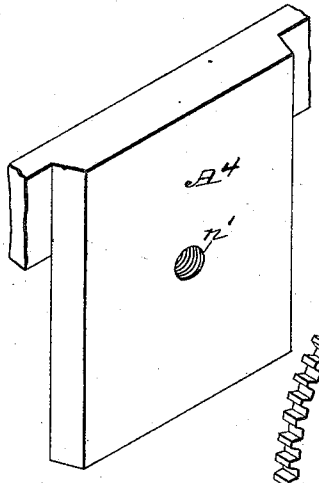
(No Model.)

G. W. BALDRIGE & G. H. LASAR.

ESCAPEMENT FOR TYPE WRITERS.

No. 344,933. Patented July 6, 1886.

Fig. 1.



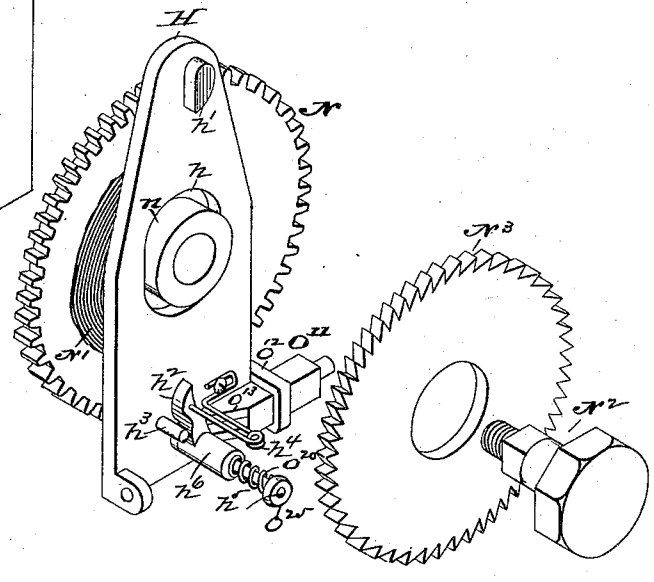


Fig. 5.

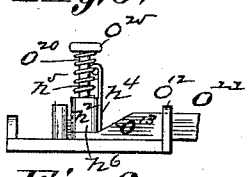


Fig. 6.

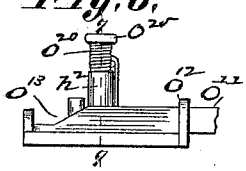


Fig. 7.

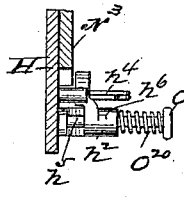


Fig. 2.

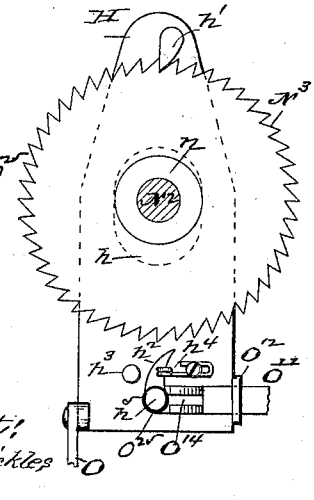


Fig. 3.

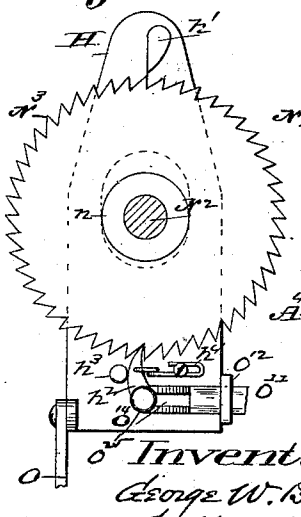
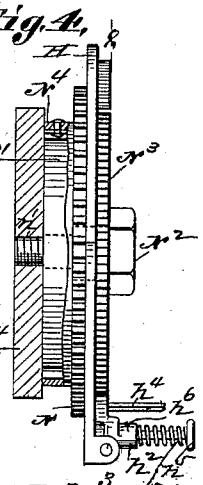


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE W. BALDRIGE AND GODFREY H. LASAR, OF ST. LOUIS, MISSOURI; SAID LASAR ASSIGNOR TO SAID BALDRIGE.

ESCAPEMENT FOR TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 344,933, dated July 6, 1886.

Original application filed March 17, 1885, Serial No. 159,233. Divided and this application filed December 9, 1885. Serial No. 185,206. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. BALDRIGE and GODFREY H. LASAR, of St. Louis, Missouri, have jointly made a new and useful Improvement in Escapements, of which the following is a full, clear, and exact description.

The present improvement was shown in our pending application for an improvement in type-writers, filed March 17, 1885, and numbered 159,233, and by direction of the Patent Office is now presented in a separate application.

The annexed drawings, making part of this specification, is largely a reproduction of that already exhibited in the application referred to.

Figure 1 is a view in perspective showing separated from each other the various parts of the improved escapement. Fig. 2 is a vertical section on the line 2 2 of Fig. 4. Fig. 3 is a view similar to that of Fig. 2, the dog-plate being raised. Fig. 4 is an edge elevation, partly in section, of the escapement; and Figs. 5, 6, and 7 are details showing the mechanism for removing the lower dog from the plane of the scape-wheel, Figs. 5, 6 being plan views, and Fig. 7 being a section on the line 7 7 of Fig. 6.

The same letters of reference denote the same parts.

N, Figs. 1, 4, represents a gear-wheel, and N′ represents a coil-spring. The gear N is journaled upon the bolt N^2, which passes through the hub *n* of the gear, and is screwed into the part A^4 at *n*′. The part A^4 is any suitable support for the escapement mechanism. The spring N′ encircles the bolt between the gear N and the part A^4, the inner end of the spring being fastened to the bolt, and the outer end of the spring being fastened to the gear, or to some part—such as the casing N^4—attached to the gear. The gear N engages with the paper-carriage rack, or any other part having rectilinear or rotary motion. The movement of such part in one direction operates to wind up the spring, and when the gear is released the spring acts to rotate it in the opposite direction. The hub *n* is extended, and forms a bearing, upon which the scape-wheel N^3 is fastened. H represents what may be styled the "scape-plate." It is slotted vertically at *h*, and it is arranged between the scape-wheel and the gear N. The slot *n* is large enough for the scape-plate to be passed onto the hub *n*, and it is sufficiently elongated vertically to enable the scape-plate to be lifted and lowered in the manner and for the purpose presently described. The bolt N^2 when in place, as in Fig. 4, is rigidly fixed; but it does not bind the gear N, the scape-wheel, and the scape-plate in their respective movements—that is, the gear and the scape-wheel can as one part rotate reciprocatingly upon the bolt, and the scape-plate can be moved reciprocatingly upward and downward between the gear and the scape-wheel. The scape-plate is supplied with the two dogs, *h*′ and h^2, which are designed to work in connection with the scape-wheel. They are arranged upon the plate to be one *h*′ above, and the other, h^2, beneath, the center of the scape-wheel, and they point in opposite directions. The scape-wheel is at rest when in the down position of the scape-plate, as in Fig. 2, in which position the dog *h*′ is in engagement with the scape-wheel. When the plate is moved upward, the upper dog becomes disengaged, and the lower dog becomes engaged, with the scape-wheel, and the spring N′ acts to rotate the gear N and scape-wheel a distance equal to that of the movement of the point of the lower dog; for while the upper dog is fixed upon the scape-plate the lower dog is pivoted thereupon, and it is turned to and fro upon its pivot, as indicated by its two positions shown in Figs. 3 and 2, respectively, and when the scape-wheel engages with that dog h^2 the dog moves with the scape-wheel until the dog encounters the stop h^3, whereupon the further movement of the dog and scape-wheel is prevented. When the scape-plate is moved downward, and the dog h^2 disengaged therefrom, the spring h^4 acts to turn the dog on its pivot back into the position of Fig. 2. As the dog h^2 becomes disengaged, the dog *h*′ becomes engaged with the scape-wheel, and the scape-wheel is again held stationary until the scape-plate is moved upward again. The scape-plate can be moved, in the manner described, by any suitable means, as, for instance, the connecting-rod O. When it is desired to rotate the gear N independently of the escapement, the scape-plate is lifted to dis-

engage the upper dog, and the lower dog is removed from the plane of the scape-wheel, and preferably by the following means: A thrust-bar, O^{11}, is adapted to be moved longitudinally in the guide O^{12} upon the scape-plate. The thrust-bar is beveled at O^{13}, and is slotted at O^{14}, to be slipped upon the pivot h^5 of the dog h^2, and so that the extreme end of the thrust-bar comes between the hub h^6 of the dog and the scape-plate, as shown more distinctly in Fig. 5. By thrusting the bar O^{11} forward its beveled portion operates to wedge the dog away from the scape-plate and out of the plane of the scape-wheel, and the parts assume the position of Figs. 6, 7. The pivot h^5 is extended outward from the scape-plate, and is encircled by the spring O^{20}, which at its outer end bears against the shoulder O^{25}, and its inner end against the end h^6, and when the thrust-bar is withdrawn the spring acts to replace the dog h^2 in the plane of the scape-wheel; but as long as the dog h' is disengaged and the dog h^2 is withdrawn laterally, as described, the gear and scape-wheel can be rotated freely.

We claim—

1. The combination of the gear N, hub n, bolt N^2, scape-wheel N^3, and scape-plate H, slotted at h and provided with the dogs h' h^2, substantially as described.

2. The scape-plate having the upper and lower dogs, in combination with the scape-wheel, said dogs being arranged as described, and one of them being pivoted to said scape-plate, and said scape-plate having a reciprocating movement, as described.

3. The scape-plate having the pivoted dog h^2, the stop h^3, and spring h^4, in combination with the scape-wheel, substantially as de-described.

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GODFREY H. LASAR.

Witnesses:
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J. W. HOKE.