G. E. BURNETT.

TAX-RECKONERS.

No. 194,646. Patented Aug. 28, 1877.

Fig. 1.

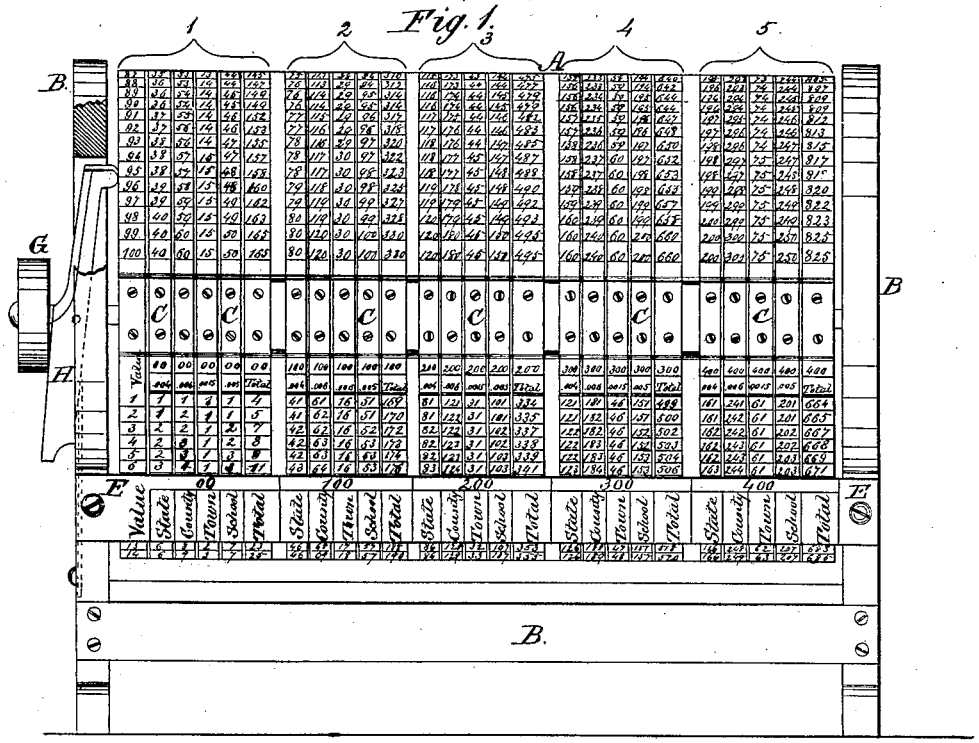
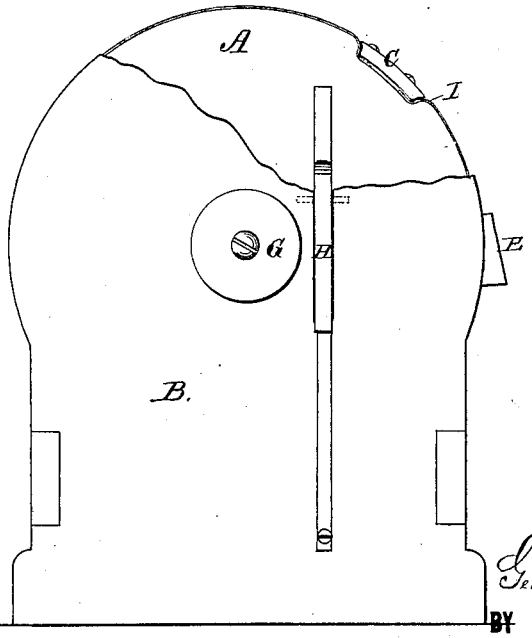


Fig. 2.



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UNITED STATES PATENT OFFICE.

GEORGE E. BURNETT, OF HARRISBURG, ILLINOIS.

IMPROVEMENT IN TAX-RECKONERS.

Specification forming part of Letters Patent No. **194,616**, dated August 28, 1877; application filed May 24, 1876.

To all whom it may concern:

Be it known that I, GEORGE E. BURNETT, of Harrisburg, in the county of Saline and State of Illinois, have invented a new and Improved Tax-Computator; and I do hereby declare that the following is a full, clear, and exact description of the same.

The computator is chiefly designed for the use of assessors and collectors of taxes.

It consists, mainly, of a cylinder adapted to rotate, and having numerous strips attached on which are inscribed numbers representing values or assessments, also the tax-rates and the amounts of the several taxes on the given values or assessments and the totals or aggregates of the taxes. The strips are adjustable and detachable, each being secured by a separate screw-clamp. The cylinder is rotated by a finger-wheel, and arrested or held by a friction-brake, arranged in a peculiar manner, as hereinafter described.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective (partly front and partly plan) view, and Fig. 2 an end view, of the computator, a portion of the frame being broken away to show the construction of certain devices.

The rotating cylinder A is supported horizontally upon journals in a suitable frame, B. Its periphery is plain, but a series of paper strips, inscribed with numbers indicating values, as hereinafter explained, are attached to it, and arranged in groups for convenience of computation. These strips are secured by means of screw-clamping pieces C, which are beveled at each end and placed in a lengthwise groove, D, of the cylinder, to hold the ends of the strips by friction with the sides of the groove. The left-hand strip of the group No. 1 is inscribed with numbers from 1 to 100, representing so many different values or assessments on property. For instance, one citizen may be assessed one dollar, another fifty dollars, and a third one hundred dollars. When the value or assessment exceeds one hundred dollars the second group, 2, of strips is used; and when it exceeds two hundred dollars the third group is used, and so on. In other words, each group to the right of the first represents values one hundred dollars higher than the one to the left of it. The next strip to the right of the first strip in group 1 is inscribed with numbers representing the amounts of the State tax on the several values or assessments (placed opposite or on the same horizontal line) at the rate of four mills (.004) on the dollar. The second strip to the right is similarly inscribed with the amounts of county tax on the different values at the rate of six mills (.006) on the dollar, and the third strip with the amounts of the town tax at the rate of one and one-half mill, (.0015,) and the fourth strip with the amounts of the school tax at the rate of five mills, (.005.) The said amounts are the products of the several values (from one dollar to one hundred dollars) multiplied by the rate per cent.—*i. e.*, the rate of tax for State, county, &c. Thus, suppose the value or assessment is five dollars, then at the several rates of four, six, one and one-half, and five mills the amount of the respective taxes will be as follows: State tax, four mills, (.02;) county, six mills, (.03;) town tax two mills, (.01;) and school tax, five mills, (.03.) These added together give a total of nine cents, (.09,) which is the amount of all the taxes levied.

The fifth strip in the first group to the right of the first or value strip bears the numbers representing the totals of the amounts of the taxes on the several horizontal lines. Thus the total of the State, county, town, and school taxes on fourteen dollars, at the rates above given, is twenty-five cents, (.25;) on ninety dollars it is one dollar and forty-nine cents; on ninety-five dollars it is one dollar and fifty-eight cents, and on one hundred dollars its is one dollar and sixty-five cents.

It will be observed, however, by reference to the table, Fig. 1, that the fractions of a cent are not noted, but extended as so many cents. Thus on a value of one dollar the State tax at the rate of four mills would really be four mills, but it is set down as one cent, (.01.) This is in conformity to the statute of Illinois. But when the computator is used in another State the numbers will, of course, be changed to correspond with the requirements of the statutory law or custom there governing.

When the value exceeds one hundred dollars the second group of strips is used in the calculation in the same manner as the first group, as above described. The first or values

strip (at end of cylinder) is, however, still used for parts of one hundred dollars. Thus, if the value or assessment is two hundred and ninety-five dollars, the cylinder is rotated until the number 95 in the first strip appears just above the horizontal bar E, then the respective amounts of State, county, town, and school tax will appear at the rates of four, six, one and one-half, and five mills in the second group, on the same horizontal line. These amounts are one dollar and eighteen cents, one dollar and seventy-seven cents, forty-five cents, and one dollar and forty-eight cents, and the total is four dollars and eighty-eight cents.

The bar E subserves the use just indicated, namely, to divide the inscribed periphery of the cylinder on any horizontal line, and also indicates the several groups and the several divisions of the taxes, being suitably inscribed for the purpose, as shown in Fig. 1.

The strips of the several groups may be readily detached by loosening the screw-clamps C, and others as easily substituted. Substitution is necessary whenever the rate of tax is changed, since the products of the rate into the several values will change correspondingly.

It will be perceived that when the strips have been suitably inscribed and attached to the cylinder, the operation of multiplying each value or assessment by the different tax-rates need not be repeated each time the tax on any value or amount of property of a given individual citizen is required to be known; but such amount, and also the total amount of the several taxes on the same value, will appear on the cylinder, and may be read at sight. These amounts may be then transferred or extended on the assessor's or collector's books, and thus a great economy of labor effected.

The cylinder is rotated by a disk or finger-wheel, G, attached to one of the projecting journals of the same. Close beside it is placed a friction-brake, H, for arresting and holding the cylinder A in any desired adjustment. The brake consists of a pivoted spring-lever, one end of which projects through the frame and bears upon the end of the cylinder, while the other end projects from the outer side of the frame. By seizing the disk G between the fore-finger and thumb the outer end of the brake-lever H may be simultaneously pressed in by the third finger. The cylinder may hence be conveniently rotated and arrested by one hand.

What I claim is—

1. In combination with the series of independent detachable strips bearing numbers representing values, the independent detachable screw-clamps, one for each strip, and the cylinder provided with a groove, all as shown and described.

2. The combination, with the rotating cylinder, of the circular finger-piece attached to its journal, and the spring-brake lever pivoted alongside the finger-piece, as shown and described, for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of April, 1876.

GEORGE E. BURNETT.

Witnesses:
W. E. BURNETT,
S. L. CHEANEY.