

402-13

BEST AVAILABLE COPY

A. C. FREESE.
LOOSE LEAF BINDER.
APPLICATION FILED MAR. 21, 1911.

1,008,810.

Patented Nov. 14, 1911.

2 SHEETS-SHEET 1.

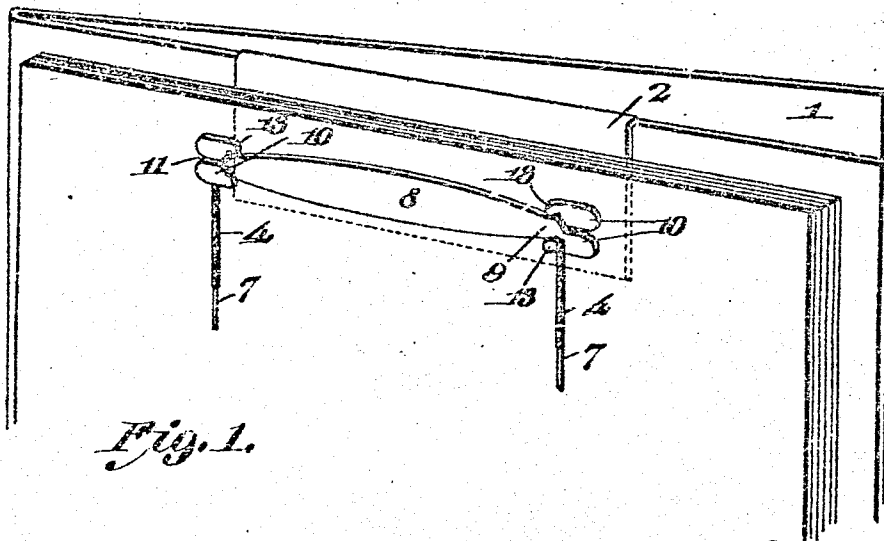


Fig. 1.

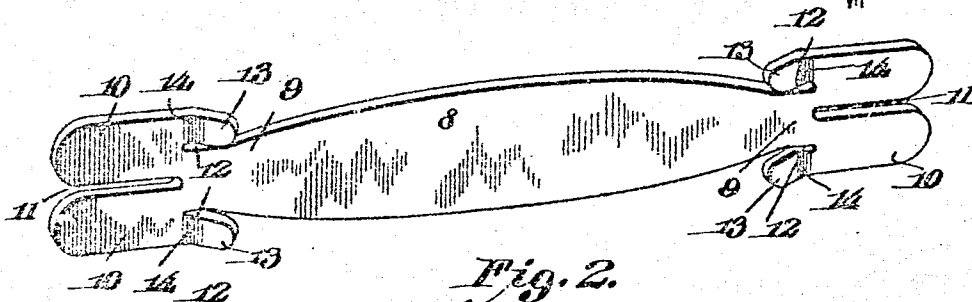


Fig. 2.

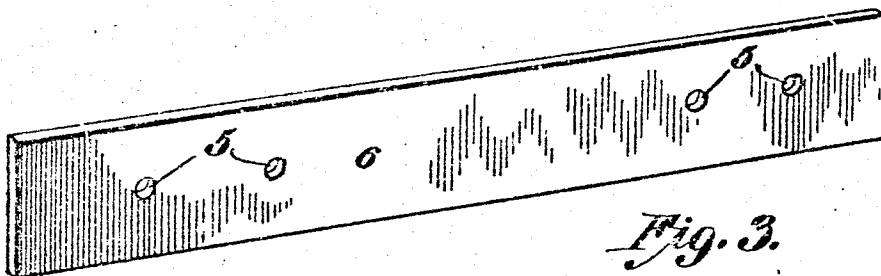


Fig. 3.

Witnesses
A. C. Freeze
Edmondson

Inventor
Albert C. Freeze
384 Victor J. Evans,
Attorney

A. C. FREESE.
LOOSE LEAF BINDER.
APPLICATION FILED MAR. 11, 1911.

1,008,810.

Patented Nov. 14, 1911.

2 SHEETS-SHEET 1.

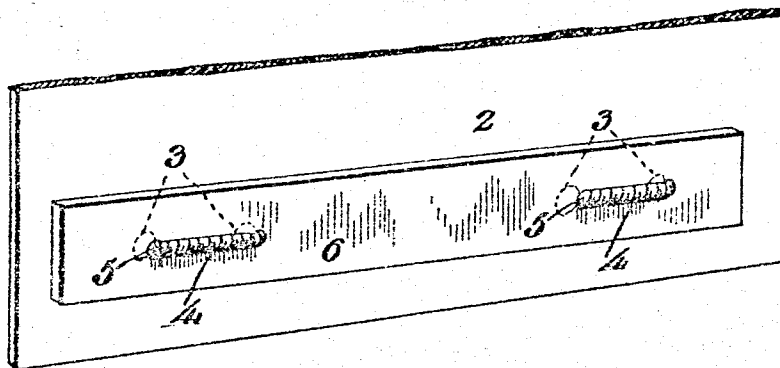


Fig. 4.

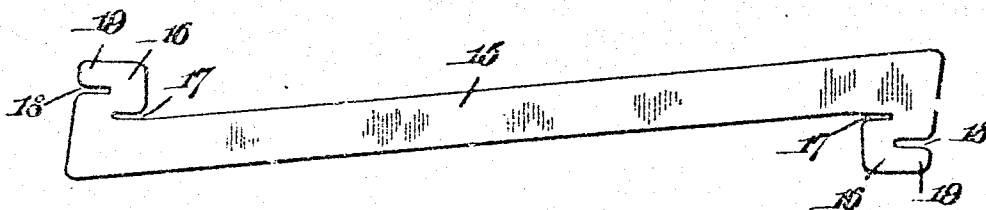


Fig. 5.

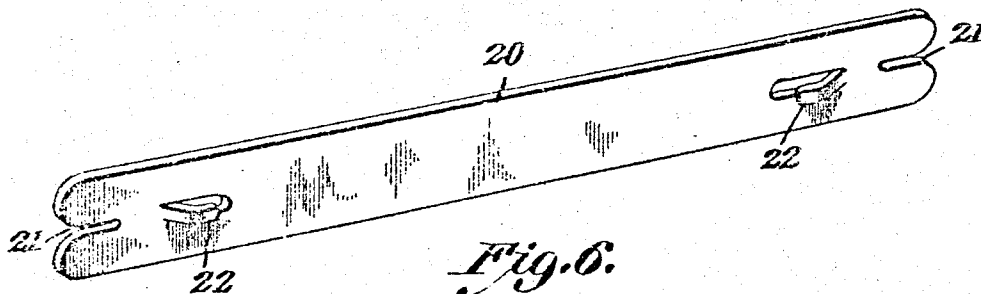


Fig. 6.

Witnesses

E. J. Smith
Edmund Smith

Inventor
Albert C. Freese.

By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

ALBERT C. FREESE, OF SAN FRANCISCO, CALIFORNIA.

LOOSE-LEAF BINDER.

1,008,810.

Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed March 11, 1911. Serial No. 613,745.

To all whom it may concern:

Be it known that I, ALBERT C. FREESE, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

This invention relates to loose leaf binders and to file wrappers used in connection therewith.

It is the object of this invention to provide a simple and efficient device embodying a flexible binding element which may be inserted through the papers or sheets to be filed wherein a great number of these sheets may be superimposed, thus allowing any desired expansion.

A further object of the invention is the provision of a loose leaf binder which is adapted to securely, quickly and in any easy manner fasten a plurality of papers together and which will permit a sheet to be added or removed from the file at any time or from any point in the bunch of sheets.

The principal use of the invention is with folders for vertical filing systems where the papers are securely fastened together within the file and preferably upon a folded tab or the binder may be attached by simply perforating the folder and arranging the back plate of the binder on the outside. I also wish it understood that the binder may be used independently of the folder and if desired the bound sheets placed in the folder or filed in any suitable manner and, while the device is particularly adapted to constantly expanding letter files, it may also be readily adapted for samples of cloth, oil-cloth, leather and the like.

Further objects of the invention will appear as the following specific description of the invention is read in connection with the accompanying drawing, which forms a part of this application and in which:—

Figure 1 is a perspective view of a folder showing the binder secured therein. Fig. 2 is a perspective view of the preferred form of plate for binding the cord. Fig. 3 is a perspective view of the back plate. Fig. 4 is a detail sectional perspective view showing the connection of the binder to a folder tab on an enlarged scale. Fig. 5 is a plan view of a modified form of binding plate. Fig. 6 is a detail perspective view of a further modified form.

Referring more particularly to the drawing, 1 represents an ordinary folder having a tab 2 arranged either upon the front or the back of said folder and having perforations 3 therein to permit the passage of the binding cord 4. This binding cord is connected through four apertures 5 in the back plate 6 and passes through the apertures 3 in the tab and has its terminal ends provided with metallic tips 7 which facilitate the passage of the same through the punched holes in the letters or sheets to be filed.

The top plate or binding plate comprises a single integral sheet of metal 8 which is reduced, as at 9, adjacent its ends to form the heads 10. These heads are provided with centrally disposed longitudinal slots 11 extending inwardly from the ends and having parallel walls and the heads adjacent the reduced portion 9 of the strip are slotted, as at 12, the resulting prongs 13 being bent upwardly on a line 14 which extends across the plate at the terminus of the slots. The termination of the slots 11 is preferably coincident with the holes in the tab 2 or in the sheets to be bound together so that a straight portion of the cord will run through said openings.

In the operation of the device illustrated in the first four figures, the cords 7 are first laced through the openings 5 in the back plate 6 and then passed through the tab or, if the tab is not used, directly through the sheets to be bound together. They are then inserted into the slots 11, passed over the plate into one of the slots 12 down and under the plate and across the same and secured in the opposite slot 12. Any other suitable arrangement of connecting the cords to the binding plate (but in all instances the cord should be first secured in the slot 11) can be adopted, this being sufficient to prevent relative separation of the back and binding plates.

The modification shown in Fig. 5 embodies a plate 15 with lateral extensions 16 projecting from opposite sides. At the junction of the projections with the strip slots 17 are formed and on the opposite sides of the projections, adjacent their ends, slots 18 are formed, the resulting tongue or finger 19 being slightly raised so as to permit ready entrance of the cord into the slot. In this form the cord, after passing through the apertures in the sheets to be bound together, is inserted into the slots 17 in the

opposite direction from that illustrated in Figs. 1 to 4 and is then carried across the projections and drawn into the slots 18.

In the modification shown in Fig. 6, a straight strip of metal 20 is illustrated having longitudinal slots 21 projecting inwardly from its ends which are adapted to receive the cord and intermediate the length of the strip and adjacent each end thereof tongues 22 are bent up from the strip and extend at an acute angle thereto so as to form a wedging opening or space between the plate and the tongue. In this type of binding plate the cord is carried into the slots 21 and then drawn around into the wedging space formed between the finger 22 and the plate 20.

The separate parts of the device can very readily be manufactured of any suitable type of metal, preferably aluminum, if metal is used, or the back plate may be made of thin tin, pressboard, cardboard or the like and, while the slots shown in the binding plates, have been indicated with parallel walls, it is to be clearly understood that this may be varied in any suitable way, as by making them with diverging walls.

Having thus described the invention, what I claim as new is:—

1. In combination, an apertured back plate, a flexible metallic tipped member laced in said back plate, a binding plate having longitudinal slots therein to receive the flexible member, laterally projecting portions at the ends of said binding plate, and projections struck up from said portions longitudinally of the plate and extending at an acute angle thereto, said projections forming wedging slots to receive the flexible member.

2. In combination, a folder, an apertured tab secured to the folder, a back plate having apertures therein, a flexible member laced in the back plate and passing through the apertures in the tab, a slotted binding plate, and wedging devices formed thereon adapted to bind the flexible element thereto.

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

ALBERT C. FREESE.

Witnesses:

H. M. PABOR,

EDITH W. BURNHAM.

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