(No Model.)

A. W. KIENTOFF.

ESCAPEMENT.

No. 302,851. Patented July 29, 1884.

Fig. 1.

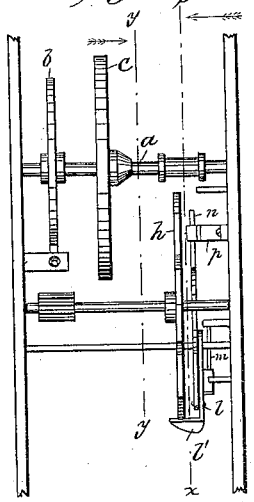


Fig. 2.

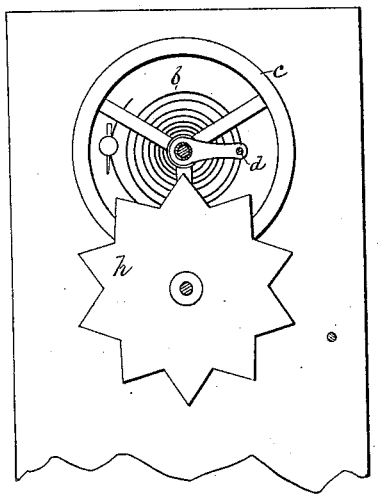
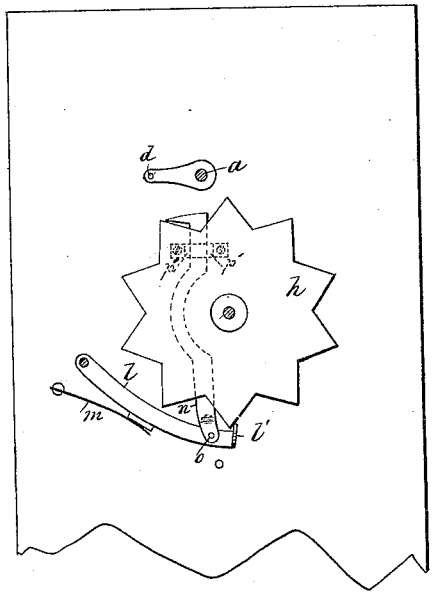


Fig. 3.



WITNESSES:

W. W. Hollingsworth

W. Ready

INVENTOR:

August W. Kientoff

BY Munn & Co

ATTORNEYS.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

AUGUST W. KIENTOFF, OF DALLAS, OREGON.

ESCAPEMENT.

SPECIFICATION forming part of Letters Patent No. 302,851, dated July 29, 1884.

Application filed May 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, AUGUST W. KIENTOFF, a citizen of the United States, residing at Dallas, in the county of Polk and State of Oregon, have invented a new and useful Improvement in Time-Piece Escapements, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings and letters of reference marked thereon, in which—

Figure 1 is an end view of my improved escapement. Fig. 2 is a sectional view on line *x x*, Fig. 1; and Fig. 3 is a sectional view on line *y y*, Fig. 1.

Similar letters indicate like parts in all the figures.

My invention relates to balance-wheel or pendulum escapements in time-pieces; and it consists in the peculiar construction and arrangement of the parts, as hereinafter more fully set forth, and pointed out in the claims.

Referring to the drawings, in which I have shown the device applied to a balance-wheel escapement for a time-piece, *a* represents the balance-staff of a time-piece operated by a hairspring, *b*, and carrying the balance-wheel *c*, and a pallet or roller, *d*, which engages with the escapement-wheel *h*, operated by a weight or spring through a train of wheels.

l represents a pawl hinged at one end to the frame of the time-piece, and provided at its opposite end with a hook, *l'*, adapted to engage with a tooth of the escapement-wheel *h* and prevent it from revolving.

m represents a spring pressing on the back face of the pawl *l*, and forcing its hooked end *l'* into engagement with a tooth of the escapement-wheel *h*.

n represents an arm secured at one end to the spring-pawl *l* at *o*, and resting near its opposite end on the block *p*, secured to the frame of the time-piece.

p' represents a keeper secured to the block *p*, through which the arm *n* passes, the keeper serving as a guide to the arm *n* in its reciprocations. The arm *n* extends upwardly sufficiently far to allow its end to be struck by the pallet or roller *d* in its oscillations. In practice the pallet or roller *d*, operated by the hairspring, will strike the upper end of the arm *n* of the spring-pawl *l*, throwing its hooked tooth *l'* out of engagement with a tooth of the escapement-wheel, which imparts an impulse to the balance-wheel, and allows the escapement to revolve one tooth, when the spring *m* will force the spring-pawl *l* into engagement with the next tooth of the escapement-wheel, which process will continue for the other teeth of the escapement-wheel.

My escapement can be applied to a common toothed escapement-wheel.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the balance-staff *a* and pallet or roller *d* secured thereto, of the escapement-wheel *h* and spring-pawl *l*, having arm *n*, substantially as shown and described.

2. The combination, with the balance-staff *a*, balance-wheel *c*, spring *b*, and pallet or roller *d*, of the escapement-wheel *h*, lever *l*, having hook *l'*, arm *n*, and block *p*, having keeper *p'*, substantially as shown and described.

AUGUST W. KIENTOFF.

Witnesses:
JOHANNAS EMMENS,
THOMAS I. LOVELADY.