

No. 767,262.

PATENTED AUG. 9, 1904.

C. CHIVERS.
BOOKBINDING.

APPLICATION FILED MAY 16, 1904.

NO MODEL.

Fig. 1.

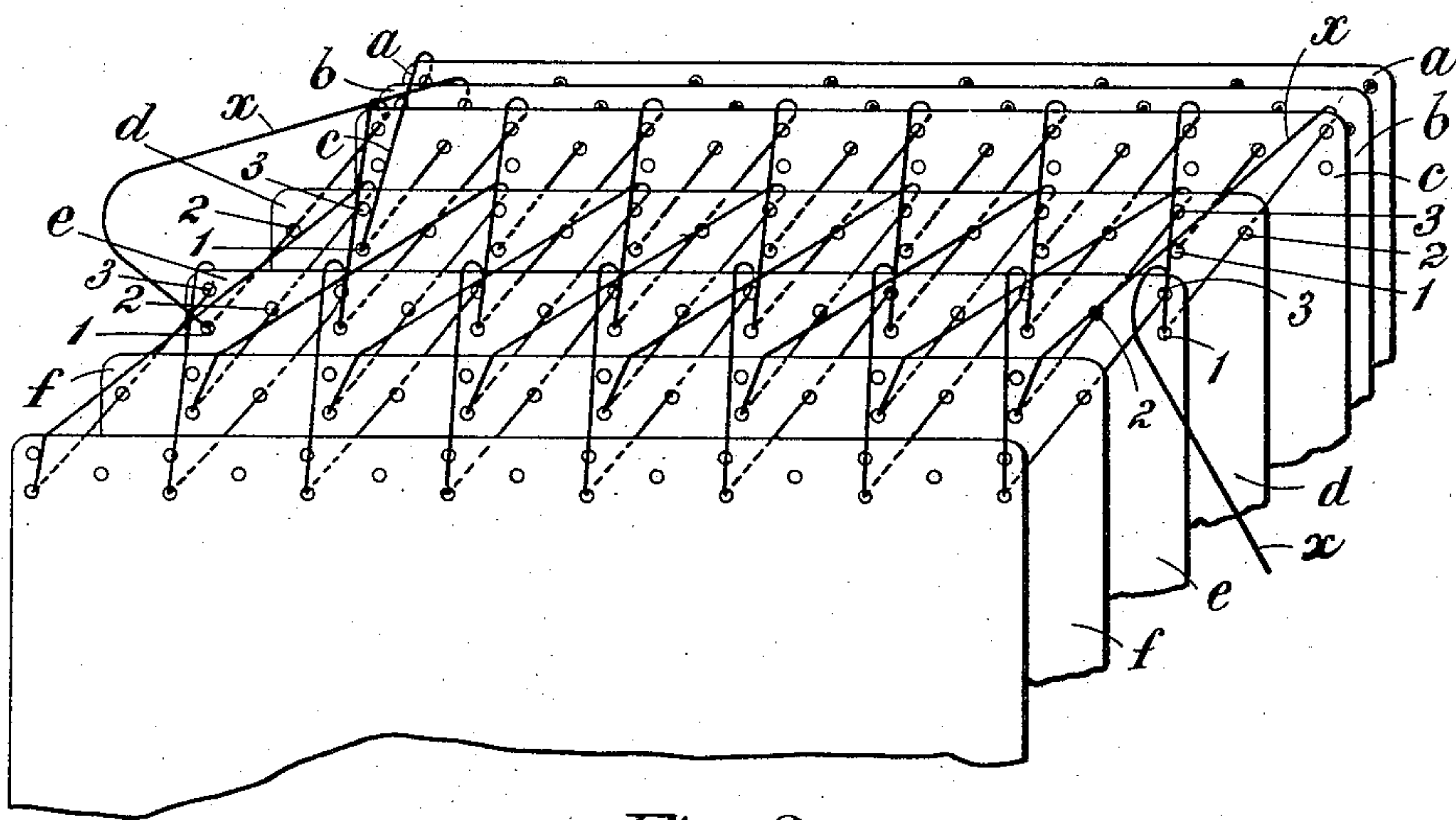
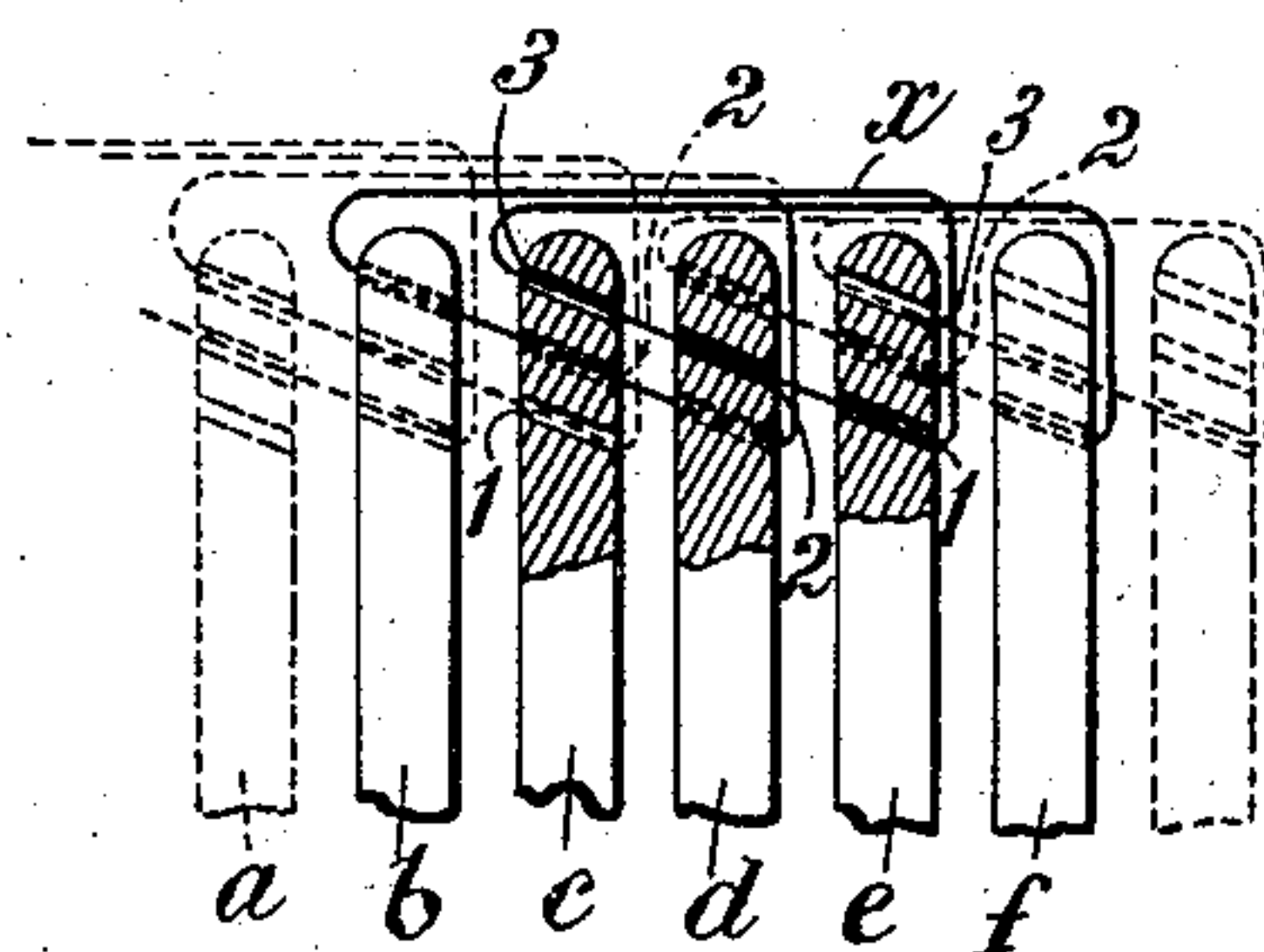


Fig. 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

CEDRIC CHIVERS, OF BATH, ENGLAND.

BOOKBINDING.

SPECIFICATION forming part of Letters Patent No. 767,262, dated August 9, 1904.

Application filed May 16, 1904. Serial No. 208,207. (No model.)

To all whom it may concern:

Be it known that I, CEDRIC CHIVERS, a subject of the King of Great Britain, residing at Bath, England, have invented a certain new and useful Improvement in Bookbinding, of which the following is a specification.

The invention relates to the binding of books, and is particularly applicable as a means of sewing books needing rebinding of which the sections have become loose and broken away in the fold or back.

The invention consists in sewing the sections together by stitches which enter the sides of each and pass through the next section and a third section in an outwardly-slanting direction, so that when each section is completely sewed or secured in place it is attached to the two next sections on both sides of it, excepting in the case of the two end sections at the beginning and end of the book, which are finished off in any convenient manner. Each section is sewed through three times before it is completely attached to its neighbors, the thread each time passing through a different row of holes, commencing with the bottom row, then an intermediate row, and finishing with the top row, as will be more clearly understood from the accompanying drawings, of which—

Figure 1 is a diagrammatic view in perspective of a number of sections, showing the passing and repassing of the thread there-through; and Fig. 2 is an end-view diagram, partly in section, showing the arrangement of the perforations in the sides of the sections and their upward direction.

a b c d e f g are a number of the sections of which the book is made up and which are preferably first prepared to receive the sewing-thread by being perforated along the sides adjacent to the back edge with three rows of holes 1 2 3, so arranged that the holes are alternately single and in pairs—that is, the holes of the top and bottom rows 1 and 3 are vertically over one another in each section, while the holes of the middle row 2 are in an intermediate position between each pair.

The sections are so placed for stitching together that in every other section—for instance, in *a c e g*—the outermost holes of the

rows are the pairs of holes in rows 1 and 3, while in the alternating sections *b d f* the outermost holes are the single ones in row 2, by which arrangement single holes come opposite to pairs in each adjacent section from end to end thereof, as shown in Fig. 1.

For clearness of explanation it may be assumed that sections *a b*, Fig. 1, are end sections which have been attached to each other by sewing through the sides in any convenient manner and the sections *c* and *d* have been partially attached thereto and to each other by the system of stitching hereinafter fully described and that a fresh section *e* is about to be added to *a*, *b*, *c*, and *d*. For this purpose the thread *x* is brought from section *b* over the sections *c* and *d* and is passed in at the lower hole of the left-hand end pair in row 1 of section *e* and upwardly through the end hole of the middle row 2 of section *d* and out through the upper hole of the end pair in row 3 of section *c*, when it is taken back obliquely over the top edges of the sections to section *e* again and enters the lower hole of the next pair in row 1, repeating its former passage in a fresh set of holes farther along the row each time from left to right of Fig. 1 until the row is complete, when a fresh section *f* is added, and the thread is brought over and again commences with the lower hole of the first pair in row 1 of the fresh section *f* and passes through the holes in the same order as before, but in the reverse direction—that is, from right to left of Fig. 1—until it arrives at the end of the section last applied, which operation is repeated until the book is complete.

It will be seen that the finish of a row of stitches to partially attach a fresh section in place through its lower row of holes 1 also completes the attachment through its upper row of holes 3 of the next section but one back, or the partial attachment of *e* through row 1 completes *c* through top row 3 and also fills up the middle row 2 of the intermediate section *d*, leaving the top row 3 of holes therein to be completed by the attachment of another section *f*. The last two sections, however, by this means would not be fully sewed, and if this is deemed necessary they

are stitched through in any convenient way, as in the case of the first two sections. By such a system of stitching, therefore, each section with the exception of the end sections, 5 as above described, is indirectly attached to all the rest and directly attached to the two next or adjacent sections on either side of it. For instance, *c* is attached to both *b a* on one side of it and *d e* on the other side, such an arrangement providing a means which will not break back of repairing books especially applicable for repairing the books of public libraries and like institutions, which are sub- 10 jected to rough and constant usage.

15 As stated, it is found convenient to first prepare the holes for the thread to pass through, and this is done by any usual stabbing or perforating machine, the needles of which are set at an angle or which holds the 20 sections at an angle to the needles while stabbing or perforating.

What I claim is—

1. A bookbinding comprising a series of sections and a stitching entering the sides of 25 each section and passing through the next and the third section in an outwardly-slanting direction so that the thread emerges be-

yond such third section, after which it again enters the first and repeats its former passage through the second and third sections, 30 but in a different spot, and is again reentered into the first.

2. A bookbinding comprising a series of sections, each one of which is provided with holes passing slantingly through the sides of 35 same and arranged alternately singly and in pairs, the latter being located one above the other with respect to the back of the section and adjacent sections having their holes alternating so that the single hole of one sec- 40 tion comes opposite the pair of holes of the adjacent section, and a stitching passing successively through the lower hole of one of the pairs, then through the single hole of the next section, and then through the upper 45 hole of the pair of the third section.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CEDRIC CHIVERS.

Witnesses:

ALLEN PARRY JONES,
A. KNIGHT CROAD.