(No Model.) 2 Sheets—Sheet 1

S. R. HAMILTON.

VAULT CASH INDICATOR.

No. 538,109. Patented Apr. 23, 1895.

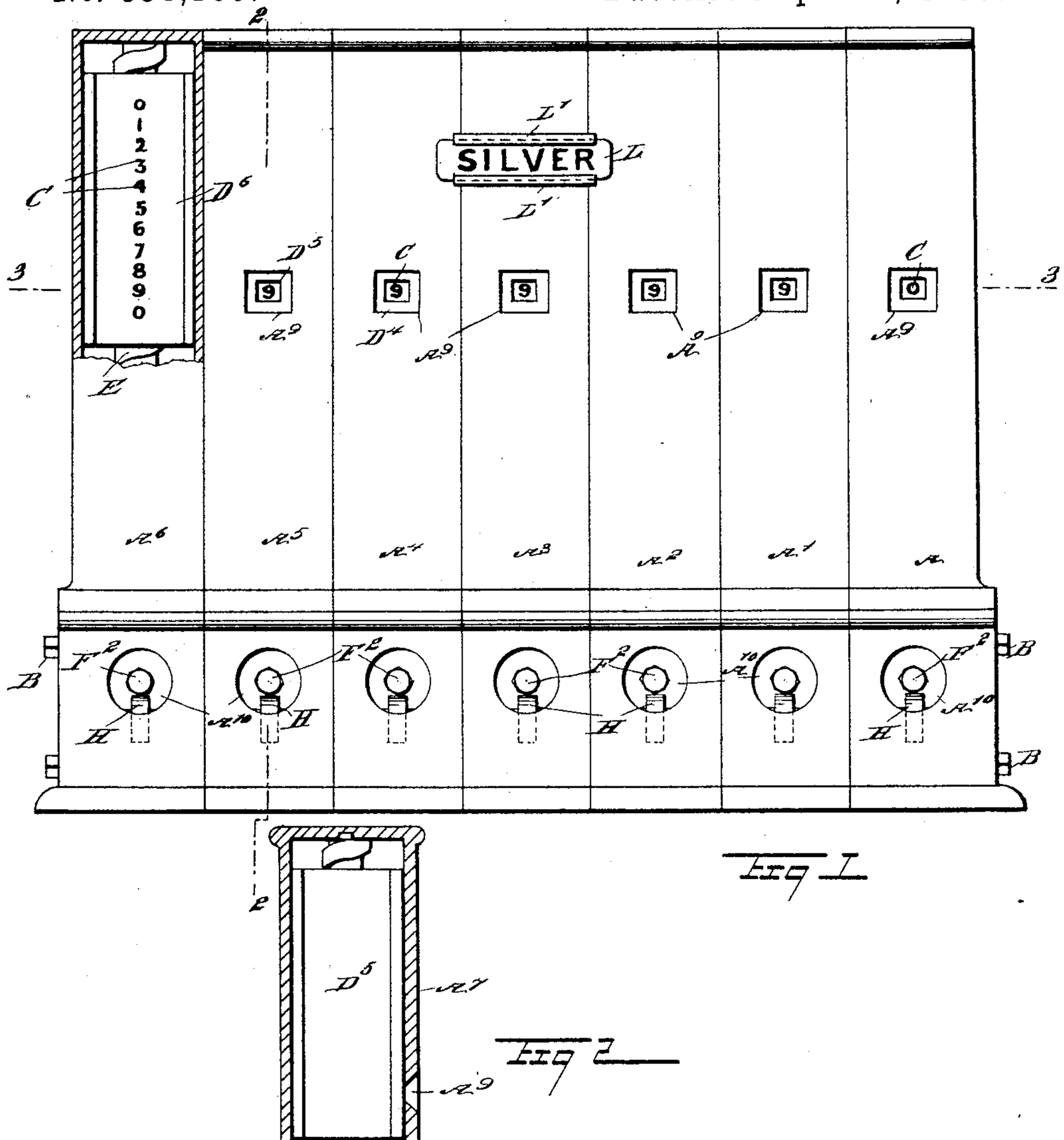

Fig 1

Fig 2

(No Model.) 2 Sheets—Sheet 2

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Fig 3

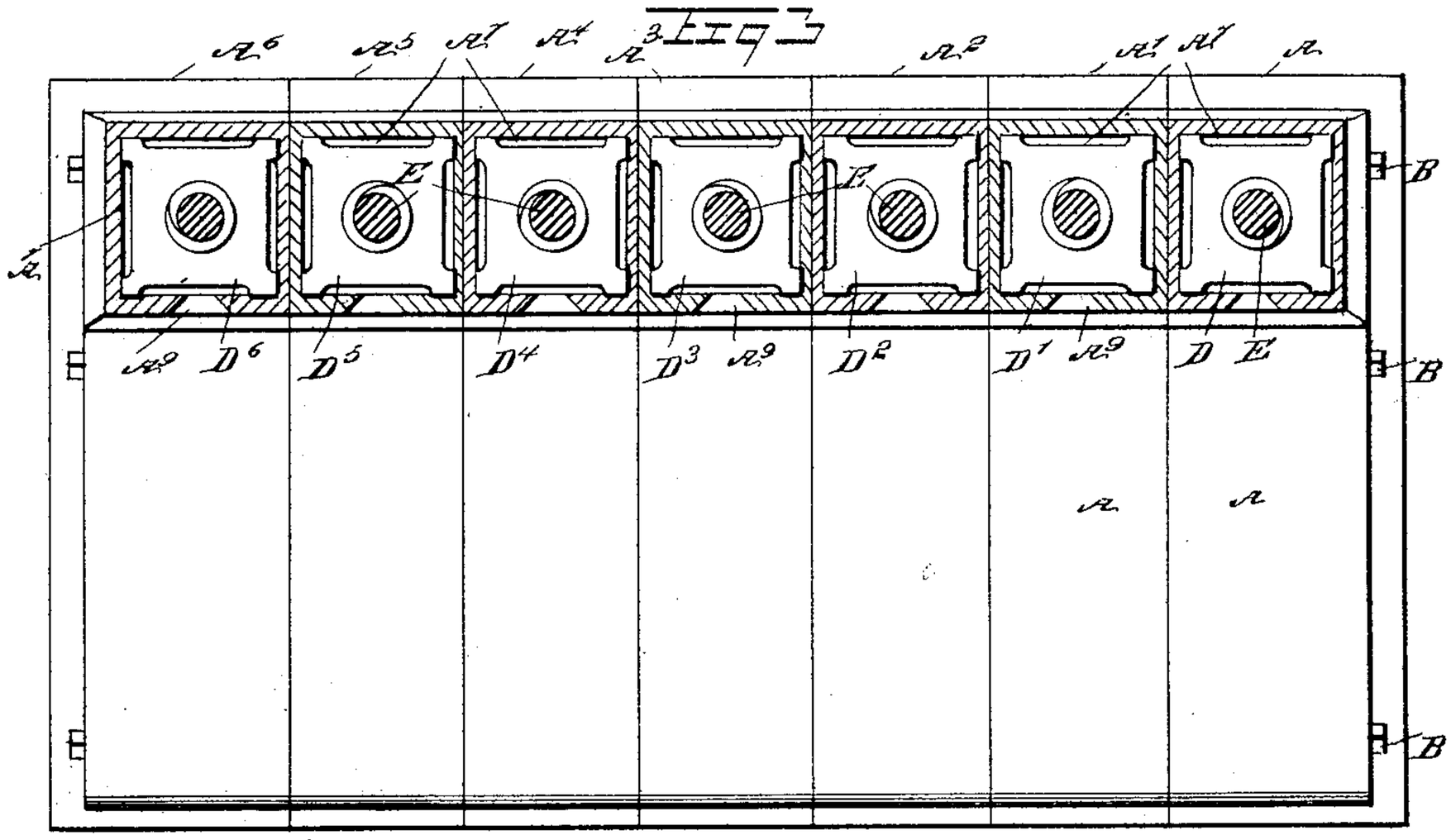


Fig 4

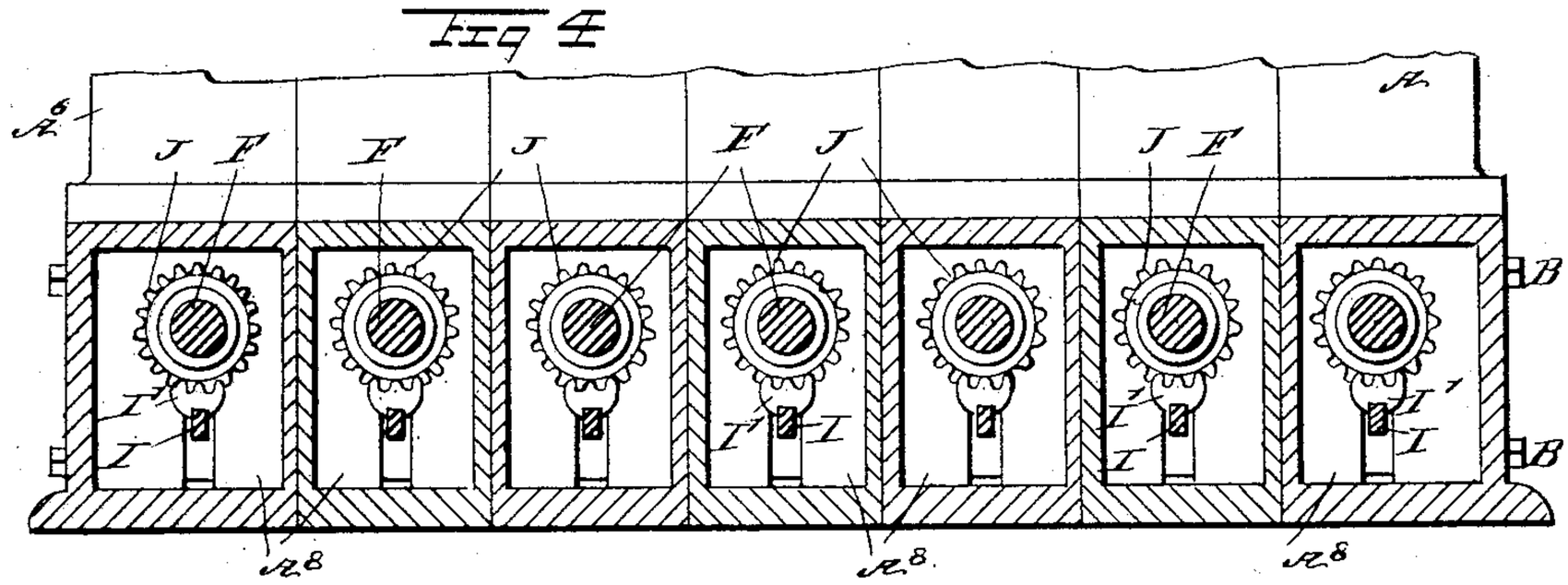
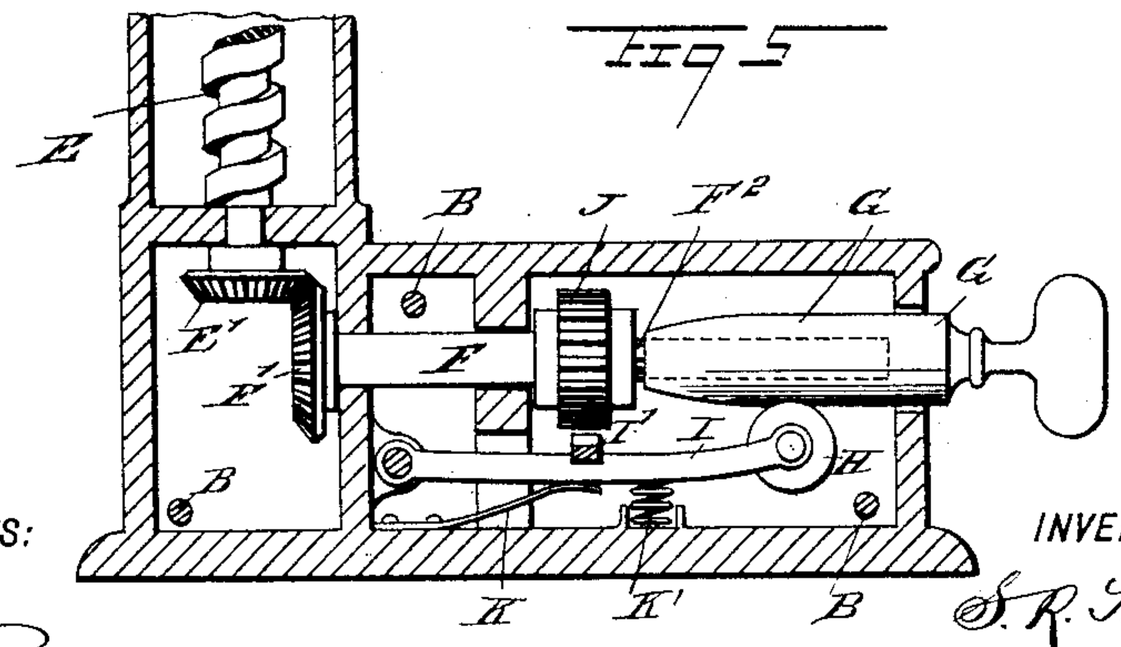


Fig 5



WITNESSES:

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UNITED STATES PATENT OFFICE.

SAMUEL R. HAMILTON, OF FARMERSVILLE, TEXAS.

VAULT CASH-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 538,109, dated April 23, 1895.

Application filed November 3, 1894. Serial No. 527,798. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL R. HAMILTON, of Farmersville, in the county of Collin and State of Texas, have invented a new and Improved Indicator, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved indicator, designed for indicating an amount of money, commercial articles, &c.; for instance, indicating the amount of money contained in a safe or vault.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the improvement with part of the casing in section. Fig. 2 is a transverse section of the same, on the line 2—2 of Fig. 1. Fig. 3 is a sectional plan view of the same, on the line 3—3 of Fig. 1. Fig. 4 is a sectional front view of the improvement on the line 4—4 of Fig. 2; and Fig. 5 is a transverse section of a modified form of the improvement.

The improved indicator is provided with a series of casings A, A′, A^2, A^3, A^4, A^5, A^6, all alike in construction and fastened together by bolts B, to form a single casing of the entire series. Each casing is made L-shape in cross section, by forming a vertical part A^7 and a horizontal part A^8 which latter is the base piece, to permit of conveniently setting the casing on a desk, safe, or in any other convenient place. In the front of each vertical part A^7 of the series of casings is arranged an opening A^9, through which appears a numeral C forming one of a series of numerals arranged one above the other, and preferably in consecutive order, as indicated at the left in Fig. 1. These numerals C are arranged on the front face of the blocks D, D′, D^2, D^3, D^4, D^5, D^6, fitted to slide vertically in the corresponding casings, A, A′, A^2, A^3, A^4, A^5, A^6. As illustrated in Fig. 3, each block D to D^6 has its sides somewhat depressed to form bearing corners fitted into the corners of the vertical part A^7 of the respective casing, to reduce the frictional contact of the block with its casing, as also to prevent abraisons of the numerals as the blocks are moved up or down in the respective casings.

Each block D to D^6, is formed with a vertically-disposed screw threaded aperture engaged by a screw rod E journaled in suitable bearings in the vertical part A^7 of each casing, the lower end of each screw rod being provided with a beveled gear wheel E′ in mesh with a beveled gear wheel F′, fastened on the rear end of a transversely disposed shaft F, mounted to turn in suitable bearings in the horizontal part A^8 of each casing A to A^6.

The front face F^2 of each shaft F is made polygonal in cross section, and is adapted to be engaged by a key G interposed through an opening A^{10} in the front of the horizontal part A^8 of each casing. The key G is tapering at its inner end, so as to engage and actuate a friction roller H, held on the front end of a lever I, fulcrumed in the horizontal part A^8, and provided at its rear end with a weight I^2 for normally holding the front end of the lever I in an uppermost position to rest the friction roller H on the end F^2 of the shaft F. See Fig. 2. Now when the key G is inserted through the opening A^{10} to engage the end F^2 of the shaft, then the beveled end of the said key engages the friction roller H and presses the latter downward, so as to impart a downward or swinging motion to the lever I. The latter is provided on the top with a locking projection I′ adapted to engage a gear or ratchet wheel J, which is secured on the shaft F, at the time the lever I is in an uppermost position, to prevent the shaft F from being turned accidentally at the time the key G is removed. When, however, the latter is inserted and the lever swings downward, as above described, then the lug I′ moves out of contact with the gear wheel J, and the shaft is now free to be turned by the operator turning the key G. By means of this locking device and peculiar shaped key required for its manipulation, any change by unauthorized persons is prevented.

Instead of employing weight I^2 for holding the front end of the lever I in an uppermost position, I may employ a spring or springs K, K′ pressing against the under side of the lever I, as illustrated in Fig. 5.

On the casing A^3 are arranged guideways L′ above the opening A^9, to receive a slide L bearing a legend to indicate the nature of the material of which the amount is to be indicated by the machine. For instance, if the device is used for indicating the amount of silver contained in a bank vault, then a slide L containing the word "Silver" is inserted in the guideway L′, as illustrated in Fig. 1.

The numerals in the casing A are intended to indicate the units, those in the casing A′ to indicate the tens, and these in the next casing hundreds, and so on. To indicate "decimals" casings with apparatus above described are added to the right of casing A as many as may be desired. If it is desired to indicate larger amounts, then casings are added to the left of casing A^6 as high as the necessity of enumeration may demand. When it is desired, for instance, to indicate a certain amount of silver contained in the vault, safe or other device on which the machine is applied, then the operator first applies the key G on the end F^2 of the shaft F contained in the casing A, to turn the said shaft to cause the gear wheel F′ to impart a rotary motion to the gear wheel E′, so that the screw rod E is revolved, and the block D is moved up or down in the vertical part A^7 of the casing A, until the desired numeral corresponding to the unit of the amount to be indicated, appears in the opening A^9 of the said casing A. This operation is repeated on each casing A′, A^2, A^3, A^4, A^5, A^6, to bring the numerals for the tens, hundreds, &c., corresponding to the amounts to be indicated, into the openings A^9 of the several casings. Thus, when it is desired to indicate that the amount is 9,999,990, as shown in Fig. 1, then the operator manipulates the several mechanisms in the casings, to bring those numerals into the openings A^9, and the device indicates at a glance, how much silver is contained in the safe or vault.

As previously mentioned, the device may be employed for indicating the amount of commercial articles in weights or measurements, according to the nature of the article.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. An indicator, provided with a casing having a vertical and a horizontal part, each provided in its front face with an opening, a nut block fitted to slide in the vertical part of the said casing, and having numerals at its front face, each of which is adapted to appear in the opening of the vertical part of the casing, a screw shaft located in the said vertical part and engaging the nut block a horizontally disposed shaft mounted to turn in the horizontal part of the casing, gear wheels for connecting the said shafts with each other, a locking device for locking the said horizontal shaft in position, and a key adapted to engage the front end of the said horizontal shaft and the said locking device, to disconnect the latter from the shaft, substantially as shown and described.

2. An indicator, provided with an operating shaft having its end shaped to receive a key, a wheel on said shaft a lever having a locking lug adapted to normally engage the wheel and a free end projecting longitudinally of the shaft and in advance of the wheel to be engaged by the key, substantially as described.

SAMUEL R. HAMILTON.

Witnesses:
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