G. K. SNOW.

Method of Binding Books.

No. 168,535. Patented Oct. 5, 1875.

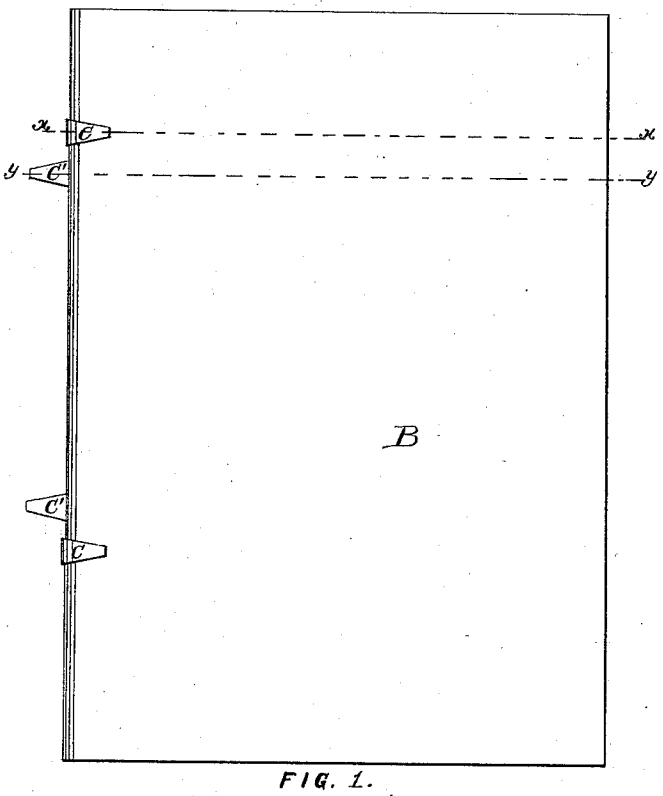

FIG. 1.

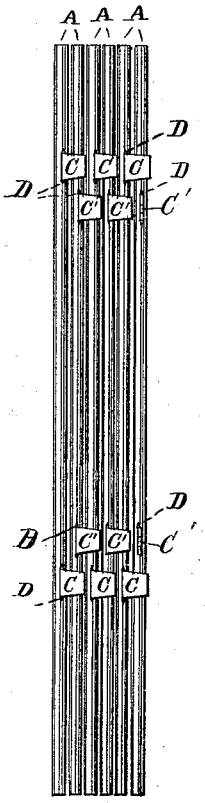

FIG. 2.

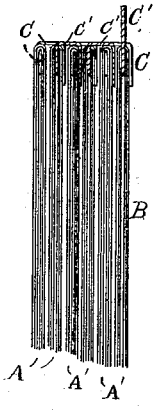

FIG. 4.

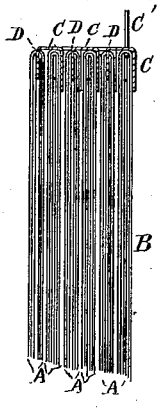

FIG. 3.

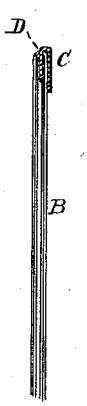

FIG. 5.

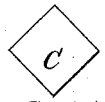

FIG. 7.

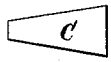

FIG. 8.

FIG. 6.

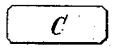

FIG. 9.

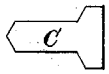

FIG. 10.

WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE K. SNOW, OF WATERTOWN, MASSACHUSETTS, ASSIGNOR TO MARY J. SNOW, OF SAME PLACE.

IMPROVEMENT IN METHODS OF BINDING BOOKS.

Specification forming part of Letters Patent No. **168,535**, dated October 5, 1875; application filed September 12, 1874.

To all whom it may concern:

Be it known that I, GEO. K. SNOW, of Watertown, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Method of Binding Books, Pamphlets, and Newspapers, of which the following, taken in connection with the accompanying drawings, is a specification:

My invention relates to a device, and the method of applying it, for securing together the different leaves of a signature and the different signatures of a book or pamphlet, or the different issues of a newspaper, as a substitute for sewing or stitching; and it consists in the use, as a means of securing the several leaves of a signature and then the several signatures together, of pieces of gummed cloth or other suitable flexible material cut to suitable form and size, and applied by inserting, through slits made through the several sheets of the signature of a book or folded newspaper sheet, on the line of and parallel with the fold thereof, one or more strips or patches of cloth or other thin flexible material, and securing one end thereof by means of gum, paste, or other suitable adhesive material to the inner surface of the newspaper sheet or the inner leaf of the signature, and folding the projecting portion of said strip over the folded edge of the second signature or sheet, and securing it in like manner to the outside leaf of said second signature or sheet. Each succeeding signature or sheet is secured to the one immediately preceding it in precisely the same manner that the second is secured to the first, the portions of the fastening strips or patches which project from the slits made in the fold of the last signature being folded down upon and secured to the outer sheet of said signature, for the purpose of securely fastening the several leaves of said signature.

In the drawings, Figure 1 is a side elevation of a book illustrating my invention, without covers. Fig. 2 is an elevation of the back edge of the same book without covers. Fig. 3 is a transverse section on line *x x* on Figs. 1 and 2. Fig. 4 is a similar section on line *y y* on Figs. 1 and 2. Fig. 5 is a transverse section, illustrating the manner of applying my invention to secure the several leaves of a single signature together. Fig. 6 is a transverse section, illustrating a modification of my invention as applied to securing together two or more single leaves, two or more sheets folded into two leaves each, or two or more signatures the several leaves of which have been previously secured together. Figs. 7, 8, 9, and 10 illustrate different forms of the fastener.

A A represent the different signatures of a book, each signature consisting of several leaves, B. C is a strip or patch of cloth or other suitable flexible material, one end of which is passed through a slit, D, made through one of said signatures, on the line of and parallel to the last fold of the sheet from which the signature is formed, one end of said strip being secured by gum, paste, glue, or other suitable adhesive material to the inner leaf of the signature, while the other end is folded down over the folded edge of the next signature, and secured in like manner to the exterior leaf thereof, as shown.

Another strip, C′, is applied to the second signature in the same manner as C is applied to the first, and if another signature is to be added the outer end of C′ is folded over the folded edge of the third signature, and secured thereto in the same manner as C is secured to the second signature.

The same operation may be repeated as long as there are signatures to add, and when the last signature is secured in place the projecting portion of the strip C′, the inner end of which is secured to the inner leaf of said last signature, is folded over and gummed to the outer leaf of the same signature.

These strips or patches of cloth, cut to any desired convenient form, (modifications of which are shown in Figs. 7, 8, 9, and 10,) I propose to manufacture ready for use, with one side coated with gum or other suitable adhesive material, and put them up in boxes or packages of one hundred or one thousand, and put them on sale as a new article of manufacture.

These little articles will be very useful to almost every one as a ready and convenient, as well as an inexpensive, means of securing together important papers, such, for instance,

as files of letters, memoranda, specifications, the several leaves of newspapers having more than two leaves, or binding together the successive issues of newspapers, and for many other uses too numerous to mention here, in addition to their use as a means of securing together the several leaves of books in the process of binding, as a substitute for sewing and stitching, or the old-fashioned tapes still used in some classes of work.

This mode of binding has advantages over either of the modes heretofore used, in that it is stronger, and consequently more durable, than the sewing or stitching with thread, and that the book will open out flat at whatever place it may be opened, on account of the signatures being fastened together at their extreme back edges, while in the use of the tapes, as heretofore applied, the signatures have been secured together by the tapes passing through slits made through the folded signatures at right angles to the plane of the leaf, at a distance of, say, one-fourth of an inch, more or less, from the folded edge of the signature, which has the effect to so bind the leaves together that the book cannot be opened out flat without danger of breaking the tapes or otherwise injuring the book.

If it is desired to secure together the several leaves of a folded newspaper without intention of binding the several successive issues together, my fastener would be applied as shown in Fig. 5.

Another mode of applying my invention to securing together single leaves or sheets folded into two leaves, or two or more signatures the several leaves of which have been previously secured together, is illustrated in Fig. 6, where A A are the two signatures or sheets folded into two leaves each, and C the fastener by which they are secured together, one end of which is secured to the outside leaf of one signature, while the remaining portion is folded over the folded edges of both sheets or signatures, and its opposite end is secured to the outside leaf of the other signature, as shown. C′ in the same figure is another fastener, secured at one end, by gum or other adhesive material, to the inside leaf of one of the sheets, the remaining portion projecting beyond the folded edge of the sheets in position to be folded down over and secured to a third folded sheet, or a single leaf if it is desired to add other leaves or sheets.

In applying my invention to binding books to receive board covers, I propose to apply two or more of my fasteners to the first and last signatures, one end of each of which will be left projecting, as seen at C′, Fig. 1, to be secured to the inner face of the cover.

What I claim as new, and desire to secure by Letters Patent of the United States, is as follows:

The method herein set forth of securing together two or more newspaper sheets or signatures of a book and the several leaves of said signatures by means of strips or patches of cloth having one end secured, by gum or other adhesive material, to the inner surface or leaf of one sheet or signature, and the other end, after passing through a slit formed in the line of the fold of said sheet or signature, folded over the back of the next sheet or signature, and secured in like manner to the outer leaf of said second sheet or signature, substantially as described.

Executed at Boston, Massachusetts, this 8th day of September, 1874.

GEO. K. SNOW.

Witnesses:

N. C. LOMBARD,

WM. P. EDWARDS.