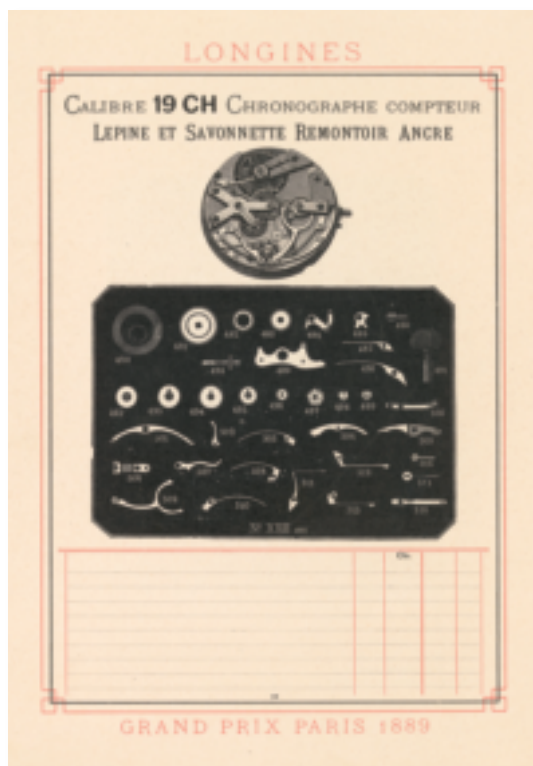


19CH



At the beginning of the 1880s, Longines developed a series of movements characterised by a plate which covered three-quarters of the surface area¹. This line of calibres was a response to the desire of Francillon and David to adapt the construction of the movement to mechanised production. The machining of the supports for the wheels, a $\frac{3}{4}$ -plate under which the gear-train pivoted, was therefore simplified. This construction model was made in various sizes and types including a 19 line version, the 19A, which was pro-

duced in 1880. This calibre constituted the technical basis for the 19CH, a chronograph-counter movement developed in 1889.

In 1878, in line with the commercial impulse provided by the company's agent in New York, Longines made its first foray into the field of timing devices by transposing the construction patent for a simple chronograph,

invented by the Vaudois watchmaker Lugrin, to one of its 20 line calibres while adapting its production to the manufacturing methods that had gradually been adopted after 1867². At the end of the 1880s, Longines produced another chronograph calibre³, the 19CH, by adding a chronograph device to the 19A.

The 19CH was a 19 line movement built to enable the user to measure intervals of time as well as to display the time; it had a chronograph mechanism and a counter mechanism positioned above the level of the counter-plate which held the wheels. These devices necessitated the production of specific components such as the driving wheel, the chronograph runner, the intermediate driving wheel, the minute-counter wheel, the ratchet wheel and pillar wheel, the seconds heart, the minute-recorder heart, the operating lever, the lever hook, the operating lever spring, the flat spring, the blocking lever and its spring, the hammer and its spring, the heart friction spring, the ratchet click, the minute-recorder jumping spring⁴. The 19CH had a semi-instantaneous jumping minute-recorder⁵

¹ Cf. calibres 19A, 14A, 14AS, 18AS, 15AS, 13AS, 17A, 17AS.

² Cf. calibre 20H.

³ Cf. calibres 19.73, 18.89, 19.73N, 13.33Z, 18.72, 13.ZN, 12.68Z stop, 24 lines, 30CH, 260-262.

⁴ Cf. ARL, catalogue of components no. 7, pp. 152-153.

⁵ Cf. BERNER, G.-A., *ibid.*, p. 200.

19CH

which recorded the number of complete rotations made by the centre seconds-hand recorder. This calibre was intended to measure fifths of a second.

In brief, the 19CH was a transformation of the 19A into a timing instrument. With the growth in popularity of sport that started around the 1830s, chronographs were no longer the exclusive privilege of specialised fields but became a common object and thus took on a new importance. While Longines saw an opportunity to diversify its production – centred around the traditional mechanical movement but becoming increasingly mechanised – timing activities as well as chronometry competitions⁶ enabled the company to combine the brand's skills with the quality of its watches⁷ in a sort of prototype publicity.



First produced in

1889

Movement

manually wound mechanical

Ebauche

open-face, bottom plate and 5 bridges

Functions

hours, minutes, seconds, chronograph, semi-instantaneous counter

Balance-count

18,000 vibrations per hour

Display

1/5 second

Size

19", 43.15 mm

Height

9.00 mm

Winding mechanism

pendant, lever

Hand-setting mechanism

pendant, push-piece

Jewels

15 rubies

Gear-train

traditional, 5 wheels

Escapement

straight-line lever

Balance

bimetallic

Balance-spring

steel, Breguet overcoil

Index-assembly and balance-spring stud

index, top balance-endpiece, square screw-in stud

Miscellaneous

Column-wheel chronograph, single push-piece

⁶ For example, cf. calibres 21.59, 21.60, 24.99, 21.29, 30Z, 30B, 360, 261.

⁷ Cf. TRUEB Lucien, *ibid.*