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BINDER AND TRANSFER DEVICE.
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2 SHEETS—SHEET 1.

Fig. 1

Fig. 2

Fig. 3

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George H. Jenkins, of Oak Park, and Michael N. Murphy, of La Grange, Illinois.

Binder and Transfer Device.

1,218,202.


To all whom it may concern:

Be it known that we, George H. Jenkins and Michael N. Murphy, citizens of the United States, residing at Oak Park and La Grange, respectively, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Binder and Transfer Devices, of which the following is a specification.

10. This invention relates to a temporary binder for loose leaves, to a permanent binder for the same, and to the means employed for effecting a transfer from the one binder to the other.

15. Among the particular objects of our invention is the construction of a binder which is simple and inexpensive, and expeditious to handle; and a device of the kind described which will fulfil its purposes in a highly satisfactory and efficient manner.

20. The invention further consists in other features of construction and combinations of parts as will hereinafter appear.

In the drawings:

25. Figure 1 is a side elevation of a binder embodying our invention showing one of the temporary covers removed from operative position, the remaining elements appearing in proper relation to effect a transfer of leaves;

30. Fig. 2 is an end elevation of what is shown in Fig. 1, a portion being broken away and shown in section;

35. Fig. 3 is a fragmentary end elevation of leaves bound between permanent covers with the backing not yet applied in place;

40. Figs. 4, 5, and 6 are detail views of another form of locking connection between the covers;

45. Figs. 7, 8, and 9 are detail views of a still further modification of locking connection;

50. Fig. 10 is a detail view of another modification of locking connection; and

55. Fig. 11 is a detail showing the manner in which one of the covers is preferably secured in place.

In carrying into effect our invention, we contemplate the use of a pair of covers similar in many respects to those commonly used in connection with loose leaves. The binding means for the leaves so held in place is here represented as consisting of a pair of posts, which may, however, be more or less in number, and of integral or sectional construction as preferred. In the course of business operations, it is customary to transfer the leaves in bound form to permanent covers to be filed away. It is to reduce the relative high cost and laborious process of effecting such a permanent transfer that our present invention is chiefly useful.

As appears best in Fig. 1, we have illustrated a pair of temporary covers 13 and 14 each having a binding section 15 and 16 respectively. The cover 13 is capable of removal from the connecting means between the covers, here shown as posts 17, screw-threaded to receive a nut or cap 18 for maintaining the parts in assembled relation. The posts 17 are each secured to the binding section 16 of the cover 14, as best shown in Fig. 2, through the instrumentality of a plate 19 joined to the post at its base, and secured preferably within a recess or countersunk portion 20, by means of screws 21, 75 or other equivalent means.

At the time the covers 13 and 14 are put into use one of the permanent covers 22 is laid in position over the posts 17, as shown in Figs. 1 and 2. A flexible backing 23 to be used only at the completion of the binding operation is folded away, as shown in Fig. 1, the manner in which said backing is used being clearly set forth and disclosed in certain other applications now filed by George H. Jenkins, one of the inventors herein. The permanent cover 22 having been placed in position, as shown, the leaves 24 are laid in place upon the posts, and added to from time to time as necessary. The cover 13 protects one side of the stack of leaves by being secured in place upon the posts 17 through the instrumentality of the nut 18. It is only at the time that a transfer of the contents of the binder is desired that the cover 13 is removed, and the second permanent cover 25 is secured in place, as shown in Fig. 1.

After the leaves 24 are compressed between the covers 22 and 25 by means of the posts 17 and screw member 15, the screws 21 are removed from the binding section of the cover 14, thereby permitting the plate 19 to be detached therefrom. Preferably a recess or countersunk portion 26 is formed in the binding section of the cover 22, occupying a corresponding and registering position to the recess 20, so that the plate 19
may seat within said recess and not substantially obstruct or project above the surface of the cover 22.

The nut 18, as best shown in Fig. 11, is preferably provided with slots 27 within which a suitable tool may engage to effect a tight compression of the leaves between the permanent covers 22 and 25. Also we prefer to provide a recess or seat 28 in the hinged portion of the cover within which the said screw may wholly or partially rest. Should any portion of the post 17 project above the said screw when a permanent binding is desired, the same may be sawed off or otherwise shortened, so that the permanently bound book presents no projecting elements along the hinged portions of the covers 22 and 25. The binding operation may be further completed by affixing the back 23 in place to cover up and conceal the plate 19, as well as the nut 18. It is obvious that the covers 13 and 14 having been removed from the leaves are again available for use, it being merely necessary that new posts be secured in place to the binding portion 16 of the cover 14 by using the same screws 21 which were previously removed.

The invention heretofore described may be carried into effect in a number of different ways, that illustrated in Figs. 1, 2 and 3 being but one embodiment thereof. It is contemplated, however, that any one of several other forms of connection between the temporary covers may be advantageously utilized, and with this in view several modifications of the construction heretofore described are illustrated in Figs. 4 to 10 inclusive.

Referring to the modification illustrated in Figs. 4, 5, and 6, we have shown the end of the post 17 secured to the binding portion 16 as formed with a beveled or enlarged head 29. The head of this post is inserted within an opening 30, of a size to conveniently receive the same, and lateral pressure against the post is brought to bear by actuation of a screw member 31 which advances a block 32 against the beveled end of the post 17. This movement causes the post to be securely locked in position against a plate 33 having faces corresponding to the beveled end of the post 17. At the time it is desired to disengage the cover 14 from the post the screw member 31 is revolved in the proper direction to cause a release of pressure against the beveled end of the post 17. Such movements having been effected the beveled end 29 is free to withdraw from the binding section 16 and lie against the permanent cover 22, preferably within a suitable formed recess.

In Figs. 7, 8, and 9, the post 17 is shown as provided with a plate 33 arranged to seat within a recess 34 and lock therein. The plate 33 is preferably of an elongated shape, and the recess 34 is of similar size and shape. Entrance of the plate 33 into the opening 34 is accomplished only when the post 17 is turned to the proper position. The interior of the recess 34 is preferably arranged with inclined faces 35 corresponding to similarly inclined faces 33 with the result that the post 17 is securely locked in position and held against movement. At such time as a transfer of leaves from the temporary covers is desired, the post 17 is revolved in the opposite direction the proper distance to permit the plate 33 withdrawing from the recess 34. As explained for the other forms of construction, suitable recesses are preferably arranged within the binding portion of the permanent cover 22 to receive the plate 33. To facilitate the turning of the post 17 in this form of construction, the upper end may be provided with a wrench-hold or other equivalent construction to enable rotary movement being applied from a wrench or other suitable instrument.

In Fig. 10 is shown a still further modification of the construction previously described. In this instance the post 17 is shown to be provided with an enlarged head portion 36 screw-threaded to engage within a socket 37 formed in the binding portion 16 of the cover 14. To prevent an unlocking of the threaded portion 36 from the temporary cover, a set-screw 38 may be used to engage with one surface of the threaded portion 36, and when loosened to permit withdrawal of the post 17 from the cover 14 for the purpose of effecting a disengagement therebetween.

It is obvious that the forms of construction described and illustrated for accomplishing the purposes of our invention may be varied very considerably. An underlying characteristic of all of the constructions shown is that the transfer of the leaves to the permanent covers may be made without scarcely any effort on the part of the operator, and with no injury or detriment to the temporary covers thereto used which are again available for use.

We claim:

1. A binder embodying in combination a pair of permanent covers, a stack of leaves therebetween, a temporary cover arranged adjacent and outside of one of said permanent covers, a connecting element between all of said covers and leaves for binding the same together, and means for effecting a disconnection of said element from said temporary cover without affecting the binding between said leaves, substantially as described.

2. A binder embodying, in combination,
a pair of permanent covers, a stack of leaves interposed therebetween, a temporary cover arranged adjacent to and outside of one of said permanent covers, a plurality of posts entered through said permanent covers and interposed leaves, base plates upon which said posts are mounted, and a detachable connection between said base plates and said temporary cover for permitting removal of the temporary cover without disarrangement of the leaves and permanent covers, substantially as described.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."