(No Model.)

J. DORNBIRER.

TEMPORARY BINDER.

No. 444,695. Patented Jan. 13, 1891.

Fig. 1

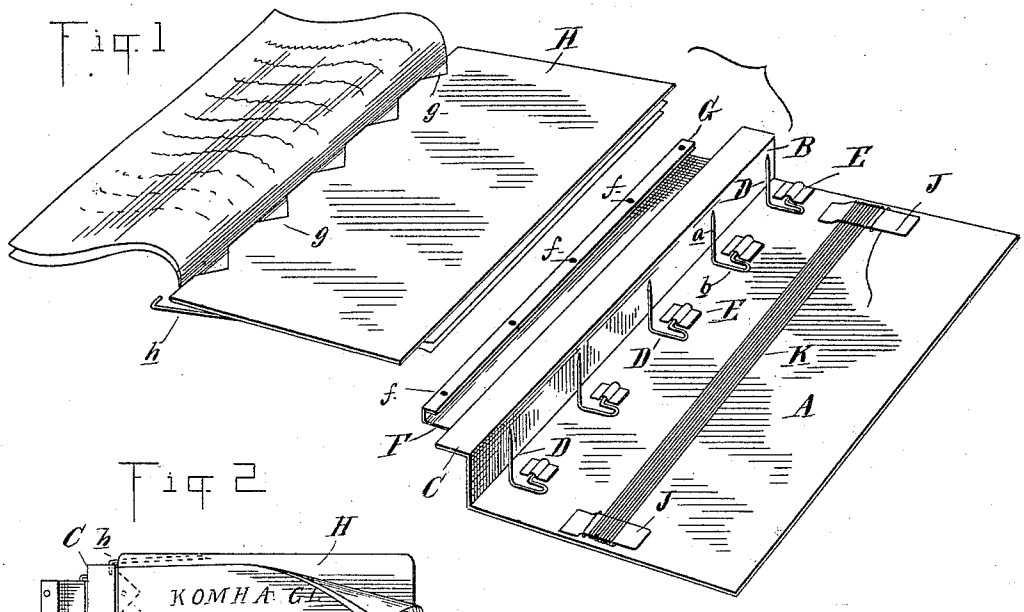


Fig. 2

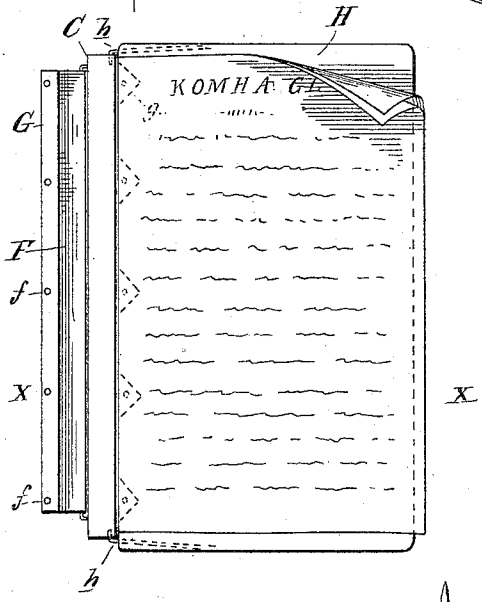


Fig. 3

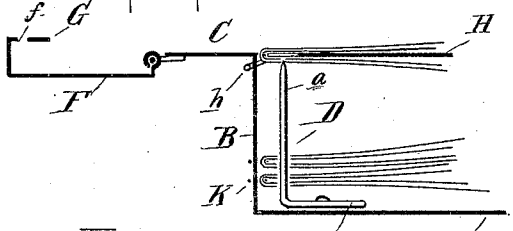


Fig. 4

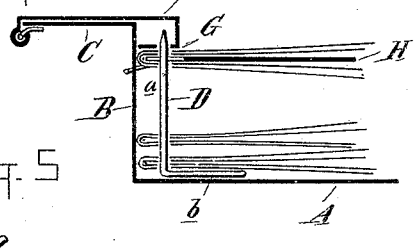
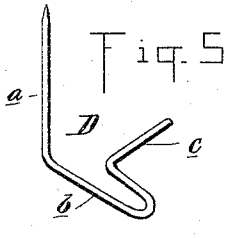


Fig. 5



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JACOB DORNBIRER, OF SANDUSKY, OHIO.

TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 444,695, dated January 13, 1891.

Application filed March 10, 1890. Serial No. 343,347. (No model.)

To all whom it may concern:

Be it known that I, JACOB DORNBIRER, a citizen of the United States, residing at Sandusky, in the county of Erie and State of Ohio, have invented certain new and useful Improvements in Temporary Binders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in temporary binders; and the invention consists in the peculiar construction and arrangement of parts, as more fully hereinafter described and claimed.

In the drawings which accompany this specification, Figure 1 is a perspective view of the parts. Fig. 2 is a plan view; Fig. 3, a horizontal section through Fig. 2, showing locking-bar in its open position; and Fig. 4 is a similar view with the bar in its locked position. Fig. 5 is a detached perspective view of one of the binding-thorns.

A is a stiff cover, preferably made of sheet metal, having one edge bent to form the back B and flange C.

D are removable binding-thorns, which are preferably made, as shown in the drawings, of a piece of wire sharpened at one end, having a vertical portion *a*, foot *b*, and shank *c*.

E are sockets soldered or otherwise secured to the cover A and adapted to receive the shank *e* of the thorns D and hold said thorns in position by frictional engagement.

F is a locking-bar hinged at one edge to the flange C and adapted to fold over the same. This bar is provided with the flange G, having suitable apertures *f*, corresponding in number to the thorns D, and in which said thorns are adapted to be engaged in the closed position of the bar.

H is a gage-plate, preferably made of sheet metal, having notches *g* on one edge and suitable spring-hooks *h*, adapted to engage over the back B in the operation of the device, as more fully hereinafter described.

J are ears secured at one edge to the cover A, on which a suitable amount of binding-cord K may be wound.

In practice the parts operate as follows: The locking-bar being in its open position, as shown in Figs. 1, 2, and 3, the operator first places the gage-plate H within the fold of the paper he wishes to place in the file, thus engaging the hooks *h* over the back B. He next turns down the locking-bar. It will be seen that in this position the fold or binding edge is kept in close contact with the back B, and as the notches *g* correspond in number and position to the thorns D the latter are free to perforate the paper when the bar is closed down upon them. When a poor quality of paper is used, instead of depending upon the thorns D for the securing of the paper, it may be found desirable to use in addition the binding-cord, a suitable quantity of which is always at hand on the ears J. This cord may be placed in the fold with the plate H and afterward wound around the back B. Whenever it is desired to remove the papers from the file, as at the end of a year, it may be done by simply opening the bar F, after which the thorns are free to be disengaged from their sockets E by sliding the bound numbers from the cover. In so doing the thorns are left sticking in the perforations in the papers and may be removed one at a time and a binding-cord substituted. Where the cord K has been used, it will be necessary to cut it across the back before the papers can be removed; but the ends may then be knotted or secured to the cords substituted for the thorns, thus giving additional strength to the permanent binding. When the gage-plate is not in use, it may be placed beneath the papers next to the cover and secured in that position by the hooks *h*.

Another advantage of the flange C is to form a convenient hand-hold for the reader while using the file.

What I claim as my invention is—

1. The combination, with the cover provided with the thorns and back of the cover, of the gage-plate having notches corresponding with the thorns, and hooks secured to said gage-plate and adapted to engage with the back of the cover, substantially as described.

2. The combination, with the cover provided with the thorns and the back of the cover, of the gage-plate adapted to engage in the folds of the paper and made of a size to project beyond the upper and lower edge of the paper, the spring-hook secured to said projecting edges, and the flaring notches formed on the inner edge of said gage-plate and

corresponding with the thorns, substantially as described.

3. In a temporary binder, the combination, with the cover and a back formed integral therewith, having an outward-projecting flange forming a hand-hold, of thorns detachably secured in proximity to said back and having shanks parallel therewith, substantially as described.

4. In a temporary binder, the combination of the cover A, back B, the outwardly-projecting flange integrally formed therewith, the locking-bar hinged to said flange and provided with apertures *f*, and the thorns D, secured to the cover, substantially as described.

5. The combination, with a cover, of the thorns provided with the upright portions, the foot formed thereon, and the shank slidingly engaging into sockets E, formed on the cover, substantially as described.

6. In a temporary binder, the combination of the cover A, back B and outwardly-projecting flange C integrally formed therewith, a locking-bar hinged to said flange and provided with the apertures *f*, and the thorns D, secured to the cover, and gage-plates H, provided with spring-hooks *h* and flaring notches *g*, all arranged to operate substantially as described.

7. The combination, with the cover A, provided with the back B, of thorns detachably secured in sockets to said cover a short distance from said back, said thorns having a vertical portion *a*, foot *b*, and shank *c*, adapted to be engaged in said sockets, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 10th day of February, 1890.

JACOB DORNBIRER.

Witnesses:
M. B. O'DOGHERTY,
P. M. HULBERT.