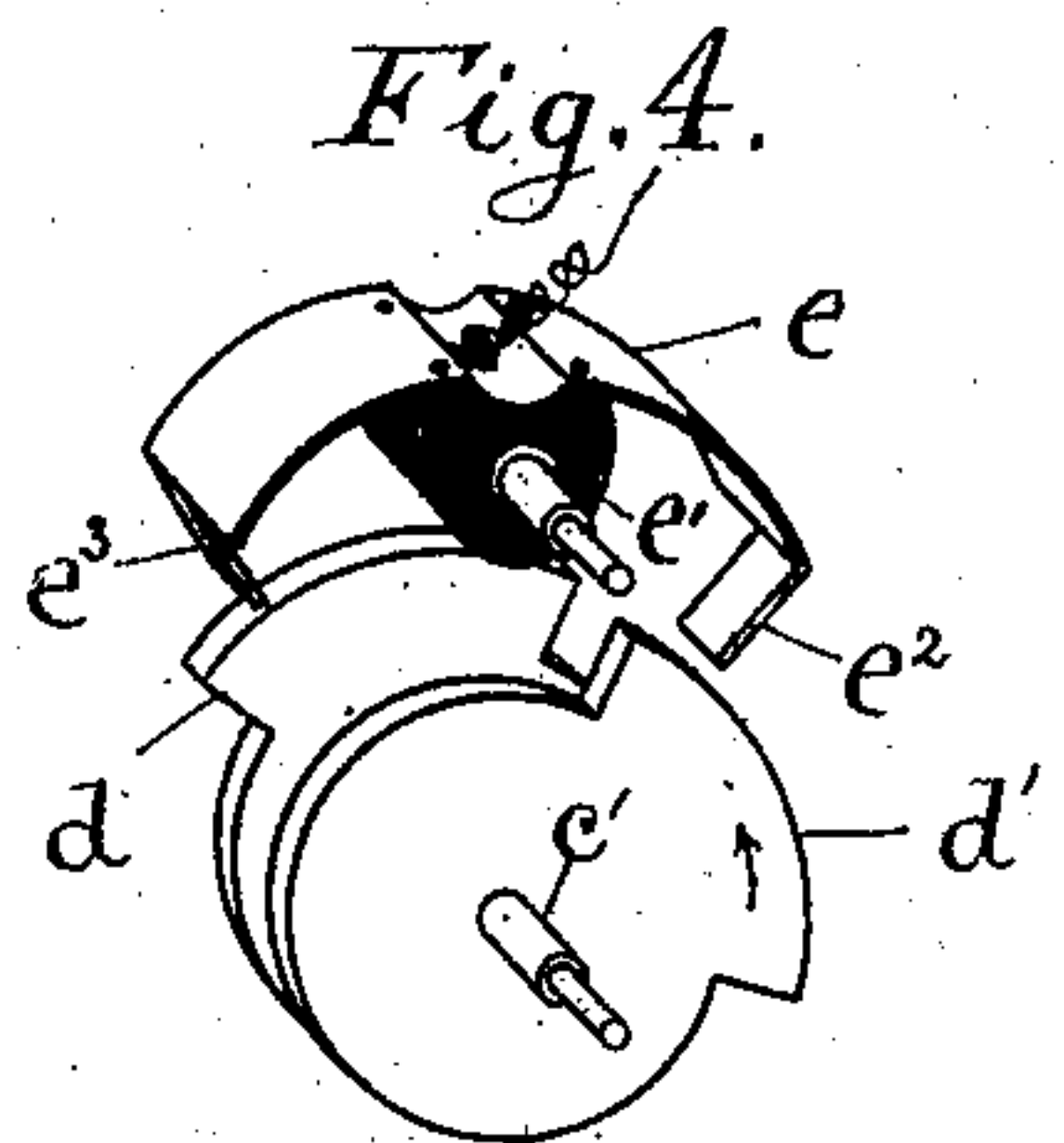
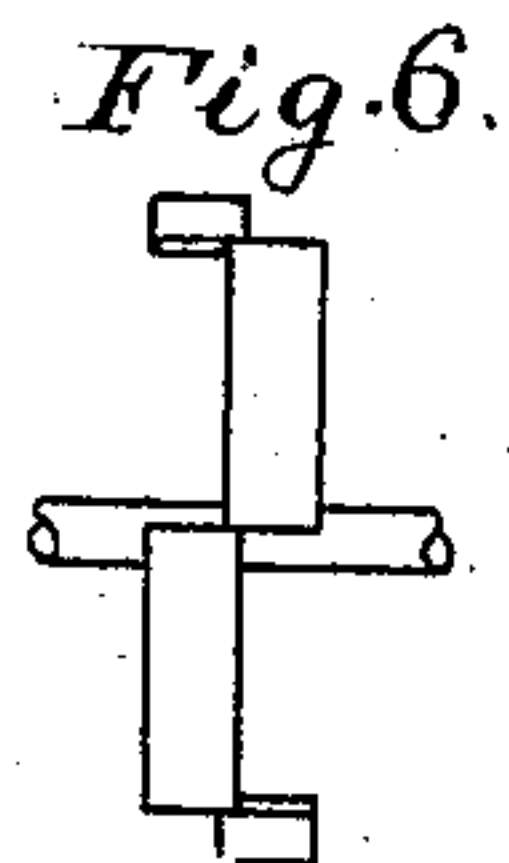
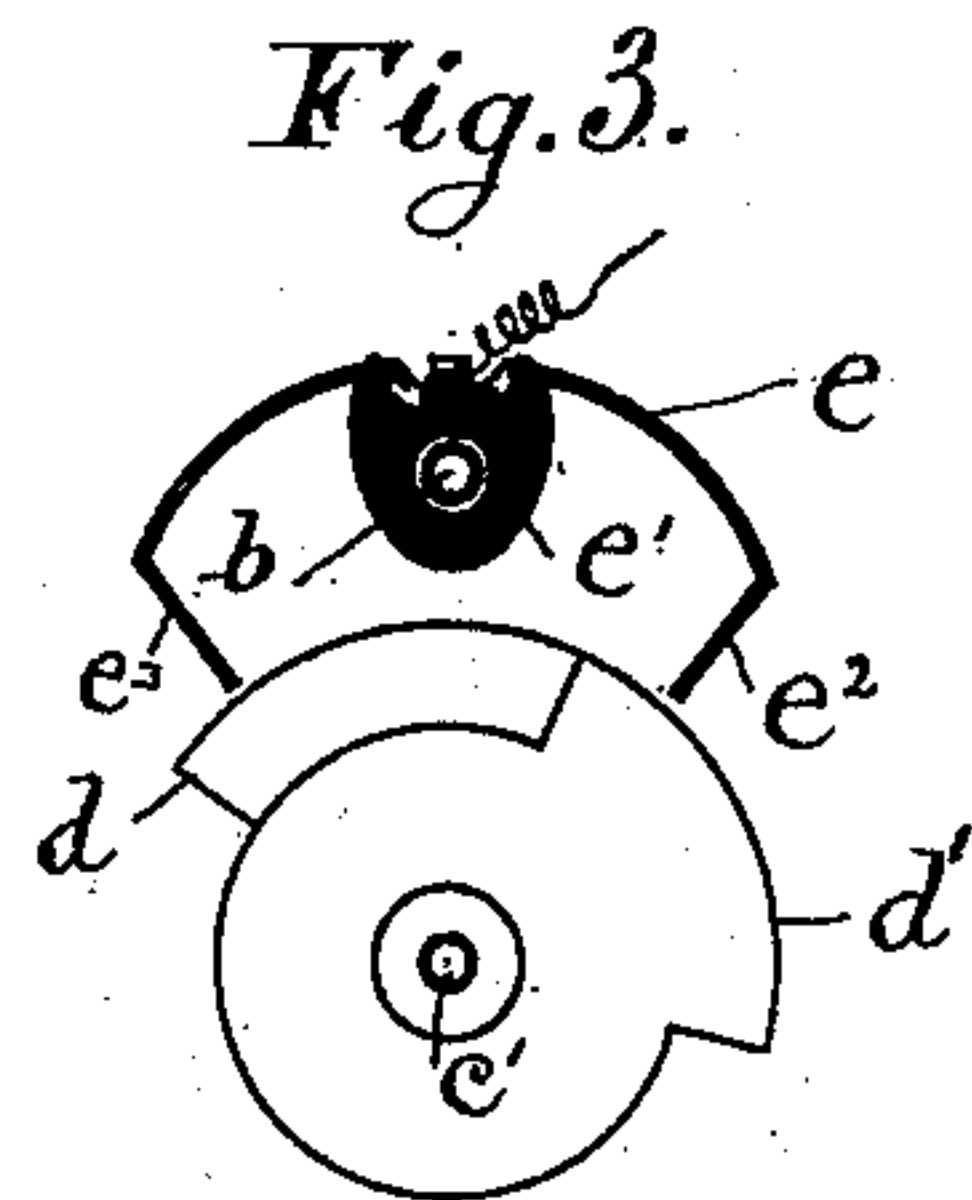
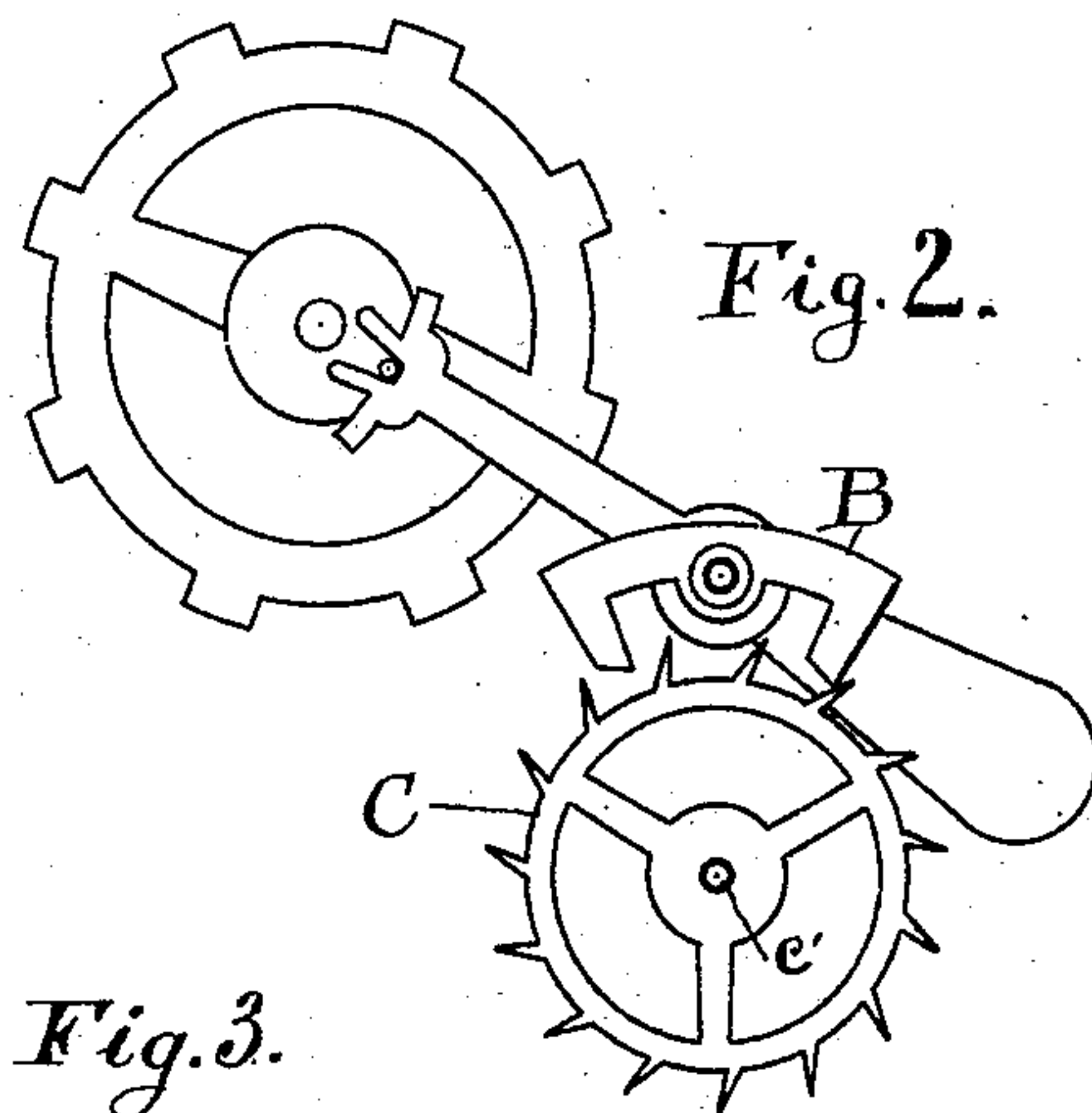
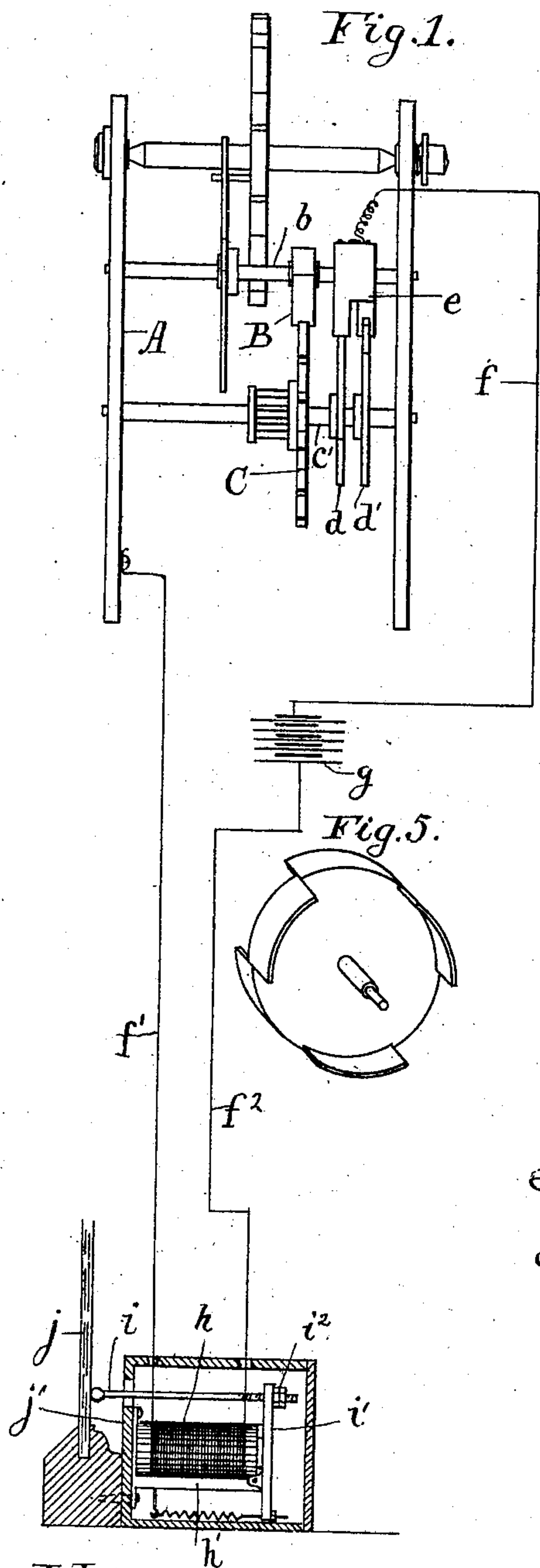


A. A. WHITE.
CIRCUIT CLOSING DEVICE.
APPLICATION FILED MAY 18, 1907.

903,251.

Patented Nov. 10, 1908.



Witnesses:
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Atty.

UNITED STATES PATENT OFFICE.

ALFRED A. WHITE, OF BANGOR, MAINE, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS,
TO NATIONAL TRADE TAPPER COMPANY, OF BANGOR, MAINE, A CORPORATION OF
MAINE.

CIRCUIT-CLOSING DEVICE.

No. 903,251.

Specification of Letters Patent.

Patented Nov. 10, 1908.

Application filed May 18, 1907. Serial No. 374,487.

To all whom it may concern:

Be it known that I, ALFRED A. WHITE, a citizen of the United States of America, and resident of Bangor, county of Penobscot, State of Maine, have invented certain new and useful Improvements in Circuit-Closing Devices, of which the following is a specification.

My invention relates to a circuit closing mechanism particularly adapted to be used in connection with an advertising device for tapping windows and the like to attract attention and the object of the device is to produce a series of sharp taps on the window of any desired number or at any desired intervals in simulation of the tapping of a person who wishes to attract attention.

The invention generally consists of a clock mechanism including a segment wheel and a pallet both of which are included in the electric circuit, the ends of the pallet being adapted to alternately contact with the segment, said ends and the segments of the wheel being preferably offset so that each end of the pallet contacts with a separate set of segments.

I illustrate my invention by means of the accompanying drawing in which

Figure 1 is a general view of my apparatus with tapping mechanism shown in side elevation and its containing case in section. Fig. 2 is an elevation of the escapement mechanism of the clock work. Fig. 3 is an elevation of the special pallet and segment wheels producing the intermittent closing of the circuit. Fig. 4 is a perspective of the same. Fig. 5 is a perspective of a modified form of said segment wheel and Fig. 6 is an edge view of the same.

In the drawing, *j* represents the window with the lower sash in section and *j'* is a box or casing secured to the lower sash in which is located the tapping mechanism *J* supplied with power through an electric circuit which is represented by wires *f f' f''* and the battery *g* and also included in this circuit is a make and break device for intermittently opening and closing the circuit. This consists of a segment wheel and means operated by a clock work mechanism for contacting intermittently therewith. As here shown, I provide a clock work mechanism *A* which is connected in the electric circuit *b* being the pallet shaft *B* the regular pallet, *C* the spur wheel and *c'* the spur wheel shaft.

For the purpose of intermittently closing the circuit, I locate on the spur wheel shaft a segment wheel in two parts *d* and *d'* secured side by side with their operative segments located so as to follow each other as the wheels rotate as hereafter explained.

Located on the regular pallet shaft *b* is a special pallet *e* having two ends or contact points *e²* and *e³* so located that, as the pallet oscillates by the movement of the pallet shaft, the points will contact first on one part of the segment wheel and then on the other. The pallet *e* is insulated from the pallet shaft by a block *e'* and it is connected by wire *f* with the battery and circuit. The arrangement of the segments as shown is such that intermittent contacts are made practically through one fourth revolution of the spur wheel shaft and the centers of the two segments are substantially the same distance apart as the points of the pallet so that, as the segment wheel revolves each segment arrives at and leaves its contact point at practically the same time. Thus as the pallet oscillates its two points contact first one and then the other of the two parts of the segment wheel and at each contact the circuit is closed, the magnet energized and the tapping mechanism operated.

In Figs. 5 and 6 are shown an alternate form of segment making use of a single wheel having the segments laterally offset so that they are in line with their respective contact points. It will be seen that the segments may be of such form and arrangements to give any desired intervals.

The clock work mechanism may be contained in a suitable box and located at any distance away from the tapping mechanism.

I claim:—

1. The herein described circuit closing device consisting of a clock mechanism embracing a segment wheel, a contact member adapted to intermittently contact with said segment wheel and an electric circuit including said contact member and said segment wheel.

2. The herein described circuit closing device consisting of a clock mechanism embracing a segment wheel, an oscillating pallet the ends of which are adapted to contact intermittently with said segment wheel and an electric circuit including said pallet and segment wheel.

3. The herein described circuit closing de-

vice consisting of a clock mechanism embrac-
ing a segment wheel having alternating seg-
ments laterally offset from each other, an os-
cillating pallet the ends of which are offset
5 to contact with the offset segments and an
electric circuit including said segment wheel
and said pallet.

Signed by me at Bangor Me, this 14th
day of May, 1907.

ALFRED A. WHITE.

Witnesses:

JOHN T. GEOJAN,
EZRA B. KELLIHER.