Aug. 11, 1959 J. BAMAT 2,898,730

WATCH MOVEMENT INCLUDING A SWEEP SECONDS HAND

Filed Nov. 2, 1956

FIG. 1

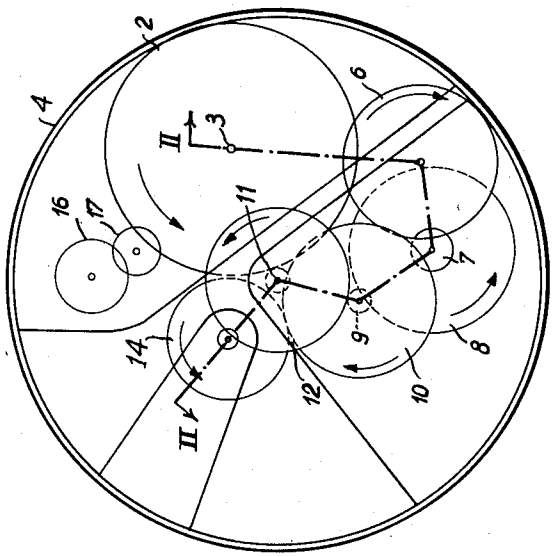
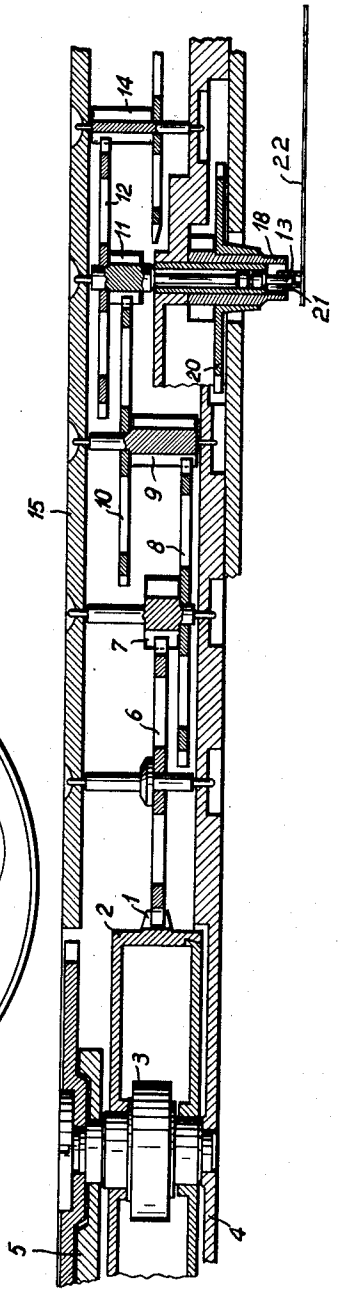


FIG. 2



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WATCH MOVEMENT INCLUDING A SWEEP SECONDS HAND

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Claims priority, application Switzerland November 9, 1955

1 Claim. (Cl. 58—59)

My invention has for its object a watch movement with a sweep seconds hand and an eccentric large driving wheel. According to my invention, the barrel spring drives the seconds gear carrying the sweep seconds hand through an intermediate wheel, a second gear and a large driving wheel, while said seconds gear extends alone into the gap between an outer surface of the barrel and the train wheel bridge.

I have illustrated by way of example in the accompanying drawings a preferred embodiment of my invention. In said drawings:

Fig. 1 is a diagrammatic plan view of a watch incorporating my invention as seen from the bridge side.

Fig. 2 is a cross-section thereof through line II—II of Fig. 1.

These drawings illustrate bearings and further details of the bridges, the number, shape and disposition of which form obviously no part of the invention.

The teeth **1** on the barrel **2**, the spindle **3** carrying which is pivotally held between a plate **4** and the barrel bridge **5**, meshes with an intermediate wheel **6**. The latter meshes in its turn with the pinion **7** of the large driving gear, the wheel **8** of the latter driving the pinion **9** of the second gear. The second wheel **10** on the latter drives the pinion **11** of the sweep seconds gear which latter is coaxially rigid with a pin **13** carrying the seconds hand **22**. The seconds wheel **12** driving the escape wheel **14** extends alone into the gap between the upper surface of the barrel **2** and the train wheel bridge **15**. This arrangement allows obtaining a very thin movement.

The spindles of the intermediate wheel and of the large driving and second gears are revolubly carried between the plate **4** and the train wheel bridge **15**. The spindle of the intermediate wheel may however, in a modification, be fitted on the one hand between the plate **4** and a bridge provided especially therefor and not illustrated.

Obviously, the gearings **6**, **7—8**, **9—10** and **11—12** will constrain the seconds wheel to rotate in the same direction as the barrel which, when seen from the bridge **5**, rotates anti-clockwise. Its winding requires therefore a transmission including two intermediate wheels.

The teeth on the barrel also control, with the interposition of a friction drive, the wheel of a motion work which is not illustrated, which wheel meshes with the cannon pinion **18** while a pinion coaxially rigid with said motion work wheel controls the hour wheel **20**. The cannon pinion spindle is revolubly carried on a socket **21** fitted inside the plate.

What I claim is:

In a movement for a watch including a frame, a socket rigidly secured to said frame and a cannon pinion revolubly carried on the latter, the combination of a barrel provided with an annular series of teeth, an intermediate wheel meshing with the barrel teeth, a large driving gear located eccentrically of the movement and controlled by the intermediate wheel, a second gear controlled by the large driving wheel, spindles for said wheel and gears, a train wheel bridge in which is revolubly journaled at least one of said spindles and extending partly over the barrel at a small distance from said barrel to form a gap between said train wheel bridge and the surface of the barrel facing same, a sweep seconds gear controlled by the second gear and including a wheel extending into the gap between the train wheel bridge and the surface of the barrel facing the latter and a seconds hand coaxially rigid with said seconds gear wheel.

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