

(Model.)

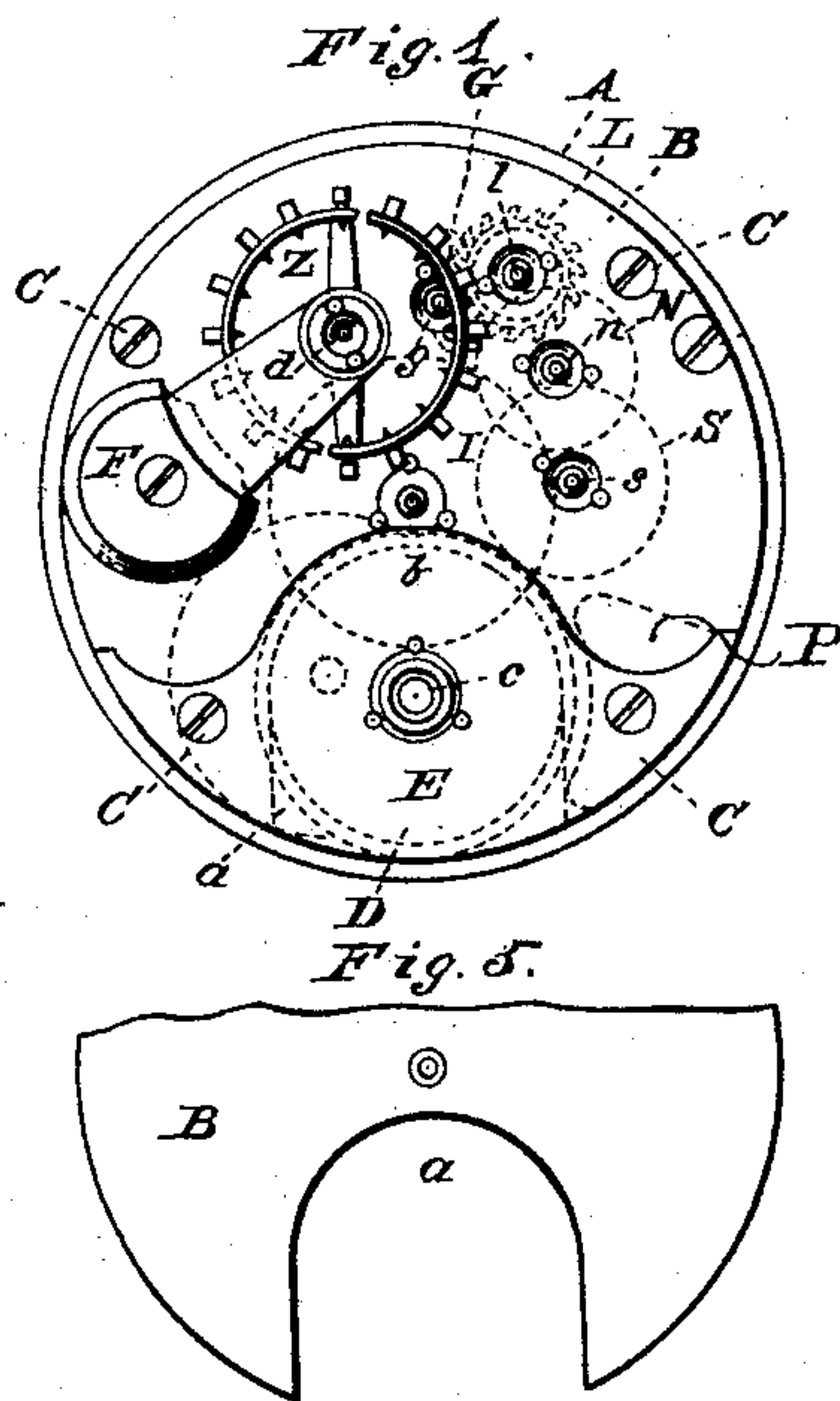
2 Sheets—Sheet 1.

D. GRUEN.

WATCH.

No. 372,261.

Patented Oct. 25, 1887.



WITNESSES

Villette Anderson.
Phil. Masi.

INVENTOR

Dietrich Gruen
by Anderson & Smith
Attorneys

(Model.)

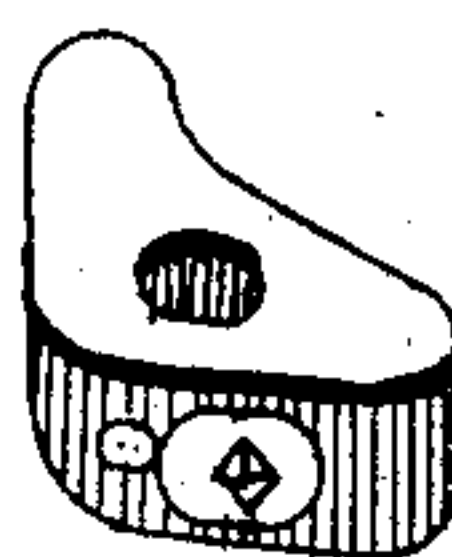
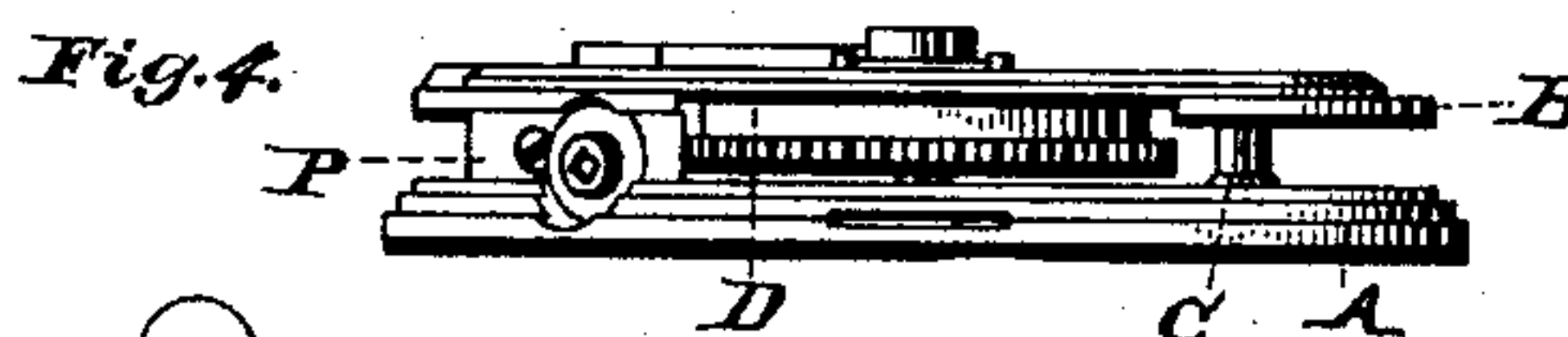
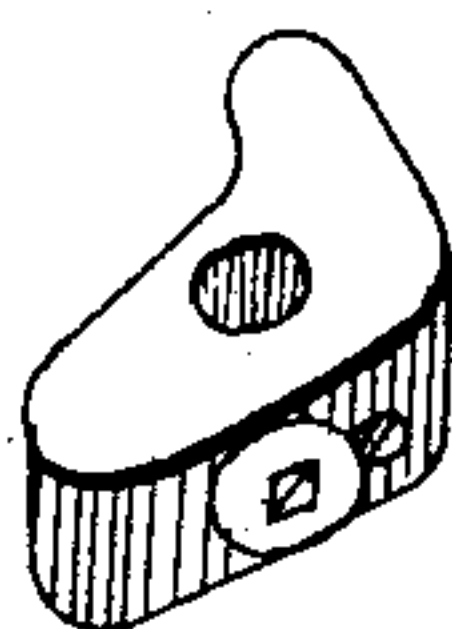
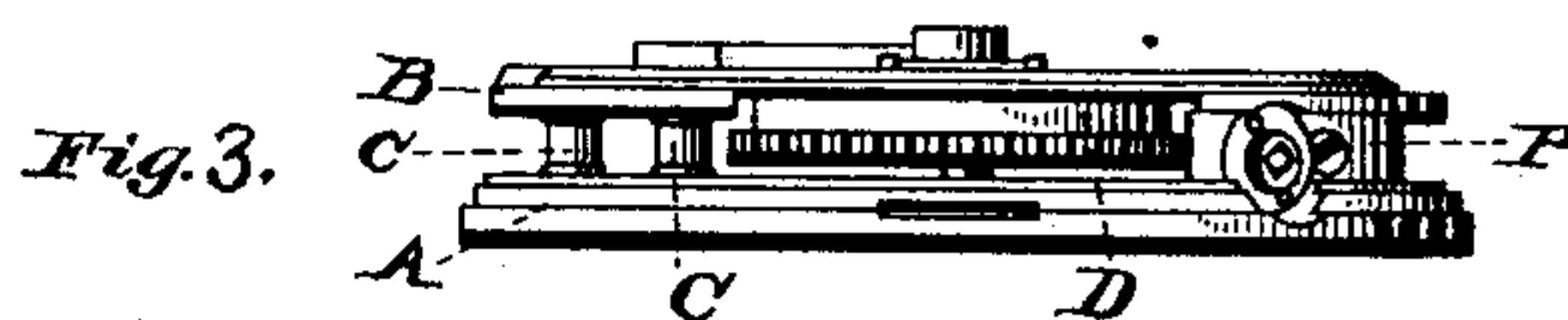
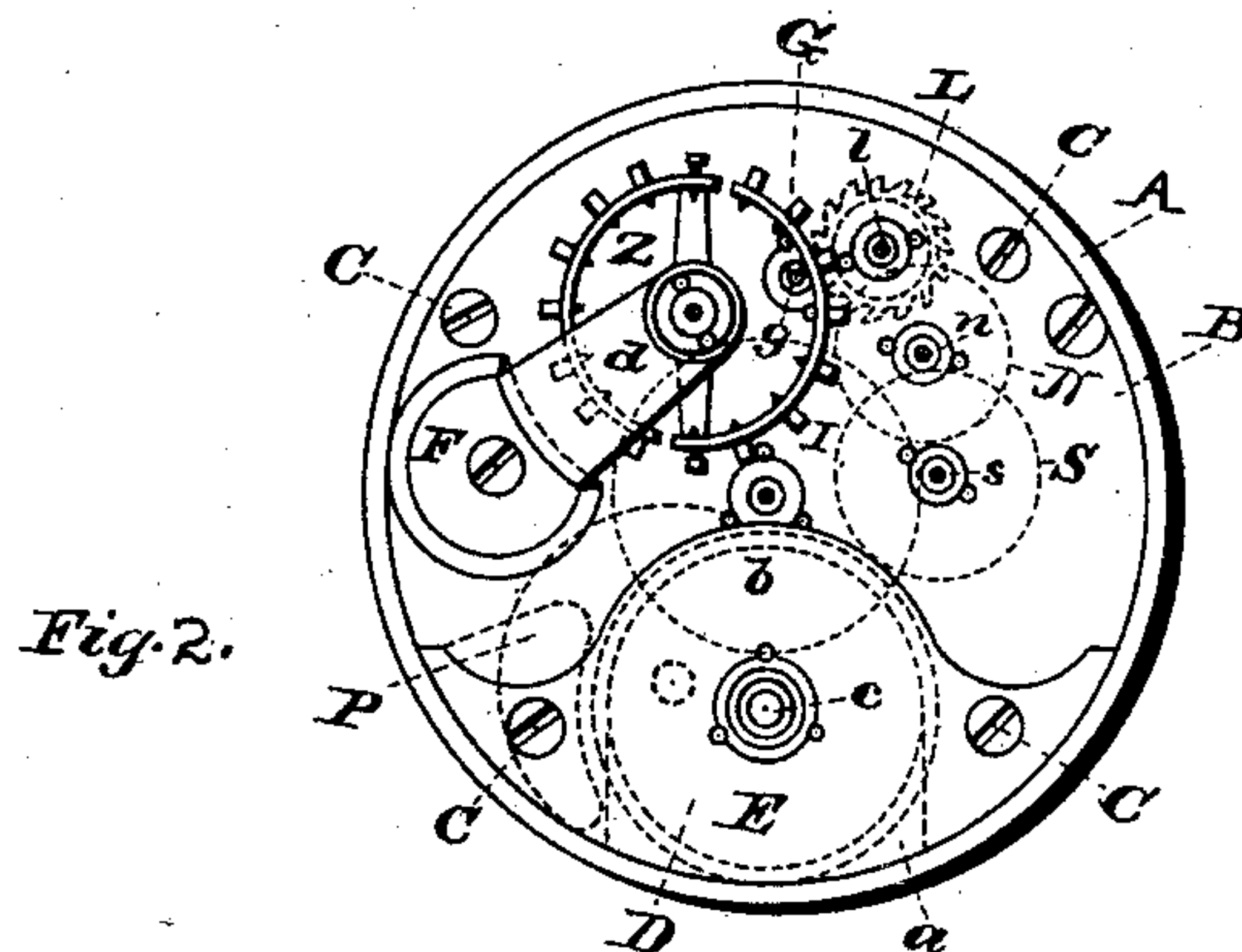
2 Sheets—Sheet 2.

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WATCH.

No. 372,261.

Patented Oct. 25, 1887.



WITNESSES

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UNITED STATES PATENT OFFICE.

DIETRICH GRUEN, OF COLUMBUS, OHIO, ASSIGNOR TO THE COLUMBUS
WATCH COMPANY, OF SAME PLACE.

WATCH.

SPECIFICATION forming part of Letters Patent No. 372,261, dated October 25, 1887.

Application filed August 27, 1885. Serial No. 175,487. (Model.)

To all whom it may concern:

Be it known that I, DIETRICH GRUEN, a citizen of the United States, resident at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Watches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 represents the invention applied to a stem-winding hunting-case watch. Fig. 2 represents the same applied to a stem-winding open-face watch. Fig. 3 is an edge view of Fig. 1. Fig. 4 is an edge view of Fig. 2. Fig. 5 is a plan view of part of the back plate.

The invention relates to improvements in watches; and it consists in the construction and novel combination of parts, as hereinafter set forth.

In the accompanying drawings, A designates the pillar-plate, B the full plate, and C the pillars. The plate B is cut out at *a* to allow the introduction of the barrel D.

E is the barrel-bridge, which is centrally extended at *b* to cover entirely the cut-out *a* of the top plate. In the barrel-bridge is the bearing *c* for the pivot of the barrel.

The balance-wheel Z, having the bearing *d*, is arranged to one side of and away from the center of the top plate, and the balance-bridge F is secured to the top plate at one side of the barrel-bridge, as at *e*. The train is arranged mainly on the opposite side of the center wheel from the barrel and well away from the center, in order to provide room for the balance-wheel.

L is the escape-wheel having the bearing *l*. I is the center wheel. *g* is the bearing of the escapement-lever G.

s and *n* are the bearings of the third wheel, S, and fourth wheel, N, respectively.

By the arrangement of the parts it will be seen that there is sufficient space between the barrel and the mechanism below the balance-bridge on one side and the train on the other side to permit the introduction of a stem-winding bridge.

P is a stem-winding bridge of general triangular shape and made reversible, so that it may be inserted between the pillar-plate and top plate on the right of the barrel-bridge in stem-winding hunting-case watches, as shown in Fig. 1, occupying then the place of the pillar at that side, and by turning it over it may be inserted between the pillar-plate and top plate on the left of the barrel-bridge in stem-winding open-face watches at ninety degrees from its former position, as shown in Fig. 2, occupying the place of the pillar on that side. Thus a single pattern of stem-winding bridge may be made for both open-face and hunting-case watches, which gives room for great economy in time and labor.

Having described my invention, I claim—

1. The combination, with the pillar-plate and the back plate of a watch-movement and the barrel and barrel-bridge, of the reversible stem-winding bridge, substantially as specified.

2. The combination, with the pillar-plate and back plate of a watch-movement and the barrel and barrel-bridge thereof, of the stem-winding bridge P, capable of attachment at either side of the barrel, whereby the stem-winding mechanism may be arranged for an open-faced watch or a hunting-case watch, substantially as described and set forth.

In testimony whereof I affix my signature in presence of two witnesses.

DIETRICH GRUEN.

Witnesses:

IRA E. MULFORD,
WM. S. DRESBUCK.