No. 669,584. Patented Mar. 12, 1901.

C. I. HUNT.

AUTOMATIC RECORDING DEVICE FOR SCALES.

(Application filed May 31, 1900.)

(No Model.)

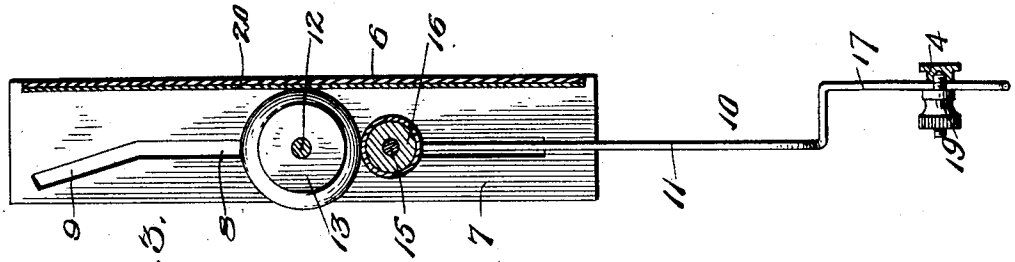


Fig. 3.

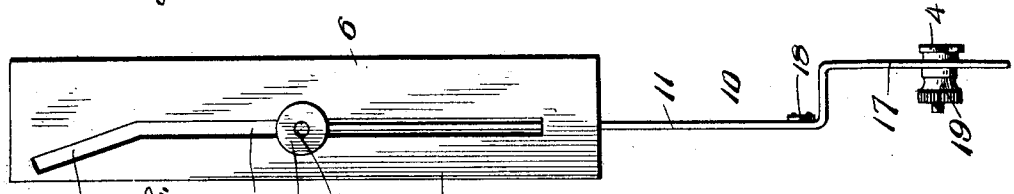


Fig. 2.

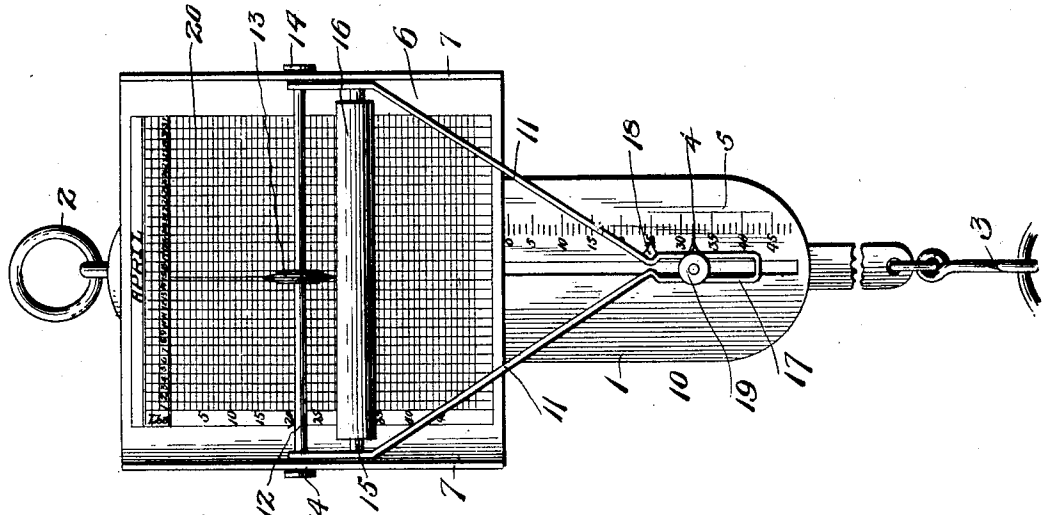


Fig. 1.

Witnesses

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AUTOMATIC RECORDING DEVICE FOR SCALES.

SPECIFICATION forming part of Letters Patent No. 669,584, dated March 12, 1901.

Application filed May 31, 1900. Serial No. 18,564. (No model.)

To all whom it may concern:

Be it known that I, CHESTER I. HUNT, a citizen of the United States, residing at Nunda, in the county of Livingston and State of New York, have invented certain new and useful Improvements in Automatic Recording Devices for Scales; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to automatic recording devices for scales.

The object of the invention is to provide a device of this character which shall be simple of construction, durable in use, and comparatively inexpensive of production and which is designed to be attached to the ordinary form of spring-scales and by means of which the weight of merchandise will be recorded.

The invention is particularly designed for use at dairies where it is desired to ascertain and keep a record of the amount of milk given by each cow.

To this end the invention consists in providing a suitable card-holder adapted to receive a card upon which is arranged vertical columns representing the dates of the month intersected by horizontal lines representing units of weight, which units correspond with the graduated face of the scale. Connected to the card-holder, adapted to move independently relative thereto, is a recorder, which is designed to record the weight upon the card; and, finally, the invention consists in providing means for connecting the recorder to the movable part of the scales, whereby the recorder will be actuated and moved corresponding to the movement of the movable part of said scale.

In the accompanying drawings, Figure 1 is a front elevation of an ordinary spring-scale, showing my invention applied thereto. Fig. 2 is a side elevation of the device removed from the spring-scale, and Fig. 3 is a vertical sectional view through the same.

Referring to the drawings, 1 denotes an ordinary spring-scale provided with a ring 2 for suspending it and a hook 3 for engaging with it the article to be weighed.

4 denotes the usual indicator-point, which moves along the graduated face 5 of the spring-scale.

6 denotes the card-holder, which is attached to the upper end of the spring-scale in any desired manner and is provided with parallel side flanges 7, which have longitudinal vertically-disposed slots 8, the walls of which extend forwardly at an angle near their upper ends, as shown at 9.

10 denotes an indicator, which comprises a bail-like frame 11, the upper ends of which are connected to a transverse shaft 12, upon which is loosely mounted the indicator-wheel 13. The ends of the shaft 12 extend through the slots 8 in the side flanges of the card-holder and are provided with heads 14. A transverse bar or shaft 15 has its ends connected to the frame and supports an inking-roller 16, which is of less diameter than the indicator-wheel 13 and is constantly in contact with the periphery of said wheel. The lower end of the bail-like frame 11 is formed with a loop 17, to which is secured an indicator 18. A set-screw 19 works through this loop, and its screw-threaded end is engaged with the indicator-point 4 of the scale.

20 denotes an indicator-card, which is divided into vertical columns representing the days of the month, and these columns are intersected by horizontal lines indicating units of weight which correspond to those indicated upon the face of the spring-scale. It being desired to ascertain and to record the weight of milk given by each cow, it will be understood that there will be a card for each cow. In its normal position the ends of the shaft engage the walls 9 of the slots 8 and hold the indicator-wheel a slight distance in advance of the face of the card-holder. The card is now placed in the card-holder and a bucket or pail suspended from the hook on the scale. The weight of the bucket or pail will draw both the indicator-points 4 and 18 downward, and the thumb-screw is loosened, so that the frame may be moved a slight distance upward to bring the indicator-point 18 at the point marked "0" on the face-plate of the scale and indicator-wheel 13 to point marked "0" on card. The milk placed in said bucket will draw the frame 11 downward, thus causing the indicator-wheel to roll downward and in engagement with the card, thus

marking upon said card the number of pounds of milk contained within the pail. It is understood that the indicator-wheel 13 is moved lengthwise of the shaft, so that it may be adjusted to any of the dated columns, so that a complete record may be kept from day to day of the amount of milk given by each cow. When the pail is removed from the scale, the spring of the scale will return the parts to their normal position, with the recording-wheel out of engagement with the card, thus permitting the card to be withdrawn from the holder and another card inserted preparatory to recording the weight of the milk given by another cow.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood without requiring an extended explanation. It will be seen that the device is exceedingly useful for the purpose for which it is designed and that it may be placed upon the market at a comparatively small cost.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus fully described my invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a record-card holder, of a recorder movably connected thereto and adapted to travel over the record-card and in engagement therewith, means for automatically removing the recorder from engagement with the card when the parts are in their normal position, and means for connecting the recorder to the movable part of a weighing-scale, substantially as set forth.

2. The combination with a spring-scale, of a record-card holder secured thereto, a recorder consisting of a frame having a removable connection with the card-holder, a recording-wheel carried by said frame, means for automatically removing the recording-wheel from engagement with the card when the parts are in their normal position, and means for attaching said frame to the indicator-finger of the scale, substantially as set forth.

3. The combination with a spring-scale, of a card-holder secured thereto, a frame, a shaft connected to said frame and having a movable connection with said card-holder, an indicator-wheel longitudinally movable upon said shaft, an inking-roller carried by the frame and in engagement with the indicator-wheel, means for connecting the frame to the indicator-finger of the scale, and means for elevating the indicator-wheel from engagement with the card when in its uppermost or elevated position, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHESTER I. HUNT.

Witnesses:
A. M. HUNT,
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