

G. K. SNOW.

2 Sheets
Sheet 1.

Book-Binding.

No 27,166.

Patented Feb. 14, 1860.

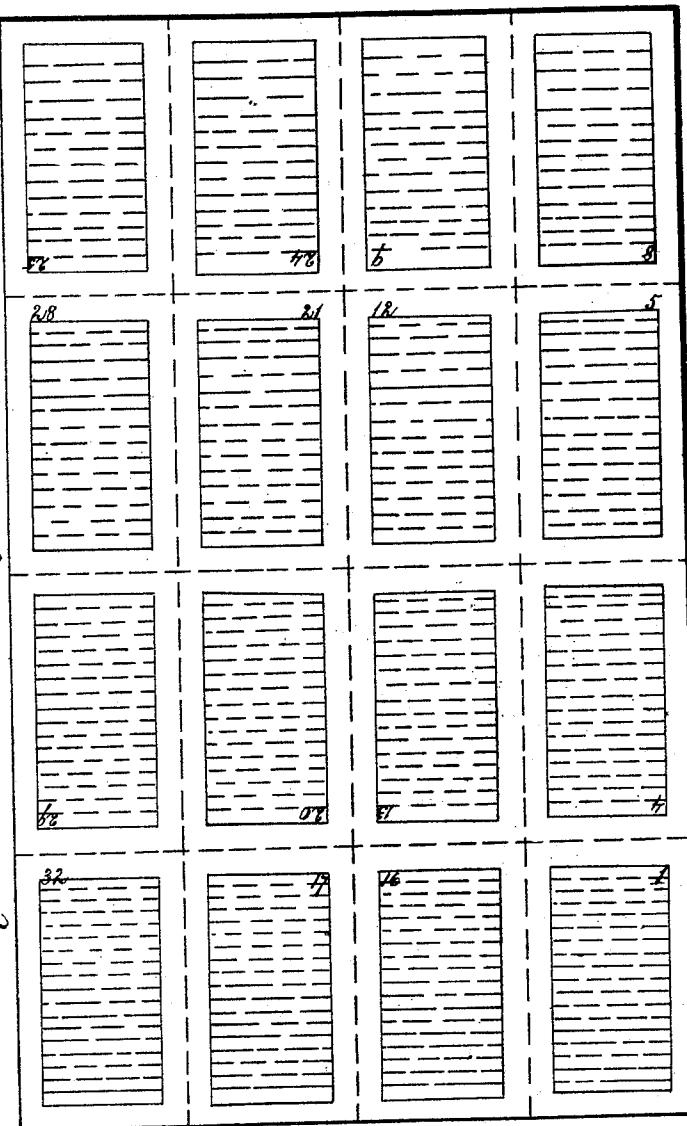
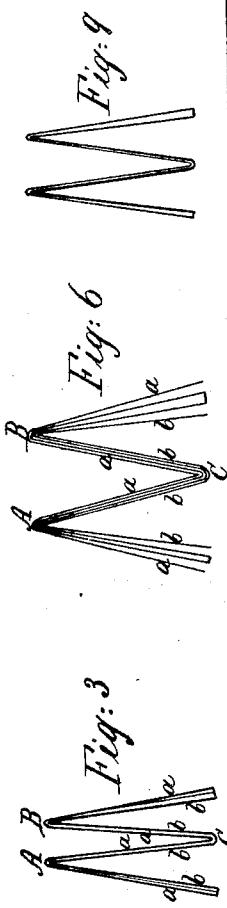


Fig. 1

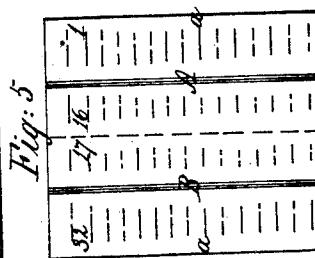


Fig. 5

Witnesses

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2 Sheets.
Sheet. 2.

Book-Binding

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Fig. 2

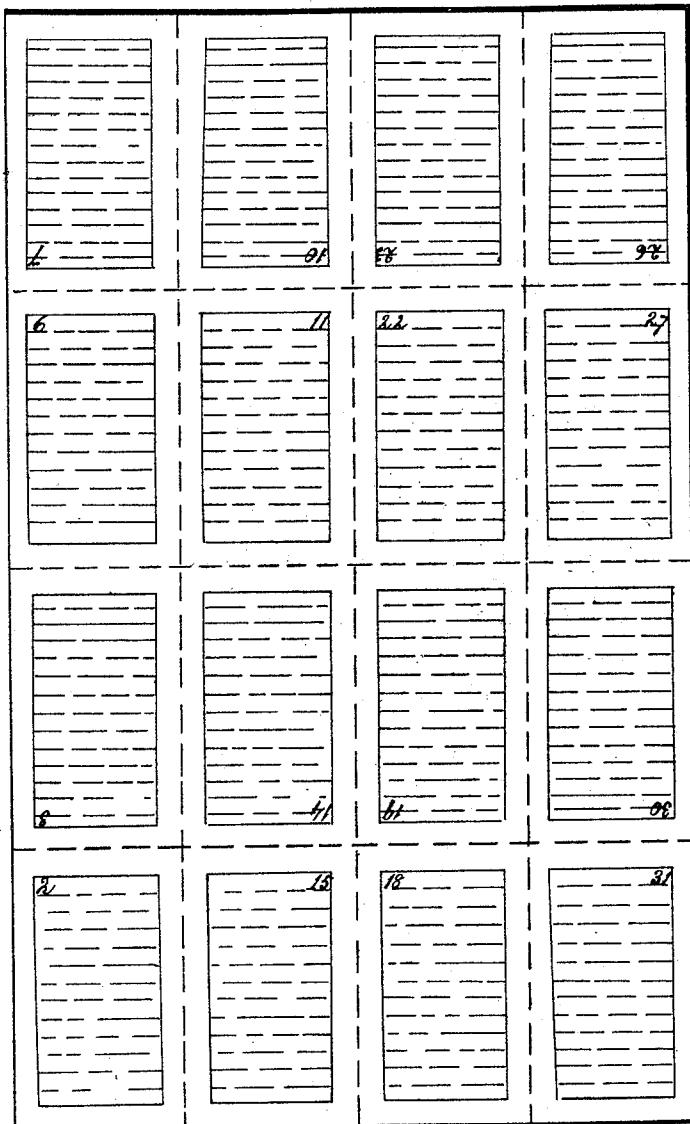
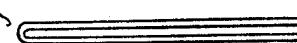


Fig. 1



Fig. 8.

Fig. 10



Witnesses

R. H. Ladd
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Inventor

Geo. H. Snow

UNITED STATES PATENT OFFICE.

GEORGE K. SNOW, OF WATERTOWN, MASSACHUSETTS.

FOLDING PAPER FOR BOOKBINDERS.

Specification of Letters Patent No. 27,166, dated February 14, 1860.

To all whom it may concern:

Be it known that I, GEORGE K. SNOW, of Watertown, in the county of Middlesex and State of Massachusetts, have invented 5 new and useful Improvements in the Art of Bookbinding; and I do hereby declare that the same are fully described and represented in the following specification and the accompanying drawings.

10 The nature of my invention consists in folding a sheet of paper with back folds and into two connected signatures having their connection along and between the front edges to be trimmed, and so that the connection may be trimmed or separated with 15 such front edges while they are being trimmed by the usual process.

By the term "signature", I mean that 20 collection of leaves of a book through which the needle is passed in order to sew the same to the backband used in binding the book.

Figures 1, and 2, of the drawings represent, opposite sides of a sheet of paper after 25 having been folded on my improved plan and subsequently been unfolded, the lines of fold being shown in red. Fig. 3, is a top edge view of the sheet as folded, the folds being opened apart in order to exhibit their angular arrangement. Fig. 4, is a front 30 edge view of the same. Fig. 5, a rear edge view; Fig. 6, a transverse section; Fig. 7, exhibits an edge view of the first folding of the sheet.

In Figs. 1, and 2, are exhibited in colored 35 rectangles, the printed pages or part of each page imprinted, each page being numbered in the order in which it will be when the sheet is folded.

In carrying out my invention of folding 40 the sheet represented in the above Figs. 1, and 2, one half of the sheet is first to be turned over and folded down upon the other half; next, each half of the sheet is to be folded back upon itself, so that what may 45 be termed the "first folding" of the sheet shall appear in edge view as shown in Fig. 7; next, the sheet so folded is to be again folded in the same manner with the "second folding" whose lines of fold shall be at 50 right angles or thereabout with the lines of the first folding, the same giving the folded sheet the appearance shown in Figs. 3, 4 and 5. In this way, the sheet will be divided into two signatures A, B, the inner 55 half of each of which will be connected to that of the other as shown at C, the connec-

tion being along and between the front edges, a, a, a, and b, b, b, to be trimmed and such connection being so arranged between them, when the pages are registered together, that the connection may be cut away from the inner halves of the signatures during the process of trimming the front edges. Another mode of carrying out my invention would be to make the first folding 60 of the sheet as shown in edge view in Figs. 8, and 10, viz., with but one back fold, the second folding of it being the same as that hereinbefore mentioned, or in other words with two back folds as shown in Fig. 9, 70 which is a top edge view of the sheet folded with the lines of the second folding at right angles with those of the first folding.

The common practice of folding sheets for 75 book work or for binding them together is to make each folding of the sheet with but a single lapping of it, the sheet being folded first, in one direction and next folded at right angles, every fold being at a right angle with that next folded, whereas, with 80 my improved mode of folding, either, one, two, or more back foldings are given to the sheet before the right angle folds are made, these latter being made so as to form two 85 signatures and connect them between the front edges to be trimmed as set forth. Thus by backfolding the sheet, one or more times in the first folding of it, as well as by backfolding it twice in the second folding of it, or that which is at right angles to the 90 first, I effect my invention, among the advantages of which over the common mode of folding is, that the connection of the two signatures is made to serve as a sure guide to the book binder in order to prevent him 95 from accidentally sewing through any less number than all the page portions of each signature; and furthermore, the invention presents an advantage in gathering a pack 100 of signatures for a book, as it saves one half the labor usually expended in such when they are folded by the old process. Besides 105 by my invention, the inner folds of the back of each signature are not so liable to be crinkled or cockled. Other advantages will also be apparent to printers and book binders.

My invention therefore and what I claim as an improvement in the art of book binding or in preparing sheets of paper or other material for being bound, consists in folding each sheet with backfolds and into two 110

connected signatures having their connection along or adjacent to and between the front edges to be trimmed and so that the said connection may be trimmed or separated with such front edges from the rest of the paper while they are being trimmed; my process involving the back folding of the sheet one or more times in making the

first folding and the back folding of it twice or other suitable greater number of times in making the second folding or that which is at right angles to the first folding.

GEO. K. SNOW.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.