

ABSTRACT

A mechanical timepiece of the present invention has a movement structured having a mainspring constituting a power source for the mechanical timepiece, a train wheel rotating due to a rotation force of the mainspring upon being rewound, an escape/speed-control device for controlling rotation of the train wheel, the escape/speed-control device including a balance with hairspring alternately repeating right and left rotation, an escape wheel and pinion rotating based on rotation of the train wheel and a pallet fork controlling rotation of the escape wheel and pinion based on operation of the balance with hairspring. The balance with hairspring includes a stud mainspring, a stud stem and a stud wheel.

The mechanical timepiece of the invention further comprises a time count section to count time having a quartz oscillator constituting source oscillation, an IC including a frequency-dividing section to input an output signal outputted due to oscillation of said quartz oscillator and output a signal concerning a time by frequency-dividing the signal, and a power source to operate said IC; a watch error section for detecting a watch error of said mechanical timepiece; and a watch-error adjusting section including a regulator operating based on a count signal counted by said time count section

and an operation state signal representative of a watch error detected by said watch-error detecting section. The regulator is rotated by the motor based on a operation state signal. With this structure, the vibration period of the balance with hairspring can be varied making possible to accurately adjust the watch error of the mechanical timepiece.