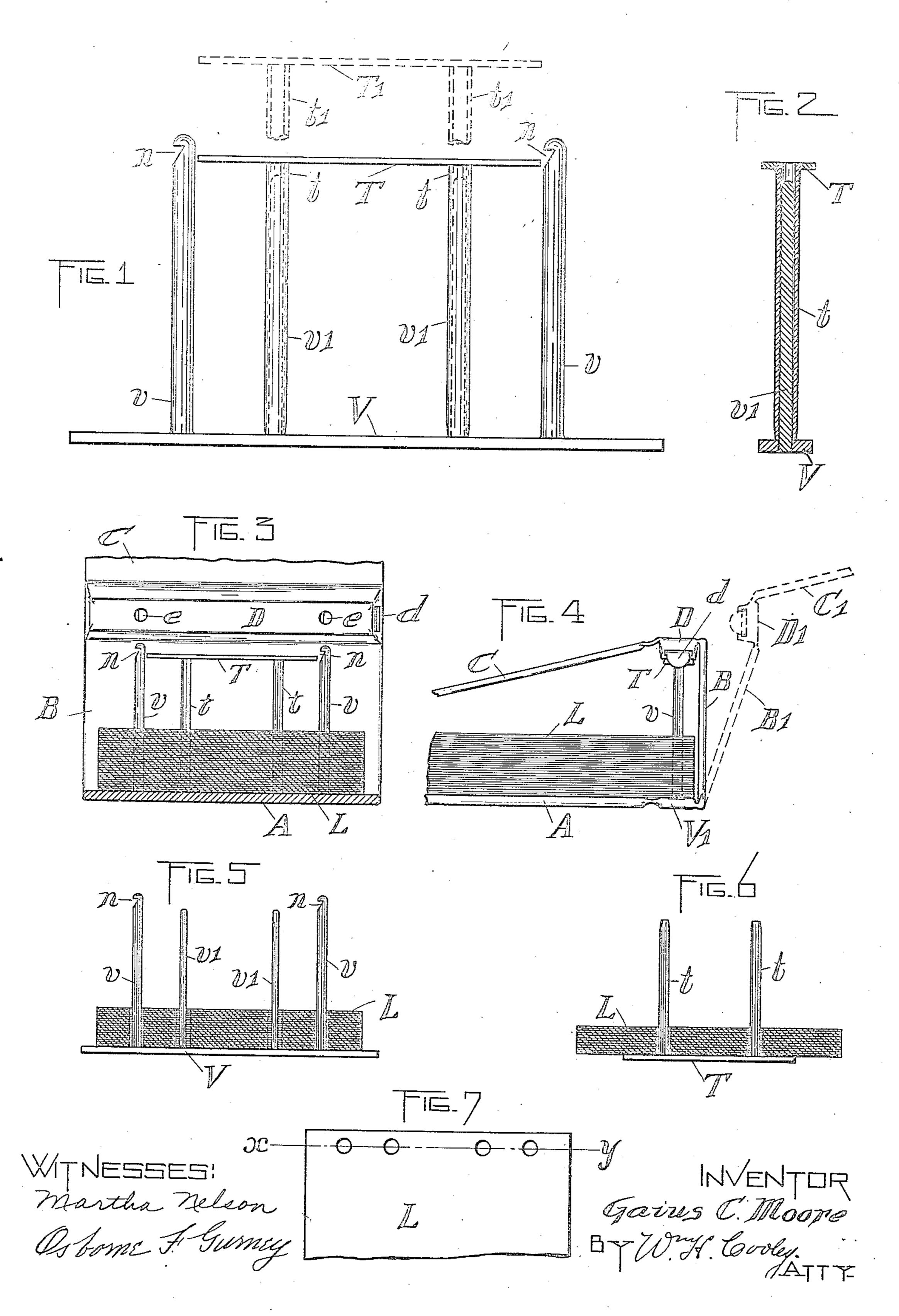
G. C. MOORE.

LOOSE LEAF BINDER.

APPLICATION FILED NOV. 29, 1909.

979,326.

Patented Dec. 20, 1910.



## UNITED STATES PATENT OFFICE.

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LOOSE-LEAF BINTER,

979,326

Specification of Letters Patent. Patented Dec. 20, 1910.

Application filed November 29, 1909. Serial No. 530,308.

To all whom it may concern:

Be it known that I, Gaius C. Moore, a citizen of the United States, and a resident of Rochester, in the county of Monroe and 5 State of New York, have invented a new and Improved Loose-Leaf Binder, of which

the following is a specification.

This invention, while applicable to many forms of loose leaf binders, is more espe-10 cially designed for that class of loose leaf binders in which cover leaves are flexibly connected each to a different connecting piece and both such connecting pieces flexibly united to a common back piece and in 15 which also one of the connecting pieces carries impaling posts for receiving the leaves. while the other connecting piece carries means for releasably engaging the free ends 20 connecting piece and extending upwardly to use in the binder. through the leaves in the binder, the object being to provide a construction permitting the ready removal of any desired number of the leaves from the binder and holding them 25 in alinement while thus removed in order to insert in or remove from the binder any desired leaf located at any point therein and that by means of mechanism in no way engaged by the regular impaling posts carried 30 by the lower connecting piece for holding the posts carried by the removable plate in alinement independently also of the leaves in the binder.

In carrying out my invention I prefer to 35 make the impaling posts carried by the removable plate tubular and they may be of any desired length extending downwardly through openings therefor in the leaves to the lowest point where it is desired to re-40 move any leaf from the binder; such tubular posts are arranged to engage over and be firmly held in proper alinement by rods engaging therein and carried by the lower connecting piece; such rods may extend up-45 wardly any desired distance and the tubular posts may be of any desired length permitted by the locking mechanism for holding the cover parts of the binder in place. whereby such posts are held in alinement in-<sup>50</sup> dependently of the other impaling posts and also independently of the holes in the leaves, thus removing the strain from the leaves when the binder is being handled.

The accompanying drawings illustrating my invention are as follows;--

Figure 1 shows, in elevation, the impaling post carrying plates of such binder and in dotted line the removable plate as partially removed, while Fig. 2 shows a sectional view through the center of one of the tubular im- 60 paling posts. Fig. 3 is a view of the completed binder from the front edge partially opened and with the locking mechanism disengaged. Fig. 4 shows the binder in end view; with the parts shown in dotted line in 65 the position indicated in Fig. 3. Figs. 5 and 6 show the plates after the removal of the removable plate with part of the leaves removed therewith, the leaves being shown in vertical sectional views taken on the line 70 x-y of Fig. 7. Fig. 7 is a plan view of of the impaling posts carried by the other part of the leaves having openings adapted

> Similar letters refer to similar parts throughout the several figures of the draw- 75

ings.

Referring to the drawings,—V is the bottom plate carrying the impaling posts v and bound into the connecting piece V<sup>1</sup> in the usual way.

A is the lower cover plate; V<sup>1</sup> is the connecting piece flexibly connected thereto and

also to the back piece B.

D is the upper connecting piece flexibly connected to the cover C and to the back 85 piece B. The connecting piece D carries spring actuated locking mechanism d for engaging the notches n in the upper ends of the impaling posts v which are inserted in the holes e therefor in the assembled con- 90 necting piece D. The plate V also carries rods  $v^1$  adapted to engage within the tubular posts t carried by the removable plate T.

L are the leaves in the binder.

In using a binder made in accordance with \$5 my present invention the parts are normally locked in the position seen in Fig. 4, and when it is desired to remove any particular leaf from the binder, the locking mechanism d is actuated to disengage the connect- 100 ing piece D and the back B, connecting piece D and cover C are turned back as seen in dotted lines at B<sup>1</sup>, D<sup>1</sup> and C<sup>1</sup> respectively, then the plate T may be removed with any desired number of the leaves L impaled on 105 and held in alinement on the tubular posts t

carried thereby. The plate T and posts t are shown in dotted lines in Fig. 1 at T¹ and t¹ as partly removed, the leaves are separated, either just above or below, the leaf to be inserted or removed, and all the leaves above the point of separation are removed together with the plate T and the posts t carried thereby. They may be laid down thereafter, as indicated in Fig. 6, and the uppermost leaf on either section removed as desired, or leaves may be inserted, and the parts thereafter reassembled.

It is believed, from the foregoing description, that the construction, method and use of my binder is sufficiently clear to call for

no further explanation herein.

What I claim is:

1. In a loose leaf binder, in combination with the cover having a base member and 20 impaling posts carried thereby and means for releasably engaging the free ends of the posts for holding the binder closed, a removable plate carrying two tubular posts and means independent of the leaves in the 25 binder or such first named impaling posts for holding such plate and tubular posts carried thereby properly alined comprising rods engaging within such tubular posts, such rods extending upwardly from the base 30 member carrying such first named impaling posts and parallel therewith, such cover adapted, when the binder is opened, and such rods and such tubular posts engaging thereover-spaced apart, to permit the en-35 gagement between such rods and between

such tubular posts of the leaves at their back edges by the hand or fingers of the operator in removing a portion of the leaves from the binder together with such plate and tubular

posts carried thereby.

2. In a loose leaf binder, in combination with the cover having a base member and impaling posts carried thereby and means for releasably engaging the free ends of the posts for holding the binder closed, a remov- 45 able plate carrying two tubular posts and means independent of the leaves in the binder or such first named impaling posts for holding such plate and tubular posts carried thereby properly alined comprising 50 rods engaging within such tubular posts, such rods extending upwardly from the base member carrying such first named impaling posts and parallel therewith, such cover adapted, when the binder is opened, and such 55 rods and such tubular posts engaging thereover spaced apart, to permit the engagement between such rods and between such tubular. posts of the leaves at their back edges by the hand or fingers of the operator in re- 60 moving a portion of the leaves from the binder together with such plate and tubular posts carried thereby and leaves having openings therein adapted to receive such impaling posts and such tubular posts.

GAIUS C. MOORE.

Witnesses:

Martha Nelson,
Osborne F. Gurney.

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