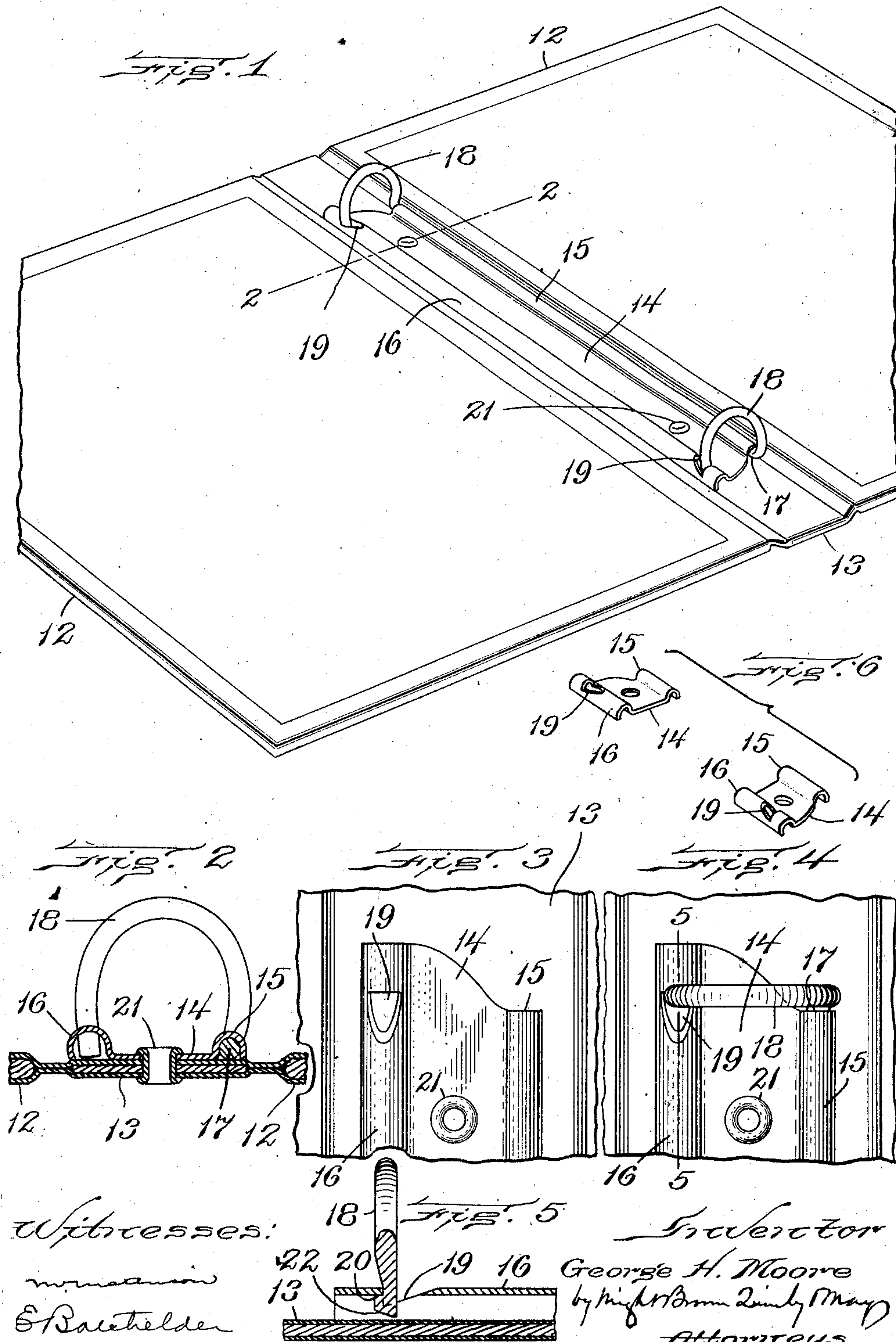


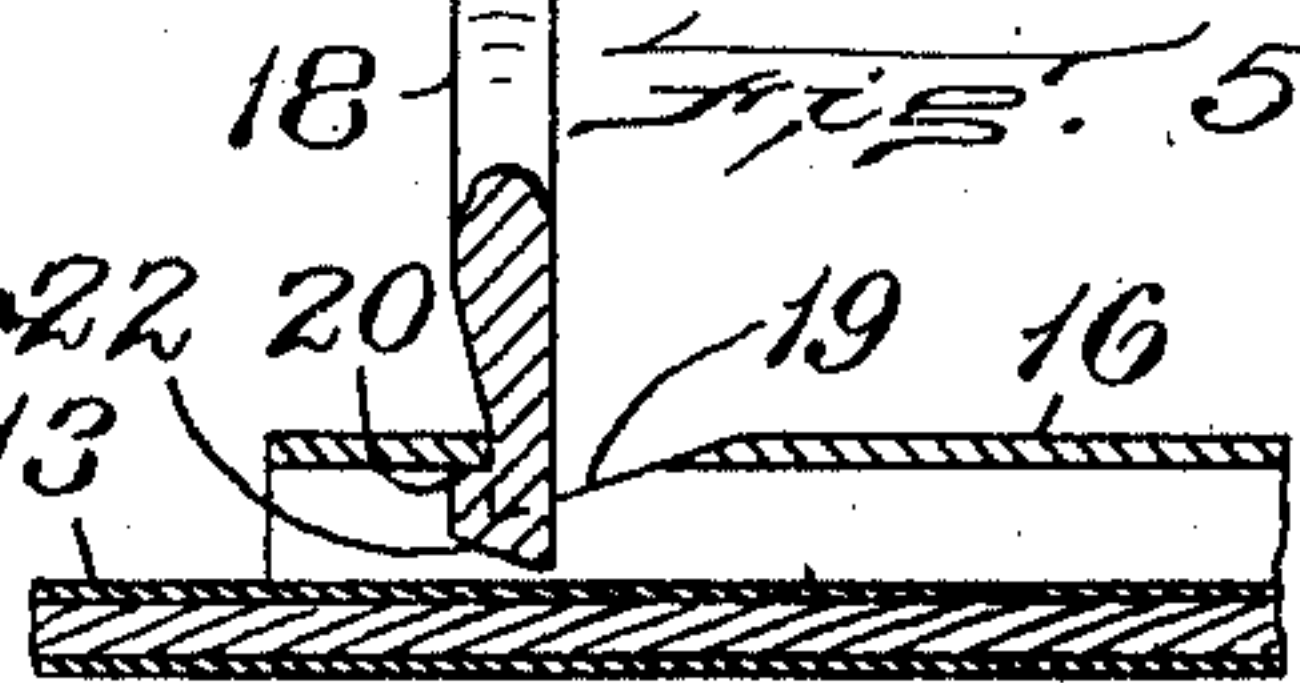
G. H. MOORE.
 TEMPORARY BINDER.
 APPLICATION FILED JUNE 5, 1907.

905,559.

Patented Dec. 1, 1908.



Witnesses:
 E. R. Schelder



Inventor
 George H. Moore
 by *Wm. Brown & Co.*
 Attorneys.

UNITED STATES PATENT OFFICE

GEORGE H. MOORE, OF BOSTON, MASSACHUSETTS.

TEMPORARY BINDER.

No. 905,559.

Specification of Letters Patent.

Patented Dec. 1, 1908.

Application filed June 5, 1907. Serial No. 377,331.

To all whom it may concern:

Be it known that I, GEORGE H. MOORE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Temporary Binders, of which the following is a specification.

This invention relates to devices for temporarily holding loose sheets in a cover composed of side pieces and a back to which the side pieces are flexibly connected, the leaves being detachably secured to the back so that they can be manipulated like the pages of a book.

The invention relates particularly to that class of temporary binders in which a rock shaft is journaled in bearings on the back or connecting portion of the cover, and is provided at its ends with hooks adapted to pass through orifices formed for their reception in the leaves or sheets, the back being provided with catches to engage said hooks, and hold them in position to secure the leaves.

The invention has for its object to provide a simple and efficient device of this character, in which the rock shaft, the catches which engage its hooks, and the sockets and bearings in which the rock shaft is journaled, are adapted to be secured to the back of the cover after the latter has been completed, so that no operations incidental to the manufacture of the cover are required to hold the rock shaft and catches in place.

Otherwise stated, the object of the invention is to reduce to the minimum the expense of time and labor involved in manufacturing a temporary binder of the class above referred to, and to produce a device of the utmost simplicity, strength and durability.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification,—Figure 1 represents a perspective view of a temporary binder embodying my invention. Fig. 2 represents a section on line 2—2 of Fig. 1. Fig. 3 represents a top plan view of a portion of the sheet metal plate which forms the bearing for the rock shaft and the catches for the hooks, said plate being disconnected from the cover. Fig. 4 represents a view similar to Fig. 3, showing a portion of the rock shaft and one of its hooks engaged with the plate. Fig. 5 represents a section on line 5—5 of Fig. 4. Fig. 6 represents a per-

spective view showing the plate hereinafter referred to, made in two parts or sections.

The same letters of reference indicate the same parts in all the figures.

In the drawings 12 12 represent the lids or sides, and 13 represents the connecting portion or back with which the sides 12 are flexibly connected in the usual or any suitable manner, the parts 12 12 and 13 constituting a cover such as is ordinarily made by processes and methods commonly practiced by book binders.

Upon the inner side of the back 13 is placed a sheet metal plate, comprising a flat body portion 14 and longitudinally extending bosses or beads 15 16 formed by embossing the edge portions of the plate, the said beads presenting semi-cylindrical external surfaces which project from the back 13. The outer edges of the bosses are substantially flush with the inner side of the body portion 14 of the plate, so that they bear against the back 13, the bosses and the back collectively forming longitudinal sockets. The socket formed by the boss 15 receives the rock shaft 17, on the end portions of which are formed the hooks 18 which are adapted to engage perforations formed in loose sheets. The hooks 18 are formed to extend across the plate, and enter orifices 19 formed for their reception in the boss 16. One side of each hook is provided with a notch which forms a shoulder 20 (Fig. 5) adapted to engage the portion of the boss 16 which forms one end of an orifice 19, the arrangement being such that when the outer end of the hook 18 is swung downwardly into the opening 19, the shoulder 20 will engage one end of the orifice, as shown in Fig. 5, the engaged end of the orifice constituting a catch, and the shoulder 20 of the hook snapping or springing into engagement with said catch by the resilience of the hook. The body portion 14 of the plate is united to the back 13 by fastening devices, which are preferably eyelets 21, the setting flanges of the eyelets being preferably arranged to bear upon the outer surface of the back 13, while the spread or upset ends of the eyelet tubes are upon the outer surface of the body portion 14 of the plate.

From the foregoing it will be seen that when the hooks 18 are swung over toward the boss 16, their shoulders 20 will spring into engagement with the portions of the boss 16 which form the ends of the orifices

19, the hooks being thus securely held in their leaf-securing position. When it is desired to remove the leaves, the hooks may be sprung out of engagement with their catches 5 and swung outwardly from the boss 16.

My invention is characterized chiefly by the sheet metal plate having the body portion 14 adapted to bear upon the inner side of the back 13, and to be secured thereto by 10 eyelets or other equivalent fastenings, and by the bosses 15 16 formed at opposite edges of the body portion of the plate. Said bosses not only provide a bearing for the rock shaft, and catches for the hooks, but 15 they furthermore strengthen and stiffen the sheet metal plate so that it is not liable to be bent crosswise. The body portion 14 of the plate being recessed or offset below the highest portions of the bosses, is enabled to have 20 a flat and extended bearing on the inner surface of the back, and to be secured thereto by fastening devices which are independent of the structure of the back. Hence the sheets or layers of which the sides 12 and 25 back 13 are formed, are adapted to be assembled, cemented together and dried, while held flat and under pressure, to form a complete cover before the operation of connecting the rock shaft and catches to the back. 30 Heretofore it has been necessary to utilize parts of the material of the back in securing the bearings and catches of the rock shaft to the back, an operation which involves a great deal more expenditure of time and 35 labor, and therefore entails more expense than is required in the production of my improved binder here shown, which is produced by simply securing to a cover that has been previously formed in a complete condition, the sheet metal plate having the bosses 40 and the rock shaft engaged with one of the bosses. The hooks 18 have beveled outer ends 22 which bear upon the crown of the arched rib 16 in close proximity to the apertures 19 when the hooks are moved toward 45 their locking position. The beveled ends 22 cause the deflection of the hooks into the apertures 19 when said ends are pressed against the rib 16. The arched form of the rib enables it to resist the pressure of the ends of 50

the hooks against it without yielding or bending inwardly. The plate may be made in two independent parts or sections, each having one of the apertures 19, as shown in Fig. 6, without departing from the spirit of 55 my invention.

I claim:

1. A device of the character stated comprising a back, a sheet metal plate having an intermediate portion secured to said back 60 and provided with longitudinal ribs one of which is formed with catches, and a rock shaft journaled beneath the other rib and having shouldered hooks to engage said catches, the inner sides of said ribs being integral with and rising directly from the intermediate portion which is secured to the back. 65

2. A temporary binder comprising a cover having side pieces and a connecting back portion, a sheet metal plate supported upon 70 the inner side of the back, and longitudinal semi-cylindrical ribs offset from the body portion, and located at opposite edges thereof to form longitudinal sockets, a rock shaft journaled in one of said sockets, and having 75 shouldered hooks, the other rib having catches and forming arched hook-engaging members, and fastening devices securing the body portion of the plate to the back.

3. A temporary binder comprising a cover 80 having side pieces and a connecting back portion, a sheet metal plate composed of a flat body portion bearing upon the inner side of the back, and longitudinal semi-cylindrical arched ribs offset from the body portion 85 and located at opposite edges thereof, one of said ribs having apertures in its crown portion, a rock shaft journaled in the other rib and having shouldered hooks provided with beveled outer ends, each adapted to bear 90 upon and be deflected by the crown of the apertured rib into one of said orifices, the arched form of the rib supporting it against the pressure of the hook.

In testimony whereof I have affixed my 95 signature, in presence of two witnesses.

GEORGE H. MOORE.

Witnesses:

C. F. BROWN,
E. BATCHELDER.