F. THOMAS. RAIN GAGE. APPLICATION FILED OUT, 23, 1903.

NO MODEL.

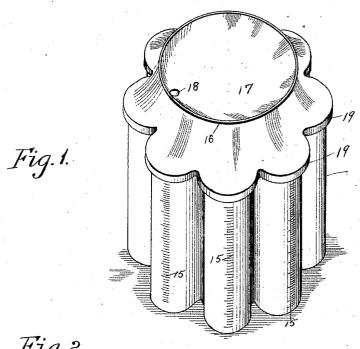


Fig.2.

13 Fig.3.

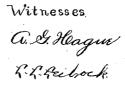
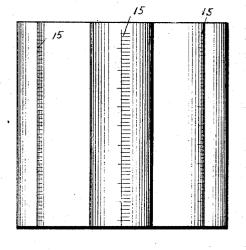


Fig.4.



Inventor Fred Thomas.

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UNITED STATES PATENT OFFICE.

FRED THOMAS, OF DES MOINES, IOWA.

RAIN-GAGE.

SPECIFICATION forming part of Letters Patent No. 764,315, dated July 5, 1904.

Application filed October 23, 1903. Serial No. 178,300. (No model.)

To all whom it may concern:

Be it known that I, FRED THOMAS, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have 5 invented certain new and useful Improvements in Rain-Gages, of which the following is a specification.

The objects of my invention are to provide a device of this class of relatively large capacity and of minimum efficiency which may be contained in a comparatively small space to facilitate shipping and handling and which may be easily carried and placed in position for use.

A further object is to provide a device of this class of simple, durable, and inexpensive construction.

My invention consists in the construction, arrangement, and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows in perspective the complete device. Fig. 2 shows a vertical sectional view of the cover detached. Fig. 3 shows a top or plan view of the base, and Fig. 4 shows a side view of the base.

Referring to the accompanying drawings, the base portion or the gage proper is formed to be composed of a series of short upright cylinders arranged in a circle, and a hollow space is provided in the center of the base be-35 tween the cylinders. The entire base portion is preferably molded or formed complete in one piece and of glass. The cylindrical chamber into which the rain is first admitted is indicated by the numeral 10. Between it and 40 the adjacent chamber to the right and in the top of the partition dividing the said chambers is a notch 11, from which the overflow from the cylindrical chamber 10 may enter the next chamber, (indicated by the numeral 45 12.) The partitions between each succeeding chamber to the right are provided with notches, except that the last cylinder, or the one to the left of the chamber 10, does not have an overflow-notch between it and the 50 chamber 10. The central space between the

cylindrical chambers, which is also of cylindrical form, is indicated by the numeral 13 and is separated from the cylindrical chambers only by thin partitions. I have placed in the space 13 a tube or cylinder 14, prefer- 55 ably made of some opaque substance of dark color, for purposes hereinafter made clear, and on the outer face of each of the cylindrical chambers is a scale, (indicated by the numeral 15.) This scale is formed by placing black 60 marks upon the glass surface. The water in the cylinders can readily be seen behind said scale. The object in providing the opaque cylinder 14 is so that the water-line in the cylindrical chambers may readily be seen by 65 being contrasted with the dark surface of said cylinder 14.

I have provided for collecting the rain and for discharging it into the first cylindrical chamber 10 and for preventing evaporation 7° by providing a cover, which is also preferably made complete of one piece and of glass, comprising a circular rim 16, forming a cup-shaped rain-catching device, with the bottom 17 there-of inclined downwardly toward a small opening 18, arranged near one side of the rim 16. The lower edge of said rim is formed into a flange 19, which flange is corrugated to closely fit the exterior of the base portion.

In use I place the cover upon the base with 80 the opening 18 directly over the cylindrical chamber 10. Obviously the corrugated rim 19, by engaging the corrugated exterior of the base, will prevent the cap from turning relative to the base, and all of the rain re- 85 ceived into the cup-shaped top will enter the chamber 10. The gage may be conveniently set upon a box or other suitable support, and it has a broad base upon which it may stand without the need of any fastening devices 90 whatever. When the chamber 10 becomes filled with water, the overflow will pass through the groove 11 into the chamber 12 adjacent thereto, and this will continue until all of the cylindrical chambers are full.

The marks upon the scale may be so arranged as to form a continuous scale, beginning at the bottom of the chamber 10 and running to the top of the chamber, then beginning again at the bottom of the chamber 100

12, running to its top, and so on, and the scale is proportioned to the area of the cup-shaped top, so that the amount of rainfall in inches may be clearly determined at any time by consulting the scale and comparing it with the water-level of the chamber that is only partially filled.

By providing a gage of this class in which the base is made complete of one piece of glass on and the cover is also made complete of another piece of glass it is obvious that a cheap and durable construction is provided which is compact in form and may be easily shipped and handled and may be supported from a flat support without any fastening devices.

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

of the United States therefor, is—

1. An improved rain-gage, comprising a base portion formed of glass and having therein a series of open-topped chambers arranged side by side, the partitions between the chambers provided with overflow-notches and a cover therefor having a cup-shaped top provided with an inclined bottom and with an opening in said bottom to discharge into one of the said chambers.

2. An improved rain-gage, comprising a base portion formed complete of one piece of cransparent glass and having therein a series

of open-topped chambers arranged side by side forming a complete circle, the partitions between the chambers provided with over-flow-notches, said base portion having a central opening, an opaque lining in said central 35 opening, a scale arranged upon the outer faces of the chambers, and a cover for collecting rain and discharging it into one of said chambers.

3. An improved rain-gage, comprising a 40 base portion formed complete of one piece of transparent glass and having therein a series of open-topped chambers arranged side by side forming a complete circle, the partitions between the chambers provided with over- 45 flow-notches, said base portion having a central opening, an opaque lining in said central opening, a scale arranged upon the outer faces of the chambers, and a cover therefor formed complete in one piece having a cup- 5° shaped top and an inclined bottom therein and provided with an opening at the lowermost portion of the inclined bottom to discharge into one of said chambers and also having a flange overlapping and fitting the 55 top of the base portion.

FRED THOMAS.

Witnesses:

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S. F. Christy.