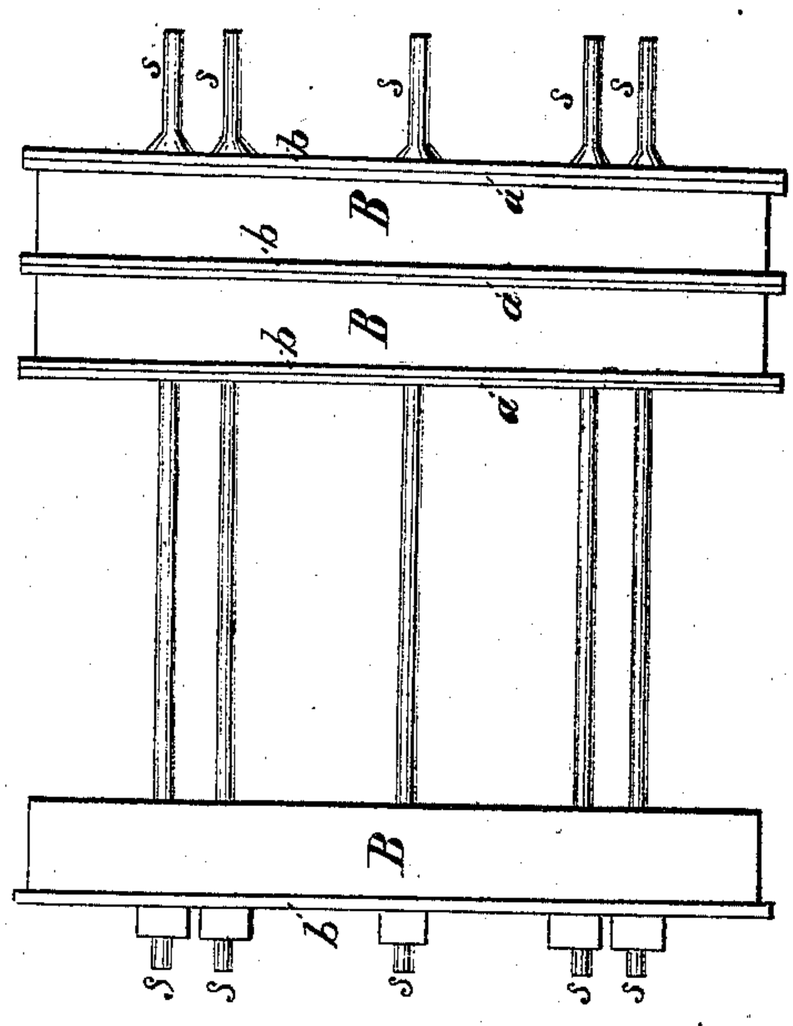


Fig 3.



UNITED STATES PATENT OFFICE.

STEPHEN D. CARPENTER, OF MADISON, WISCONSIN.

MACHINE FOR PRINTING SUBSCRIBERS' NAMES ON NEWSPAPERS.

Specification of Letters Patent No. 17,194, dated May 5, 1857.

To all whom it may concern:

Be it known that I, STEPHEN D. CARPENTER, of the city of Madison, in the county of Dane and State of Wisconsin, have invented a new and useful Machine for Printing Directions on Newspapers and Documents, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to letters of reference marked thereon, like letters of reference corresponding to like parts in the different figures, in which—

Figure 1 is a side elevation, and Fig. 2 is an end view. Fig. 3, is a section of the cylinder with the flexible material inverted. Fig. 4 is a plan view of the shaft treadle and arm with slide and spring attached.

The nature of my invention consists in a compound cylinder on which the type for printing the names of subscribers is placed, the cylinder having a revolving and sliding movement, for bringing the name required, directly under the press or platen, as hereinafter described.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

In the construction of my invention, I use either metal, or wood, as is most convenient and economical.

In Fig. 1, A is the frame, B the cylinder, C the shaft passing through the cylinder, D the stand frame, E is the upright supporter of the platen guide, F is the spring, *h* platen guide, *i* cross arm of platen guide, *j* arm with pulley 2 on it, over which the cord works. This arm may be lowered in building a working machine, so as not to stand above the stand frame; *k* the cord, *l* the pulley under which the cord plays, *g* the platen, *q* the brackets, under feed board R, *l'* the treadle board, M the shaft to which the treadle is attached, N is the ratchet wheel, *w* the arm on the shaft M, on which I slide the catch and spring *w'*; *s*, *s* are the bolts with nuts, passing through the cylinder, *b* the crank, *t* the thumb screw for adjusting the slide, P the feather on the shaft C, fitting in the slot, or groove, in the inner part of the cylinder.

In Fig. 2, A is the frame, B the cylinder, C the shaft, D the frame stand, E the upright supporter of the platen, F is the spiral spring, *g* the platen, *h* the platen guide, J the arm with pulley 2, over which the cord passes, *k* the cord, or strap, *l* the treadle, M the shaft, *w* the arm on the shaft, *w'* the catch, *p* the spring, 7 is the spring catch for holding the cylinder in its proper place, 8 the spring for holding the catch in its position, and to prevent it from moving laterally, N the ratchet wheel.

In Fig. 3, B, sections of the cylinder, (*a*) strips of india rubber between the sections, B, B, into which the type are pressed, and held firmly, so that they cannot fall out, as the cylinder revolves. S, S, bolts having nuts to screw the sections B, firmly together, and the ends of which serve as handles to slide the cylinder. (*b*) are elevations, or flanges on the sections B.

In Fig. 4, (*l*) the treadle, M the shaft, *w* the arm on the shaft M, *w'* the slide on the arm *w*, (*c*) catch, *p* spring.

In the operation of my invention the cylinder being arranged with india rubber or other flexible substance let in between the sections of the cylinder, as seen in Fig. 3, letters *a* (*a*) and bolted together by bolts and nuts at S, S, the type are set on the cylinder between the flanges, having between them, and the flanges on one side the flexible substance as india rubber, by which they are held firmly from dropping out.

In Fig. 2 the type are run in red lines, or burs, set vertically on the cylinder, while the spaces between them in diagonal lines represent reglets wider at the top than on the base to accommodate themselves to the space between the types.

The type when set correspond to the names on the subscription book, or persons to be addressed, which I fasten to their proper places, at regular distances apart, by beveled reglets, and screw the whole firmly together by means of the screws *l*, *l*. The top of frame D is a bed plate, through which there is a mortise corresponding with the size of the type, and the length of the name, on which the platen (*g*) is forced, by means of the strap (*k*) attached to the shank of the platen guide (*h*), and the treadle (*l*) and operated by the foot, while the newspapers, or documents are being fed in between the bed plate and platen. After the impression is made the platen guide is forced up by means of the spiral spring F. This upward motion raises the foot treadle and the shaft attached, whose bearing is indicated at M, and gives motion to the cylinder by means of a short arm *w* attached to

the treadle shaft, which is moved by the click *c*, Fig. 2, kept to its place by the springs (*p*) and 9, both being connected with the slides *w'*. This slide is movable on said short arm, so that by varying the distance from the fulcrum the exact motion required may be given to the cylinder as the treadle is worked.

The cylinder is kept steadily in its place by means of the spring and catch, 7, and 8 shown in red lines in Fig. 2. The strap or cord from the treadle (*l*) passes over pulley 2, and under pulley 1, extending to arm (*i*) for operating the platform; as the cylinder revolves the operator presses the treadle which depresses the platen, and as the pressure is lifted from the treadle, the spring throws it up causing the cylinder to revolve, the space of one name. When the cylinder has made one revolution the catch (*y*) is lifted out of the notch in the feather on shaft C and the cylinder is pushed the distance of one of the spaces between the flanges, and then the main operation is again repeated, and so on till the cylinder passes the entire length of itself to the left, which finishes the process of direction.

Into the stand D I insert the usual inking rollers *u* and *u'*, with a metallic traversing distributing roller. Before the work is commenced the hand is applied to the crank *b*, and several turns given so as to get the ink properly distributed.

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

1. The construction of the cylinder B made as described in sections with flanges *b*, to which india rubber or any flexible material is secured, for receiving the type, which type are set on the face of the cylinder, in column, as described, and for the purposes set forth.

2. I claim the said cylinder in combination with the platen operated as above described.

3. I claim the combination of said cylinder, with the devices whereby it is rotated, as set forth.

STEPHEN D. CARPENTER.

Witnesses:

T. G. CLAYTON,

JOS. C. CLAYTON.