

B. B. HOLMES.
CALCULATOR.

APPLICATION FILED NOV. 20, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

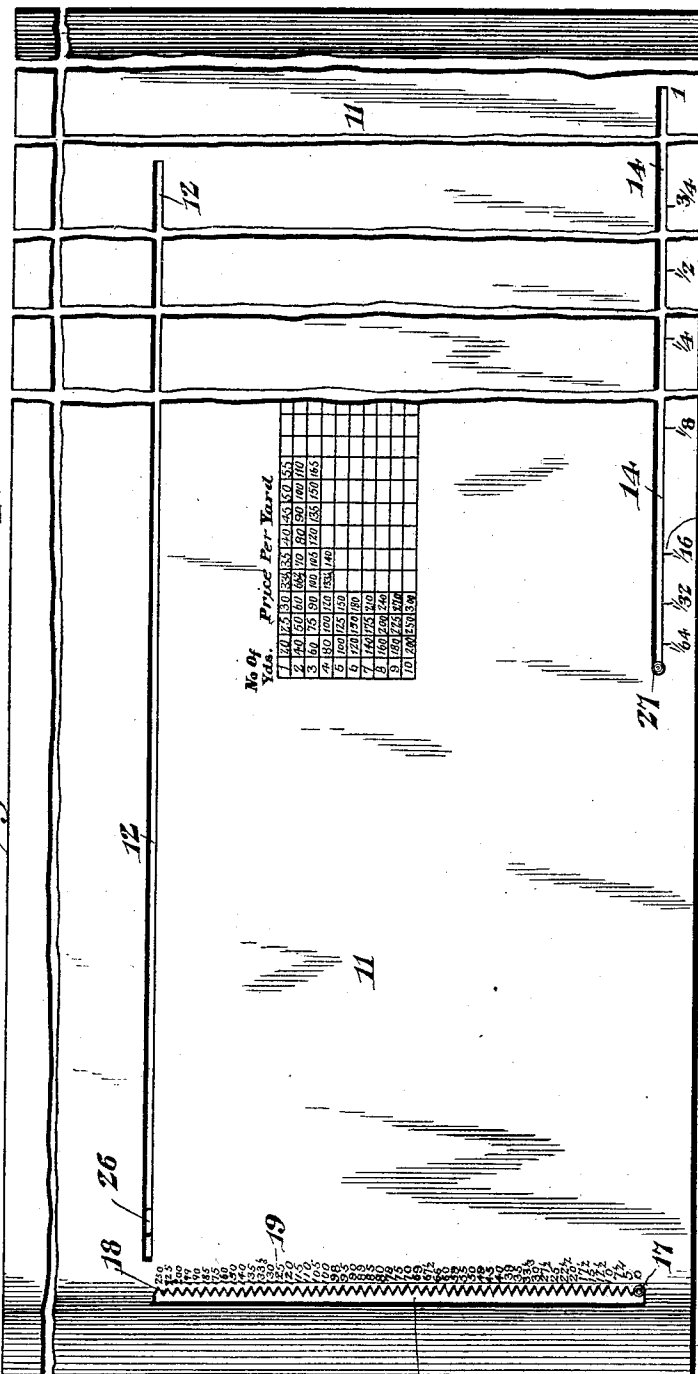
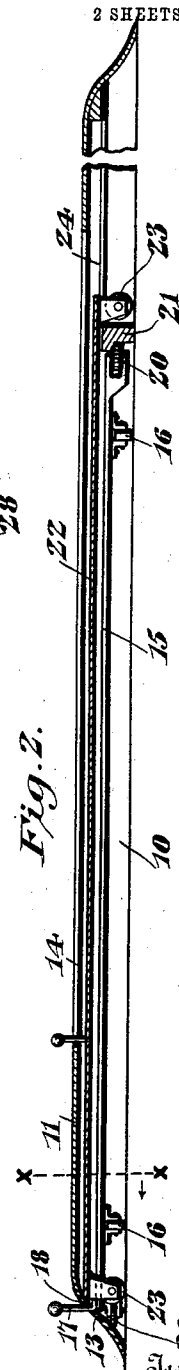


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

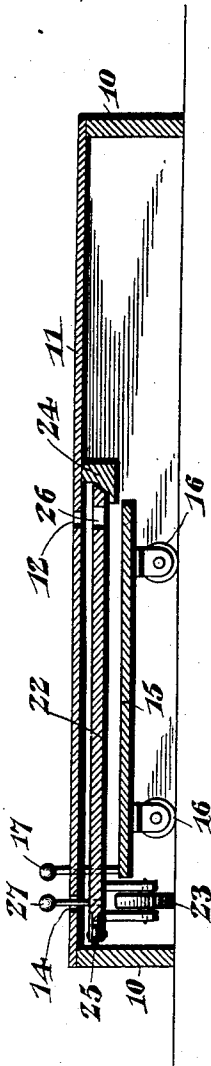
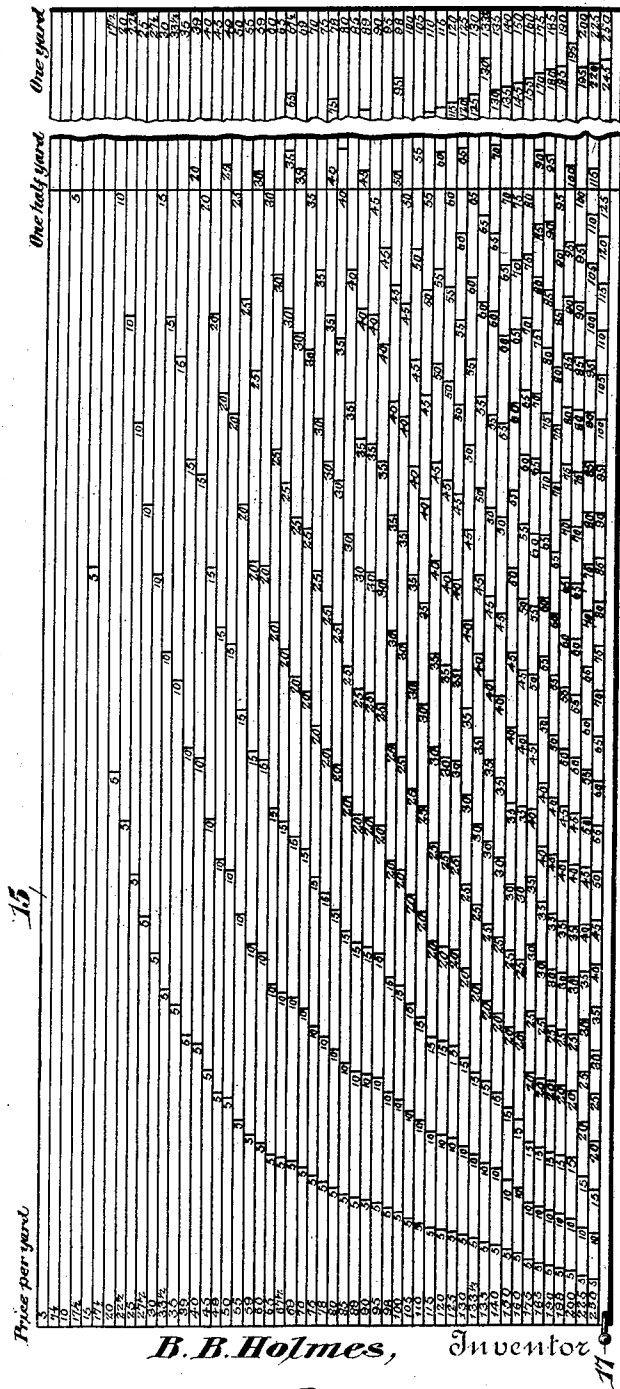


Fig. 4.



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UNITED STATES PATENT OFFICE.

BYRON BERT HOLMES, OF ELBA, NEBRASKA.

CALCULATOR.

SPECIFICATION forming part of Letters Patent No. 732,301, dated June 30, 1903.

Application filed November 20, 1902. Serial No. 132,121. (No model.)

To all whom it may concern:

Be it known that I, BYRON BERT HOLMES, a citizen of the United States, residing at Elba, in the county of Howard and State of Nebraska, have invented a new and useful Calculator, of which the following is a specification.

The present invention relates to calculators, and while particularly intended for use by merchants in computing lengths of cloth to be cut for customers it may be readily employed for many analogous purposes.

The prime object of the invention is to provide a calculator of the above class which is very simple both in construction and operation, so that it may be readily understood by a clerk or merchant.

In the preferred embodiment of the invention the calculator is arranged to indicate the amount of material to be cut from a piece of goods when the price per yard and the amount of money to be spent are given; but it will be seen after an understanding of the structure that by other arrangements of scales and tables different problems may be as easily computed. In like manner the invention is not to be limited to the exact construction shown, as changes may be made provided they are within the scope of the claims hereto appended.

In the drawings, Figure 1 is a plan view of the calculator. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is a cross-sectional view taken on the line X X of Fig. 2, and Fig. 4 is a plan view of the platform and the computing-table carried thereby.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

It has been found necessary in order to show the structure upon a scale sufficiently large to be understood to break away unimportant portions thereof, while maintaining the relative arrangement of the several parts. It is believed, however, that the invention can be as readily understood.

As shown in the accompanying drawings, a casing 10 is provided having a flat cover 11, provided with a longitudinally-disposed sight-opening 12, a transversely-disposed slot 13, located contiguous to one end, and a longitudinally-disposed slot 14, arranged contiguous to one of the side edges. Within this cas-

ing is movably mounted a platform 15, supported upon rollers 16, which rest upon the table or counter upon which the calculator is placed. This platform is movable transversely of the casing, and consequently transversely of the sight-opening 12. It is provided with a computing-table, the arrangement of which is clearly shown in Fig. 4.

The upper face of the platform, which is preferably one yard in length, is subdivided by longitudinal lines into a plurality of spaces, each one of which is provided at its ends with numerals representing a certain price per yard, from five cents to two dollars and fifty cents. These spaces are subdivided into different sections of a yard, each division being clearly marked, as shown by a price representing the cost of said section. It will therefore be understood that as the platform moves back and forth beneath the sight-opening 12 of the casing the different spaces will be exposed beneath the same. Said platform is moved through the medium of a handle-arm 17, that projects through the transverse slot 13, and is arranged to engage in suitable notches 18, formed in one wall of the slot, these notches being spaced apart distances equal to the width of the divisions of the computing-table. A finder-scale 19 is arranged alongside of this transverse slot and corresponds to the price-marks per yard upon said computing-table, each numeral of the finder-scale being opposite to one of the notches of the wall. It will therefore be seen that the operating-arm 17 also performs the function of a pointer, so that by moving said arm opposite to one of the numerals upon the indicating-scale the corresponding space of the computing-table will be exposed through the sight-opening 12. The lateral movement of the platform 15 is prevented by means of antifriction-rollers 20, journaled in the edge of the platform opposite the operating-arm 17, those at one end bearing against a suitable track 21, secured within the casing, the others resting against the casing.

Movably mounted within the casing and above the platform is an indicator in the form of a plate 22, supported at its front edge upon suitable rollers 23, the rear edge being slidably mounted in a depending bead 24, secured to the under side of the cover 11, as shown in

Fig. 3. The lateral movement of this plate is prevented by antifriction-rollers 25, which project from the front edge of the same and bear against one of the side walls of the casing. It will be observed that this indicator is movable longitudinally of the casing and at right angles to the movement of the platform 15, which it covers. It is therefore interposed between said platform and the sight-opening and is provided with a small opening 26, which is in alinement with the sight-opening to expose but a single numeral of the computing-table at one time. The opening 26 in the present embodiment is rectangular in form, though it may be of any shape desired. This indicator is operable through the medium of an arm 27, that projects through the longitudinally-disposed slot 14, and along one of the side edges of the slot is located an indicator-scale 28, representing the different subdivisions of a yard, as clearly shown in Fig. 1. In actual practice the slot 14 is one yard in length, so that the subdivisions thereof will be in proper proportion. Upon the upper face of the casing there may, if desired, be a table indicating the different prices of cloth from one to ten or more yards and at different values per yard. A portion of this scale is clearly shown in Fig. 1.

The manner of operating the device may probably be best explained by a simple example. Assuming, for instance, that a purchaser wishes to buy twenty-five cents' worth of cloth which is worth one dollar per yard, the clerk or merchant will move the arm 17 in the transverse slot 13 until it engages in the notch opposite the one-dollar mark. This, as above explained, will bring the one-dollar space of the computing-table beneath the sight-opening. The clerk then moves the indicator until the numeral "25" appears beneath the opening 26, whereupon the actuating-arm of said indicator will be opposite the one-quarter mark of the indicator-scale. It will thus be seen that said arm also serves the function of a pointer, and the clerk will thereupon understand that one-quarter of a yard is to be cut. This of course is a very simple example for illustration, but problems much more involved may arise, in which case the calculator will be very useful. By this device it will therefore be seen that a clerk or merchant may readily ascertain the amount of cloth to be cut when the amount to be spent and the price per yard are known, and as the structure is very simple the device may be manufactured at comparatively small cost. Furthermore, it is easily understood, so that a person with ordinary intelligence will be able to operate the same. It will of course be understood that the scales and computing-table shown are but one form that may be employed, and by changing them other problems of an analogous nature may be readily computed with the machine.

From the foregoing it is thought that the construction, operation, and many advantages

of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a calculator, the combination with a casing having an opening therein and having a slot with an indicator-scale arranged contiguous thereto, of a computing-table located within the casing and movable beneath the sight-opening, an indicator also located within the casing above the computing-table and movable over the same and beneath the opening, and a pointer movable in the slot of the table and coacting with the indicator-scale.

2. In a calculator, the combination with a casing having a sight-opening, of a flat platform located within the casing and carrying a computing-table, said platform being movable in one direction to different places beneath the casing to expose different portions of the table through the sight-opening, and an indicator movable over the table and in a different direction to the movement of said table.

3. In a calculator, the combination with a casing having a sight-opening, of a flat platform located within the casing and carrying a computing-table, said platform being movable in one direction to different places within the casing and beneath the opening, and an indicator also located within the casing and above the table, said indicator being movable in a different direction to the movement of said table.

4. In a calculator, the combination with a casing having a longitudinally-disposed sight-opening and a transversely-disposed slot, of a platform located within the casing and carrying a computing-table, said platform being movable transversely of and beneath the sight-opening, an operating device for the platform projecting through the transversely-disposed slot, and an indicator movable over the table and in a different direction to the movement of said table.

5. In a calculator, the combination with a casing having a longitudinally-disposed sight-opening, a longitudinally-disposed slot and a transversely-disposed slot, of a finder-scale located alongside the transversely-disposed slot, an indicator-scale arranged beside the longitudinal slot, a platform located within the casing and carrying a computing-table, said platform being movable transversely of and beneath the sight-opening, a combined operating device and pointer for the table projecting through the transversely-disposed slot and coacting with the finder-scale, an indicator located above the table and movable longitudinally beneath the sight-opening, and a combined operating device and pointer for the

indicator projecting through the longitudinal slot and coacting with the indicator-scale.

6. In a calculator, the combination with a casing having a sight-opening, of a wheeled
5 platform located within the casing and carrying a computing-table movable in one direction beneath the opening, and a wheeled indicator also located in the casing and above the table, said indicator being movable be-

neath the sight-opening and in a different direction to the movement of the platform. 10

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

BYRON BERT HOLMES.

Witnesses:

J. N. PETERS,

H. A. ANDERSEN.