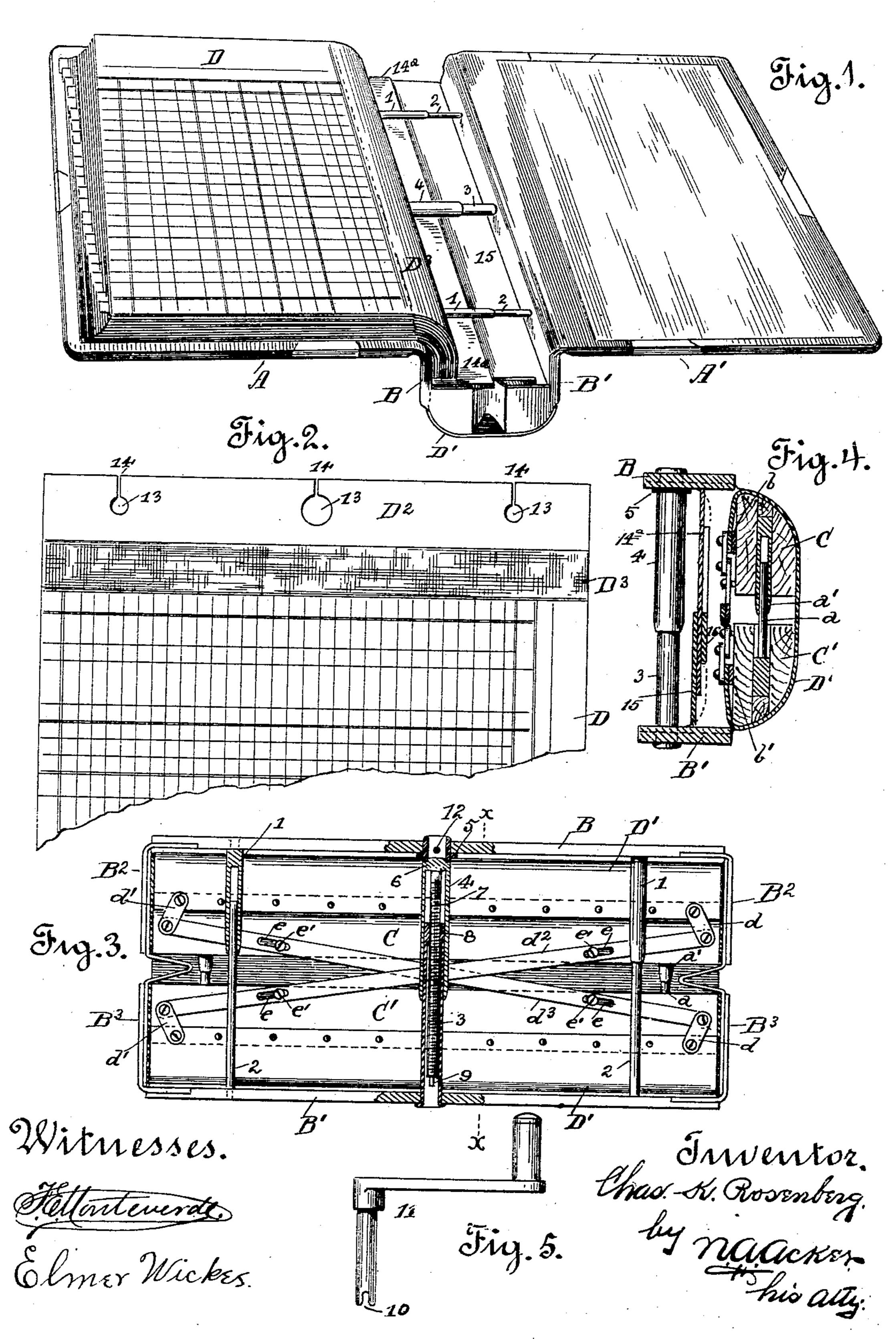
## C. K. ROSENBERG. ACCOUNT BOOK.

(Application filed Aug. 22, 1898.)

(No Model.



## United States Patent Office.

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## ACCOUNT-BOOK.

SPECIFICATION forming part of Letters Patent No. 704,216, dated July 8, 1902.

Application filed August 22, 1898. Serial No. 689, 194. (No model.)

To all whom it may concern:

Be it known that I, CHARLES K. ROSEN-BERG, a citizen of the United States, residing at San Francisco, in the county of San Fran-5 cisco and State of California, have invented certain new and useful Improvements in Account-Books; and I do hereby declare that the following is a full, clear, and exact de-

scription thereof.

This invention relates to certain new and useful improvements in that class of accountbooks commonly known to the trade as "removable-leaf ledgers," or such as permit of the leaves being readily removed and insert-15 ed at will; and it consists in the arrangement of parts and details of construction, as will be hereinafter fully set forth in the drawings and described and pointed out in the specification.

The essential object of the invention is to so construct the book as to permit of it having the same style or form of binding as is customary with ledgers or account-books generally, whereby the size of the book may be 25 increased or decreased within certain limits and the appearance of the book remain unchanged or uniform. To successfully accomplish this, it is essential that the back be so arranged that the leather binding of the back-30 bone will remain taut at all times—i. e., as the book is contracted the slack will be automatically compensated for or taken up, while when the book is expanded the said binding will automatically give to the increased thickness. 35 of the book.

The invention also consists in so constructing the parts as to permit of the book being contracted or expanded through the medium of screw-operated mechanism, thus provid-40 ing for the parts being positively held locked at any given point against movement in any direction.

In order to fully comprehend the invention, reference must be had to the accompanying 45 sheet of drawings, forming a part of this application, wherein—

Figure 1 is a perspective view illustrating the book open, the leaves being partly removed in order to show the arrangement of 50 the leaf-holding posts. Fig. 2 is a broken top plan view of one of the leaves. Fig. 3 is an inner plan view of the backbone of the book,

said view being partly in section and having the cover-plate removed in order to illustrate the adjusting and operating mechanism. Fig. 55 4 is a cross-sectional end view taken on line x x, Fig. 3, the cover-plate being in position; and Fig. 5 is a detail view of the operating-key.

In the drawings the letters A A' are used 60 to indicate the front and rear covers of the book, which are attached, respectively, to the edge plates B B'. These edge plates are secured by end brackets B<sup>2</sup> B<sup>3</sup> to the segment slide-blocks C C', which blocks constitute the 65 "backbone," so to speak, of the book, their outer faces being so rounded as to give proper shape to the back of the book. From the block C' extend the posts a, which work in sleeves or thimbles a', secured in block C as the said 70 blocks are moved toward or from each other. These posts and sleeves or thimbles serve as supports for giving strength to the backbone and hold the slide-blocks in proper alinement.

To the plate B are secured the sleeves or 75 thimbles 1, within which fit and work the posts 2, attached to the plate B'. These sleeves or thimbles and posts, while serving to connect the plates B B' and hold the same in proper alinement, also serve as supporting-80 posts for the book-leaves D. Said posts are placed near the outer ends of the slide-blocks, and between the same is arranged the screwactuated lock mechanism, which consists of, in the present case, a hollow thimble 3, rig- 85 idly secured to and passing through the plate B', and a rotatable sleeve 4, which extends through the plate B and fits over the thimble 3. This sleeve 4 is prevented from moving outward by means of the flange or collar 5, 90 which bears against the inner face of the plate B, Fig. 3 of the drawings. Within the sleeve 4, near its outer end, is affixed, or it may form a part of the sleeve, the head-block 6, to which is attached the worm or screw 7. This screw 95 or worm extends through a screw-threaded head 8 into the thimble 3. The end of the screw or worm 7 is reduced, so as to form a shoulder or shank 9, which is engaged by the slotted end portion 10 of the operating-key 11 100 when inserted into the thimble 3. Through the outer portion of the shell 4 is arranged

the cross-bar or pin 12, with which the slotted

end of the operating-key engages when the

lock mechanism is operated from that side of the book. As the opening end of the thimble 3 is exposed at one side of the book and the open end of the sleeve 4 at the opposite side, 5 I provide for operating the lock mechanism from either side. This saves the accountant being compelled to turn the book over in order to fit the key, which ofttimes occurs where the key-opening is formed at one side.

As the screw or worm 7 is turned to right or left the rotatable sleeve 4 is forced inward or outward upon the thimble 3 and the book contracted or expanded, as the case may be. It will be understood that as the rotatable 15 sleeve is forced inward or outward the sleeves 1 of the telescopic leaf-posts correspondingly

move upon the posts 2 and the frame-plates B B' move toward or from each other. As these plates carry the segment slide-blocks 20 C C', it is obvious that the same move therewith. Inasmuch as the expansion or contraction of the book is accomplished through

the medium of screw-actuated mechanism it is apparent that the same may be positively 25 locked and held at any desired position, for the parts cannot be adjusted toward or from each other unless the screw mechanism be ac-

tuated for this purpose.

Upon the segment-blocks C C' work, re-30 spectively, what I shall term the "take-up strips" b b'. To these strips are attached the free ends of the leather backbone-cover D', which must be drawn inward as the book contracts, so as to permit a smooth face and pre-35 vent wrinkling, and permitted to move outward as the book is expanded. To accomplish this in a simple manner, each strip is connected at opposite end by links d d' to lever-rods  $d^2 d^3$ . Each rod is formed with 40 slots e and held to the segment-blocks by pins e'. This forms a lazy-tongs connection, which closes and opens upon the inward and outward movement of the segment-blocks.

Each leaf D is preferably attached to a 45 stub D<sup>2</sup> by a flexible joint D<sup>3</sup>, and each stub is provided with holes 13, which permit of the leaves being fitted over and sliding upon the telescopic posts and central lock-post, and each hole of the stub is intercepted by a rear-50 ward slot 14, which permits of the leaves being taken out and put in without removing or entirely separating the covers of the book.

I do not wish to be understood as confining

myself to the particular form of take-up mechanism herein described for the backbone- 55 cover, for I am well aware that changes may be made in the mechanical construction thereof, although the described connection is a simple and effective one and for such reason has been described and illustrated as a 60

preferred form of connection.

In order to protect the edges of the leaves against interfering with the take-up mechanism, the said mechanism is provided with a guard, which in the present case consists of 65 the plates 14<sup>a</sup> 15, which are attached, respectively, to the frame-plates BB'. One of said plates—say 14<sup>a</sup>—has its ends flanged over in order to provide guide-supports 16 for the plate 15. When the several parts work to- 70 ward or from each other, the plate 15 moves inward and outward below the plate 14<sup>a</sup> in the guides 16.

Having thus described my invention, what I claim as new, and desire to secure protection 75

in by Letters Patent, is—

1. In a book of the character described, the combination with the adjustable frameplates, the telescopic connecting-posts carried thereby and which constitute leaf-supports, 80 of the screw-actuated lock mechanism by which the frame-plates are adjusted toward and from each other, said mechanism comprising a thimble having a screw-threaded opening therein, a screw or worm working 85 therein, means for holding the screw or worm against longitudinal movement, and means at each end of said screw or worm to facilitate turning of the same.

2. In a book of the character described, the 90 combination with a backbone and cover, of an automatic take-up connected with the free ends of the cover whereby said cover may be adjusted to the adjustment of the backbone comprising the lever-rods  $d^2$ ,  $d^3$  and the rela- 95 tively short links d, d' pivoted to the respective ends of said rods and to said cover, and means for positively expanding or contracting said backbone, substantially as described.

In testimony whereof I affix my signature, 100 in presence of two witnesses, this 15th day

of August, 1898.

CHARLES K. ROSENBERG.

Witnesses:

N. A. ACKER, LEE D. CRAIG.