(No Model.) 2 Sheets—Sheet 1.

W. M. KINNARD.

TEMPORARY BINDER.

No. 394,189. Patented Dec. 11, 1888.

Fig. 1.

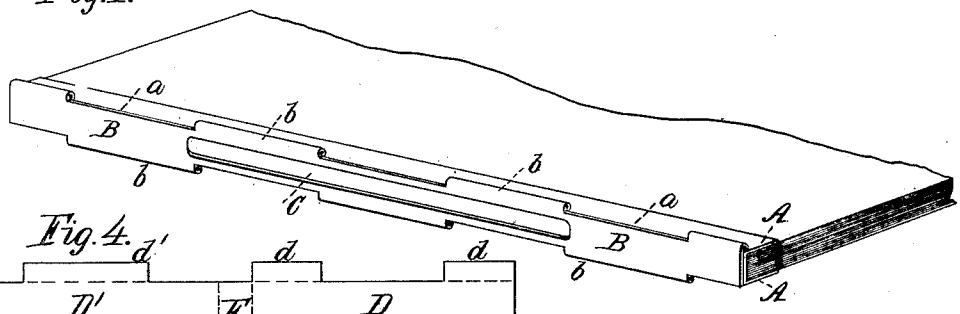


Fig. 4.

Fig. 2.

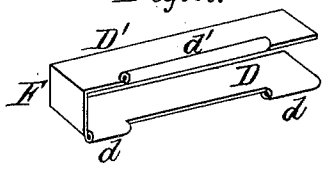


Fig. 3.

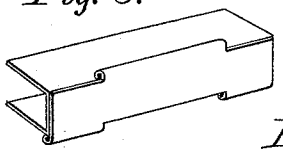


Fig. 5

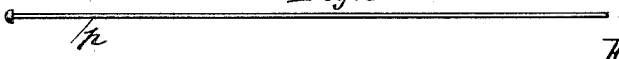
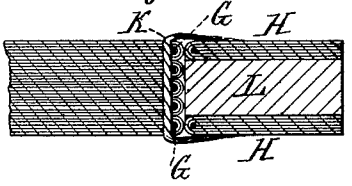
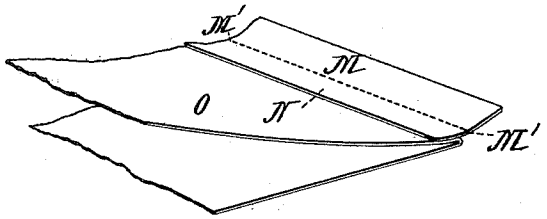


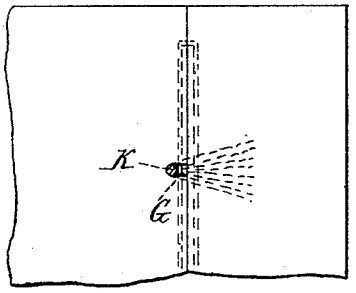
Fig. 6.



Fig. 7.







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(No Model.) 2 Sheets—Sheet 2.

W. M. KINNARD.

TEMPORARY BINDER.

No. 394,189. Patented Dec. 11, 1888.

Fig. 8.

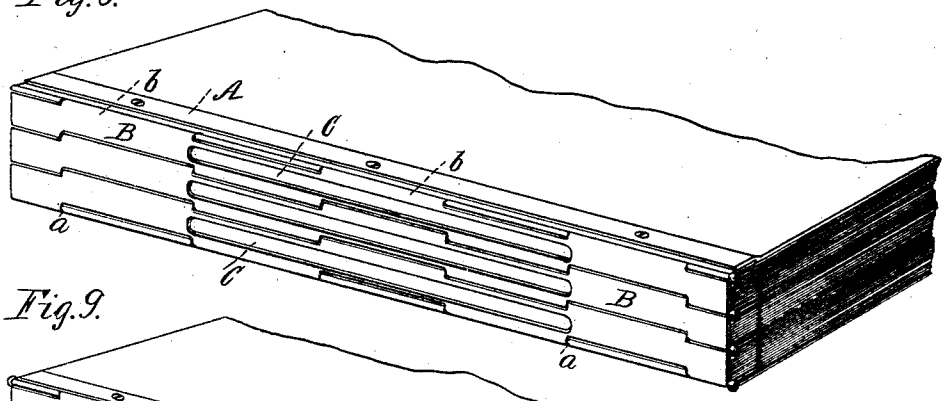


Fig. 9.

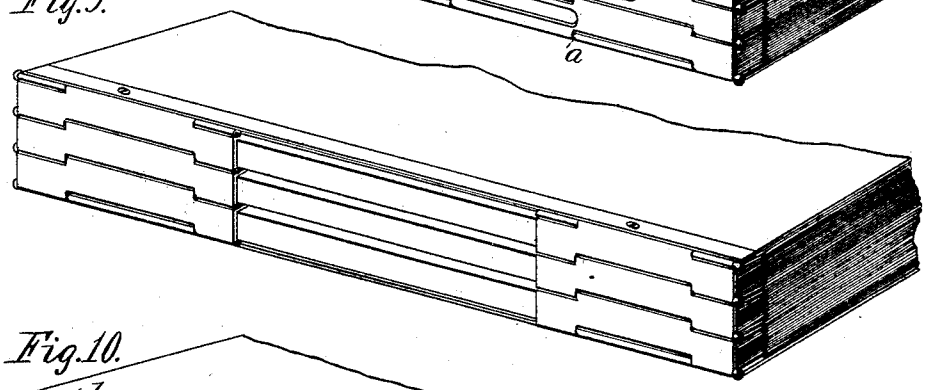
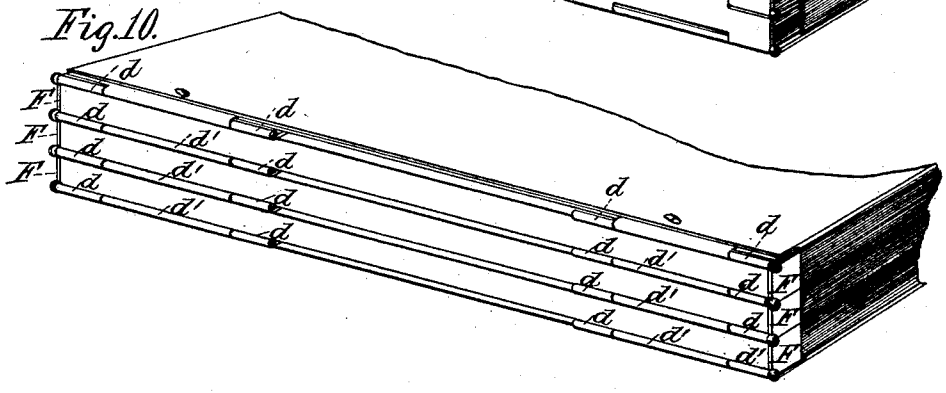


Fig. 10.



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UNITED STATES PATENT OFFICE.

WILL M. KINNARD, OF DAYTON, OHIO.

TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 394,189, dated December 11, 1888.

Application filed July 18, 1887. Serial No. 244,591. (No model.)

To all whom it may concern:

Be it known that I, WILL M. KINNARD, of Dayton, Montgomery county, Ohio, have invented a new and useful Improvement in Temporary Binders, of which the following is a full specification, reference being had to the accompanying drawings.

My invention relates to an improvement in binding for blanks, and has more especial reference to the binding together of legal blanks of different kinds, classified and indexed for convenient use, and so arranged that when any particular form of blank is exhausted a new set can be readily inserted and the entire book or package kept complete.

The invention consists in the novel construction of the binder, and also in the novel manner of securing the blanks together to form pads for use with said binder, all as hereinafter fully described, and clearly set forth in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of the back of a package or "pad" of blanks fastened together by my improved binding. Figs. 2 and 3 are perspective views of a modified form of the binding. Fig. 4 is a plan view of a piece of sheet metal cut or stamped to be folded into shape to form a binding. Fig. 5 is a pin used to hinge the various pads together. Fig. 6 is a sectional and perspective view illustrating the means of attaching double or sheet blanks to the binding-stubs. Fig. 7 is a sectional view of the manner of binding any number of one special kind of blanks together into a pad. Fig. 8 is a perspective view of a number of pads of different blanks hinged or bound together. Figs. 9 and 10 are also perspective views of the same with modified forms of binding.

In many State and county offices it is necessary to have on hand a supply of a great variety of forms of legal blanks, and it has been customary to have each form of blank fastened into bundles or packages by binding together their edges in any convenient manner, and these were known as "pads." It is difficult to fasten these blanks together into a pad in a secure and convenient way, and one feature of my invention relates to the improvement in fastening these blanks into pads. It is also very inconvenient to take care of the great variety of pads of legal blanks often necessary in an office, and to have them within convenient reach when required, and to remedy this they were often bound together in a large book. This, however, was expensive, and very frequently one form of blank would become exhausted before the others. It remained then to throw away the entire remainder of the book or begin having disconnected pads or packages of particular blanks. The large number of blank forms required in some offices made this a serious difficulty and inconvenience, as well as expense, to overcome which I have invented an improved mode of attaching the pads together, so that they form together a single bound book; but when any one pad is exhausted it can be readily replaced without affecting the others.

When single blanks are used—that is, consisting of a single piece of paper—small holes may be perforated across them near one edge, the narrow margin forming a stub from which the remainder of the sheet can be readily torn in the well-known and convenient method. I then clamp these studs between two narrow strips of metal or stiff material, holding them firmly with rivets, if necessary. The outer or back edges of these strips of metal are provided with hinges, so that any number of pads can be hinged together.

In Fig. 1 the stubs are shown embraced by a strip of metal, A A, folded or bent over them, and on the back of this is a strip of metal, B, with alternate portions of its edges *b b b* curled over to form hinges, the middle portions, C, being cut away to insert the title or description of the particular form or blank. In binding together a number of these pads they are placed together so that the curled portions or hinges of one correspond and fit with those of the next, as shown in Figs. 8, 9, and 10, when a pin, *p*, Fig. 5, is inserted through both, forming a strong flexible hinge. By this means, when the book is opened at any particular point or blank, it lies perfectly flat and convenient for writing. When any one of the pads is exhausted, the pins connecting it with the others are withdrawn and a new pad inserted in its place. By this means

the book may be always kept supplied with a sufficient number of each form of blank. They are all bound together and are always at hand, instead of being scattered about the office.

An ordinary marginal thumb-index may be used, so that any particular form may be instantly found.

Instead of constructing the binding as shown in Fig. 1, I prefer to use the form shown in Figs. 2 and 4, which extends only part way across the back and may be very economically made. I first stamp a piece of sheet metal in the form shown in Fig. 4. The edges *d d* are curled over, as shown, to form hinges, and the ends D D′ bent round until they are parallel, as in Fig. 2, leaving the portion F as wide as the proposed pad or package of blanks is thick. Fig. 3 is a short metal back or binding constructed with a closed end, as shown also in Fig. 10.

In order to make the book or pads more flexible and insure their lying perfectly flat when opened, I prefer to bind the blanks into pads with hinged stubs, as shown in Fig. 7. A number of sheets of paper or blanks are folded over, as shown at G, forming a signature. An equal number of narrow strips are folded, as shown at H, to form stubs. The signatures and stubs are then stitched together, forming a hinge or flexible joint, so that the stubs or signatures will lie flat at any ordinary angle. The blank may be perforated with small holes just below the point where it is hinged to the stub, so as to be readily torn off or separated when used. Where a considerable number of these signatures are bound together in a single pad, the stubs become so thick as to make the back of the book or pad clumsy and awkward and prevent its lying flat. To remedy that I omit the stubs to some of the inner signatures and insert in their place a backing of straw-board or any convenient substance, as shown at L, Fig. 7, to which the outer stubs are firmly glued. I then bind all the signatures to the outer stubs by the cord K, whose ends may be spread out and glued to the stubs, as shown, or fastened in any convenient manner. By this means the back of the book may be made as thin as desired.

Where double or sheet blanks are used, it is of course desired to tear off the whole sheet, consisting of two folios, without separating them. I therefore attach the sheet to the stub in the manner shown in Fig. 6.

The stub M is made of sufficient width, and near the edge is a row of small holes, M′, leaving a narrow margin, N. To this margin is glued the sheet O at or near the fold or crease. When the sheet is pulled out, the stub is torn across the row of holes, the margin being torn off with the sheet, the sheet itself remaining untorn.

By my improvements above described the various forms of the blanks are conveniently bound together, and they are so flexible that they are always ready for use without being separated from the book. Any number of sets or pads of different blanks or forms may be bound together, and when any one set is exhausted it may be readily, quickly, and cheaply replaced.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As a binding for blanks, the combination, with a pad of blanks, of a metal binding-strip bent to embrace the back and upper and lower portions of the pad, a hinge-strip secured to the back of the binding-strip and having alternate portions of its upper and lower edges curled over to form hinges, and a pin for securing one hinge-strip to another, substantially as described.

2. The combination, with a pad of blanks, of a metal binding-strip bent to embrace the back and upper and lower portions of the pad, and having an elongated opening in the back, a metal hinge-strip with a like elongated opening secured to the back of the binding-strip and having alternate portions of its upper and lower edges curled over to form hinges, and a pin for securing one hinge-strip to another, substantially as described.

3. The combination, with a pad of blanks, of a metal binding-strip bent to embrace the back and upper and lower portions of the pad, a metal hinge-strip secured to the binding-strip and bent so that one part will lie in a horizontal plane above the other part, with sufficient space between the two parts for the reception of the pad, and having alternate portions of its rear edges curled over to form hinges, and a pin for securing one hinge-strip to another, substantially as described.

4. In combination with a binder of the class described, a pad consisting of a number of signatures, each signature comprising a number of sheets of blanks folded in the middle, a series of stubs, each made up of narrow strips of paper folded in the middle, said strips equaling in number the number of sheets of paper in each signature, and a stitching-thread uniting the blanks and stubs, substantially as described.

5. In combination with a binder of the class described, a pad consisting of a number of signatures, each signature comprising a number of sheets of blanks folded in the middle, a stub made up of an upper and a lower signature of narrow paper strips, and an intermediate filling of straw-board or other suitable material, and a stitching-thread uniting the blanks and stub, substantially as described.

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Witnesses:
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