ATO ½ second master clock

A slim ATO electric French wall clock, dating from c.1940-50s within a mahogany case, serial no. 109432.

The 5 ½ inch silvered dial has a subsidiary seconds dial .

The movement is driven by a conventional 1.5V battery, and has a half-second pendulum. The movement is stamped Leon Hatot, with the serial number below.The pendulum consists of an Invar rod and a curved magnetic bar below the brass bob. The magnetic bar passes through a fixed solenoid. At the appropriate moment, an electric switch closes, energising the electromagnet and producing a magnetic field that repels the magnet. This push is the impulse that drives the clock.

A pointed centre marker below the pendulum pivots to perform its ancillary function, as a transport locking mechanism for the pendulum.

The clock has three spurs at the top left hand side of the clock, which would have impulsed slave apparatus (or clocks).

Height: 18 1/2 inches (47cms)
Width: 10 1/2 inches (26cms)
Depth: 4 1/4 inches (11cms)

The movement is working, but will be overhauled for sale and guaranteed for 3 years.

M. Leon Hatot devised this electromagnetic mechanism in c.1919 in association Marius Lavet, a talented engineer who had already been a leading participator in the development of the Bulle clock. Indeed the principles of his ATO clock are broadly similar to that of M. Favre Bulle's and the two French companies were direct competitors for several decades, differentiating their clocks with very many different styles of cases.