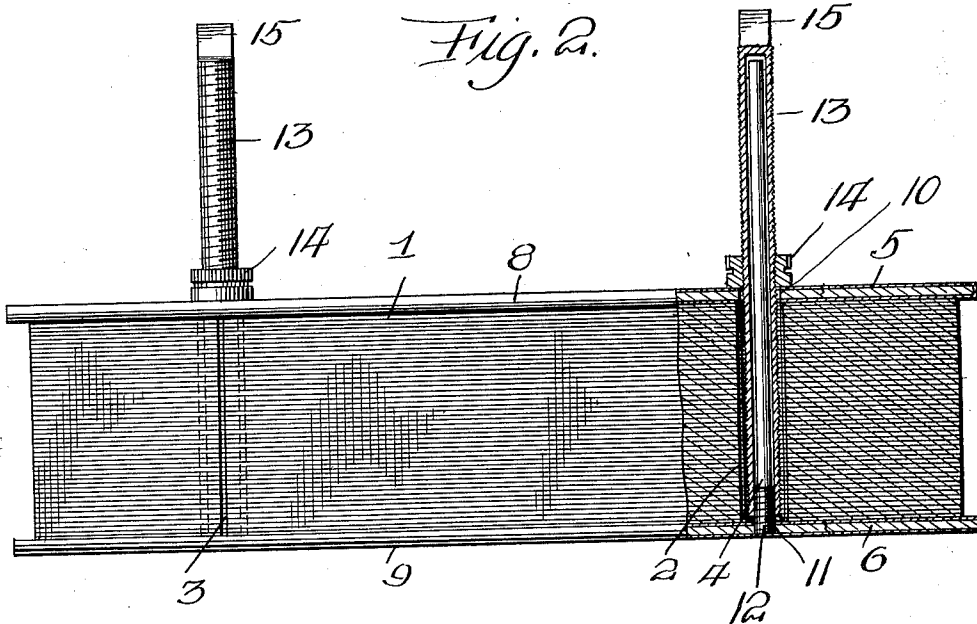
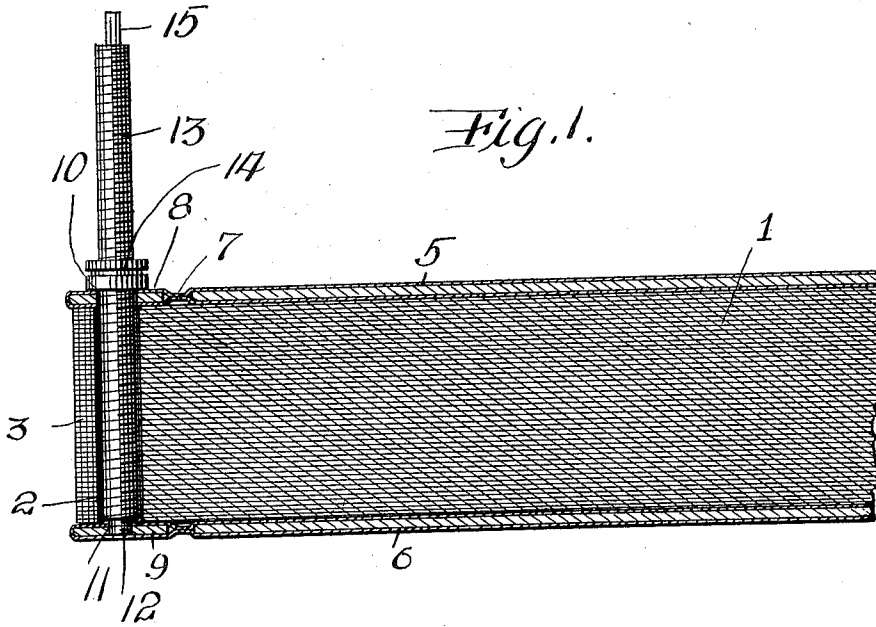


F. S. BORGMAN.
 LOOSE LEAF BINDER.
 APPLICATION FILED FEB. 23, 1912.

1,032,809.

Patented July 16, 1912.



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UNITED STATES PATENT OFFICE.

FRANCIS S. BORGMAN, OF PITTSBURGH, PENNSYLVANIA.

LOOSE-LEAF BINDER.

1,032,809.

Specification of Letters Patent.

Patented July 16, 1912.

Application filed February 23, 1912. Serial No. 679,292.

To all whom it may concern:

Be it known that I, FRANCIS S. BORGMAN, a citizen of the United States of America, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to loose leaf binders and has for its object to provide a binder of such class with means in a manner as hereinafter set forth, to facilitate the removal of the upper cover so that a new leaf can be quickly and conveniently placed in position.

Further objects of the invention are to provide a loose leaf binder which is simple in its construction and arrangement, strong, durable, efficient and convenient in its use, readily set up and comparatively inexpensive to manufacture.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described and illustrated in the accompanying drawing, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In the drawing, wherein like reference characters denote corresponding parts throughout the several views:—Figure 1 is a longitudinal sectional view, broken away, illustrating a loose leaf binder in accordance with this invention, and Fig. 2 is an end view, partly in section, of the binder.

Referring to the drawing in detail, 1 denotes a series of leaves, each of which in the present instance are shown provided with perforations 2 near their binding edges. Each leaf has a slit 3 which extends from its perforation clear to the adjoining edge, so that the portions of the leaf may be bent back at the slit to pass by the guide post 4, which extends through the perforations to permit of the removal or insertion of the leaf. The leaves are not necessarily constructed in this manner, as it will be obvious that any leaf of this type may be used. The leaves in this instance are shown as confined within the upper and lower covers 5—6 respectively, each of which is joined by a flexible hinge 7 to back members indi-

cated by reference characters 8 and 9; each of said members may be formed of metal or any other suitable material and said member 9 is provided with a pair of openings 10 registering with the openings 2 in the leaves and of substantially the same diameter as said openings 2. The member 9 is formed with a pair of openings 11 of reduced diameter with respect to the openings 2 and the wall of each of said openings 11 is screw threaded.

As illustrated, two guide posts 4 are employed, but it is obvious that the number of guide posts will correspond with the number of openings 2 in the leaves. Each of the guide posts 4 is cylindrical in contour and is formed with screw threads 12 at its lower end for engagement with the threads of the opening 11. The guide posts 4 project above the cover 5 and each is mounted thereon by a binding element which constitutes an elongated tube 13 provided with peripheral threads and further provided with interior threads at its lower end for engagement with the threads 12 at the lower end of the guide posts whereby the tube 13 will be detachably secured to the guide posts. The binding element further includes a clamping nut 14 which engages with the peripheral threads of the tube 13 and further is adapted to abut against the cover 5 for clamping the same in position. The upper end of the tube 13 is formed with a nip or finger piece 15 to facilitate the connecting to and the disconnecting from the guide posts 4.

As illustrated two binding elements are employed, the number of binding elements corresponding to the number of guide posts and by setting up the binding elements in a manner as stated, they can be quickly detached from the guide posts and elevated so that the cover 5 can be also elevated and an additional leaf inserted. The setting up of the binding elements in a manner as stated also provides for the quick removal of the same from over the guide posts 4, so that the cover 5 can be readily removed from the guide post when occasion so requires.

What I claim is:—

1. A loose leaf binder including a pair of covers, a guide post extending through one of said covers, a peripherally threaded tube mounted upon said guide post and detachably connected at its outer lower end to the

lower end of the guide post, and a clamping nut engaging the peripheral threads of said tube.

2. A loose leaf binder comprising a pair
5 of covers, a plurality of guide posts extending through one of said covers and detach-
ably connected to the other of said covers, a
peripherally threaded tube mounted on each
10 of and detachably connected to the lower
end of the guide posts, and clamping nuts
engaging with the peripheral threads of
said tubes and capable of engaging the up-
per of said covers.

3. A loose leaf binder including a pair of
15 covers, a guide post extending through one
of said covers, a peripherally threaded tube
mounted upon said guide post and detach-
ably connected at its outer lower end to the
lower end of the guide post, a clamping nut
20 engaging the peripheral threads of said

tube, and a finger piece provided at the upper end of said tube.

4. A loose leaf binder comprising a pair
of covers, a plurality of guide posts extend-
ing through one of said covers and detach- 25
ably connected to the other of said covers, a
peripherally threaded tube mounted on each
of and detachably connected to the lower
end of the guide posts, clamping nuts en-
gaging with the peripheral threads of said 30
tubes and capable of engaging the upper of
said covers, and a finger piece carried by
the upper end of each of said tubes.

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

FRANCIS S. BORGMAN.

Witnesses:

MAX H. SROLOVITZ,
CHRISTINA F. HOOD.

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