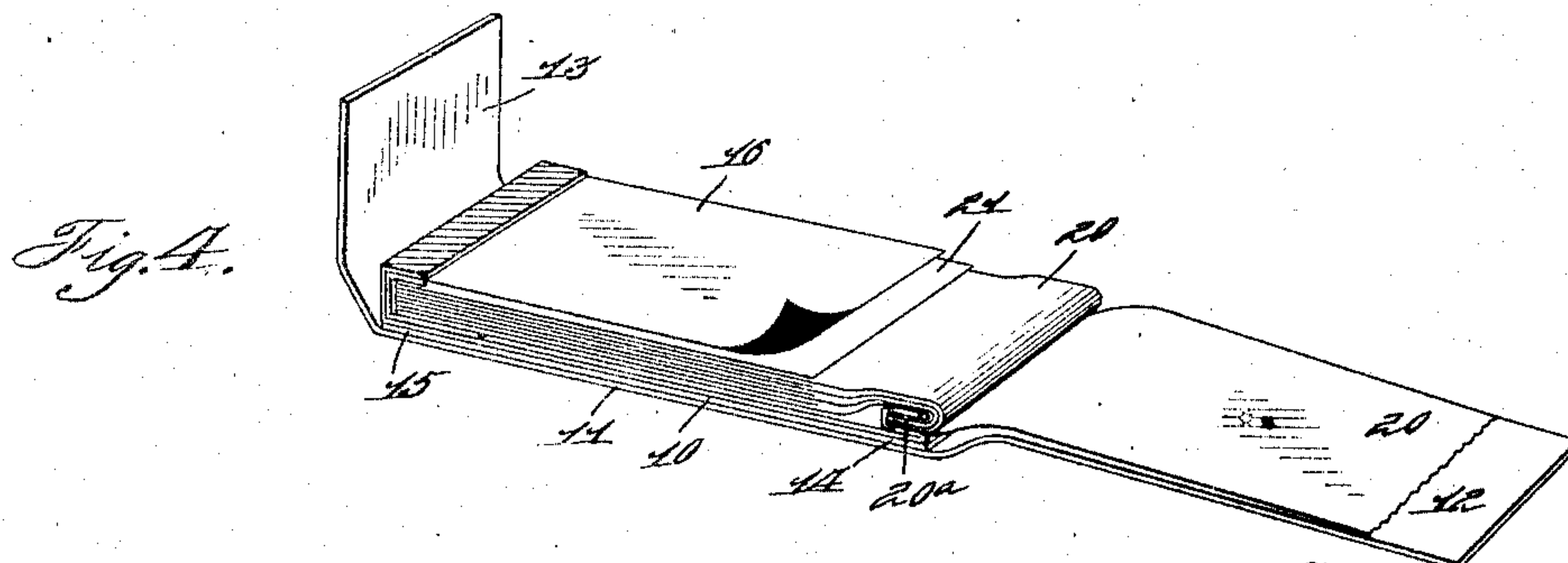
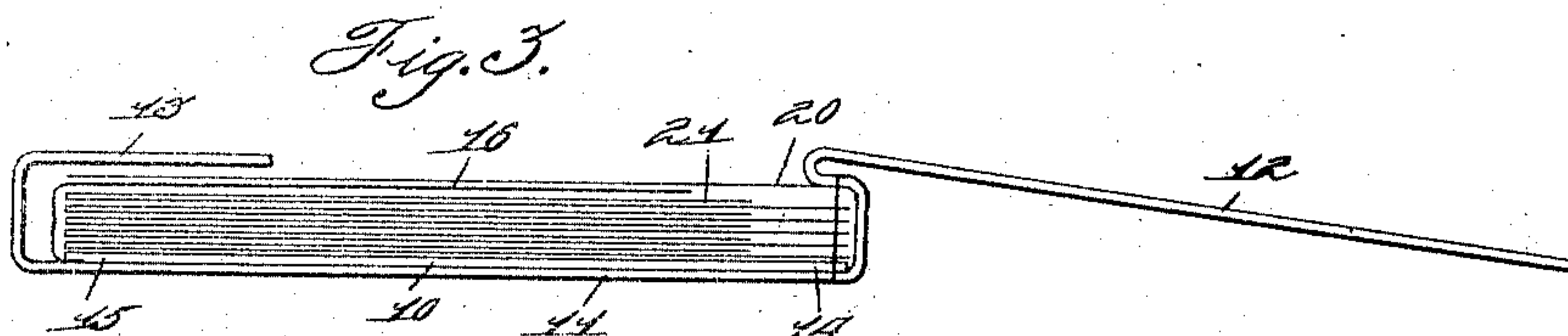
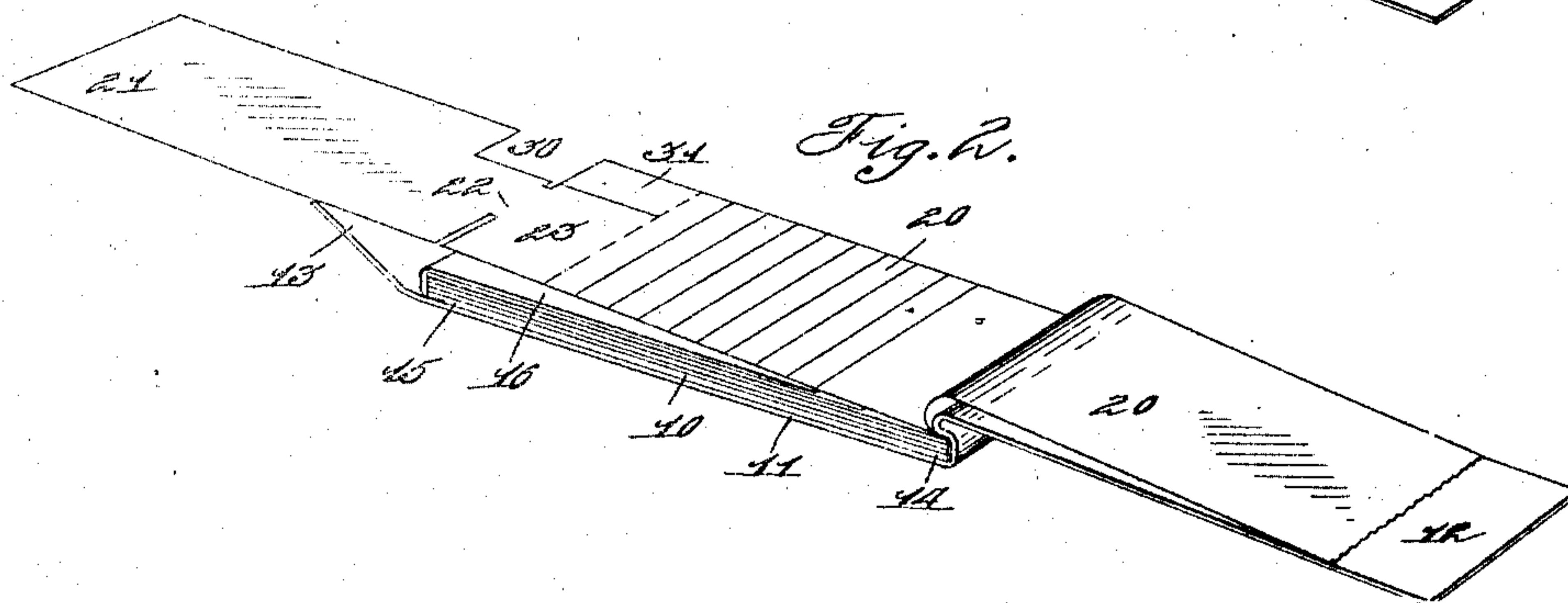
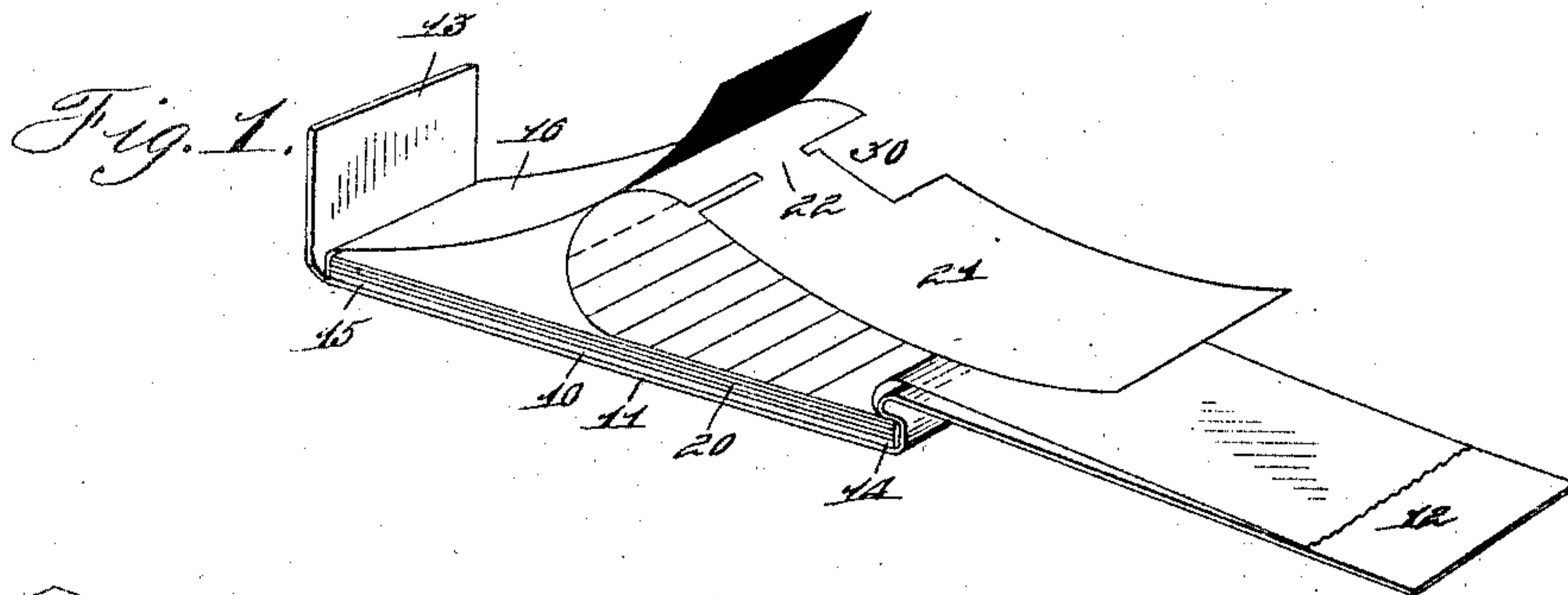


No. 864,506.

PATENTED AUG. 27, 1907.

F. M. BORING.
MANIFOLDING ACCOUNT BOOK.
APPLICATION FILED JUNE 19, 1903.



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UNITED STATES PATENT OFFICE.

FRANK M. BORING, OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE NATIONAL CASH REGISTER COMPANY, OF DAYTON, OHIO, A CORPORATION OF OHIO, (INCORPORATED IN 1906.)

MANIFOLDING ACCOUNT-BOOK.

No. 864,508.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed June 19, 1903. Serial No. 162,216.

To all whom it may concern:

Be it known that I, FRANK M. BORING, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain
5 new and useful Improvements in Manifolded Account-Books, of which I declare the following to be a full, clear, and exact description.

My invention relates to that class of manifolded account books in which the entries are made upon a series of original leaves which are retained within the book, and these entries are duplicated upon a set of duplicate leaves adapted to be detached from the book; and it is among the general purposes and objects of my invention to provide an improved means for handling
15 the duplicate slip so that the carbon duplicating sheet need not be handled or disturbed between the various transactions, and to furnish an improved method for carrying forward the total amounts of the previous sales, and also to facilitate the opening of the book quickly
20 to the proper place ready for receiving the entries.

In the accompanying drawings forming part of this specification: Figure 1 represents a perspective view of the book showing a duplicate leaf partly withdrawn from beneath the carbon sheet. Fig. 2 represents a
25 perspective view of the book showing the duplicate sheet fully withdrawn and ready to be detached. Fig. 3 represents a diagrammatic view showing the relative positions of the various leaves when the book is ready for use. Fig. 4 represents a modification of the manner
30 of binding the original sheets.

The back-piece 10 of the book consists of a sheet of card-board or other suitable material which is stiff enough to form a good writing surface. Extending under this back-piece 10 is a cover-piece which is
35 made of thin flexible card-board and envelops the entire book and consists of a back cover portion 11 and front cover 12 and a "separator" 13 the purpose of which will appear later. Bound together, by suitable wire staples, at the lower end 14 of the back-piece 10 is
40 a set of leaves 20 upon which the original entries are to be made and which, for convenience, may be called "originals"; and these binding staples extend through both the front cover 12 and the back cover 11, and the front cover may thus be folded over upon the upperside
45 of the book when the book is not used. The original leaves 20 extend to the outer end 15 of the book and at their free outer ends have attached duplicate leaves 21, there being of course one duplicate leaf attached to each original leaf; but each duplicate is attached to its original
50 by only a narrow web of paper 22, as is shown in Figs. 1 and 2, the remaining width of the paper being slit away so that the duplicate may easily be detached

from the original. In the normal position of these two sets of leaves the duplicate leaf is folded over on top of the original leaf with the writing surface of each leaf
55 uppermost.

At the end 15 of the back-piece 10 there is attached, by means of a flexible hinge, a carbon manifolded sheet 16 which is adapted to be folded over and rest upon the upper surface of the duplicate sheet 21. This carbon
60 sheet 16 does not extend the full length of the duplicate sheet 21, as is best shown in Fig. 3, and thus a small portion of the duplicate sheet extends beyond the carbon sheet and may easily be taken hold of by the person using the book so as to be withdrawn in the manner
65 later described. The lower end of the duplicate sheet 21 moreover, does not extend fully down to the binding portion of the original sheets but falls slightly short of this point, as shown in Fig. 3, so that the free end may easily be grasped by the clerk using the book.
70

Each original leaf is perforated near its outer end so as to form a stub portion 23 and upon this stub portion the clerk may enter the customer's name and the amount of the purchase together with such other data as may be desired, constituting a sort of summary of
75 the entries upon the original sheet and then this stub portion may be detached and filed away with a cashier or in a cash register.

The manner of using the book is as follows. The first page of the original sheets 20 is made without any
80 duplicate sheets attached thereto. The clerk folds this original sheet back upon the cover 12 and then folds the carbon sheet 16 over upon the next succeeding duplicate sheet 21 which is attached, as will be observed, to the following original then the first original is folded
85 over on top of the carbon sheet 16. The card-board flap 13, which has been called the "separator," and the purpose of which will be hereinafter explained, is held upward in the position shown in Fig. 1 and the clerk then writes upon the original sheet 20 the usual entries,
90 and he also at the same time makes his entries on the stub portion 23, for filing. As soon as the entries have been made he detaches the stub portion 23, folds back the original sheet upon the cover 12, and the free end of the duplicate sheet 21 is then exposed so that it may
95 easily be taken hold of and the entire duplicate sheet, carrying with it the next original sheet, may easily be withdrawn from beneath the carbon sheet without the necessity of handling the carbon sheet in any manner. In Fig. 1 the duplicate sheet is shown in the
100 process of being withdrawn from beneath the carbon sheet 16. As soon as the clerk has pulled the duplicate sheet toward him in the manner just described so as to withdraw from beneath the carbon sheet both the dupli-

cate and original to which it is attached, then the clerk pulls the duplicate sheet forward and away from him to the position shown in Fig. 2, the carbon sheet in the meantime having dropped beneath the original sheet which has just been withdrawn and therefore being in position between this original sheet and the succeeding duplicate sheet. In this position, as shown in Fig. 2, the clerk may easily hold the original sheet and by a slight movement detach the extended duplicate sheet therefrom since all that separates the two sheets is a slight web portion 22; and this duplicate sheet is then delivered to the customer. It is thus obvious that this new original sheet to which this duplicate was attached is now in position to be used for the next set of entries and thus the book is always ready with an original sheet placed on top of the carbon sheet with a duplicate sheet below the carbon ready for immediate use, and the clerk does not have to handle the carbon sheet to place it between the duplicate and the original upon each transaction. Furthermore it is apparent that the duplicate sheet which is delivered to the customer upon any transaction is not one which is attached to the original sheet corresponding to that same transaction but it is attached to the following original sheet, which, of course, makes it possible to have a carbon sheet situated at the perforated or folded end where the original and duplicate sheets are joined, and thus the carbon sheet will not have to be disturbed during the entire use of the book, and being situated at the end of the book in this manner it may maintain its position undisturbed and is free from liability to be torn or misused during the handling of the book.

I will now describe the use of the "separator" 13. As before stated, the clerk while writing the entries in the book, holds this "separator" in an elevated position, as shown in Fig. 1; but as soon as the duplicate leaf has been withdrawn to the position shown in Fig. 2 and the duplicate leaf has been detached from the original, the "separator" 13 is folded over upon the original sheet 20 which is now in position for the next entry, as shown in Fig. 3. Then the book may be closed; but upon the re-opening of the book the clerk simply grasps the upper end of the book and holds the "separator" 13 in the position in which it was last set, so that the original leaves which have already been written upon are allowed to fall away from the "separator," but the one about to be written upon is held beneath the separator. Thus the book naturally opens to the position ready for use and the clerk, as before, now holds back the "separator" in an elevated position so that he may write the new entries upon the original sheet.

In case these manifolding books are used for the purpose of keeping a separate account for each customer, one book being used for that customer alone, it becomes desirable to carry forward from one sheet to another the amount of the past transactions so that upon the duplicate sheet, which is delivered to the customer, will appear the itemized account of the last transaction together with the statement of his total account to date; and furthermore this amount is retained upon the last original which has been written upon in the book so that by opening the book at this point the total amount of the account can easily be determined by the proprietor. In Figs. 1 and 2 I

have shown the duplicate sheet 21 with an angular portion cut away, as at 30, from the upper right-hand corner, and upon the stub portion of the original sheet 20 there is spaced off upon the right-hand side a blank portion 31 which lies directly below the cut away portion of the duplicate sheet when the sheets lie in their normal positions. When the clerk has added up the total amount of the first transaction, he writes this total upon the blank portion 31 of the stub of this original and it is obvious that this amount is thereupon duplicated upon the stub of the next original and is not duplicated upon the duplicate sheet 21 owing to the fact that the duplicate sheet is cut away at this portion. Thus when the next original sheet is to be used for the next transaction the clerk immediately sees the duplicated amount of the total for the previous transaction written in the upper right-hand corner of the stub and this amount he writes in the column on the body portion of the original sheet. This total amount of the past transaction is added to the amount of the present transaction and this new total is written both upon the original sheet (and is thus duplicated to the duplicate sheet) and is also written, as before stated, in the right-hand corner of the stub portion and is thus duplicated upon the next stub ready for reference in the following transaction in the manner described. It is apparent that this blank portion 31 of the stub, and the cut-away portion 30 of the duplicate, must simply be large enough to permit of writing two numbers in the blank portion, one of which numbers is the total carried forward there by duplication from the preceding stub, and the other number is written there by the clerk as the new total which is to be carried forward by duplication upon the next succeeding stub portion.

In Fig. 4 I have shown a modification in the method of binding the original leaves. The entire set of the original leaves 20, with the duplicate leaves attached and arranged as heretofore explained, is placed face downward with its binding portion 20^a situated at the lower end 14 of the back-piece 10 but with the entire set of leaves extending outward upon the cover 12 in the opposite direction from the normal position when in use. Then the binding portion 20^a is suitably fastened to the back-piece 10, and to the back cover portion 11, by means of staples or other suitable means. Then the entire set of leaves is folded over backward upon itself to its normal position ready for use, as shown in Fig. 4. It is obvious that this "reverse-binding" method produces a double thickness of leaves at the lower end 14 of the back, but it will be seen that this is compensated for by the fact that beyond the binding end there are also duplicate layers due to the presence of the duplicate sheet 21 attached to each original sheet, which duplicate sheets are not bound in at the end 14, as before explained. Thus this reversely bound portion of the original leaves can be pressed down sufficiently to cause the leaves to assume practically a flat position throughout the length of the book. As soon as each original leaf is used by being written upon, it is folded backward upon the cover 12, as before explained, in which position, as will be seen in Fig. 4, it normally lies out flat owing to this reversed method of binding; and thereby the duplicate sheet 21 may be made to extend almost down to the binding

portion 20* and still be easily accessible to the clerk and readily be taken hold of to be withdrawn in the manner above described.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a manifolding account book the combination with a set of original leaves bound together at one end of a suitable back; of a copy leaf detachably secured to each original leaf at the end opposite the binding end and folded over upon the writing surface thereof; a manifold-
10 ing sheet attached to said back opposite said binding end and adapted to be folded over between one copy leaf and the preceding original; and a flexible separator attached to said back for separating the used from the unused
15 original leaves, substantially as described.

2. In a manifolding account book, the combination of a

set of original leaves bound together at one end of a suitable back and folded over reversely upon the binding portion, a set of copy leaves, and a manifolding sheet adapted to be interposed between the original and the copy sheets, 20 substantially as and for the purpose described.

3. In a manifolding account book, the combination of a set of original leaves bound together at one end of a suitable back and folded over reversely upon their binding portion when in normal position ready for use; a copy leaf 25 attached at the free end of each original leaf; and a manifolding sheet attached at the other end of the back.

In testimony whereof I affix my signature, in the presence of two witnesses.

FRANK M. BORING.

Witnesses:

J. B. HAYWARD,
N. C. WOOD.