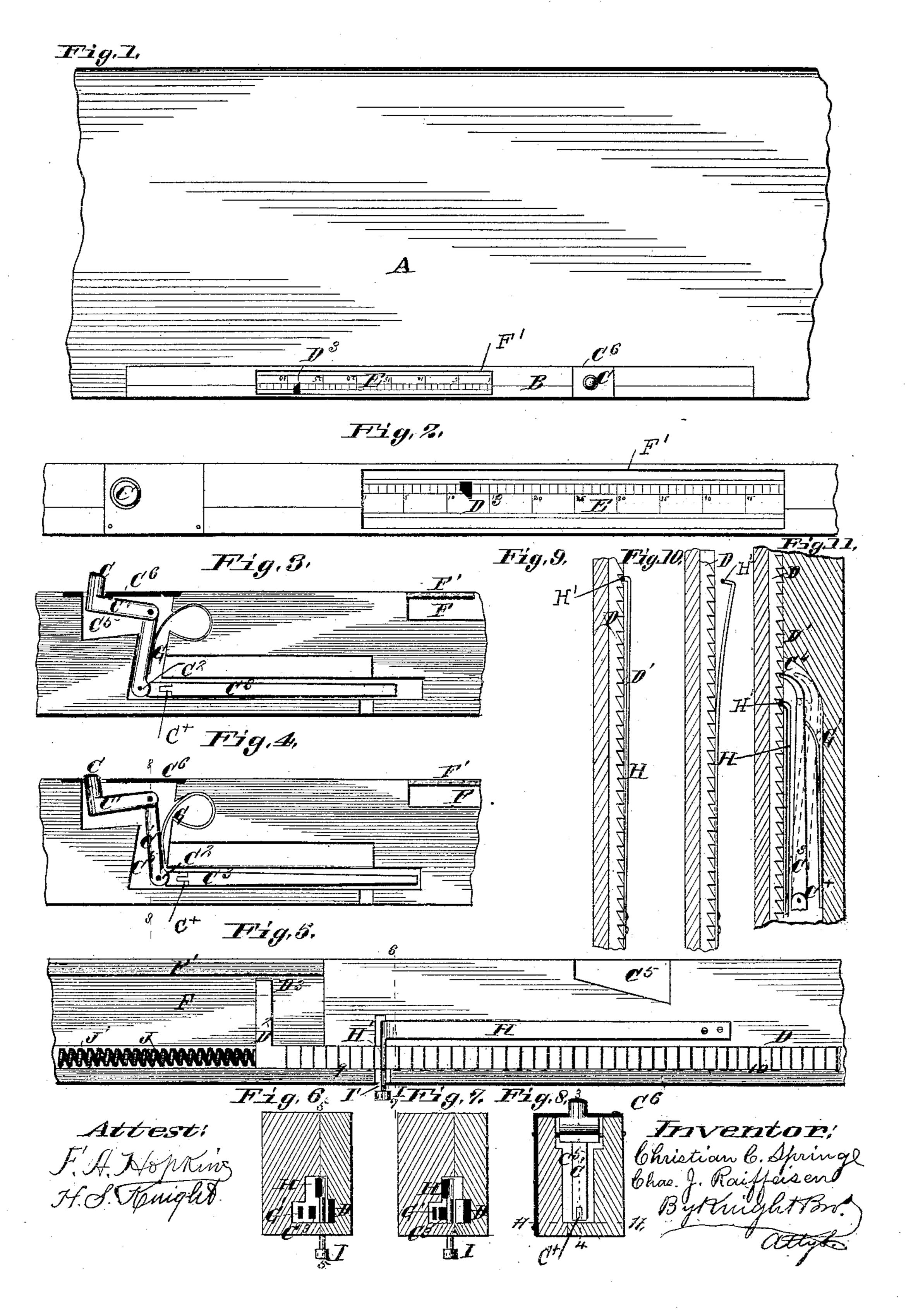
(No Model.)

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SELF INDICATING MEASURE FOR DRY GOODS, &c.

No. 332,965.

Patented Dec. 22, 1885.



## United States Patent Office.

CHRISTIAN CONRAD SPRINGE AND CHARLES JULIUS RAIFFEISEN, OF SEDALIA, MISSOURI.

## SELF-INDICATING MEASURE FOR DRY-GOODS, &c.

GPECIFICATION forming part of Letters Patent No.332,965, dated December 22, 1885.

Application filed June 20, 1885. Serial No. 169,305. (No model.)

To all whom it may concern:

Be it known that we, Christian C. Springe and Charles J. Raiffeisen. both of Sedalia, in the county of Pettis and State of Missouri, 5 have invented a certain new and useful Improvement in Self-Indicating Measures for Dry-Goods Counters, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a top view of our self-indicating measure, which in this figure is shown inlaid in the front top edge of the counter. Fig. 2 is a top view of the measure on an enlarged scale. Figs. 3 and 4 are enlarged detail vertical longitudinal sections at 34, Fig. 8, showing the parts in two positions. Fig. 5 is a detail longitudinal section at 55, Fig. 6. Figs. 20 6 and 7 are transverse sections at 67, Fig. 5.

Fig. 8 is a transverse section at 8 8, Fig. 4. Figs. 9 and 10 are detail longitudinal sections at 9 10, Fig. 5; and Fig. 11 is a horizontal longitudinal section at 11 11, Fig. 8.

Our invention relates to certain improvements in registering measures for dry-goods, &c.; and our invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, similar letters of reference in the various figures indicate like parts.

A represents a dry-goods counter of usual construction, and B represents our self-indicating measure, preferably inlaid or countersunk in the inside top edge of the counter next the clerk who operates it.

C is the operating thumb knob or key of the bell-crank lever C', that works in its cham40 ber C<sup>5</sup> within the instrument. (See Figs. 3, 4, and 5.) To the bell-crank lever is hinged or pivoted at C<sup>2</sup> a pawl, C<sup>3</sup>, which it operates when the key is depressed, the curved point or end C<sup>4</sup> of said pawlengaging with the teeth D' of the rack-bar D (when the thumb knob or key is depressed operating the bell-crank lever,) advancing it longitudinally the length of a tooth. Rising at a right angle from one extremity of said rack-bar is a vertical arm, D<sup>2</sup>, 50 which is surmounted by an indicating-finger, D<sup>3</sup>, that as the rack-bar is moved travels over

a graduated scale, E, in the chamber F, the finger pointing to the number on the graduated scale coincident with the number of yards measured. F' is a glass protector that covers 55 said chamber, and while it does not obstruct the view effectually guards from injury the traveling index-finger and graduated scale. It also prevents the goods under measurement from interfering with the finger as it travels. 65 (See Figs. 1 and 2.)

G is the sustaining-spring, that after each operation of the bell-crank lever returns it with the thumb-knob to its normal position ready for its next movement, and G' is the 65 spring which impresses the pawl of the bell-crank lever, enforcing its engagement with the rack, which it moves, (see Figs. 3, 4, and 11,) the pawl being hinged at C\* to admit of lateral movement.

H is a spring, to which is attached a dog, H', that engages the rack and prevents its return until the close of the measurement, when it and the actuating pawl of the bell-crank lever are simultaneously tripped and disen-75 gaged by a trip knob or trigger, I, forming a continuation of said dog, and which projects through an aperture, I', beneath the instrument. (See Figs. 5, 6, and 7.)

J is a spiral spring, which (after the conclu- 80 sion of a count) forces back the rack-bar with its traveling index-finger ready for the next count. (See Fig. 5.)

J' in same figure is a long slotted box or chamber, in which the said spring operates.

The thumb-knob or operating-key C is at one end of a yard-measure, the other end of which may either be at the far end of the instrument or marked in any other convenient way on the counter, &c.

In operation, as the forward end of the material being measured reaches the thumb-knob, and a yard of the cloth has thus been measured, the clerk's thumb depresses the knob, which, operating the bell-crank lever and its pawl, 95 projects the rack - bar (bearing the finger-index) longitudinally the length of a tooth, and the finger-index is thus carried a step along the graduated scale and counts one, and so on, yard by yard, until the amount required is noo measured. The trip-knob or trigger connected to the spring-dog H' is now made to trip the

dog, as also that of pawl C, out of their seats in the notches of the rack-bar, thereby disengaging their hold and allowing the bar to be thrown back to its initial position by the spiral spring J, ready for another measurement and count.

We have shown our measure as inlaid in the top of a counter, with the figures pointing in the most easy position for the customer to distinguish the record, as our preferable plan; but we do not confine ourselves to this position or this mode of using the measure, as it is evident that the measure may be attached in any other convenient position desired, and also used, if required, independent of the counter.

Among the advantages in the use of this measure may be noted its mechanical certainty in counting and the liberty it gives the measuring-clerks to converse with customers on business matters without making errors in the

measurement of the goods.

We claim as our invention—

1. A registering - measure comprising a frame, a scale, a bell-crank lever having a knob projecting through the frame, a sliding spring pawl hinged to the bell-crank lever, a sliding spring rack-bar having an arm provided with an index-finger pointing to the scale, and a spring-bar retaining the rack-bar as it is adjusted by the pawl, substantially as set forth.

2. A registering - measure comprising a

frame, a scale, a bell-crank lever having a knob projecting through the frame, a pawl formed with a curved end and hinged to the bell-crank lever, spring bearing on the pawl, spring bearing on the bell-crank lever, sliding spring rack-bar having index-arm, and a spring-bar retaining the rack-bar as it is adjusted by the pawl, substantially as set forth.

3. A registering measure comprising a 40 frame, a scale, a bell-crank lever having a knob projecting through the frame at its outer end, a sliding pawl at its inner end, a sliding spring rack-bar having index-arm, and a spring having a dog (for retaining the rack-bar as the 45 latter is adjusted) formed with a trigger for releasing the dog, substantially as set forth.

4. A registering - measure comprising a frame, a scale, a spring bell-crank lever having a knob projecting through the frame, a spring 50 sliding pawl hinged to the bell-crank lever, a sliding spring rack-bar having an arm provided with an index - finger pointing to the scale, and a spring-bar having a dog provided with a trigger extending through the frame, 55 substantially as set forth.

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In presence of— E. R. Marvin, Fredk. Putschen.