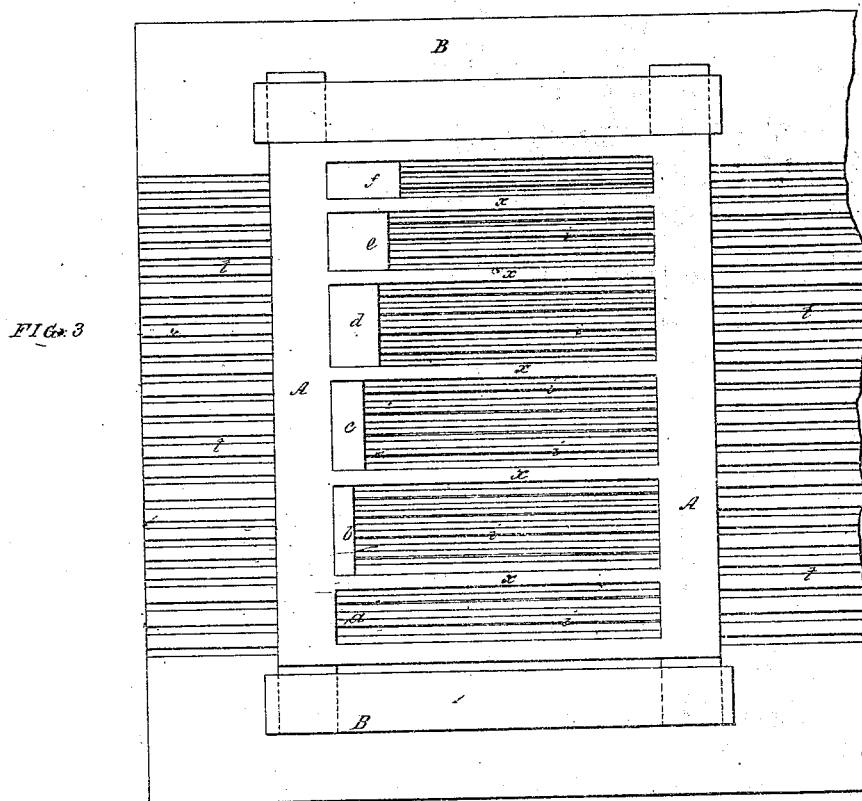
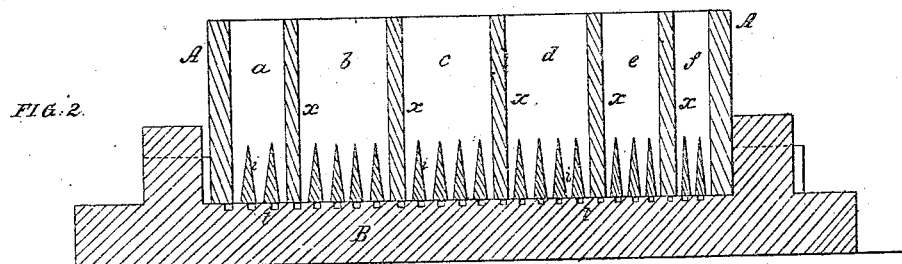
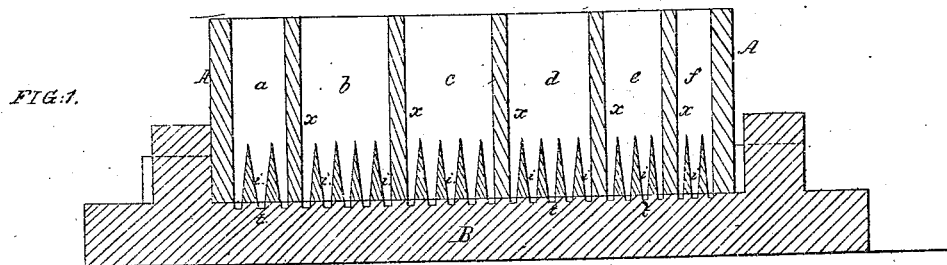


G. P. Farmer
Sticking Needles in Paper
No 53799. *Patented Apr. 10. 1866*



Witnesses.
Wm. Albert Steel
John Parker.

Inventor.
G. P. Farmer,
By his Atty
H. Howson

UNITED STATES PATENT OFFICE.

GEORGE P. FARMER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR STICKING NEEDLES INTO PAPER.

Specification forming part of Letters Patent No. 53,799, dated April 10, 1866.

To all whom it may concern:

Be it known that I, GEORGE P. FARMER, of Philadelphia, Pennsylvania, have invented an Improvement in Machines for Sticking Needles in Paper; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement, fully described hereinafter, in the machine for sticking needles in paper for which Letters Patent were granted to me on the 1st day of July, 1862, my improvement being such that the said machine can be used for inserting needles of different sizes into one paper wrapper.

In order to enable others skilled in the art to apply my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figures 1 and 2 are transverse sections of my improvement, and Fig. 3 a plan view.

In my said patent of July 1, 1862, the hopper for receiving the needles had a number of longitudinal partitions arranged at equal distances apart from each other, the space between the bases of two adjacent partitions being sufficient to admit one needle only, and each partition being beveled from the base to the top, where it was reduced to a sharp edge.

As all the spaces between the partitions in the hopper in my patented machine were of the same dimensions, needles of one size only could be inserted into a paper wrapper. It is desirable, however, that one wrapper should contain a series of different sizes. Hence my present improvement.

The hopper or box A in the accompanying drawings is, as regards external form and the lateral movement imparted to it, similar to that described in my said patent of July 1, 1862, the hopper resting on the grooved plate B. The interior of the hopper, however, is separated into several compartments, *a*, *b*, *c*, *d*, *e*, and *f*, by partitions *x*, and each compartment

is, near the lower portion of the hopper, subdivided into other compartments by sharp-edged partitions *i i*.

The spaces between the partitions *i* in the compartment *a* are adapted to the reception of the largest needles, those in the compartment *b* to lesser needles, and so on throughout the series of compartments, which are filled with needles of the class to which they are adapted.

The needles first thrown into the compartments are directed by the beveled partitions *i* to the bottom of the spaces between the said partitions, onto the face of the table B, where they rest at points between the channels *t t* of the said table. (See Fig. 2.) The hopper is then pushed transversely across the table, as described in my aforesaid patent, until the spaces between the partition *i i* coincide with the channels *t*, Fig. 1, so that the needles which are also pushed laterally must drop, one needle into each channel, from which they are pushed into the paper wrapper in a manner precisely similar to that described in my aforesaid patent.

It will be seen without further description that by the application of the above-described improvement to my patented machine needles of different sizes may be inserted into one paper wrapper.

I claim as my invention, and desire to secure by Letters Patent, as an improvement in the machine for which Letters Patent were granted to me on the 1st day of July, 1862—

The within-described box or hopper A, separated into several compartments of different sizes, and each compartment separated into other compartments by partitions *i i*, all substantially as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE P. FARMER.

Witnesses:

JOHN WHITE,
W. J. R. DELANY.