

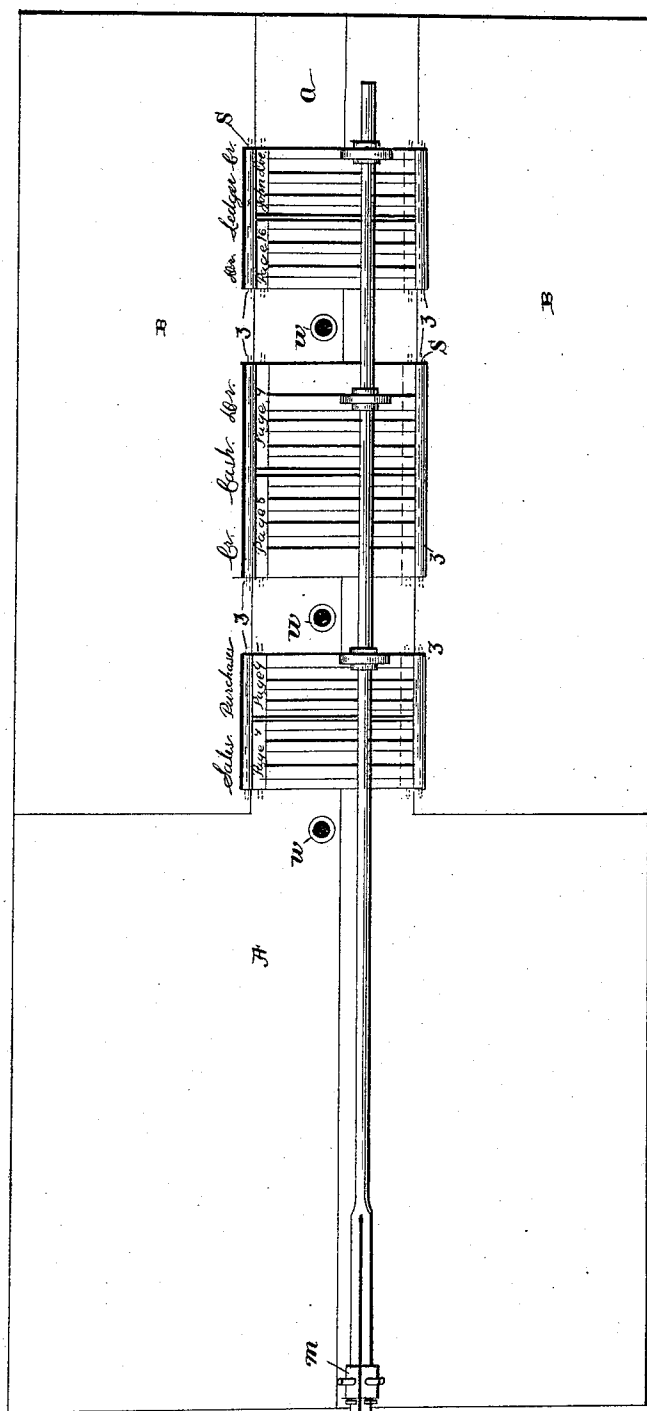
(No Model.)

2 Sheets—Sheet 1.

T. P. PATTISON.
BOOKKEEPING APPARATUS.

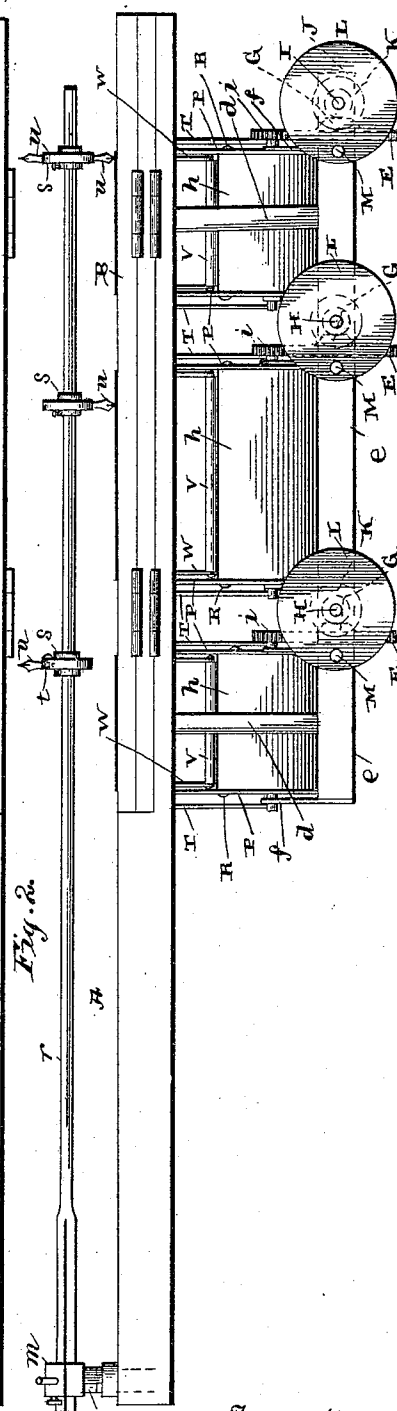
No. 486,386.

Patented Nov. 15, 1892.



Witnesses
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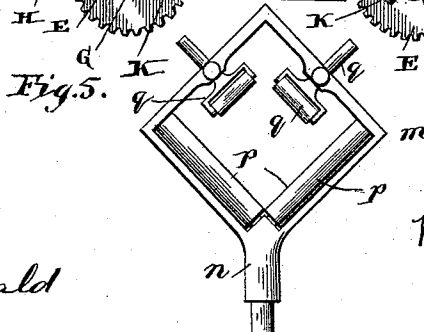
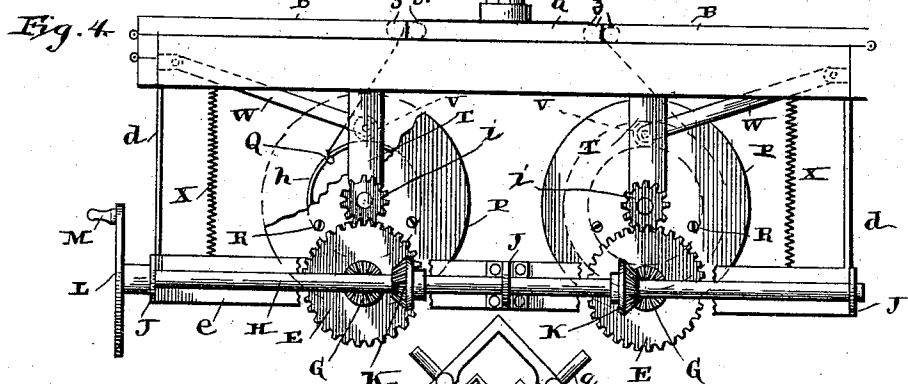
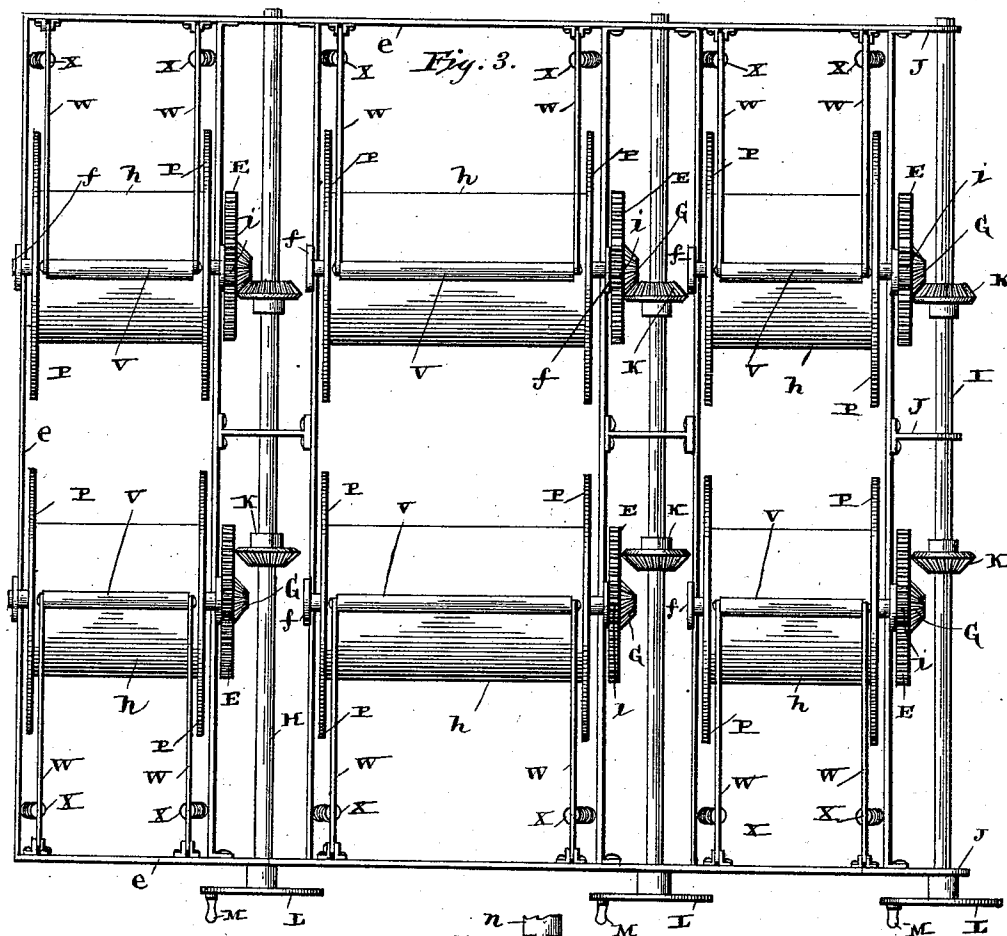
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2 Sheets—Sheet 2.

T. P. PATTISON.
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UNITED STATES PATENT OFFICE.

THOMAS PUTNAM PATTISON, OF ST. JOSEPH, MISSOURI.

BOOKKEEPING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 486,386, dated November 15, 1892.

Application filed April 21, 1892. Serial No. 430,131. (No model.)

To all whom it may concern:

Be it known that I, THOMAS PUTNAM PATTISON, of St. Joseph, in the county of Buchanan and State of Missouri, have invented certain
5 new and useful Improvements in Bookkeeping Machinery; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to
10 make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in bookkeeping apparatus; and it consists in the
15 construction and arrangement of parts which will be fully described hereinafter, and particularly pointed out in the claims.

The object of my invention is to provide a means for keeping books, whereby when an
20 entry is made upon a ledger it is at the same time and by the same operation made upon the cash or other book, so that all posting of books is done away with and the mistakes incident thereto avoided. The necessity of writing
25 a customer's name upon the cash or other book as the entries are made is also avoided, and by these and other differences, hereinafter specified, which are necessary in ordinary bookkeeping, I am enabled to reduce the
30 work one-half or more and at the same time have the books always accurately in balance.

In the accompanying drawings, Figure 1 is a top view of a desk with my invention applied thereto. Fig. 2 is an edge view of the
35 same, showing the mechanism under the top. Fig. 3 is a plan view of the operating mechanism and its supporting-frame. Fig. 4 is an end view of the desk, showing an end view of the operating mechanism. Fig. 5 is an enlarged detached end view of the support for
40 the sliding rod.

A indicates the top of a desk, which can be of the ordinary construction or any other that may be found desirable. As here indicated,
45 the top of the left-hand end of the desk is left solid, and extending from the center of this solid portion of the top to the opposite end of the desk is the central narrow portion *a*. At each side of this central portion *a* are the two
50 doors *B*, which are hinged at their outer edges to a portion of the top of the desk, so that

they can be thrown open and allow access under them for a purpose to be fully described hereinafter. Instead of hinging the doors *B*, they may be movably connected to the top in
55 any convenient manner without departing from the spirit of my invention.

The operating mechanism, to be fully described farther on, is supported under the top by means of a suitably-constructed frame. 60 This supporting-frame consists of the depending plates or bars *d*, to the lower ends of which the horizontal plates *e* are connected, thus forming a rectangular frame. Extending upward from the horizontal connecting-plates *e* 65 at suitable distances apart are the arms *f*, in which the shafts of the cylinders *h* are journaled. These cylinders *h* are arranged in pairs, as shown, and have one end of their shafts provided with the small cog-wheels *i*, 70 which intermesh with the large cog-wheels *E*, which are suitably journaled upon and supported by the horizontal connecting-plates *e* and have connected to their outer faces the bevel cog-wheels *G*. Passing through the 75 horizontal plates *e* and journaled therein are the operating-shafts *H*, which extend between the pairs of cylinders, as illustrated.

Projecting outward from the rectangular frame are the extensions or arms *J*, in which 80 is journaled a shaft *I*, which is similar to the shafts *H*. Secured to each of the shafts *H* and *I* are two gear-wheels *K*, which mesh with the bevel-gears *G*, that are secured to the cog-wheels *E*. The shafts *H* and *I* have an end- 85 wise movement through their supporting-frame, and the cog-wheels *K*, secured to the said shafts, are placed thereon a lesser or greater distance apart than the rollers or cylinders *h*, so that by moving any one of the 90 shafts endwise one of the wheels *K* can be caused to engage one of the wheels *G* for revolving one of the cylinders, while the other wheel *K* of the same shaft is carried away from the wheel *G* of the other cylinder of that 95 pair. In this manner either one of the cylinders of either pair can be revolved as desired by the endwise movement of the shaft, as will be understood and for the purpose hereinafter described. Secured to the outer 100 ends of the shafts *H* and *I* are the disks *L*, which are provided with handles *M*, by means

of which the shafts are revolved. These cylinders *h* are preferably constructed of hollow central portions, having caps or ends *P*, that fit therein and are held in place by means of

5 screws *R*.

As illustrated in Fig. 1, the cash-book, ledger, and sales and purchase books are in view on the top of the desk and consist of long sheets of paper or other suitable material to be written upon. The length of these
10 sheets will be regulated according to the amount of business done and of a width to admit the proper ruling to adapt the paper for the character of business to be entered.
15 Formed in the periphery of each cylinder is a longitudinal slot *Q*, in which one end of the paper is placed after the caps thereof have been removed. The ends of the paper are enlarged, so that after they are inserted and
20 the caps secured in place the paper cannot come out. One of the doors *B* on the top of the desk is then opened and the cylinder placed therein and the paper rolled upon the cylinder by revolving its operating-shaft, as
25 before described. This being done, the other end of the said paper is secured to the other cylinder of that pair in the same manner and then placed at the opposite side of the desk by opening the door *B* at that side. The door
30 *B* next to the bookkeeper is provided with double hinges, as shown, to allow the said door to fall down and fold, so that the operator can have easier access to the under side of the desk through the doorway to place the roller
35 in position. Between the inner edges of the door and the edges of the central portion *a* are formed openings or slots *S*, through which the paper passes from the cylinders or rollers over the said central portion, as plainly illustrated in Fig. 1, which forms a writing surface.
40 From the above it will be seen that two of the rollers form one book and as many books may be formed as desired or as may be required for the particular business being transacted.
45 After business hours the rollers are lifted from the desk and placed in the vault and then in the morning again placed in position. By the endwise movement of the shafts it will be seen that the paper forming the books
50 can be rolled upon and unrolled from either cylinder and thus any portion of the book turned to. These rollers are held in place in their bearings by means of the depending arms or plates *T*, which have their upper ends
55 secured to the under sides of the doors *B* and their lower ends resting over the shafts of the cylinders when they are closed. When the doors are opened, however, these arms are raised with them, so that the shafts of
60 the cylinders are free to be removed. The shafts of these cylinders extend from and form a part of the cap or heads of the cylinders and do not extend through them.

While I have described a particular kind of
65 cylinder, I desire it understood that this forms no essential part of my invention and that they may be constructed in any convenient

manner and any desired means provided for securing the ends of the paper in place without departing from or affecting in any manner
70 my invention.

In order to hold the paper tightly upon the cylinders and to cause it to roll tightly thereon when they are being turned, I provide a friction-roller *V* for each cylinder, which is jour-
75 naled in the outer ends of arms *W*, that have their opposite ends pivoted to the under side of the desk in any preferred manner. These rollers are held in contact with the paper as it is being rolled by means of springs *X*, that
80 have one end attached to the arms and their opposite ends hooked under the frame *A*. This construction allows the tension of the springs to be regulated and varied at will by adjusting them upon the frame, as will be read-
85 ily conceived. The simultaneous entering of the same amount upon two of the books at the same time and by a single operation is accomplished in the following manner: To the
90 left-hand end of the desk is a guideway *m*, which is provided with a shank *n*, that is swiveled to the desk in any suitable manner and is vertically adjustable for a purpose to be more fully described farther on. This guide-
95 way consists of an angular frame, as shown. Journaled to the two lower sides of this frame and at the inner side thereof are the two rollers
100 *p*, while at the two upper sides two adjustable roller-frames *q* are held therein by means of set-screws. Having one end passing through
105 this guideway is a pen-shaft *r*, which has its left-hand end passing through the said guideway made angular and to move upon the said rollers *p* and the looseness of the said shaft regulated by the adjustable roller-frames *2*.
110 The shaft *r* for the rest of its length is preferably made round and carries several sleeves or collars *s*, that are held adjustable upon the said shaft by means of screws. Each of these
115 sleeves is provided with sockets *t* to receive and hold a pen *u*, and the outer sleeve is provided with two sockets, one above the other, and each carrying a pen. The object of this will be specified farther on.

Placed in the top of the desk at one side of
115 each of the books is an inkstand *w*, which is of the same height and should be kept filled with ink to the same height. The guideway *m* is made vertically adjustable, so that it can be adjusted to a proper point to hold it level,
120 and thus cause all the pens desired to be used upon the shaft *r* to touch the books at the same time. The pens are adjusted such a distance apart that when the operator is making an entry upon the ledger with the outer
125 pen the pen next to it will be at the proper point to make a credit or a charge upon the cash-book, according to which side of the ledger is being written upon. When it is desired to make an entry upon the sales-book
130 and the ledger, the shaft *r* is moved endwise in the guideway until the round portion thereof is therein, so that it can be turned to bring the inner pen down. In this manner it will

be seen that when an entry is made upon the sales-book an entry is at the same time being made upon the ledger and that when an entry is being made upon the ledger an entry is at the same time being made upon the cash-book, according to the position of the shaft to bring either the cash-book pen or the sales-book pen into operation. From this it will be seen that all posting is done away with and the books kept accurately in balance at all times, which greatly reduces the amount of work and avoids mistakes, which are the bookkeeper's great trouble. It will be noticed that the cash is entered upon the opposite side from that in ordinary bookkeeping—that is, in entering a credit upon the ledger it is entered upon the right side of the cash-book and not on the left, as ordinarily. When entering items, the ledger-folio is turned until the proper account is reached, while the other books are only turned sufficiently after filling one line to bring the next line flush with a line A', ruled on top of the desk, and the ledger-line is also brought flush therewith.

By my apparatus for bookkeeping writing the amount on one book at the same time effects it upon the other, thus doing double the amount of work with the same amount of labor, and avoids mistakes by doing away with posting. Every post that is made from an ordinary set of books the person is obliged to walk from one book to the other to enter pages, while by my system this is avoided. In entering cash and other items in ordinary bookkeeping the name of the remitter, &c., must be written in order that when the post is made it will be known what account to post it to, but in my apparatus it is avoided because you refer to the account and enter it at once on the ledger, which, as before explained, effects at the same time the entry on the book or books. By my system no carrying forward of footings is necessary, because the books are a continuous roll, and hence the possible mistakes in carrying forward of footings are avoided. If desired, an index can be made by adding cylinders at the right or left of the ledger, which will then enable me to write the name on the ledger, as well as place it at the same time it is written on the index, just as in my usual entries, thus saving one-half the labor and time. Finally as all of my entries in ledger must be fac-simile of those entered in the books no mistake can occur in posting, which is the bugbear and terror of all bookkeepers. Consequently I know my ledger is right with my auxiliary books, while with other books it is not known, and this I esteem an advantage of the greatest importance in bookkeeping.

For the purpose of reducing the friction of the paper as it passes through the slots formed between the edges of the doors B and the central portion A I provide rollers 3, which are journaled in the adjacent edges of the doors and the said central portion, as illustrated, and between which the paper passes

to the top of the desk. This greatly reduces the friction and causes the paper to move easily and smoothly when the rollers are operated.

I do not desire to limit myself to the use of this invention to bookkeeping alone, for it can be applied to making out checks, so that the stubs will be filled up at the same time that the checks are made out, and for other similar purposes where it is desired to make two identical entries at the same time.

Having thus described my invention, I claim—

1. An apparatus for bookkeeping, comprising several sheets of suitable material arranged in a fixed relation to each other and a pen-support extending across them and carrying a pen or pens for each sheet, as and for the purpose described.

2. An apparatus for bookkeeping, comprising several sheets of suitable material arranged adjacent to each other, a pen-support extending over and across them, and adjustable pen-sockets upon the said support carrying pens, as and for the purpose specified.

3. An apparatus for bookkeeping, comprising several sheets of suitable material arranged adjacent to each other, a pen-support extending over them carrying a pen or pens for each sheet, and a universal guideway for one end of the said pen-support.

4. An apparatus for keeping books, comprising several sheets of suitable material arranged adjacent to each other, a pen-support extending over them, carrying a pen or pens for each sheet, and an inkstand for each pen, the said stands being the same distance apart as the pens, as and for the purpose set forth.

5. An apparatus for bookkeeping, comprising several sheets of suitable material arranged adjacent to each other, a guideway having an angular opening, a pen-support extending over the said sheets, having an angular end for the guideway, and a round portion, for the purpose specified, and carrying a pen or pens for each sheet.

6. An apparatus for keeping books, comprising a set of books, each of which is composed of two rollers and a sheet of suitable material wrapped thereon, a means for revolving the said rollers, and a pen-support extending over the said sheets, carrying a pen or pens for each sheet.

7. An apparatus for bookkeeping, comprising a set of books, each composed of two rollers, each having a cog-wheel, and a sheet of paper rolled thereon, an endwise shaft carrying two cog-wheels at a less or greater distance apart than the said rollers, for the purpose set forth, and a pen-support extending over the books, provided with a pen for each sheet.

8. An apparatus for bookkeeping, comprising a desk, a frame under it, rollers journaled in the said frame in pairs, the top of the desk having slots, sheets of paper passing through the said slots over the desk and

having their ends secured to the said rollers, a means for revolving the said rollers, and a pen-support extending over the said sheets and having a pen for each sheet.

- 5 9. An apparatus for bookkeeping, comprising a desk, a frame under it, rollers removably journaled in the said frame in pairs, sheets of paper passing over the desk and having their ends secured to the rollers, a
10 means for revolving them, and a pen-support extending over the said sheets, provided with a pen for each sheet, all combined as and for the purpose specified.

10. In a duplicating apparatus, the combination of the rollers, the sheets of paper passing from one to the other, a means for revolving them, friction-rollers which engage the paper, for the purpose specified, and a pen-support carrying a pen or pens, substantially as set forth.

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

THOMAS PUTNAM PATTISON.

Witnesses:

JNO. S. LEMON,

CLARENCE U. PHILLEY.