

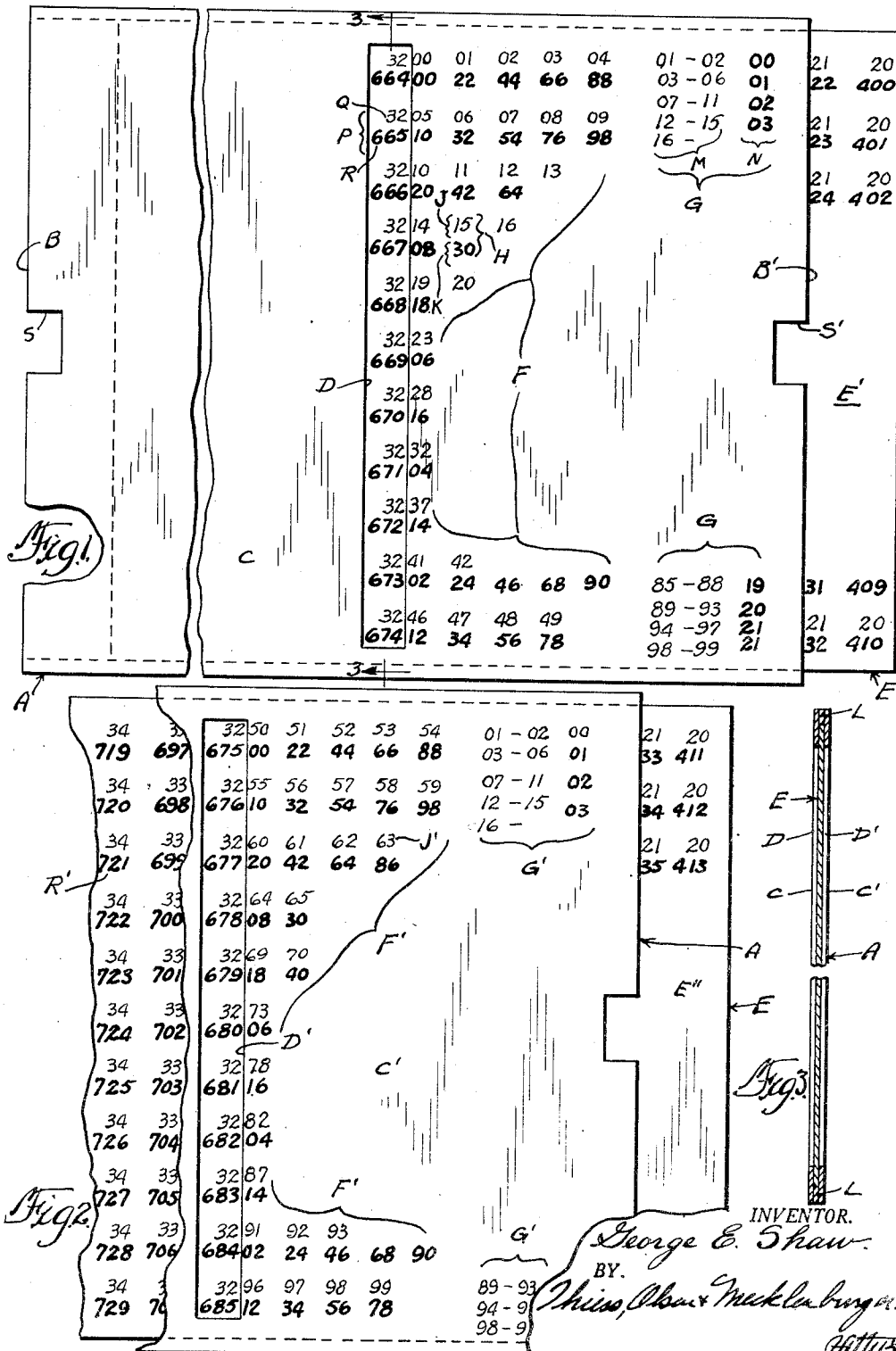
May 15, 1951

G. E. SHAW

2,553,338

INCOME TAX COMPUTING CHART

Filed Aug. 15, 1950



UNITED STATES PATENT OFFICE

2,553,338

INCOME TAX COMPUTING CHART

George E. Shaw, Joliet, Ill.

Application August 15, 1950, Serial No. 179,558

4 Claims. (Cl. 235—89)

1

This invention relates to a device for computing income tax and the like and has for one of its objects means whereby the income tax may be readily computed once the taxable income has been determined, without undue mathematical computation. It is a further object of this invention to provide a device which may be readily used by one not skilled in mathematics or accounting procedure. It is a still further object of this invention to provide a device which is capable of computing income tax on all taxable income regardless of amount. It is a still further object of this invention to provide a device which is simple and compact in construction, effective in operation, and inexpensive to produce.

Further and additional objects will appear from the description, accompanying drawings, and appended claims.

In accordance with one embodiment of this invention a device is provided comprising an envelope open at both ends and having formed in one face thereof an elongated slot. A slider piece is mounted in the envelope behind the slotted face thereof. The slider piece and envelope are adapted to move relative to each other. Indicated on the slotted face are groups of columnated figures. One group of figures is arranged in columns parallel to the elongated slot. The figures in each column of this group are arranged in pairs. One figure of a pair represents the tens of dollars part of the predetermined taxable income. The other figure of the pair represents the corresponding tax for such tens of dollars part of the income. The other group of columnated figures is arranged in adjoining parallel columns of correlated figures. A figure in one of the adjoining columns represents the hundredths of dollars or cents part of the income. A correlated figure in the other adjoining column represents the corresponding tax on such cents part of the income. The slider piece has indicated on the face thereof, adjacent the slotted face of the envelope, a plurality of columnated figures. Each of these columns has the figures thereof arranged in pairs. One figure of a pair of the latter pairs represents the hundreds of dollars part of the income. The other figure of the pair represents the corresponding tax for such part of the income. Only one column of figures indicated on the slider piece is observable at any one time through the slot. The total tax to be paid is the sum of the figures representing the tax on the hundreds of dollars, tens of dollars, and cents parts of the income.

For a more complete understanding of this in-

2

vention reference should be made to the drawings, wherein:

Fig. 1 is a front view of the device with the slider piece shown partially exposed at the right end of the envelope; portions of the figures indicated on the front face of the envelope and slider piece have been omitted in order to clarify understanding of the device.

Fig. 2 is a fragmentary back view of the device shown in Fig. 1, with portions of the figures indicated on the back faces of the envelope and slider piece likewise omitted; and

Fig. 3 is a sectional view of the device taken along line 3—3 of Fig. 1.

Referring now to the drawings and more particularly to Fig. 1, an income tax computing device is shown comprising an elongated, rectangularly-shaped envelope A open at opposite ends B and B' and having formed in the front and back faces C and C', thereof elongated slots D and D' respectively which extend substantially the width of said envelope. Disposed intermediate the front and back faces C and C' of the envelope and slidably mounted with respect thereto is a flat elongated rectangularly-shaped slider piece or card E. The envelope and slider piece may be of any lightweight, inexpensive material such as cardboard. The front and back faces C and C' of the envelope are held in spaced relation with respect to one another by means of spacer strips L mounted along the upper and lower edges of the envelope, see Fig. 3. The front and back faces of the envelope are secured to these spacer strips L by gluing, stapling, or any other suitable means.

Slots S and S' are formed at the open ends of the envelope to facilitate grasping of the slider piece E.

Indicated on the front face C of the envelope are groups of columnated figures F' and G. The figures forming group F' are arranged in columns which are parallel with respect to the elongated slot D. Each of the columns of group F' comprises a plurality of figures arranged in longitudinally-spaced pairs H. One figure J of the pair H is visually contrastable from the other figure K thereof. That is to say, the figures may be of contrasting colors or design. Figure J represents the tens of dollars part of a predetermined taxable income. Figure K on the other hand represents the corresponding income tax on the income indicated by figure J. Each pair of figures in one column of group F' is aligned in lengthwise-extending rows with the corresponding pairs of figures in the other columns of the group. It is

to be noted that figures J in group F cover the tens of dollars part of income ranging from 00 to 49. The corresponding figures J' on the back side C' of the envelope cover the tens of dollars part of income ranging from 50 to 99.

Group G of the columnated figures is spaced from group F figures and comprises two parallel columns M and N, see Fig. 1. Column M consists of a series of income range figures which are visually contrastable from the figures in column N. The income range figures in column M represent the cents part of a predetermined taxable income. The figure disposed in the same relative position in column N represents the income tax on the income indicated by the column M figure. If, for example, the cents part of the income was ten, the corresponding tax thereon would be two cents.

The back side C' of the envelope has indicated thereon groups of columnated figures F' and G' which correspond to groups F and G as heretofore described. Groups G and G' are formed of identical columnated figures. Groups F and F' are formed of figures arranged in like manner but differing only as to the income range as heretofore mentioned.

The slider piece or card E, has indicated on its front and back faces a plurality of columnated figures arranged in parallel relation with respect to the elongated slots D and D' formed in envelope A. Only one column of figures on the front and back faces of slider piece E is observable through slots D and D', respectively, for any particular setting of the piece relative to the envelope A. The columns on the faces of the piece are similar and therefore only the columns indicated on the front face E' will be described in detail. Each column indicated on the front face E' of the piece is formed of a plurality of figures arranged in longitudinally-spaced pairs P. One figure Q of a pair P is visually contrastable from the other figure R thereof. Figure Q represents the hundreds of dollars part of a predetermined taxable income. The figure R represents the corresponding income tax on such part of the income as indicated by Q.

In the columns indicated on the back side E'' of the piece, the figure R', which represents the income tax, varies slightly from the amount indicated by figure R. The reason for this variance is due to the difference in income covered by groups F and F' on the front and back sides, respectively, of the envelope.

In the device as shown in Figs. 1 and 2, the slider piece is restricted to computing income tax on incomes ranging from \$2,000. to \$4,000.00. The length of the slider piece, however, may be increased if desired so as to allow the tax on a greater range of income to be computed thereby.

The device as shown in Fig. 1 is set to compute the income tax for incomes ranging from \$3,200. to \$2,249.99. If, for example, the taxable income was \$3,208.05 the total income tax thereon would be \$665.77. To arrive at this amount one would position the envelope A with the front face C up or exposed to the reader. The piece E is then pulled out from the right end B' of the envelope until the column of paired figures having figure Q represented as 32 is observable through the slot D. The reader then selects the second pair P of figures from the top and notes that the tax on the 3200 part of the income is \$665. As represented by figure R. To get the tax on the \$8. part of the income, the reader shifts his eyes

to the right along the lengthwise row of figures until the 08 number represented by figure J in the columnated figures of group F is observed. The tax as indicated by figure K is then found to be 76¢.

What particular pair P of figures in the column, observable through slot D, is selected, is determined by the location of the figure J on the envelope face, which represents the tens of dollars part of the income. If the tens of dollars part of the income had been 48, the bottom pair P of figures would have been selected because the number 48 appears in the bottom row of figures in group F. To find the tax on the 5¢ part of the income, the reader looks to column M of group G on the front face of the envelope. The proper income range is selected, which in this instance is the second from the top. To obtain the proper tax on this amount, the reader shifts his eyes to the right and observes the figure 01 in column N. This figure is in the same relative position in column N and represents 1¢ tax. Thus the total tax on a \$3208.05 income would be the sum of \$665. + \$.76 + \$.01 = \$665.77.

If the taxable income ranged from \$3250. to \$3299.99, the back side C' of the envelope, in this instance would be used and the same procedure above described would be followed.

Where the range of taxable income is not provided for by the slider piece E, shown in Figs. 1 and 2, another slider piece covering the appropriate range may be substituted, in which event the figures F and G, and corresponding figures on the reverse side of the envelope A, would also be changed to show the figures appropriate to the different income tax bracket. On the other hand the size of the slider piece may be increased so as to enable the tax on a greater range of incomes to be readily computed by a single slider piece.

Thus it will be seen that an income tax computing device has been provided which eliminates undue mathematical computations and therefore may be used effectively and expediently by one not skilled in mathematics or accounting procedures. Furthermore, the device is of simple and inexpensive construction and may be of such size as to be readily carried in a purse or pocket.

While a particular embodiment of this invention is shown above, it will be understood, of course, that the invention is not to be limited thereto, since many modifications may be made, and it is contemplated, therefore, by the appended claims, to cover any such modifications as fall within the true spirit and scope of this invention.

I claim:

1. An income tax computing device comprising an envelope open at both ends and being provided with an elongated slot in a face thereof, and a slider piece mounted within said envelope behind said slotted face, said envelope and slider piece being movable relative to one another; said slotted face having indicated thereon a group of columns arranged in parallel relation with respect to said elongated slot, each of said columns comprising pairs of correlated figures, one figure of a pair representing the tens of dollars part of the income and the other figure thereof representing the tax on said part of the income; said slider piece having indicated on the face thereof adjacent the slotted face of said envelope columns arranged in parallel relation with respect to said elongated slot, only one of said columns being observable through said slot at any one time, each of said latter columns com-

5

prising pairs of correlated figures; one figure of a pair of said latter pairs representing the hundreds of dollars part of the income and the other figure thereof representing the tax on said hundreds of dollars part of the income.

2. An income tax computing device comprising an envelope open at both ends and having an elongated slot formed in one face thereof, the length of said slot being substantially the same as the width of said envelope, and a slider piece mounted on said envelope behind said slotted face for movement lengthwise of said envelope; said slotted face having indicated thereon columns of numbers each of said columns having the numbers thereof arranged in pairs; each of said pairs comprising visually contrastable numbers, one of said contrasting numbers representing the tens of dollars part of a predetermined income, the other contrasting number representing the tax on said tens of dollars part of the income; the face of said slider piece adjacent said slotted face having indicated thereon columns of numbers, each of said latter columns having the numbers thereof arranged in pairs; each of said latter pairs comprising visually contrastable numbers, one of said latter contrasting numbers representing the hundreds of dollars part of said predetermined income, the other contrasting number representing the corresponding tax on said hundreds of dollars part of said income.

3. An income tax computing device comprising an envelope open at both ends and having an elongated transparent window formed in one face thereof, and a slider piece adjustably mounted on said envelope behind said window; the windowed face of said envelope having indicated thereon groups of columnated figures, one of said groups having the columns thereof arranged in parallel relation with respect to said window, the other of said groups being spaced from said one group; the figures in each of the columns of the first group being arranged in pairs; one figure of a pair representing the tens of dollars part of an income and the other figure of the pair representing the corresponding income tax on such part of income; the figures in the second group being arranged in parallel columns; a figure in one of the latter columns representing the hundredths of a dollar part of said income, a figure in the same relative position in the second of the latter columns representing the income tax on said hundredths of dollar part of said income; said slider piece having indicated on the face thereof, adjacent said windowed face, columnated figures arranged in parallel relation with respect to said

6

window, only one column of said third mentioned columnated figures being visible through said window for any adjusted position of said slider piece, each of said third mentioned columns having the figures thereof arranged in pairs; one figure of a pair of said latter pairs representing the hundreds of dollars part of said income, and the other figure of said pair representing the corresponding income tax on said hundreds of dollars part of said income.

4. A device for computing the income tax on a predetermined amount of income comprising an envelope open at both ends and having an elongated slot formed in one face thereof and extending athwart substantially the width of said face, and a slider piece mounted on said envelope behind said slotted face for movement lengthwise of said face; said slotted face having indicated thereon groups of columnated figures, one of said groups having the columnated figures arranged in pairs, one figure of a pair representing the tens of dollars part of said predetermined income and the other figure of the pair representing the corresponding tax on said part of the income, the second of the groups of columnated figures being arranged in two parallel columns, one figure in one of the parallel columns representing the cents part of said income, and a corresponding figure in the other parallel column representing the tax on said cents part of said income; said slider piece having indicated on the face thereof, adjacent the slotted face of said envelope, a plurality of columnated figures, only one column being observable through said slot at a time, said piece columnated figures being arranged in pairs, one figure of the latter pairs representing the hundreds of dollars part of said income, and the other figure of said latter pairs representing the corresponding tax on said hundreds of dollars part of said income; the total tax on said predetermined amount of income being the sum of the figures representing the taxes on the hundreds of dollars, tens of dollars, and cents parts of the income.

GEORGE E. SHAW.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
778,790	Merrill	Dec. 27, 1904
798,206	Paradis	Aug. 29, 1905