No. 681,551. Patented Aug. 27, 1901.

J. H. HULSE & F. P. WILKIN.

CHEESE MARKER.

(Application filed Feb. 5, 1900. Renewed July 22, 1901.)

(No Model.)

Fig. 1.

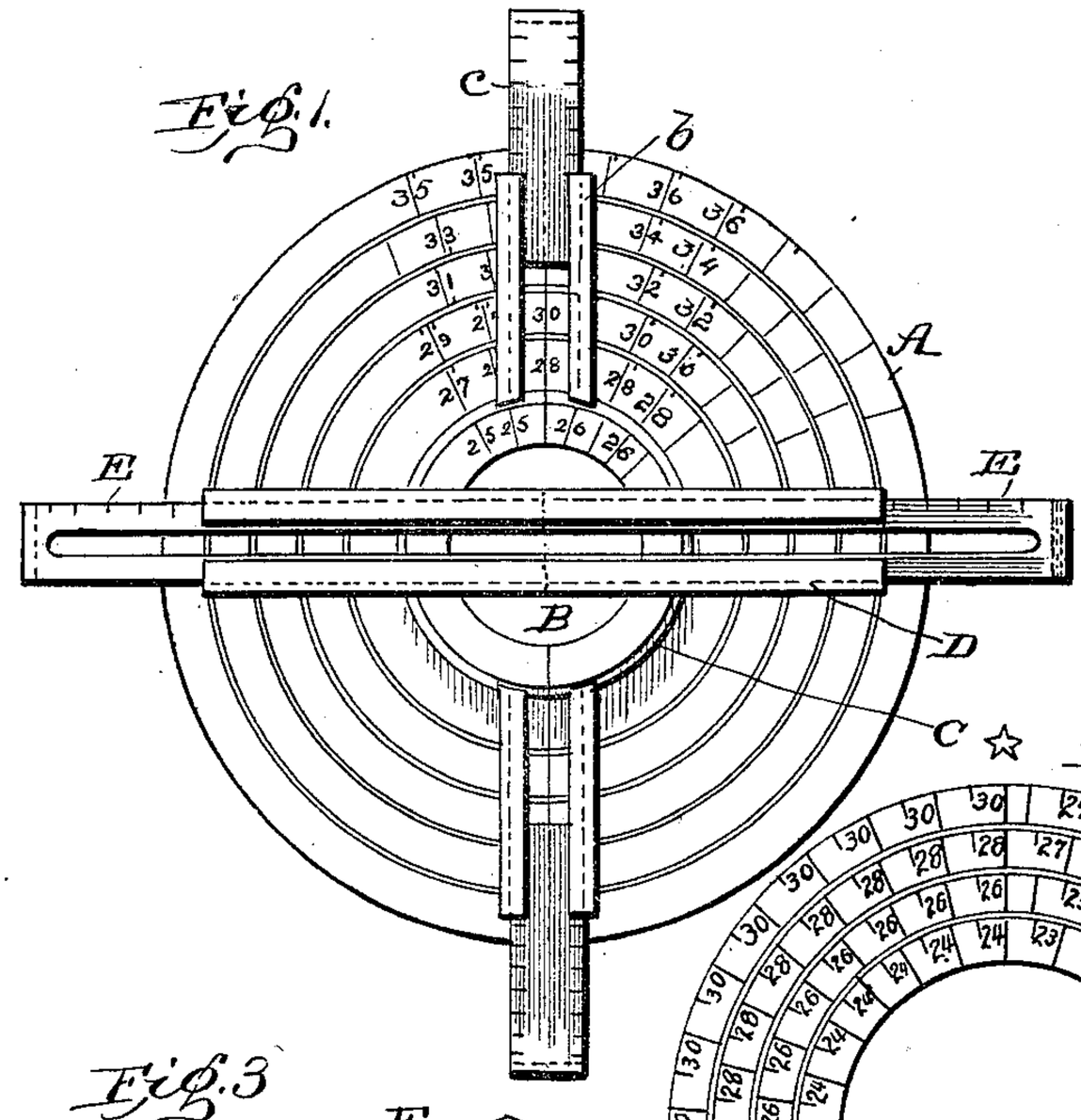


Fig. 5.

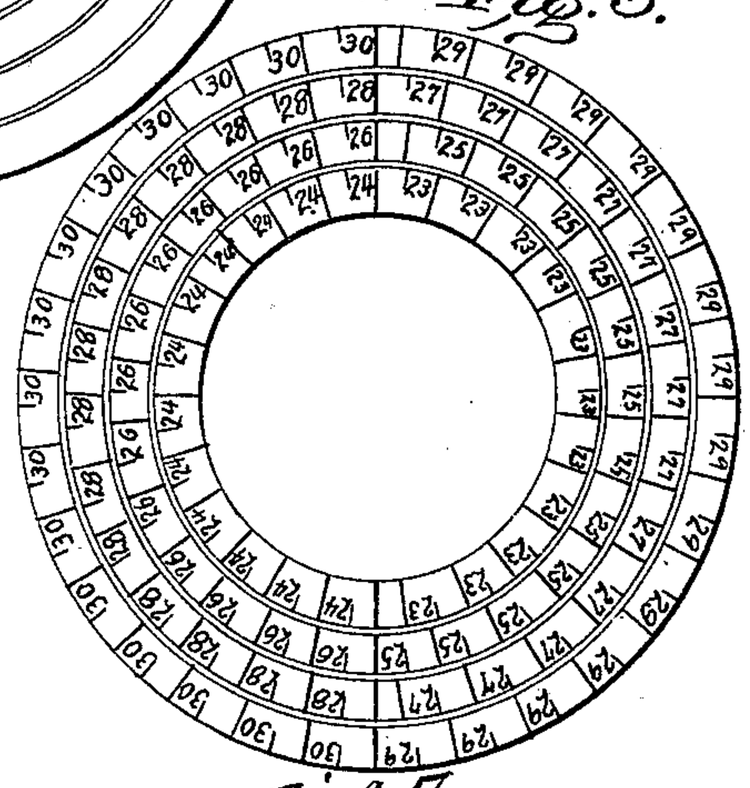
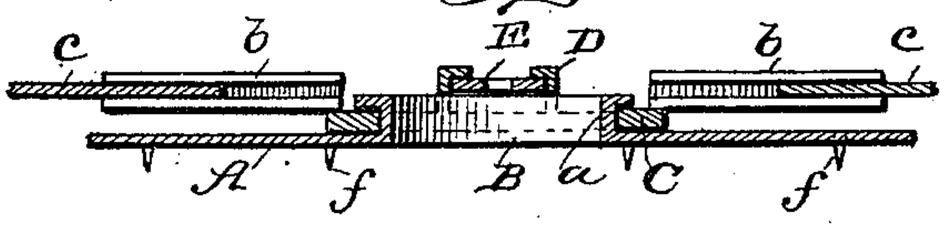
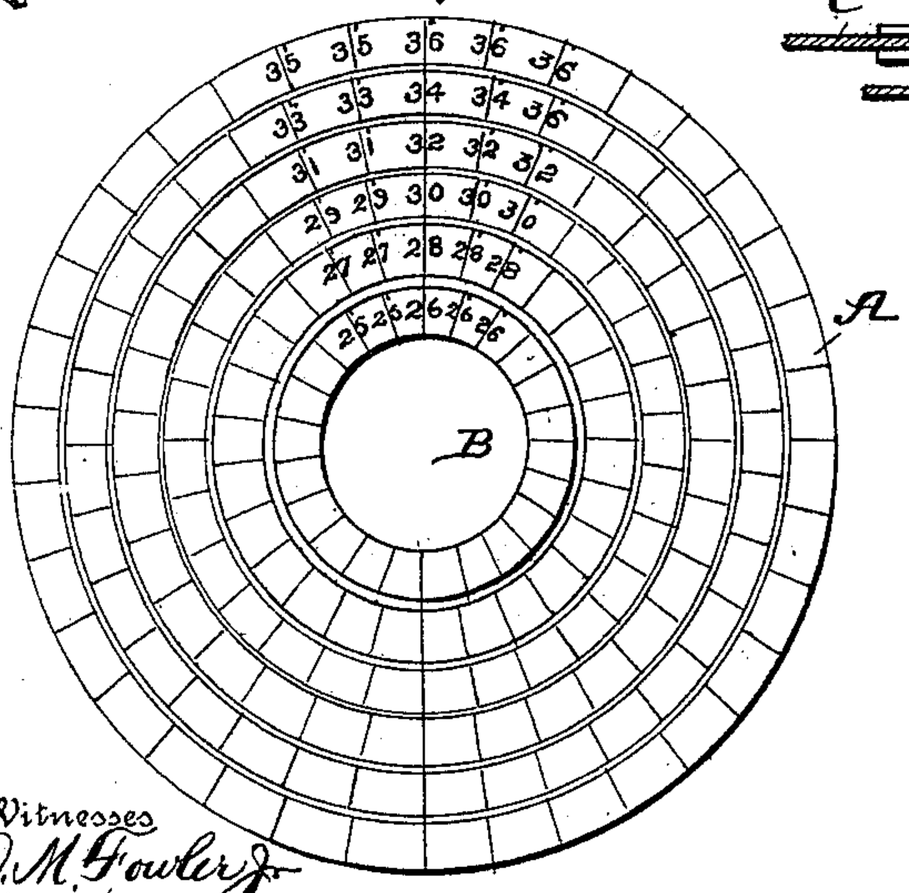


Fig. 3

Fig. 4.

Fig. 2





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UNITED STATES PATENT OFFICE.

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CHEESE-MARKER.

SPECIFICATION forming part of Letters Patent No. 681,551, dated August 27, 1901.

Application filed February 5, 1900. Renewed July 22, 1901. Serial No. 69,287. (No model.)

To all whom it may concern:

Be it known that we, JAMES H. HULSE and FRANK P. WILKIN, citizens of the United States, residing at Salt Lake City, in the county of Salt Lake, State of Utah, have invented certain new and useful Improvements in Cheese-Markers, of which the following is a description, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Our invention relates to an improvement in devices for marking or dividing cheeses and the like into a given number of parts, so that each part shall weigh a pound or any other determined unit, so that the storekeeper may cut off the exact weight called for in one piece, thereby saving waste due to mere approximation of weight, also saving the time necessary in weighing each piece or in adding to or removing from the cut-off piece where a piece of only approximate weight is cut off at first.

The device consists of a disk of proper proportional size with respect to the usual size cheeses, which run from twenty-seven to thirty-six pounds in weight, and this disk is provided with a series of circles of different diameters corresponding to the different sizes of cheeses, and each circle is divided by a diametrical line into semicircles. The semicircles on one side of the diametrical line are divided into a number of equal parts, as "24," "26," "28," "30," &c., and the semicircles on the other side of the line are divided into a number of equal parts and one one-half part, as "23," "25," "27," "29," &c., the even numbers being always on one side of the diametrical line and the odd numbers on the other, the numbers representing the weight of the cheese to be cut. Only one circle may be used; but as this would involve considerable confusion in marking we prefer to use a series of them. Rotating arms, preferably four in number, are attached to the disk, said arms being suitably graduated to center the cheese and two of them having slots which may be made to register with the radial lines on the disk, and then by using the slot as a guide the cheese may be marked clear out to its periphery.

The invention includes various details of construction and arrangements of parts, all as hereinafter described, and referred to in the appended claims.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the entire device. Fig. 2 is a plan view of the disk. Fig. 3 is a perspective view of the centering and marking arms detached. Fig. 4 is a sectional view, partly broken away. Fig. 5 is a plan view representing a number of disks properly subdivided.

In the drawings, A represents a disk of suitable relative proportional size to the ordinary cheeses. It preferably has upon its upper surface a number of circles divided by a diametrical line into semicircles. The semicircles on one side of the diametrical line are divided into a number of equal parts, as "24," "26," "28," "30," &c., and the semicircles on the other side of the line are divided into a number of equal parts and one one-half part, as "23," "25," "27," "29," &c., the even numbers being always on one side of the diametrical line and the odd numbers on the other, the numbers representing the weight of the cheese to be cut, the object of this being to make the disk as small as possible, and in this way we get just twice the number of graduations as we otherwise would. The disk instead of being divided up into a number of circles may consist of only one circle graduated to the full extent. Said disk A is made of light sheet metal, such as brass, aluminium, or steel. The center of the disk is open, as shown at B, and the edge is turned up, as at *a*, to form a flange.

C represents a ring fitting the groove on the disk A, this ring, therefore, being capable of rotation on the disk A. To this ring C are attached on opposite sides guiding-ways *b*, in which slide the graduated arms *c*, turned down at their outer ends to engage the edge of the cheese. Also attached to the ring and extending all the way across is another guide-way D, in which slides slotted graduated arms E, one of which has a downwardly-extended portion to engage the edge of the cheese, while the other graduated arm has a hinged portion to bend down over the edge of the cheese, this end portion being also pro-

vided with a slot to admit of marking the edge of the cheese. This ring, with the attached guiding-ways and sliding graduated arms, is secured to the disk by turning the flange over it, as shown, the guiding-way D being secured to the upper side of the ring C, but in such a manner as to admit of its passing over the flange, so as to turn freely. The object of these graduated arms is for fixing the center of the cheese. The disk is placed upon the same and the arms are extended an equal distance until the end pieces on the graduated arms extend over the outer edge of the cheese, and when they are all extended the same distance the center-mark is indicated and the disk secured to the cheese by means of pins *f*, provided upon its under surface, which when pressed into place hold the disk from slipping. Then the guiding-ways and graduated arms are free to turn upon the disk, and by turning the slotted graduated arms E E until the slot provided is over the radial lines in the proper circle on the disk by drawing a pencil or other marking-point through the slot clear across the cheese and disk opposite each line and number in the circle the cheese will be marked off in one-pound pieces. Referring to Fig. 5 it will be seen that by using a scale of this size eight different size cheeses can be marked. The disk is made with as many diametrical lines as is required to cover the sizes of cheese, and by having the odd numbers printed on one side, as shown, and the even numbers on the opposite side we can mark twice the number of cheeses with the same size disk. For example, by starting at the point marked with a star and placing the long bar or marker over the first long mark on the circle, which is marked "30," and drawing a line all the way across the cheese two pounds are marked out, and if the mark extends only to the center one pound is marked out, and when the mark is turned to number "3" and across the cheese six pounds have been marked out—three pounds on one side the center and three pounds on the other side. In this figure a mark is placed between each pound-mark, so a cheese may be marked in one-half pounds, if desired. A cheese weighing twenty-three pounds may be marked into pounds by using the circle laid off in eleven and a half equal parts on the odd-number side, and so on. For example, the outer circle is marked on the left-hand side of the central line into fifteen equal parts, and by moving the marker around from one division to another the whole cheese will be laid out into thirty equal parts. If the cheese is a twenty-nine-pound cheese, then by using the side of the disk-mark "29" and which is divided up into fourteen and one-half equal spaces the twenty-nine-pound cheese will be divided up into one-pound parts. If it is desired to mark the edge of the cheese, then by turning down the hinged part of the arm E and placing the point of a pencil or marker in the slot provided therein and turning the arms around a mark will be made around the outer edge of the cheese at any desired height.

Various modifications and changes in the construction of the parts of this device may be made without departing from the spirit of the invention.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The herein-described device for plotting or marking out cheeses and the like, comprising an indicating disk or plate, suitably graduated for varying sizes of cheeses, and a series of sliding graduated arms having means to engage the cheese, whereby the latter may be centered; substantially as described.

2. The herein-described device for plotting or marking out cheeses, comprising an indicating disk or plate suitably graduated for varying sizes of cheeses, and a series of sliding and rotating arms, certain of which are provided with means for registering with the graduations on the disk or plate; substantially as described.

3. The herein-described device for plotting or marking out cheeses, comprising an indicating disk or plate suitably graduated for varying sizes of cheeses, and a series of sliding and rotating arms, certain of which are provided with slots adapted to register with the markings on the plate or disk, said slots acting as guides for a marking-point; substantially as described.

4. The herein-described device for plotting or marking out cheeses, comprising an indicating disk or plate, suitably graduated for varying sizes of cheeses and a series of sliding and rotating arms, certain of which are provided with slots adapted to register with the markings on the plate or disk, said slots acting as guides for a marking-point, one of said arms having also a slotted hinged extension; substantially as described.

5. In combination with a marking-disk having a guiding-flange, a ring, C, rotatable thereon, guides on said ring for a series of sliding arms, said arms being provided with means at their outer ends for engagement with the edge of the cheese, certain of said arms having longitudinal slots adapted to register with the radial markings on the disk or plate; substantially as described.

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

JAMES H. HULSE.
FRANK P. WILKIN.

Witnesses:
S. STRINGER,
A. H. PAGE.