

INSTRUMENTS

THE FLORISSON SCAM ALTIMETER FOR AIRPLANES

(from Société de Condensation et d'Application Mécaniques,
42, rue de Clichy, Paris - 9^m°).

This permits the aviator caught in a fog to ascertain with accuracy his approach towards the invisible earth and to determine from second to second his actual distance above ground.

Operation — The pointer of a chronograph turns slowly over a dial with large figures graduated from 0 to 200 meters and 400 meters. Each time the pointer passes the "zero" on the dial, there is emitted a short whistle directed towards the ground. The reception is accomplished through a special bell receiver acoustically connected to the radio-earphones. When the operator (or the pilot) hears the echo, he can easily read the distance from the ground by noting at that instant the figure on the dial over which the pointer is passing.

Thanks to the process by which a sound wave is emitted with each revolution of the pointer, and to the utilisation of that psychological property of the ear whereby the quality of the whistle sound is perceived in spite of disturbing noises, the operation of the FLORISSON-SCAM apparatus is reliable and free from false indications.

Calibrated and subjected to lengthy trials in flight, the Altimeter has permitted measurements between 5 and 10 meters and about 150 meters with the motor of the airplane turning at normal speed, and at 300 meters with the motor throttled down to half speed. Between 10 meters and the ground, the reception is so characteristic that one can "hear the approach of the ground". For the rest the acoustic aspects of the echo (simple or multiple, clear or blurred) give instantly an approximate indication of the nature and shape of the ground beneath (flat or inhabited, bare or wooded etc.).

Total weight of the apparatus (without supply of compressed air) 8.7 kg. (19.14 pounds).

Weight of compressor 5.4 kg. (11.88 pounds).

