

(No Model.)

G. E. HUDSON.

APPARATUS FOR REGISTERING THE NUMBER OF WORDS WRITTEN
ON TYPE WRITERS.

No. 488,521.

Patented Dec. 20, 1892.

Fig - 1 -

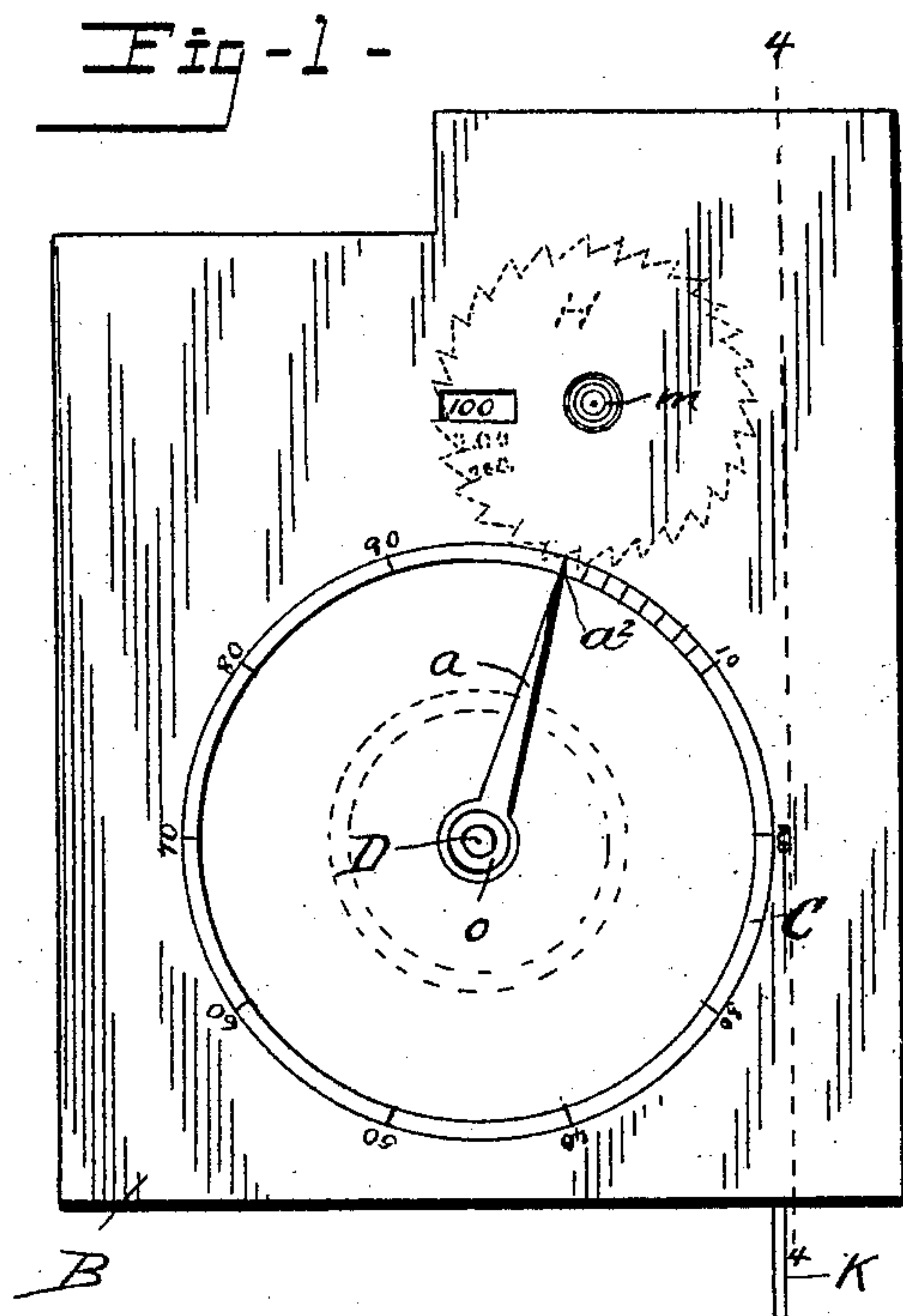


Fig-2-

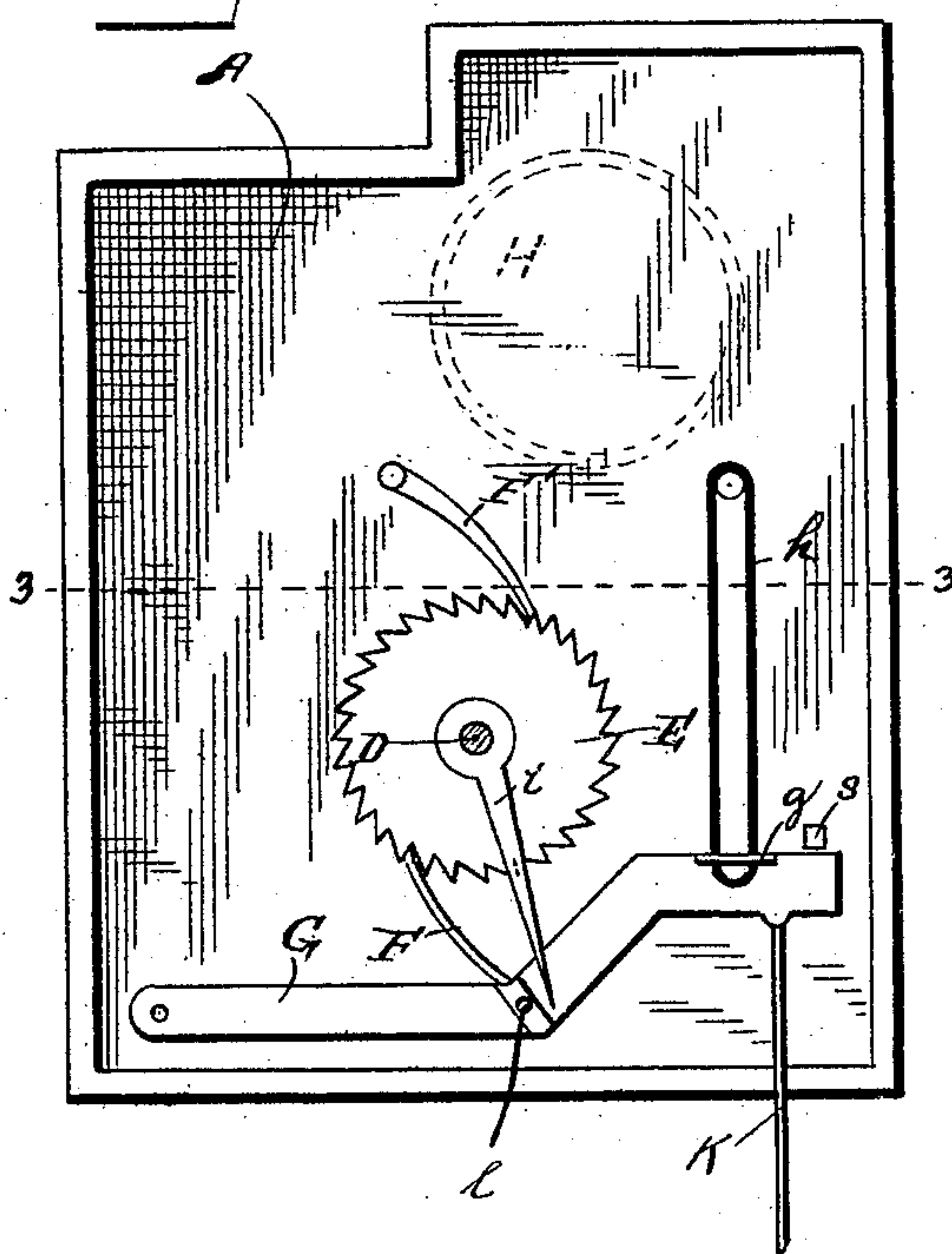


Fig - 4 -

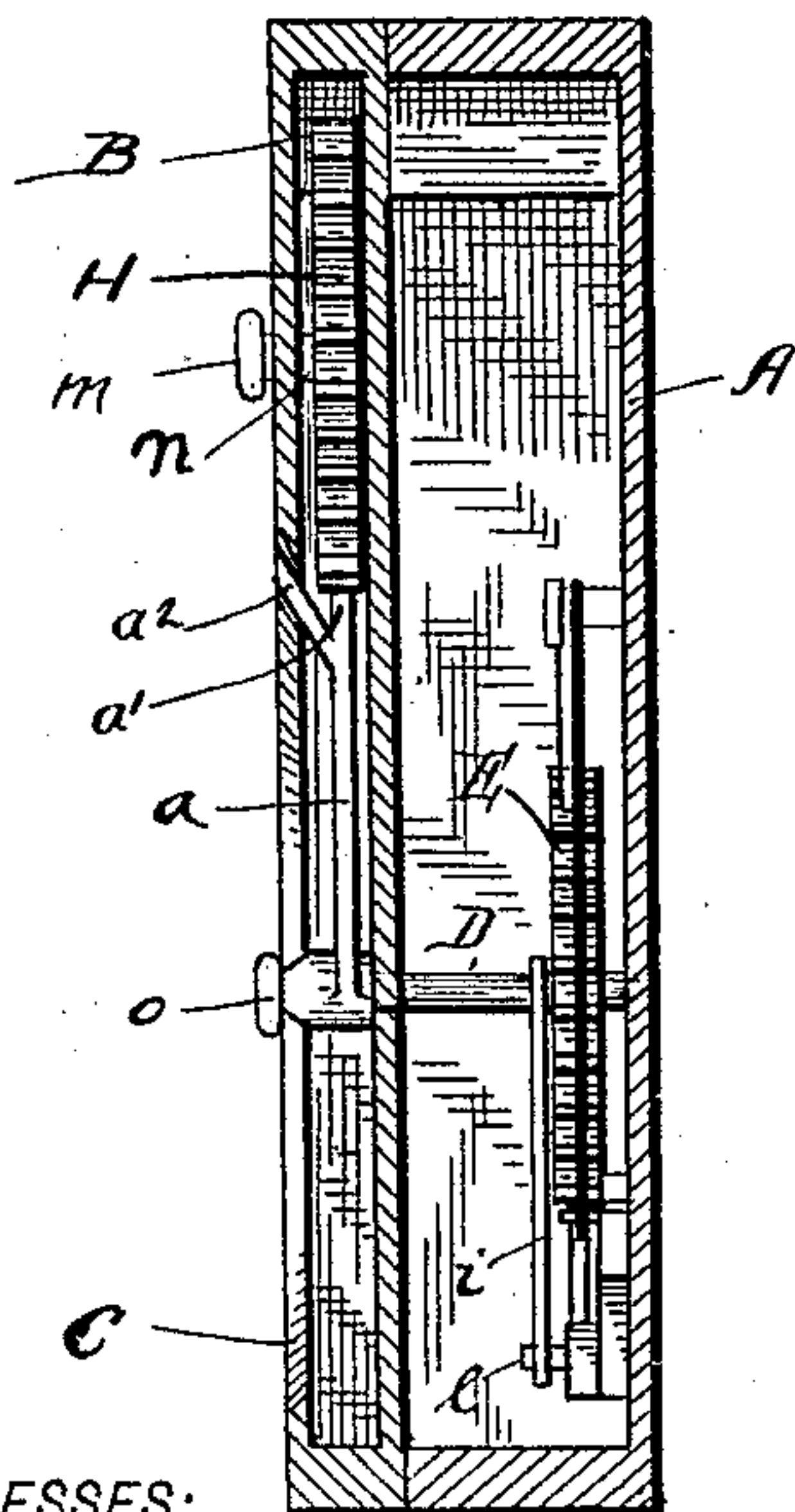
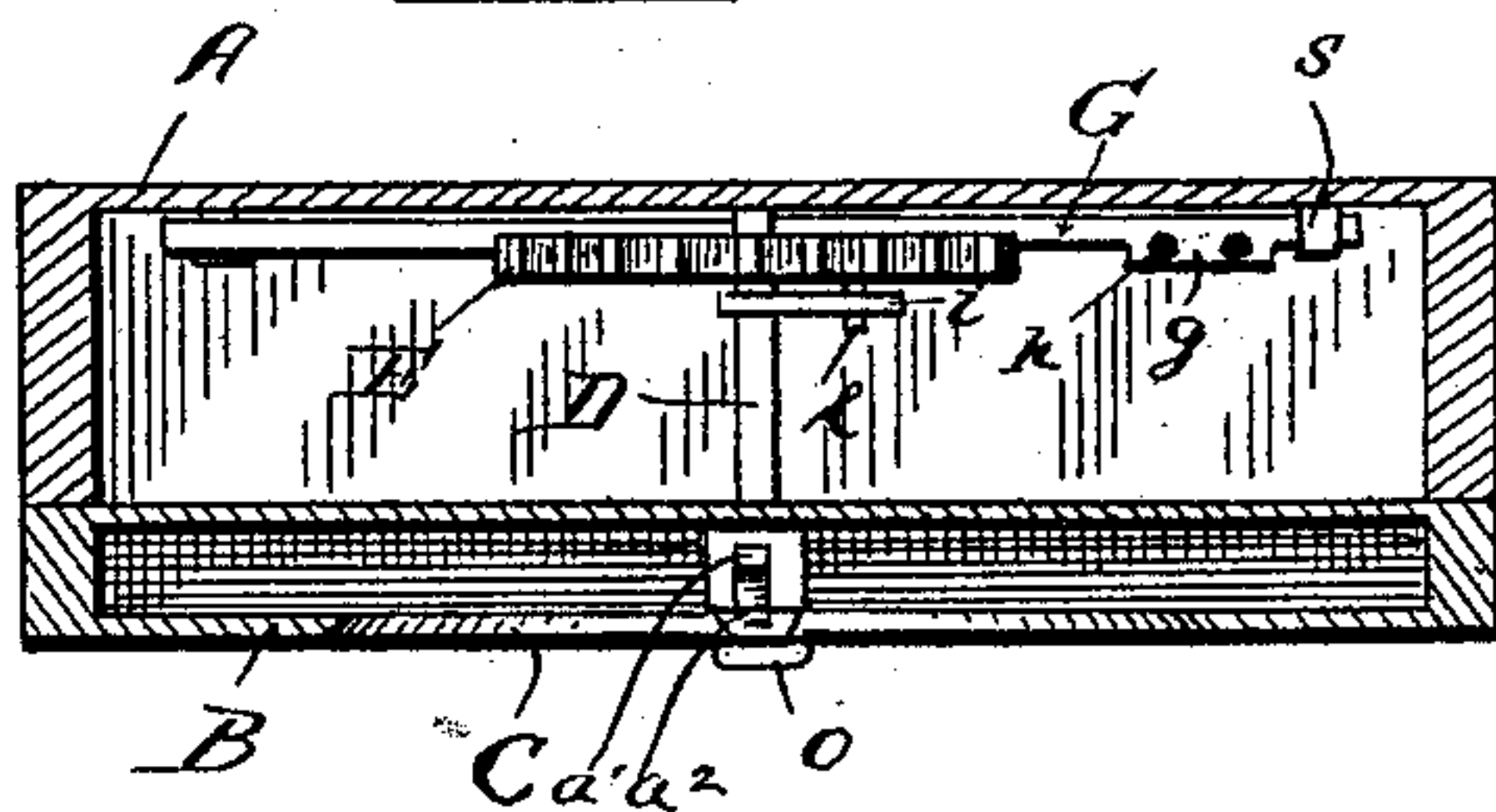


Fig - 3.



WITNESSES:

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GEORGE E. HUDSON, OF PITTSBURG, PENNSYLVANIA.

APPARATUS FOR REGISTERING THE NUMBER OF WORDS WRITTEN ON TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 488,521, dated December 20, 1892.

Application filed February 8, 1892. Serial No. 420,818. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. HUDSON, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Registering the Number of Words Written on Type-Writers; and I do hereby 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to improvements in an apparatus for registering the number of words written on type writers, and it consists in the construction and arrangement of parts, as will be hereinafter described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1. is a front elevation of my improved machine. Fig. 2. is a front elevation of the same, having the face plate, dial and pointer removed therefrom. Fig. 3. is a sectional plan view taken on the line 3-3. Fig. 4. is a sectional side elevation, taken on the line 4-4.

Referring to the drawings, A. designates the frame, of a suitable size and form of construction, and I provide the same with a face plate B. having a dial C. divided into an equal number of parts, and each part given a number in regular rotation. Secured at the center of the dial is a short shaft D. having its support in the frame A. and face plate B. said shaft having mounted rigidly thereon a ratchet wheel E. This ratchet wheel is formed with the same number of teeth as there are divisions on the dial face, said ratchet wheel is operated by means of a bar G. pivoted to the frame at one of its ends, and having at or about its center a spring pawl F. which is adapted to engage with the teeth of the wheel E. This pawl is so bent that by a downward movement of the bar G. the pawl F. leaves the ratchet wheel E. and engages with the next tooth in advance during the upward movement of said bar G. thereby moving or slightly rotating the ratchet wheel E. and the backward movement of said wheel is pre-

vented by means of a stop pawl F'. secured to the frame. Attached to the shaft D. over the face plate B. is an indicator *a*. having a double point *a'*. *a*²; the latter *a*². serving to indicate the number of separate movements of the bar G. and the former *a'*. serving to operate a ratchet wheel H. for a purpose hereinafter described. Attached to the bar G; to a projection *g*. is a rubber band or other springing material *h*. as shown in Fig. 2. which serves the purpose of returning the bar G. to its normal position. A stop *s*. is provided to limit the upward motion of the bar. and the bar is connected to the space bar of a type writing machine by means of a rod K. whereby it will have an unlimited or variable movement to correspond with the movement of the space bars of different type writers. Connected to the shaft D. is an arm *i*. which when in contact with a projecting pin *l*. on the bar G. will prevent the indicator *a*. from passing the zero point on the dial when resetting the apparatus. Above the dial and within reach of the point *a*². of the indicator is a ratchet wheel H. having radially arranged about its front face a series of numbers see Fig. 1. and this ratchet wheel as hereinbefore stated is revolved by the point *a*². engaging one of the teeth of the wheel after completing the circle about the dial, and the said wheel may be set at any point by means of a button *m*. attached to the shaft *n*. on which the wheel H. is mounted, a similar button *o*. serves as a means of resetting the indicator *a*.

Importance is attached to the bar G. and its operating means, as above described, as said bar may have a variable downward movement to overcome the variable motion of the space bar of different construction of type writing machines, also to the indicator with double points.

Having described my invention, what I claim is:

1. The combination with the frame having a face plate with a dial plate, a shaft having its bearings in the frame and dial, and provided with an indicator a ratchet wheel for operating the indicator a pivoted bar with spring pawl, and a stop pin on said bar, and an arm on said shaft. adapted to check the

movement of the indicator, as and for the purpose specified.

2. The combination with the frame having a pivoted bar, a dial plate an operating pawl
5 on said bar, a ratchet wheel H. a shaft having a ratchet wheel E. and an indicator with double points. as and for the purposes specified.

In testimony that I claim the foregoing I hereunto affix my signature this 12th day of January, A. D. 1892.

GEORGE E. HUDSON. [L. s.]

In presence of—

CHARLES LARGE,
M. E. HARRISON.