J. I. Howe.

Papering Pins.

No. 2,970. Patented Feb. 24, 1843.

Fig. 1

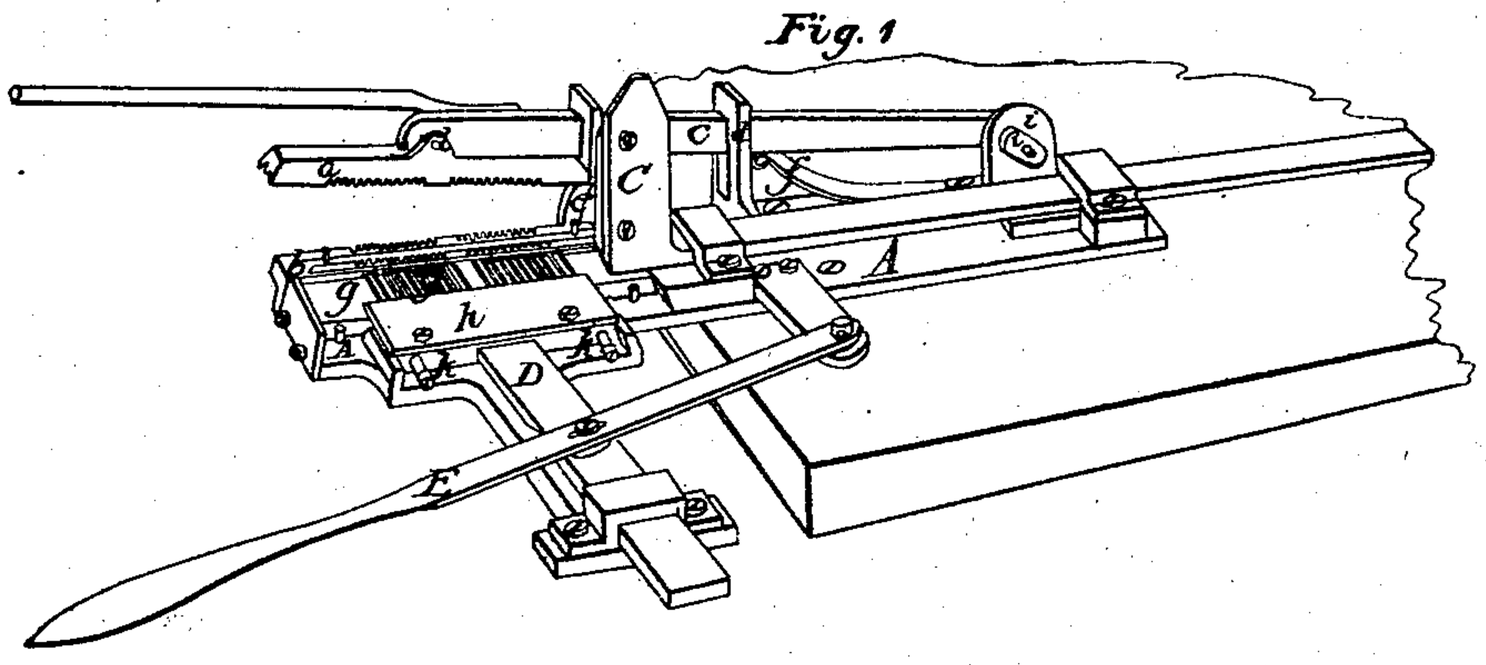


Fig. 2

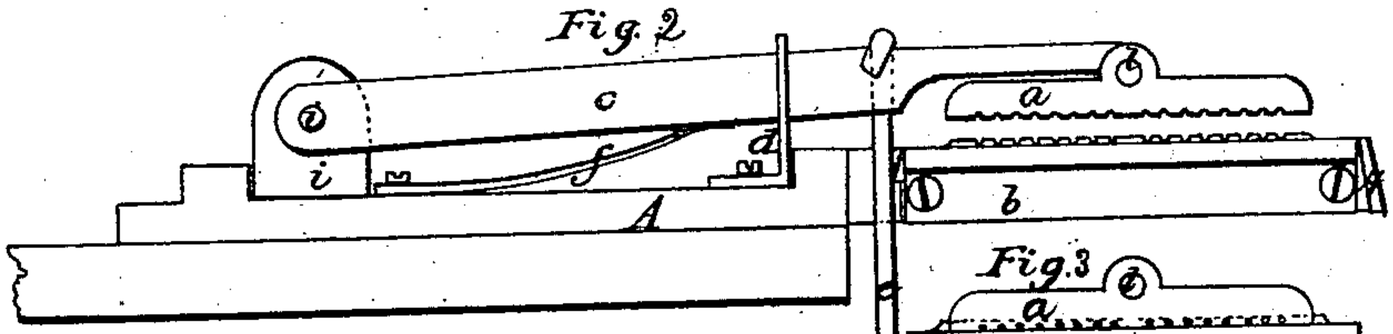


Fig. 3

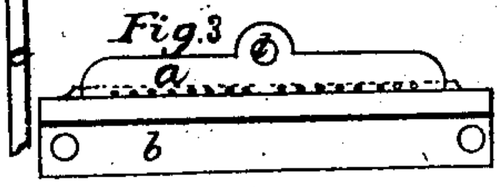


Fig. 5

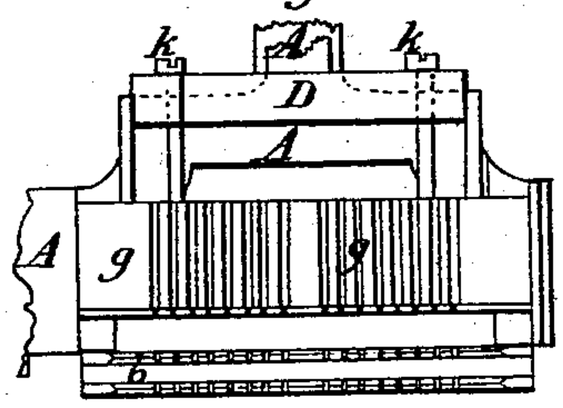
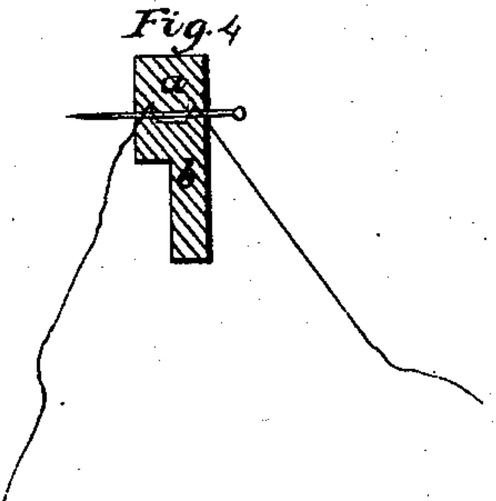


Fig. 4



Witnesses.

Sheldon Daskett

Amos Hunnington

Inventor.

I. I. Howe

UNITED STATES PATENT OFFICE.

JOHN J. HOWE, OF DERBY, CONNECTICUT.

MACHINE FOR STICKING PINS IN ROWS IN SHEETS OF PAPER.

Specification of Letters Patent No. 2,970, dated February 24, 1843; Antedated December 5, 1842.

To all whom it may concern:

Be it known that I, JOHN J. HOWE, of Derby, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement on Machines for Sheeting Pins—that is, for Sticking Pins in Rows in Sheets of Paper; and I do hereby declare that the following is a full and exact description of the construction and operation thereof, reference being had to the annexed drawings, Figures 1, 2, 3, 4, and 5, which make part of this specification, and of which—

Fig. 1 is a perspective view of an entire machine embracing my said improvement. Fig. 2 is a side elevation. Fig. 3 is an elevation of the bars for holding the paper. Fig. 4 is a transverse section of said bars. Fig. 5 is a plan of part of the machine.

The machine represented in the drawings is constructed according to the principles of "a machine for sticking pins into papers" for which Letters Patent of the United States were granted to Samuel Slocum of Poughkeepsie, in the county of Dutchess and State of New York, which Letters Patent bear date on the thirtieth day of September, A. D. 1841, excepting in so far as the same is modified by the introduction and application thereto of my improvement herein described.

In place of the "clamps A A" of the machine described in the said Letters Patent of Samuel Slocum, I employ the bars *a* and *b*, represented in Figs. 1, 2, 3 and 4. The bars *a* and *b* are so combined and connected with other parts of the machine as to form a pair of clamps, which may be closed together in a vertical direction as shown in Figs. 1 and 2. The bar *b* has upon its upper surface two longitudinal ribs, which ribs are divided by a number of transverse notches, the number of notches in each corresponding to the number of pins to be set in a row in the paper, as shown in Figs. 1, 2 and 5. The bar *a* has two longitudinal grooves on its under surface, and also a number of transverse notches or grooves corresponding to the number of pins to be set in a row in the paper. The bar *b* is fastened by screws to an immovable part of the machine, A, as shown in Figs. 1 and 2. The bar *a* is jointed at *l* to the lever *c*, and the lever *c* is connected by a joint to A at *i*, Figs. 1 and 2. A spring, *f*, acts to elevate the lever *c* and raise the bar *a* in a vertical direction from the bar *b*, Figs. 1 and 2. A hook or cord *e*, Fig. 2, connects the lever *c* with a treadle which is attached to the floor beneath the machine, by means of which the bar *a* may be closed upon the bar *b* by the foot pressing down said treadle. When the bar *a* is closed upon the bar *b*, the ribs of the bar *b*, are received into the longitudinal grooves of the bar *a*, as shown in Figs. 3 and 4; and the aforesaid transverse notches of the bars *a* and *b* come together in pairs, so as to form a system of holes or apertures across between said bars, as shown in Fig. 3. Said apertures must be sufficiently large to allow the pins which are to be sheeted or stuck by the machine to be pushed easily through them, when the bars are firmly closed together. When the bars *a* and *b* are closed, having the paper between them, two folds are formed or raised across the sheet of paper by the action of the aforesaid longitudinal ribs and grooves of said bars, and said folds of the paper intersect the transverse apertures between said bars above described, so that when the pins are pushed through said apertures they penetrate the two folds of the paper, as is shown in Fig. 4. The red line drawn between the bars *a* and *b*, in said Fig. 4, represents the paper, and a pin is shown intersecting said red line, in order to show how the pins are inserted in the folds of the paper.

The sliding hopper C, Fig. 1, the bed *g* with its system of grooves, Figs. 1 and 5, and the shover *h*, Fig. 1, are constructed and operate precisely according to the principles of similar parts in the machine for which the Letters Patent aforesaid were granted to Samuel Slocum, and which parts are described in the specification of said Letters Patent. But the cap or plate *h*, Fig. 1, has a number of teeth projecting downward from its front edge, one of which teeth fits into each of the grooves of the bed *g*, and the "system of grooves" *g* are formed in a bed or plate fitted to slide between guides on the fixed part, A, of the machine, as shown in Figs. 1 and 5, so that the slide D, Fig. 5, (to which the plate *h* is affixed by screws, as shown in Fig. 1) in being shoved forward to insert the pins in the paper, when it reaches the bed *g*, pushes said bed forward, until said bed is stopped by coming against the bar *b*. And when the slide D is retracted it strikes against the heads of the screws *k*, and draws back

the bed *g*, as is shown in Fig. 5; said screws *k* being inserted through holes in the slide D, and screwed fast in the bed *g*. The whole machine may be made of brass, or iron or other suitable metal.

Preparatory to using the machine it is fastened upon a bench or table as shown in Fig. 1, and the lever *c* is connected with a treadle in the manner hereinbefore described. The operator taking a suitable sheet of paper passes one end of it from beneath the machine up between the bed *g* and the bar *b*, and binding it toward the left hand over the bar *b*, places it in a proper position between the bars *a* and *b*. The bar *a* being now closed upon the bar *b* by pressing down the treadle with the foot, the paper is embraced between said bars in readiness for the insertion of a row of pins. The pins are then distributed in the grooves of the bed *g*, and being driven forward by the shover, *h*, are thrust through the transverse apertures between said bars, and thus inserted in the folds of the paper in the manner herein described and as represented in Fig. 4. The foot being then removed from the treadle the bar *a* will rise and release the paper with the pins which have been inserted in it. The sheet is advanced in successive portions, and the operation repeated, till the required number of rows are inserted.

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

The bars *a* and *b*, as herein described, for folding or crimping the paper, and holding it while the pins are being inserted therein. in the operation of sticking or "sheeting" pins.

Derby, November 30th, A. D. 1842.

JNO. J. HOWE.

Witnesses:

SHELDON BASSETT,

JAMES KNERINGER.