

No. 662,533.

Patented Nov. 27, 1900.

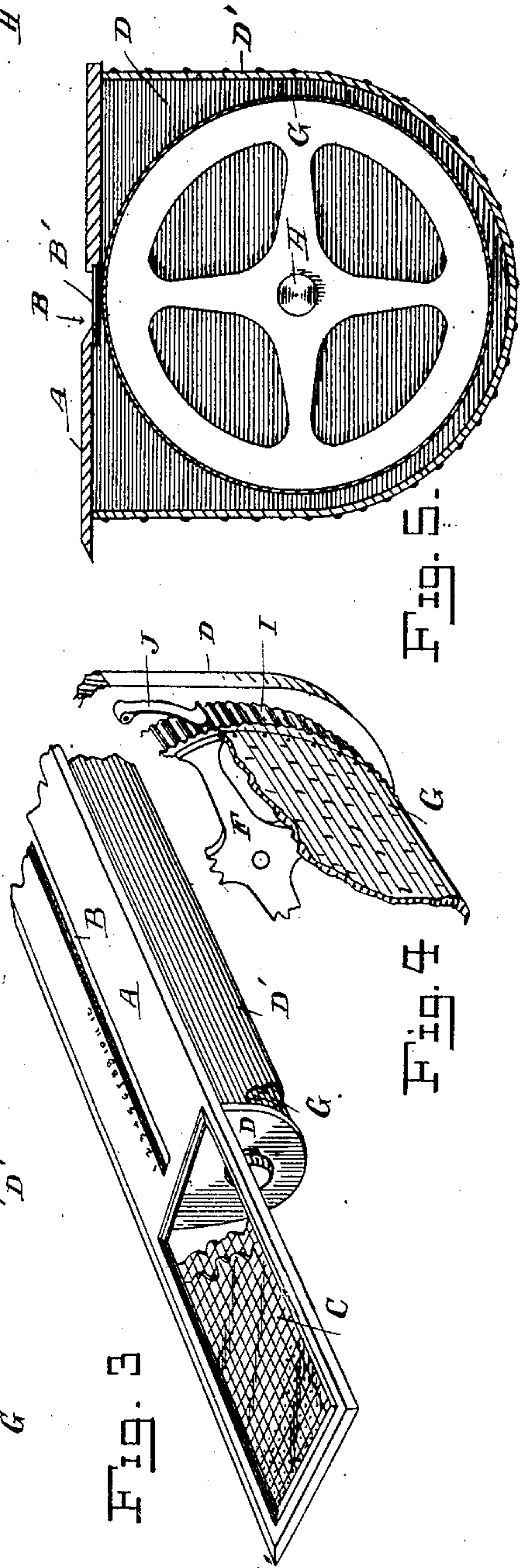
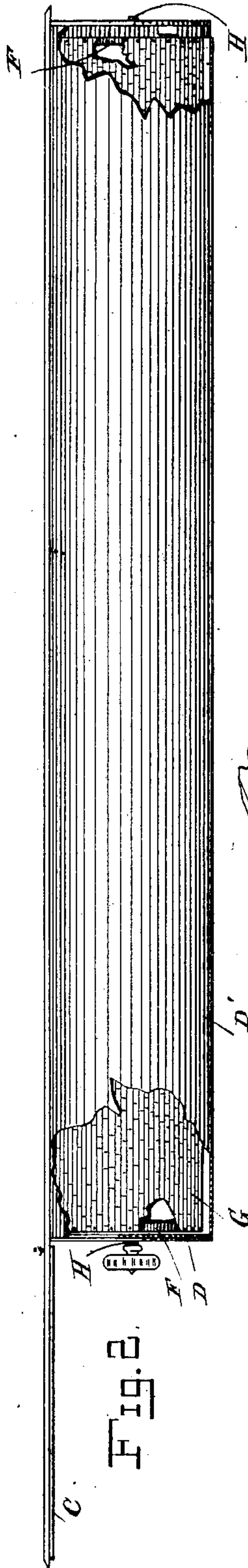
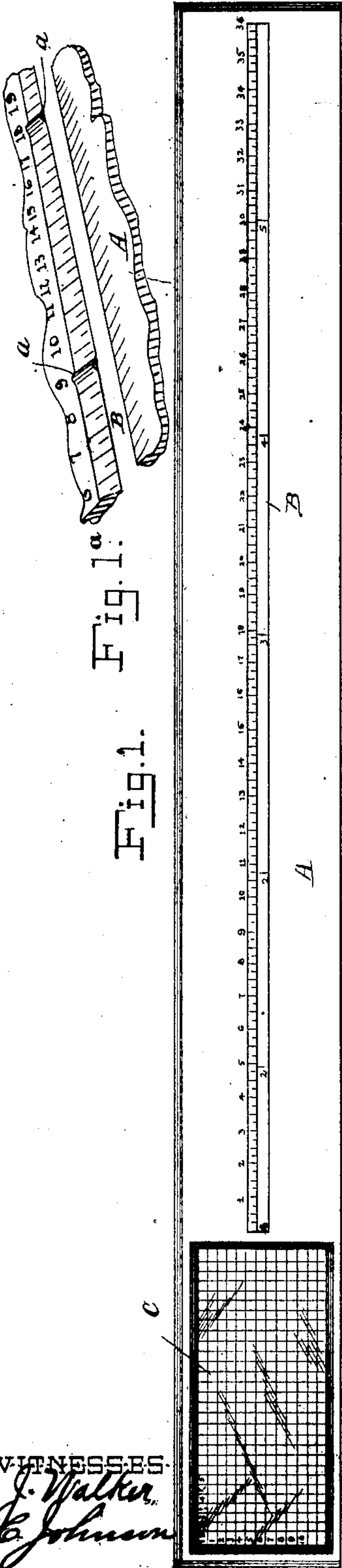
C. E. & J. G. HARRINGTON.

COMPUTING MEASURE.

(Application filed May 14, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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2 Sheets—Sheet 2.

Fig. 6.

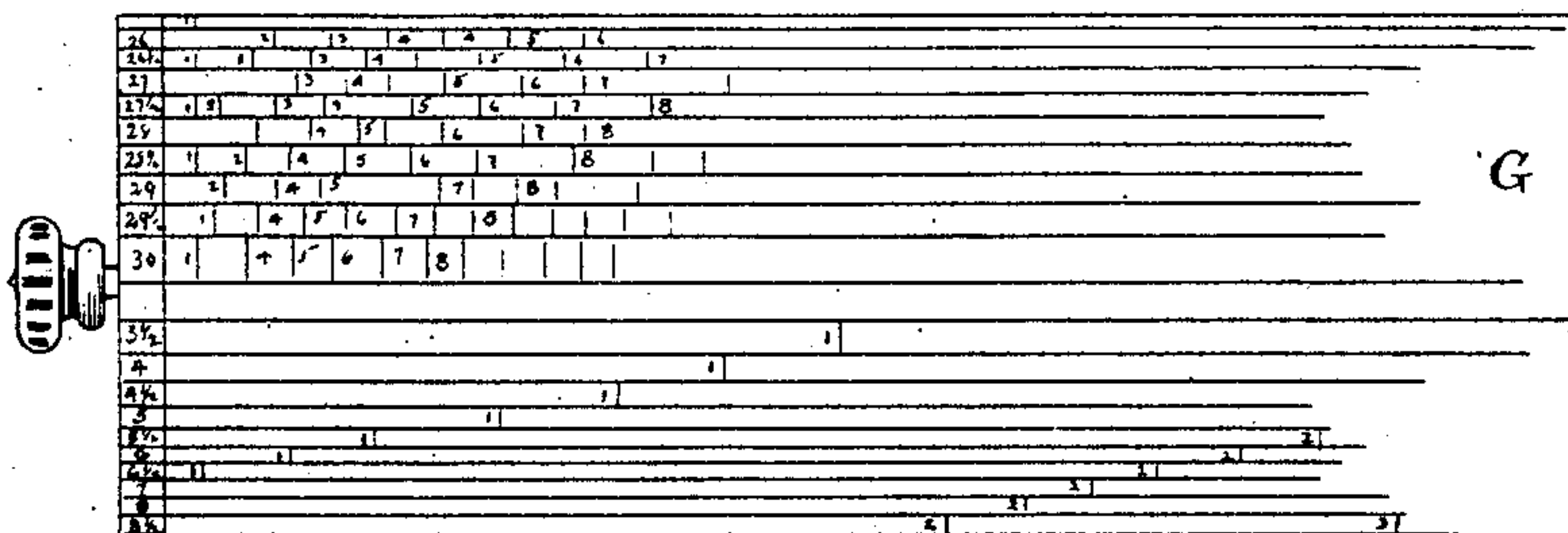
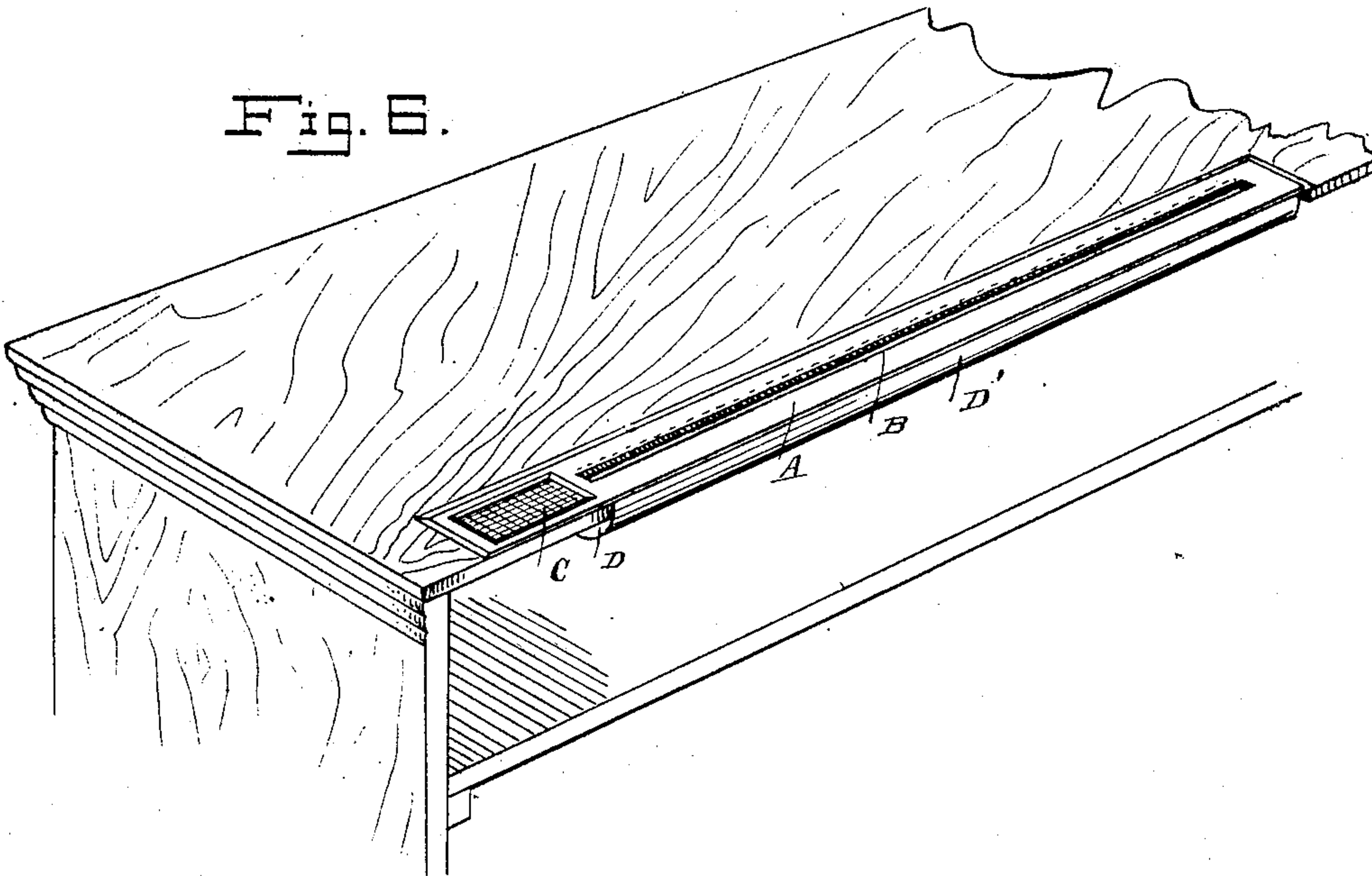


Fig. 7.

[illegible]

WITNESSES

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Fig. 8.

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UNITED STATES PATENT OFFICE.

CHARLES E. HARRINGTON AND JOHN G. HARRINGTON, OF PEORIA, ILLINOIS,
ASSIGNORS OF ONE-THIRD TO HERMAN R. ALFS, OF SAME PLACE.

COMPUTING-MEASURE.

SPECIFICATION forming part of Letters Patent No. 662,533, dated November 27, 1900.

Application filed May 14, 1900. Serial No. 16,620. (No model.)

To all whom it may concern:

Be it known that we, CHARLES E. HARRINGTON and JOHN G. HARRINGTON, citizens of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Computing-Measures; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to computing-measures for use in the sale of dry goods and all materials sold by lineal measurement.

The object of the invention is to provide a yard-measure having in connection therewith a computing-table and revoluble chart so arranged that at a glance a salesman may determine the price of a length of cloth instantly without chance of an error, and consequently without loss either to buyer or seller. We are aware that such devices are not new; but those that have heretofore been brought out are inconvenient, require headwork in their use, and consequently are not practical.

In the accompanying drawings, Figure 1 is a plan view of the device much reduced in size. Fig. 1^a is a perspective view of a beveled slot shown in Fig. 1 with raised ribs thereon. Fig. 2 is a side view of the device in part section, showing the interior construction. Fig. 3 is a perspective view of a portion of the device. Fig. 4 is a perspective view of another portion thereof. Fig. 5 is a cross-section. Fig. 6 is a perspective view of a counter, showing our improved device mounted thereon. Fig. 7 is a side elevation of a roller and chart, showing a knob for turning it. Fig. 8 is a plan view of a computing-chart used in conjunction with the roller.

In the drawings and specification letters of reference correspond.

A indicates the body of the device, which is made, preferably, of thin metal, but may be made of wood, if desired. This merely consists, as shown in Fig. 5 in cross-section, of a substantially flat portion having a slot B for the greater portion of its length, as shown, and a rectangular opening at one end having beneath it a chart C, covered by a glass for

protecting purposes. The edges of the metal surrounding the said chart are beveled, as shown, to present a neat appearance. The said slot B is also beveled at one side, the same being provided with a scale representing a yard divided into inches and fractions thereof, as in common usage. Secured to the plate A on the under side are two end hangers D D of the form shown in Fig. 5. A roller, consisting of two end spiders or spoked wheels F, carrying a cylinder G, of light metal, is supported between the said hangers D by means of stub-shafts H, one of which carries a milled knob, by which the cylinder is revolved. Said cylinder is covered with a chart (shown in Fig. 7) and is divided into horizontal spaces. At the extreme left of these spaces are indicated cents and fractions thereof, and then carried out opposite them within the spaces are figures, also indicating cents. The mark adjacent to each figure indicates the length of the material to be sold. This will appear more fully hereinafter. The computing table or chart at C is arranged as shown in Fig. 8. At the extreme left is a column marked "yards," bearing the numerals "1," "2," "3," "4," "5," and so on. On the top line are indicated the prices per yard—namely, "3½¢," "4¢," "4½¢," "5¢," and so on. To ascertain the price of, say, six yards of material at five cents, we will find "30¢" at the intersection of the column containing the price per yard and the line indicating the number of yards. The device thus constructed is attached to a counter, as indicated in Fig. 6. The counter is merely cut out sufficiently to permit the article to be placed within it in such a manner that its rear edge is flush with the edge of the counter. Since the body A is of very thin metal, the counter is not obstructed in any way and the inserted device is used as a portion of the counter, as is obvious. Beneath the scaled slot B is placed a strip of glass B', as shown in Fig. 5, serving to keep the cylindrical chart clean. The said chart may be rotated in its bearing, whereby any desired horizontal column may be brought beneath the slot B. In order to cause the cylinder to retain any position at which it is set, we provide a serrated face at I, which

receives the point of a spring J, secured to one of the end plates D, all of which will be readily understood by a study of Fig. 4.

The practical use of our improved computing-scale will now be explained.

Suppose a buyer wishes to purchase six and one-half yards of cloth at six cents per yard. By following the horizontal column having figure "6" in the left-hand column of the chart C until the vertical column having the figure "6" at the top is reached we find "36" at the intersection thereof, which means that six yards at six cents per yard would cost thirty-six cents. Now to find the cost of the extra one-half yard the chart on the cylinder is consulted. By turning said cylinder until the figure "6" as the price per yard in the extreme left-hand column is readable beneath the slot B, as shown in Fig. 1, and looking for the half-yard mark on the scale adjacent to the slot the figure "3" will be seen, as shown in Fig. 1, indicating three cents as the amount to charge for one-half yard of material. This is a simple calculation that can be done mentally, but for larger numbers the computation is not as easily done. Hence the chart C and cylinder are of very great advantage and convenience. We have indicated on the said chart C the figures "112" under the column headed by the number "8." The other spaces could likewise be filled with numbers resulting from the multiplication of the numbers at the head of the vertical columns and the number in the horizontal columns; but we merely place the number mentioned to carry out our idea. Let it be supposed that one dollar and twelve cents' worth of goods is wanted at the rate of eight cents per yard. The dealer finds that in the eight-cent column of the chart is found "112" opposite the number "14." Then fourteen yards is the amount of goods to be given for the price mentioned.

We provide on the surface of the scale at every one-fourth yard a raised rib *a*, as shown in Fig. 1^a. This is an aid in measuring the cloth. The salesman will feel the raised portion beneath his finger through the cloth and may thus quickly determine his position without having to study the scale particularly close.

A metal casing D' is attached to the end hangers D and incloses the cylinder G and protects it.

It is obvious that various sizes of our device may be made and that charts or tables for high-priced goods may be used.

We are aware that it is not new to use charts similar to the one indicated at C; but we believe it is new to use the revoluble cylinder and scale shown in connection therewith. The loss to a dealer in a year through the carelessness of a clerk or of his inability to figure correctly is known to be considerable; but with the means for making a complete and accurate deduction from plain figures already laid out no mistake can be made.

It is evident that the measuring-scale in-

stead of being on the body A, as shown, may be printed on each horizontal line of the cylinder, so that it will always be in view at whatever position the said cylinder may be placed. This will simplify the construction of the device and may be used or not, as desired. As to the charts we merely show one form of arrangement thereof; but other forms may be employed, if desired.

We claim—

1. In a computing-measure for use in selling materials by lineal measurement, the combination of the body A, a chart at one end thereof having a set of vertical columns and a set of horizontal columns, the former showing at the top the selling price of goods per yard, the latter indicating the number of yards to be sold, the intersections of the several columns showing the aggregate price of the number of yards at the cost given in the price-columns, a longitudinal slot B in the body between the said chart and the farther end of said body, a measuring-scale adjacent to the said slot, a revoluble cylinder beneath the slot the same having horizontal columns thereon indicating at the extreme left the prices of goods per yard, each of said columns being divided into fractions of a yard with the price of each fraction indicated thereon at the rate shown in the left of each column, hangers D for supporting the said cylinder, a knob for turning the latter and a casing D' surrounding it, all being arranged substantially as set forth.

2. A computing-measure for use in selling materials by lineal measurement having a flat body A, a chart attached to the surface thereof at one end which indicates at a glance the aggregate cost of goods at the intersection of a price-per-yard column and a column showing the number of yards being sold, in combination with a measuring-scale on the said body, a slot adjacent to the scale, a revoluble cylinder having a chart thereon beneath the slot, said chart having horizontal columns indicated thereon on which prices per yard of goods are shown, said columns being divided into various fractions of a yard, each fraction having the price thereof indicated thereon whereby the dealer may ascertain the aggregate cost of a number of yards at a given price per yard by referring to the stationary chart and may ascertain what the fractional part of a yard would cost, at the same price, on the revoluble chart.

3. In a computing-measure, the combination of a body A, a chart C thereon at one end having vertical columns indicating prices of goods per yard and horizontal columns indicating numbers of yards of goods to be sold, the intersections of the columns showing the aggregate cost of yards of goods so indicated, a longitudinal slot in the body between the chart C and the opposite end of the body, a measuring-scale adjacent to the slot, a cylindrical chart beneath the slot and readable through the latter, columns on the said cylin-

drical chart parallel with the slot, prices per yard indicated in the margin of the chart in said columns, and fractional parts of yards indicated in all of the columns and the cost of each fraction at the prices indicated in the respective columns, hangers D for the said cylinder, the stub-shafts H in the cylinder having their means of support in the said hangers D, means for turning the chart, means for holding the chart in place after movement and a casing for inclosing the chart the same being attached to the ends D substantially as shown and for the purposes described.

4. The combination with a store-counter having a notch cut therein, substantially as described, of a computing-measure in said notch which consists of a body A having a chart thereon at one end wherein are indicated vertical and horizontal intersecting columns the former showing prices of goods per yard, the latter showing numbers of yards

of goods to be sold and having at the intersections of the said columns the aggregate cost of goods derived by a multiplication of the figures in the intersecting columns, the slot B in the body and a measuring-scale adjacent thereto, the revoluble chart beneath the slot having prices of goods per yard indicated thereon at its marginal edge and horizontal columns opposite said prices wherein fractional parts of a yard are measured off and the prices of each indicated thereon as set forth, means for supporting and revolving said chart and a casing for inclosing said chart, all as set forth and described.

In testimony whereof we affix our signatures in presence of two witnesses.

CHAS. E. HARRINGTON.
JOHN G. HARRINGTON.

Witnesses:

DAN R. SHEEN,
C. JOHNSON.