C. S. MURPHY.

Book-Binding.

No. 147,422. Patented Feb. 10, 1874.

FIG. 2.

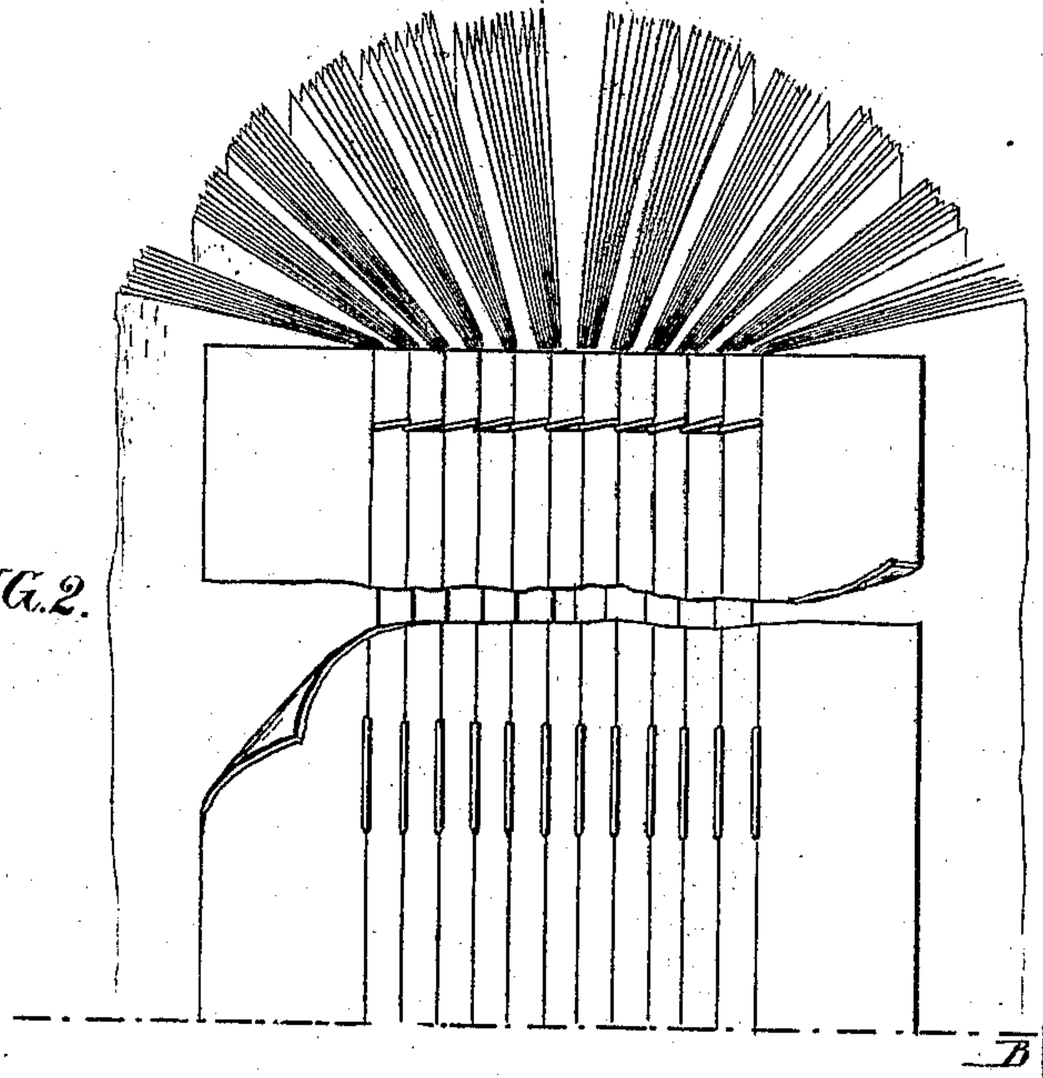


FIG. 1.

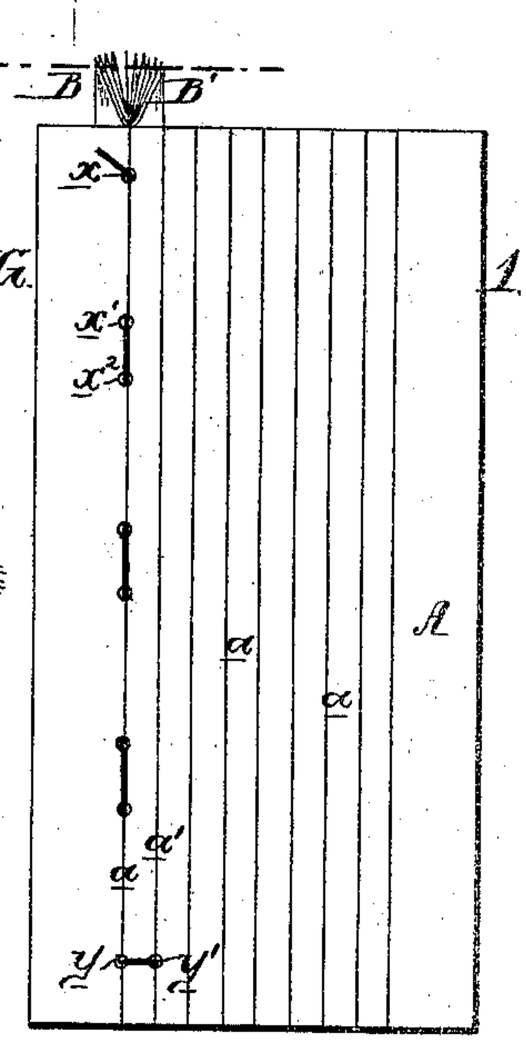
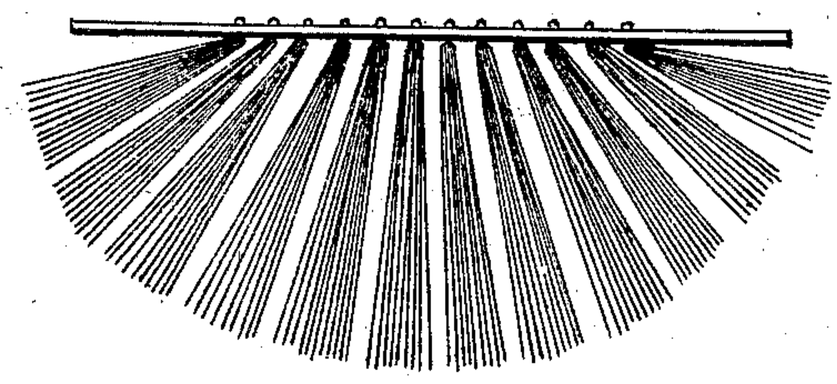


FIG. 3.



Witnesses, Hubert Howson
Thomas McElwain

Charles S. Murphy
By his attys.
Howson and Son

UNITED STATES PATENT OFFICE.

CHARLES S. MURPHY, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BOOK-BINDING.

Specification forming part of Letters Patent No. **147,422**, dated February 10, 1874; application filed May 5, 1873.

To all whom it may concern:

Be it known that I, CHARLES S. MURPHY, of Philadelphia, Pennsylvania, have invented an Improvement in Book-Binding, of which the following is a specification:

The object of my invention is to attach groups of leaves to the backs of books in a secure and permanent manner, and at predetermined distances apart, so as to insure a more secure and permanent binding, which is especially applicable to books which have to be much used, such as photograph-albums, and to scrap-books.

I take a strip, A, of leather or other equivalent material, and mark on it, by printing or otherwise, a series of longitudinal parallel lines, *a a'*, &c., which determine the lateral position of the stitches and the distance apart of the groups of leaves, the stitches being made in the manner best explained by reference to the diagram, Figure 1, of the accompanying drawing. The needle, holding the usual binders' thread, is first passed through the strip, from the back of the same, at the point *x*, and through the central crease of a group of leaves, B; thence back through the crease and strip at the point *x'*; back again through both strip and group of sheets at the point *x''*, and so on, as many stitches being made as the length of the book may require, the thread lying in the central crease of the group of sheets. When one group of sheets has thus been stitched to the strip A, the thread which has passed through the sheets, and through the strip at the point *y* on the line *a*, is transferred to the point *y'* on the adjacent line *a'*, and another group of leaves is stitched to the strip on this line *a'* in the same manner as the stitches were made on the line *a*; and this is continued until the desired number of groups of sheets have been secured to the strip, after which the sides of the book may be secured to the strip, and the binding completed in the usual manner.

I prefer, however, after the leaves have been stitched to the strip in the manner described, to further secure the latter, by glue or other adhesive material, to the folded edges of the paper, for which purpose I first sever the strip, as shown at Fig. 2, at several points, and turn up the severed edges, so as to introduce the glue beneath, after which the severed portions are turned down and pressed against the creased edges of the groups of leaves.

It will be evident that the strip A, attached to the leaves by stitches passing directly through both the creases of the groups of leaves and through the said strip, affords a much more secure medium for connecting the leaves together than the cords to which leaves are usually stitched in book-binding; and, hence, that my invention is especially applicable to the binding of books which have to be much used, and to photograph-albums, the leaves of which are subject to severe strains.

A prominent advantage of my invention appears in Fig. 3, which illustrates its application to that class of books to the leaves of which letters and other documents are usually pasted. In making books of this class, it is necessary that there should be spaces between the groups of leaves, to allow for the additional thickness imparted to the said leaves by pasting paper thereon. This spacing of the groups has hitherto been accomplished by binding in between the same short leaves—a practice involving considerable waste of paper, which is avoided by marking the strip A with parallel lines, to serve as guides for the needle, and to determine the distances apart of the groups of leaves.

I claim as my invention—

1. A book in which groups of leaves are connected together through the medium of a backing, united directly to said groups solely by stitches passing through each group and through the backing, as set forth.

2. A book in which groups of leaves are secured to a backing, with intervening spaces, determined by guiding-marks on the backing, as specified.

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

C. S. MURPHY.

Witnesses:

WM. A. STEEL,

HUBERT HOWSON.