Frank Holden electromagnetic Four-Glass clock, c.1925



A rare four-glass electromagnetic timepiece with an unusual balance, to the design of Frank Holden (patented in 1919). The whole clock is in excellent original condition. We intend to service it prior to sale, but it is currently working well.

The silvered Arabic dial has blued steel hands with centre seconds and is signed L.R. and A.S.E.M. PARIS, . This is Ateliers de Specialites Electriques et Mecaniques, a company which manufactured many of Holden's clocks.

The small polished and lacquered brass case has four beveled glasses.

An excellent article has been written by Dr. Hans Vrolijk about the life and works of Frank Holden. In it he details the 1919 patent: –

A nickel plated three tier platform contains a balance assembly. A flat coil on an armature passes between the poles of two circular magnets. Above this, the silver contacts open and close a circuit. This example has a flat hairspring mounted above the upper plate. The balance shaft then travels upwards and interacts with a ratchet and ratchet wheel to drive the motion work forward.

The seconds hand is advanced every half second.

Dimensions:

Height: 24.5cms (9 ¾ in) Width: 15.5cms (6 ¼ in) Depth: 12.5cms (4 ¾ in)

Although Frank Holden was British, he had his clocks manufactured in France.