

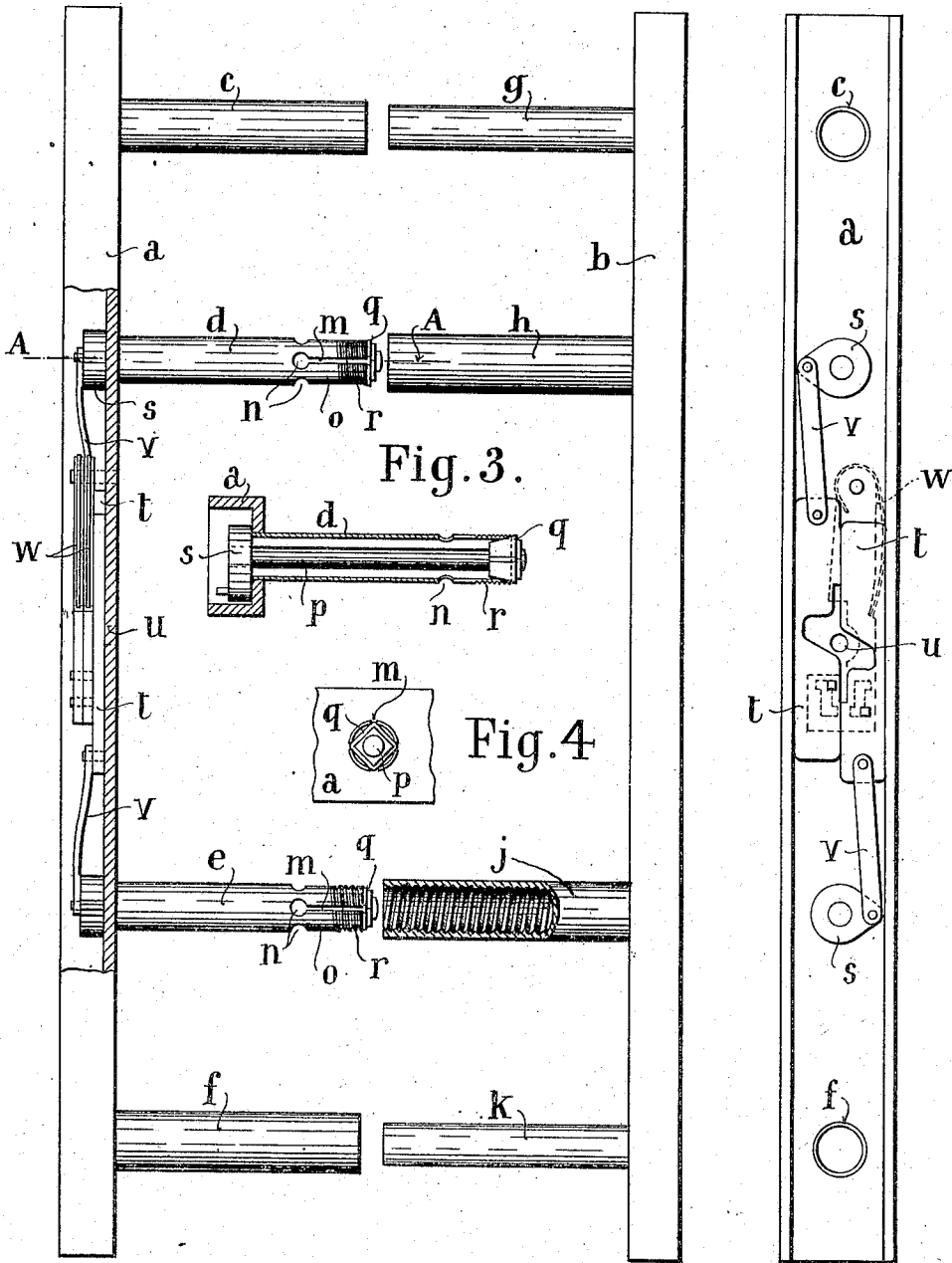
J. H. HEWITT.
 LOOSE LEAF BINDER AND THE LIKE.
 APPLICATION FILED APR. 12, 1909.

936,891.

Patented Oct. 12, 1909.

Fig. 1.

Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN HERBERT HEWITT, OF BIRMINGHAM, ENGLAND.

LOOSE-LEAF BINDER AND THE LIKE.

936,891.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed April 12, 1909. Serial No. 489,318.

To all whom it may concern:

Be it known that I, JOHN HERBERT HEWITT, of 7 Priory road, Edgbaston, Birmingham, in the county of Warwick, England, engineer, have invented certain new and useful Improvements in and Relating to Loose-Leaf Binders and the Like, of which the following is a specification.

This invention relates to loose leaf binders and the like and has for its object to provide an improved form of binding device in which the telescopic filing members are locked in any position or released by one motion of a single key.

In a filing device made in accordance with this invention two or more of the telescopic filing members are adapted to be locked by the rotary movement of spindles provided with cam like projections which cause the inner telescopic members to be pressed against the outer members.

Referring to the drawings:—Figure 1 is a sectional elevation of a loose leaf binding device made in accordance with this invention, the upper and lower parts being separated. Fig. 2 is a plan showing the locking mechanism; Fig. 3 is a section on line A—A Fig. 1. Fig. 4 is a detail.

a and *b* are channel shaped members which are adapted to be inclosed and to be attached to the covers of a book or file.

c d e and *f* are pillars or telescopic filing members attached to the channel member *a* and *g h j k* are pillars or telescopic filing members attached to the channel member *b*.

d e g and *h* are internal telescopic members sliding within *h j c* and *f* respectively. The telescopic members *d* and *e* are slotted as at *m m* and the width of the metal between the slots is reduced as at *n* to permit of the parts *o* forming the extremity of the telescopic members, *d* and *e* being more easily flexed.

p p are spindles provided with cam shaped projections *q q* which are adapted to lie normally within the slots *m m*.

The pillars *d* and *e* are reduced in diameter at their extremities and are provided with external corrugations, threads or locking ribs *r r* adapted to engage with corresponding corrugations or threads (shown in Fig. 1) inside the pillars *h* and *j* when the parts *o* are expanded, but permits the pillars *d* and *e* passing within the pillars *h* and *j* when not expanded.

s s are cranks disposed in the channel members *a* and attached to the spindles *p p*, *t t* are bolts adapted to be shot by a key inserted at *u*.

v v are links connecting *s s* and *t t*.

Any number of tumblers such as *w w* may be provided for the purpose of rendering the lock secure.

In operation assuming that the papers or loose leaves are placed on the pillars, the channel shaped plates *a* and *b* are pressed toward each other and the bolts *t t* shot by inserting and turning a key, this movement rotates the spindles *p p* and causes the cams *q q* to press against the inner walls of the pillars *d e* and express the parts *o o*, so that the threads *r r* engage with the corresponding threads within the pillars *h* and *j*, whereby the filing device is securely locked in any position; to open the filing device the key is turned in reverse direction which returns the points of the cams to a position within the slots and releases the corrugations from engagement and permits of the filing device being opened.

What I claim and desire to secure by Letters Patent is:—

1. The improved loose leaf book binder comprising the combination of attachment plates, a plurality of pillars on each of said plates, a plurality of pillars on one plate provided with slots and external locking ribs, spindles disposed within said pillars and cams on said spindles adapted to lie normally in said slots, a plurality of pillars on the other plate provided with internal locking ribs, means for partially rotating the spindles so as to press the external locking ribs on pillars so provided into engagement with the internal locking ribs on pillars coacting therewith.

2. The improved loose leaf book or binder comprising the combination of attachment plates, a plurality of pillars on each of said plates, a plurality of pillars on one plate provided with slots and external locking ribs, spindles disposed within said pillars and cams on said spindles adapted to lie normally in said slots, a plurality of pillars on the other plate provided with internal locking ribs, cranks on said spindles, bolts adapted to be shot by a key and links disposed between the cranks and bolts respectively whereby the cams and the spindle may be partially rotated for the purpose of

pressing the external locking ribs on pillars so provided with the internal locking ribs on pillars coacting therewith.

3. The improved loose leaf book or binder 5 comprising the combination of attachment plates, a plurality of pillars on each of said plates, a plurality of pillars on one plate provided with slots and external locking ribs, spindles disposed within said pillars 10 and cams on said spindles adapted to lie normally in said slots, a plurality of pillars on the other plate provided with internal locking ribs, cranks on said spindles, bolts adapted to be shot by a key and links dis- 15 posed between the cranks and bolts respectively whereby the cams and the spindle may be partially rotated for the purpose of pressing the external locking ribs on pillars so provided with the internal locking ribs 20 on pillars coacting therewith, and tumblers adapted to be operated by a key and to coact with the bolts respectively.

4. The improved loose leaf book-binder 25 comprising the combination of two plates, telescoping members on said plates, one of said telescoping members having a spring

end, a cam having a part of its working face extending radially a greater distance than another part, whereby to form a working rise adapted to engage such end, and means 30 for producing a relative rotation of said cam and the spring end of said member to spread said end against the other of said telescoping members.

5. The improved loose leaf book-binder 35 comprising the combination of two plates, telescoping members on said plates, one of said telescoping members being hollow and having its inner end slotted, and a rotary cam having an actuating part lying nor- 40 mally in one of said slots, and being adapted upon rotation to spread the end of said member against the other of said telescoping members.

In witness whereof, I have hereunto 45 signed my name in the presence of two subscribing witnesses.

JOHN HERBERT HEWITT.

Witnesses:

JOHN HEWITT,

FREDERICK WILLIAM JOSEPH SCHAEFER.