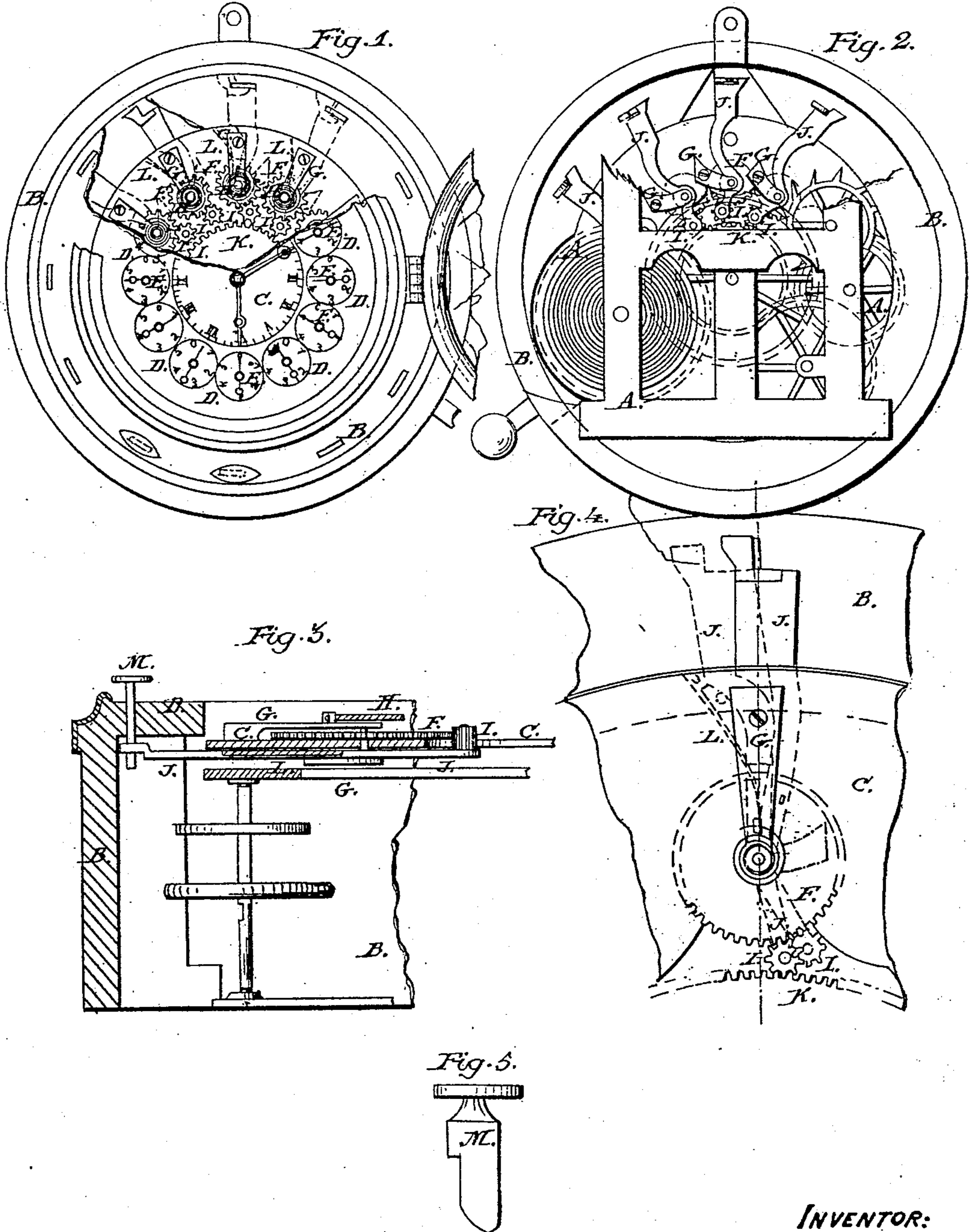


A. COURVOISIER.

Time Register.

No. 98,669.

Patented Jan. 11, 1870.



WITNESSES:
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AUGUSTE COURVOISIER, OF DENVER, COLORADO TERRITORY.

Letters Patent No. 98,669, dated January 11, 1870.

IMPROVEMENT IN TIME-REGISTER FOR HIRING-PURPOSES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, AUGUSTE COURVOISIER, of Denver, in the county of Arapahoe, and Territory of Colorado, have invented a new and useful Improvement in Time-Register for Velocipedes, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a front view of my improved time-register, part of the dial-plate being broken away to show the construction.

Figure 2 is a rear view of the same, the rear plate of the case being removed.

Figure 3 is a detail sectional view of the same.

Figure 4 is a detail view of the same, enlarged.

Figure 5 represents a key for throwing the registering-device into and out of gear with the clock-work.

My invention has for its object to furnish an improved time-register, for use in velocipede-schools, livery-stables, pleasure-boats, billiard-rooms, and other places where articles are rented by the hour, and which shall be so constructed and arranged that the party holding the key can easily know, by reference to the register, how long it has been in his possession; and

It consists in connecting the device with an ordinary clock-work, and in the construction and combination of the various parts of the device, as hereinafter more fully described.

A are the works, B is the case, and C, the dial-plate of a clock.

Around the ordinary dial of the plate C are arranged twelve, more or less, dials D, divided up into hour and minute-spaces, and each provided with a single hand, E.

The hands E are attached to the journals of the small gear-wheels F, which revolve in brackets G, which are attached to the frame of the clock-work.

The wheels F are provided with a stop, which prevents them from making more than one revolution, and stops them, with the hand E upon the zero-mark, when revolved back.

The wheels F are also provided with small coiled springs H, which revolve them back to the zero-mark as soon as they are thrown out of gear with the clock-work.

I are small gear-wheels, attached to the inner ends of the levers J, and the teeth of which mesh into the teeth of the gear-wheels F.

The levers J are pivoted to the journals of the gear-

wheels F, or in a line with said journals, so that in whatever direction the levers J be moved, the teeth of the wheels I F will always mesh into each other.

K is a large gear-wheel, attached to the hollow spindle that carries the hour-hand of the clock.

L are springs, attached to the frame of the clock-work, in such positions as to press against the outer parts of the levers J, so that when the said levers are left free, the action of the said springs will throw the wheels I into gear with the wheel K, and the registers will at once begin to record the time.

M are keys, which are passed in through holes in the front plate of the clock-case B, in such positions that their inclined sides may press the free ends of the levers J back, throwing the wheels I out of gear with the wheel K, and allowing the hands E to be carried back to the zero-point by the action of the springs H upon the wheels F.

The keys M and dials D should be numbered with corresponding numbers, so that there can be no question about the dial to which any particular key belongs.

In using the device, when a velocipede or other article is rented to any one, the key of one of the dials is taken out and delivered to the person renting the article. When he surrenders the key, he can read from the corresponding dial the time it has been in his possession. When the key is inserted in its place, the hand E at once moves back to the zero-point, ready to register the time for the next person.

The devices all act independently of each other, and as many of them may be used as can be arranged around the wheel K.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The arrangement of the small gear-wheels F, provided with stops and springs, as specified, the levers J, pinions I, springs L, and keys M, with respect to the journals on which the hands E are placed, and the driving-wheel K, all constructed and operating as and for the purpose specified.

2. The combination of the hands E E, dial D, spring H, gear-wheel F, lever J, spring L, gear-wheel K, and key M, with each other and with the hour-hand, spindle, frame, and case of a clock, substantially as herein shown and described, and for the purpose set forth.

AUGUSTE COURVOISIER.

Witnesses:

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