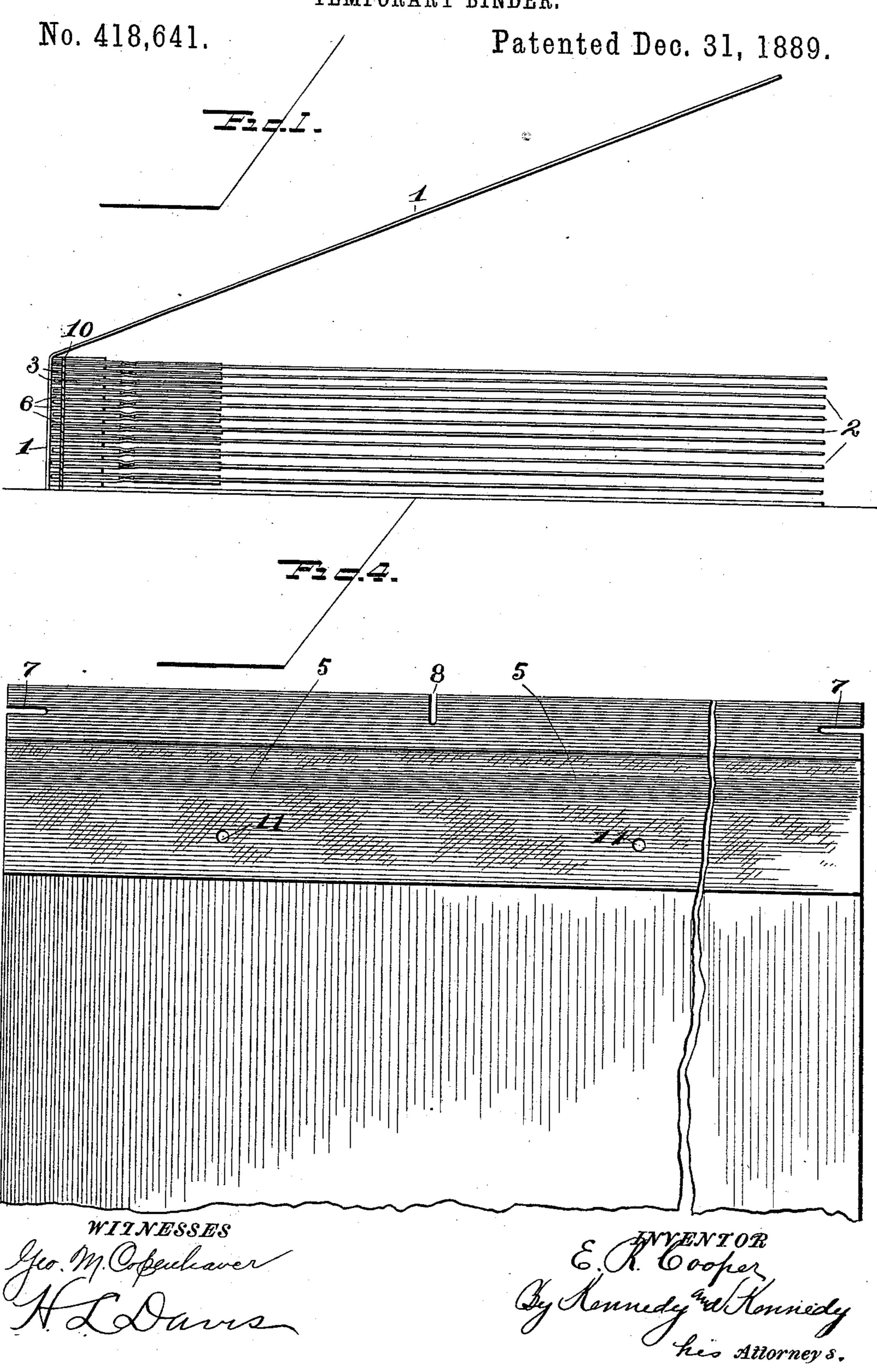
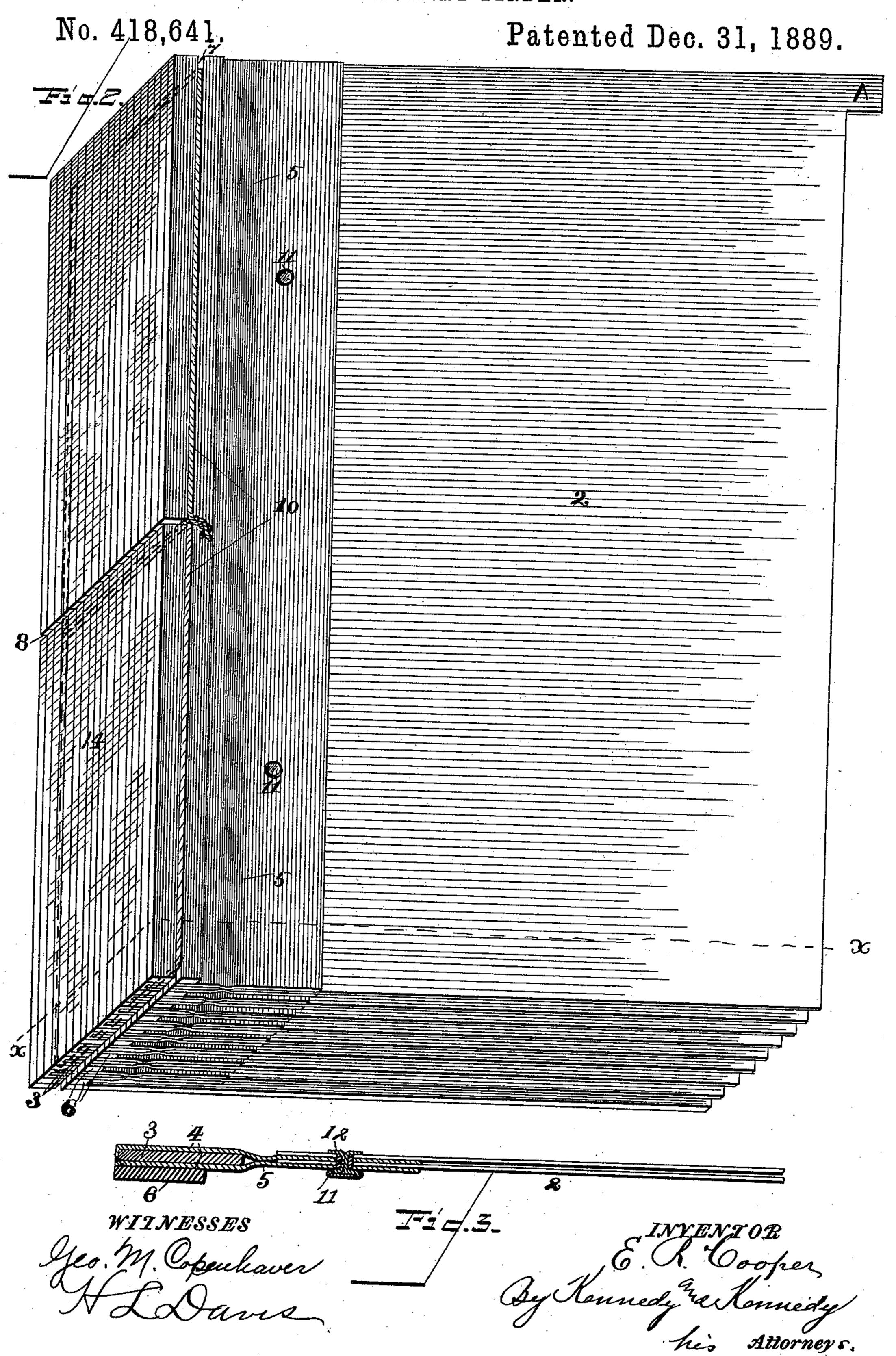
E. R. COOPER. TEMPORARY BINDER.



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United States Patent Office.

EDWARD R. COOPER, OF AUSTIN, ILLINOIS.

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SPECIFICATION forming part of Letters Patent No. 418,641, dated December 31, 1889.

Application filed April 6, 1889. Serial No. 306,180. (No model.)

To all whom it may concern:

Be it known that I, EDWARD R. COOPER, a citizen of the United States, residing at Austin, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Temporary Binders, of which the following is a specification.

My invention relates to certain new and useful improvements in temporary binders, to the objects being, first, to provide a device of this character whereby papers can be easily and securely inserted, and from which they can, when found convenient, be readily removed and others inserted without injury to the binder, and, second, to provide a binder of novel construction combining durability with the greatest degree of facility in its employment.

My invention relates to that class of bind20 ers in which leaves are bound in a back
thicker than the combined thickness of the
leaves to allow for expansion—that is, to permit papers to be inserted between the leaves—
so that when full the thickness of the front
25 of the book shall be the same as the back.

My device is designed more especially for the reception of freight and passenger tariffs, rates, sheets, classifications, and circulars employed in the railroad business, where it is found necessary at frequent intervals to issue new ones, and in which case the old ones are useless; hence it becomes useful to possess some means whereby, when these papers are issued, they can be readily placed in some convenient receptacle and as readily removed when new ones are issued to supersede them, and thus preserve said receptacle, which in most cases is displayed at railroad-stations and similar places of public resort.

The invention consists in details of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, which form a part of this specification, Figure 1 represents a view in end elevation of a device constructed in accordance with my invention. Fig. 2 represents a perspective view showing the back with the cover removed. Fig. 3 represents in section on the line x x of Fig. 2 a view of one of the leaves in detail, and Fig. 4 represents a plan view of the rear end of one of the leaves.

Similar numerals of reference indicate like parts.

1 represents the cover, within which the 55 parts are bound and protected.

In constructing my invention I form a solid back 14, of any desired thickness, as will be described.

2 represents the leaves of my temporary 60 binder, which may be of any desired number, and indexed by having their vertical edges cut away or otherwise.

3 represents stub-strips, to which the leaves are attached by a connecting-piece of fabric 65 4, in the following manner. The said connecting-pieces 4 are formed preferably of cloth; but any flexible material capable of continued use without wearing out will suffice.

A leaf 2 and a stub-strip 3 are arranged so 70 that two of their vertical edges are parallel and approximate each other, the proximity depending upon the size of the book to be formed. A connecting-piece 4, which has been previously treated with glue, paste, or 75 similar substance upon its inner surface, is now applied so that it passes around the rear edge of said strip and along its opposite sides and forward a suitable distance upon the rear end of the leaf. It is now firmly pressed 80 thereon, so as to adhere at every point. It will thus be seen that the stub-strip and leaf are securely fastened to each other, and also that a flexible joint or connection 5 is formed between them at the point between their 85 edges where the opposing portions of the connecting-piece 4 meet and adhere to each other.

The thickness of the stub-strip 3 is greater than that of the leaf 2; but to allow for a 90 greater space between the leaves I employ supplemental strips 6, which in binding are placed one between each stub, so that when the binder is made up it is provided with a solid back formed by the stubs and supplemental strips having leaves secured thereto by flexible joints or connections.

I have found that it is preferable to employ tar or straw board as the material forming these strips, although any suitable material can be employed.

When a sufficient number of stub-strips and leaves and supplemental strips are arranged, as described, to form a binder of

suitable thickness, they are glued at their rear edges, as is usual in book-binding; but to afford additional means of securing them together I form, preferably, two grooves 7 5 at their upper and lower ends, respectively, and a groove 8 at about midway the ends. in their rear edges, and pass a piece of cord or wire 10 through said grooves and around the edges, as shown. This, as will be readily 10 seen, forms a perfectly solid and durable back. The said grooves are preferably formed by sawing.

11 represents eyelets inserted at suitable points in the rear portions of the leaves, so 15 that they pass through the forward ends of the connecting-pieces, and thus form further means for securing the leaves to said pieces. The cover 1 is now applied in any suitable

manner.

12 represents paper-fasteners of the kind in ordinary use, which are passed through the eyelets from the under side and through the paper or sheet designed to be secured, and the points bent over, as shown in Fig. 3. 25 Consequently when one sheet is to be removed and another inserted it is only necessary to bend the points of the fasteners upwardly, remove the sheet and replace it by a new one, and bend the points of the fasteners 30 down again, as will be readily understood.

It is obvious that the form of eyelet and paper-fastener herein shown and described need not necessarily be employed, as other forms answering the same purpose can be 35 conveniently used in place thereof. It will also be understood that this device can be put to various uses not referred to in this specification—for instance, a "scrap-book"—in which case the insertions would be permanent, but 40 to which it would be applicable and still be within the scope of my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

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1. A binder comprising a solid back and leaves secured thereto by separate pieces of flexible material, said pieces of flexible material being permanently and rigidly secured to said back and to the leaves.

2. A binder comprising a solid back composed of separate pieces bound together and leaves secured to said back by means of separate pieces of flexible material attached to the

leaves and bound in with the pieces composing the back thereof.

3. A binder comprising a back composed of alternate stub and supplemental strips and leaves permanently secured to said stub-strips

by flexible joints.

4. A binder comprising a back composed of 60 alternate stub and supplemental strips and leaves permanently secured to said stub-strips by means of connecting-pieces secured, respectively, at their forward ends to the rear portions of the leaves and passing around 65 and secured to the corresponding stub-strips.

5. A binder comprising a back composed of alternate stub and supplemental strips and leaves permanently secured to said stub-strips by means of connecting-pieces secured, re- 70 spectively, at their forward ends to the rear portions of the leaves and passing around and secured to the corresponding stub-strips, the adjacent edges of said stub-strips and leaves being removed from each other, where-75 by a flexible joint is formed between them by the meeting surfaces of the connecting-pieces.

6. A binder comprising a solid back 14 and leaves 2 secured thereto, said back composed of alternate stub and supplemental strips 3 8c and 6, grooves 7 and 8, formed in said back, and a fastening cord or wire 10, passed through said grooves and around said back to

secure said strips together.

7. A binder comprising a back and leaves 85 secured thereto, said leaves provided with eyelets, whereby papers may be secured by passing paper-fasteners through said eyelets and

the paper to be fastened.

8. A binder comprising a back composed of 90 alternate stub and supplemental strips, leaves permanently secured to said stub-strips by means of connecting-pieces secured, respectively, at their forward ends to the rear portion of the leaves and passing around and se- 95 cured to the corresponding stub-strips, and eyelets inserted through said leaves and connecting-pieces, as described, whereby fasteners may be inserted through said eyelets to secure papers in place.

In testimony whereof I have signed this specification in the presence of two witnesses. EDWARD R. COOPER.

Witnesses:

HARRY C. KENNEDY, HARRY I. SCHINDLER.

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