L. BORTKEWICZ.

LOOSE LEAF HOLDER.

APPLICATION FILED JUNE 10, 1914.

1,120,437. Patented Dec. 8, 1914.

Fig. 1.

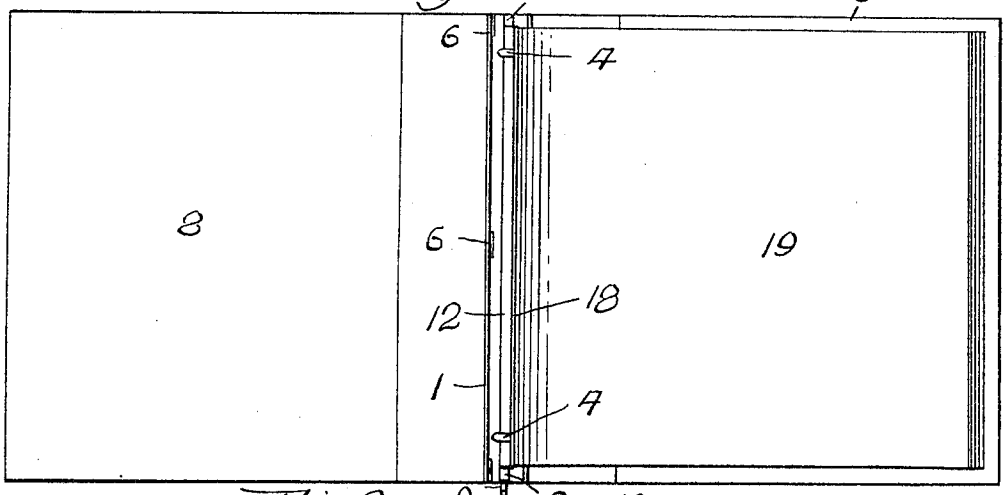


Fig. 2.

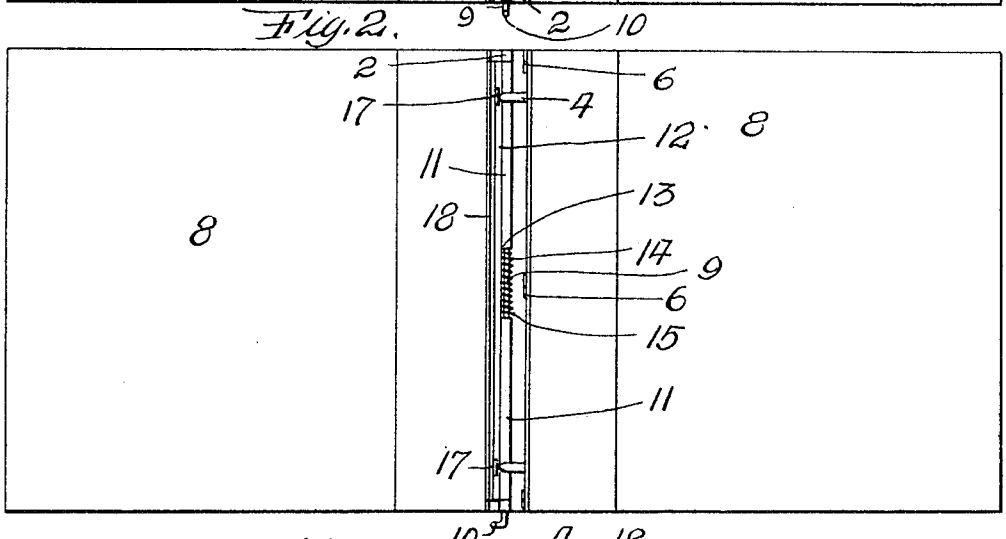


Fig. 3.

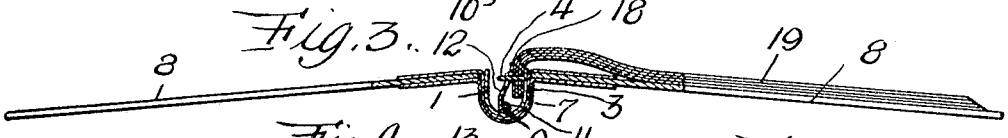


Fig. 4.

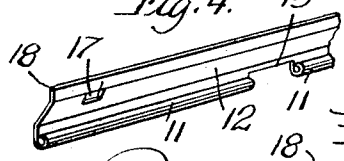


Fig. 5.

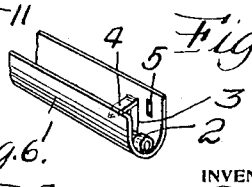
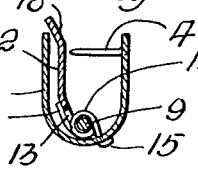


Fig. 6.



WITNESSES

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LOOSE-LEAF HOLDER.

1,120,437. Specification of Letters Patent. Patented Dec. 8, 1914.

Application filed June 10, 1914. Serial No. 844,300.

To all whom it may concern:

Be it known that I, LUDWIK BORTKEWICZ, a subject of the Emperor of Austria-Hungary, residing at Burgettstown, in the county of Washington and State of Pennsylvania, have invented certain new and useful Improvements in Loose-Leaf Holders, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a loose leaf holder, and the primary object of my invention is the provision of simple and effective means in connection with a binding for retaining leaves or pages within the binding whereby they can be removed and new pages placed in the binder.

A further object of this invention is to provide a loose leaf binder that is inexpensive to manufacture, durable, and highly efficient for the purposes for which it is intended.

I attain the above objects by a mechanical construction that will be hereinafter specifically described and then claimed, and reference will now be had to the drawing, wherein:—

Figure 1 is a plan of the loose leaf binder showing leaves or pages in position, Fig. 2 is a similar view showing the leaves or pages removed, Fig. 3 is a cross sectional view of the loose leaf binder, Fig. 4 is a perspective view of a portion of a detached clamping member, Fig. 5 is a perspective view of a portion of a detached holder, and Fig. 6 is an enlarged cross sectional view of a portion of the loose leaf binder.

The reference numeral 1 denotes a metallic holder 6 U-shaped in cross section, said holder having the ends thereof provided with bearings 2. The holder has one side thereof, adjacent to the ends, cut and sheared, as at 3 and the cut and sheared material bent to provide inwardly projecting prongs 4. The same side of the holder has openings 5 to receive fastening means 6, as rivets or staples for retaining the holder in engagement with a binder 7 having backs 8.

Movably mounted in the bearings 2 is a rod 9 having one end thereof provided with a crank 10 and secured upon said rod, within the holder 1, are the barrels 11 of a clamping member 12. The member 12 is cut away, as at 13 between the barrels 11 to provide clearance for a coiled spring 14 arranged upon the rod 9. One end of the spring 14 is mounted in the holder 1, as at 15 and the opposite end of said spring engages the clamping member 12, as at 16. The clamping member 12 has openings 17 providing clearance for the prongs 4 and said clamping member has an angularly disposed edge 18 adapted to engage sheets or pages 19 and retain said sheets or pages within the holder. The angularly disposed edge 18 of the member 12 engages a small number of the sheets or pages arranged upon the prongs 4 and the greater the number of sheets or pages placed in the binder, the greater the tension of the spring 14 and consequently the greater the pressure of the clamping member 12 against a large number of sheets or pages. The sheets or pages 19 are provided with openings to receive the prongs 4 and said sheets or pages can be easily and quickly placed in the binder when the clamping member 12 is held in an open or retracted position through the medium of the crank 10.

The device can be made of light and durable metal and used in connection with various kinds of bindings.

What I claim is:—

In a loose leaf binder, a holder, said holder having one wall thereof cut and sheared near the ends and the cut and sheared material bent inwardly to provide prongs adapted to receive sheets, a rod movably mounted in the said holder and having one end thereof provided with a crank, bearing member for the rod, a clamping member secured upon said rod within said holder and having openings to receive said prongs and an angularly disposed edge for engaging sheets arranged upon said prongs, and means encircling said rod within said holder for retaining said clamping member normally in engagement with sheets placed upon said prongs.

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

LUDWIK BORTKEWICZ.

Witnesses:

FRANK SOVJAK,

R. C. CASSIDY.

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