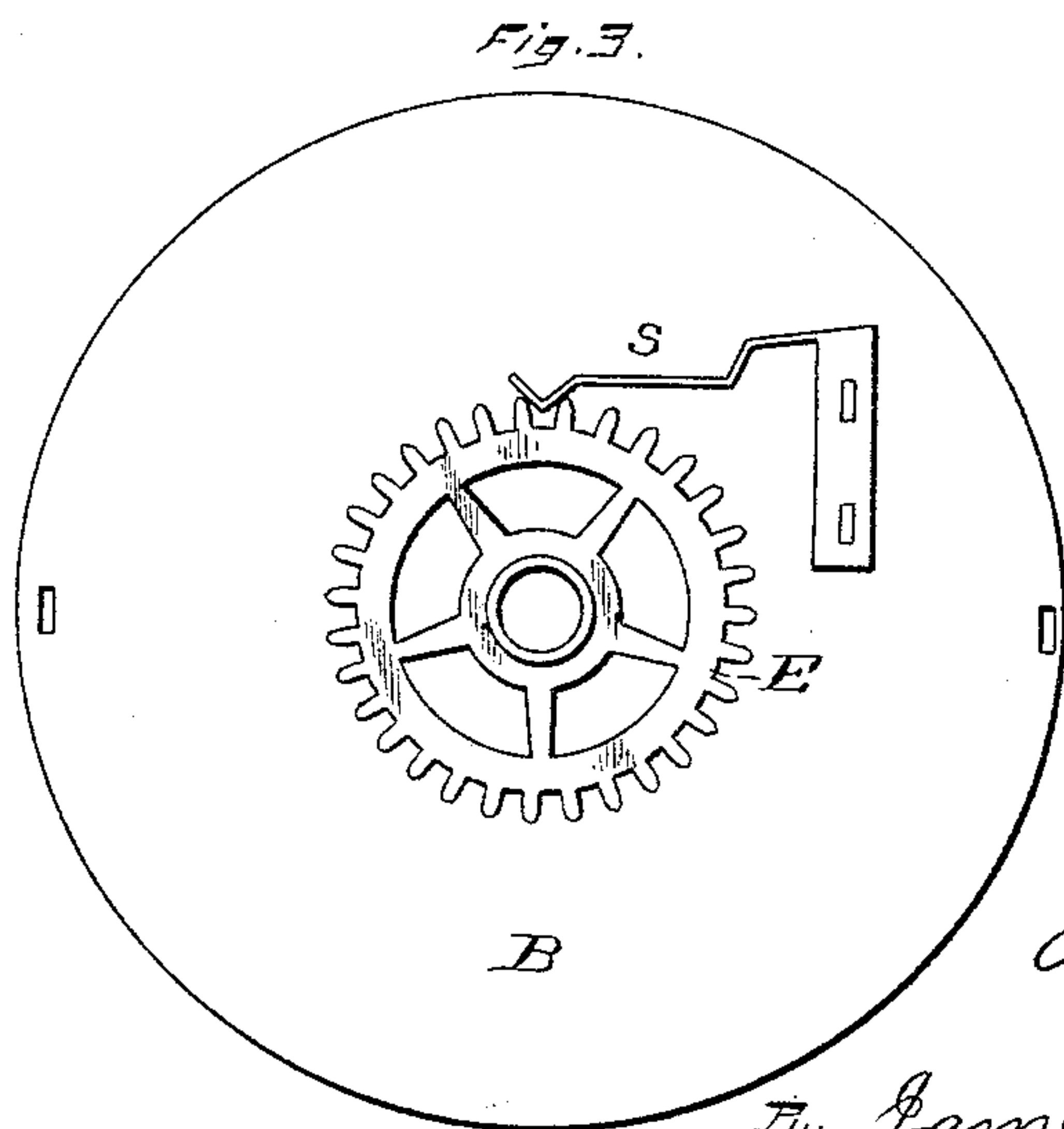
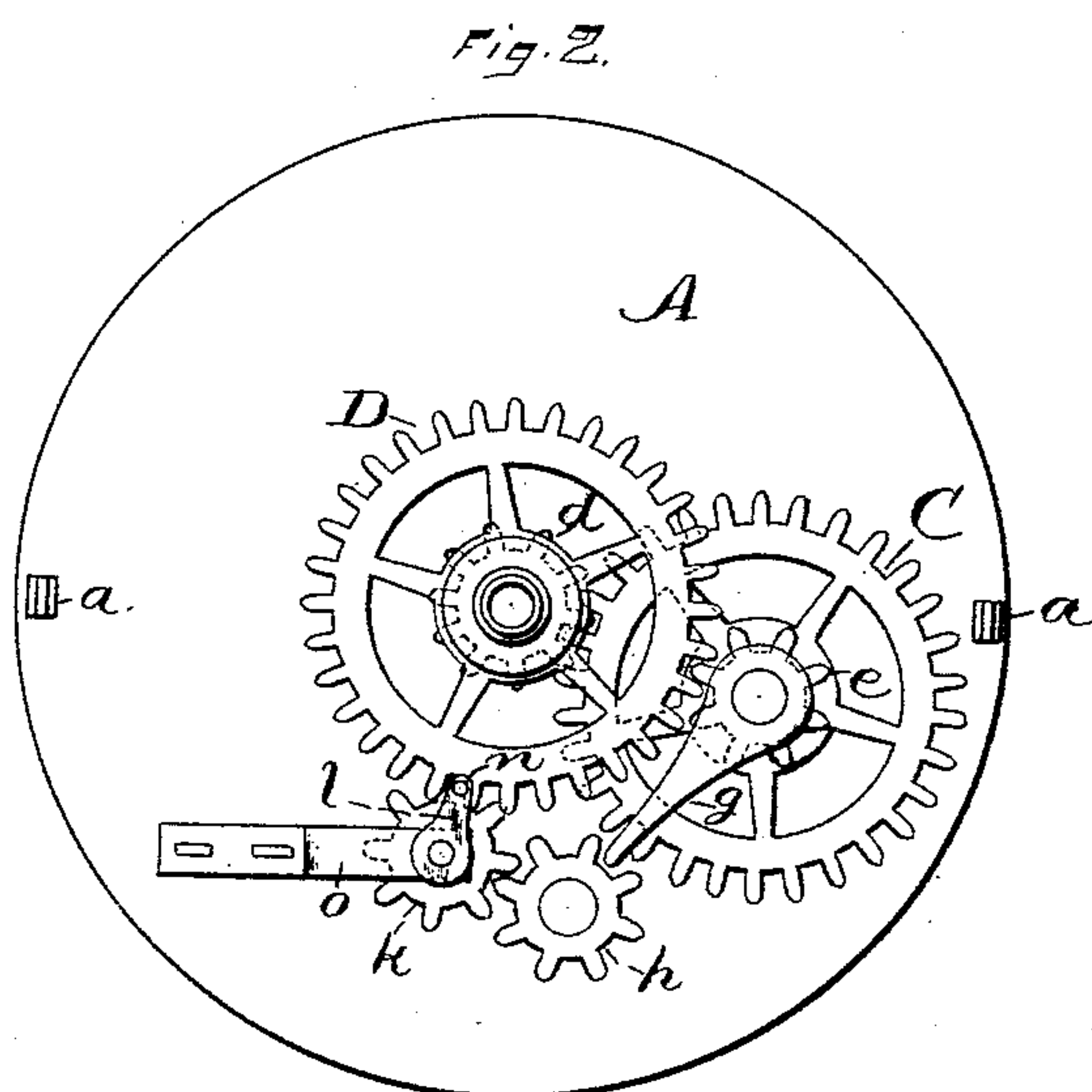
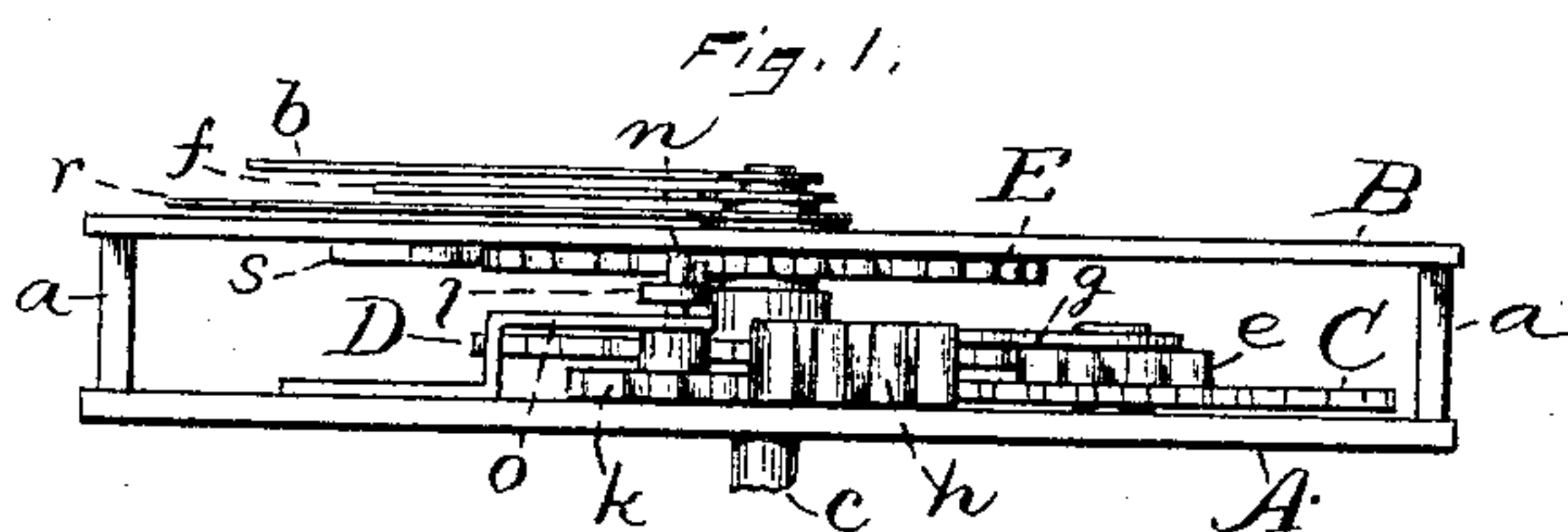


(No Model.)

A. M. LANE.
CALENDAR CLOCK.

No. 348,981.

Patented Sept. 14, 1886.



Witnesses.
John Edwards Jr.
J. H. Whiting

Inventor.
Almeron M. Lane.

By James Shepard
Att'y.

UNITED STATES PATENT OFFICE.

ALMERON M. LANE, OF MERIDEN, CONNECTICUT.

CALENDAR-CLOCK.

SPECIFICATION forming part of Letters Patent No. 348,981, dated September 14, 1886.

Application filed February 23, 1886. Serial No. 192,746. (No model.)

To all whom it may concern:

Be it known that I, ALMERON M. LANE, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Calendar-Clocks, of which the following is a specification.

My invention relates to improvements in calendar-clocks; and the main object of my invention is to produce an inexpensive mechanism that occupies but little space.

In the accompanying drawings, Figure 1 is a side elevation of my calendar, together with the front plate and other portions of a clock. Fig. 2 is a front elevation of the same, but with the clock-dial, the pointers, and the day-of-the-month wheel removed; and Fig. 3 is a rear elevation of the dial and the day-of-the-month wheel. All of said figures are on an enlarged scale.

A designates the front plate of the clock-movement, and B the dial, which is secured to said front plate by means of pillars *a a*. The minute-hand *b* is on the shaft *c*, Fig. 1, having pinion *d*, Fig. 2, and this pinion meshes into the wheel C, to which wheel is attached the pinion *e*, the latter engaging with the twelve-hour wheel D, mounted on a tubular shaft or socket and carrying the hour hand *f*, all as in ordinary clocks.

The wheel C and attached pinion *e* revolve once in three hours. I attach to the end of the pinion *e* an arm or spur, *g*, which engages the teeth of pinion *h*, mounted on a stud on the front of the front plate, A. This pinion *h* meshes into pinion *k*, which is rigidly connected to a short shaft having at its front end an arm, *l*, upon the end of which arm is a trip-pin, *n*. The shaft on which the pinion *k* is mounted has one of its bearings in the bridge *o*, which bridge bears upon the hub of the pinion *k* with sufficient force to hold it against accidental rotation. The day-of-the-month wheel E is pivoted by means of a hollow shaft to the dial B, which shaft carries at the front end the calendar-pointer *r*. This day-of-the-month wheel is held against accidental rotation by means of the spring *s*, as in ordinary calendars. The pin *n* upon the arm *l* serves as a trip pin or point for engaging the teeth of the day-of-the-month wheel E.

The operation is as follows: The spur or arm *g* once in three hours engages with the

pinion *h*, and thereby moves said pinion and the pinion *k* one-eighth of a revolution. This movement will take place eight times in twenty-four hours, and consequently the pinion *k* and its trip-pin *n*, moving intermittently once in three hours, will make one revolution every twenty-four hours, and thereby move the day-of-the-month wheel and its pointer a space which will represent one day upon the dial.

I have described the spur *g* as secured to the end of the pinion *e* to serve as a trip-pin; but it is evident that the place of attachment is not essential, as any trip pin or arm attached at any point of the pinion *e* or its wheel C, so as to engage the pinion *h* for each revolution of the pinion and wheel *e* C, will answer the same purpose.

The wheel C is what is technically termed the "minute-wheel." In the particular movement illustrated it revolves once in three hours; but I do not wish to confine my invention to a three-hour minute-wheel, and therefore reserve the right to apply the point or spur *g* to the minute-wheel of any ordinary time-piece.

The intermediate pinion, *h*, is employed in order to make the calendar-pointer *r* travel in the same direction as the hands of the clock. Otherwise it might be dispensed with, and the spur or arm *g* be made to engage directly with the pinion *k*, which carries the trip-pin *n*.

It will be seen that the construction is very simple and the mechanism occupies but a little space, especially from front to rear, so that it may be applied to a small clock or watch without materially increasing the thickness thereof.

I claim as my invention—

In a calendar-clock, the combination of the minute-wheel and attached pinion C *e*, carrying trip pin or spur *g*, the intermittently-rotating pinion *k*, operatively connected with the pointer or spur *g*, and having the trip pin or point *n* attached and rotating with said pinion *k*, and the day-of-the-month wheel E, the teeth of which are acted upon by the pin *n*, substantially as described, and for the purpose specified.

ALMERON M. LANE.

Witnesses:

JAMES SHEPARD,
JOHN EDWARDS, Jr.