

Further electronic evolution of the Palmer Kymograph

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Canon & Mulvihill (1975) demonstrated how the Palmer Kymograph together with a George Washington recorder and an overhead projector could be assembled as one unit, including a high-gain pre-amplifier. We have been gradually converting our obsolescent Palmer Kymographs into polygraphs

with a rack carrying four pre-amplifiers and associated stabilized power supply points. A unit with a total of eight channels is now shown. Its cost is approximately a fraction of that of an equivalent modern commercial multi-channel recorder.

The use and cost-benefit of polythene roll tracings has already been referred to in the earlier 1975 report.

Reference

CANNON, P.J. & MULVIHILL, T. (1975). Adaptation of the George Washington (G.W.) pen-recorder for overhead projection. *J. Physiol., Lond.*, **250**, 6P.

Transducer—adapted Benedict Roth Spirometer for small animals

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The dearth of simple satisfactory teaching experiments involving, for example, oxygen consumption,

heart rate, movement, etc., in cats, dogs or rabbits is well known.

The animal is placed in a clear glass box, approximately $50 \times 40 \times 40 \text{ cm}^3$, i.e. 80 litres (which can be covered over by dark polythene). See Figure 1. The box is connected, as a human subject would be connected, by inspiratory and expiratory tubing to a Benedict Roth Spirometer. The gasses in the box are mixed by means of a circulating fan system. Jacketed

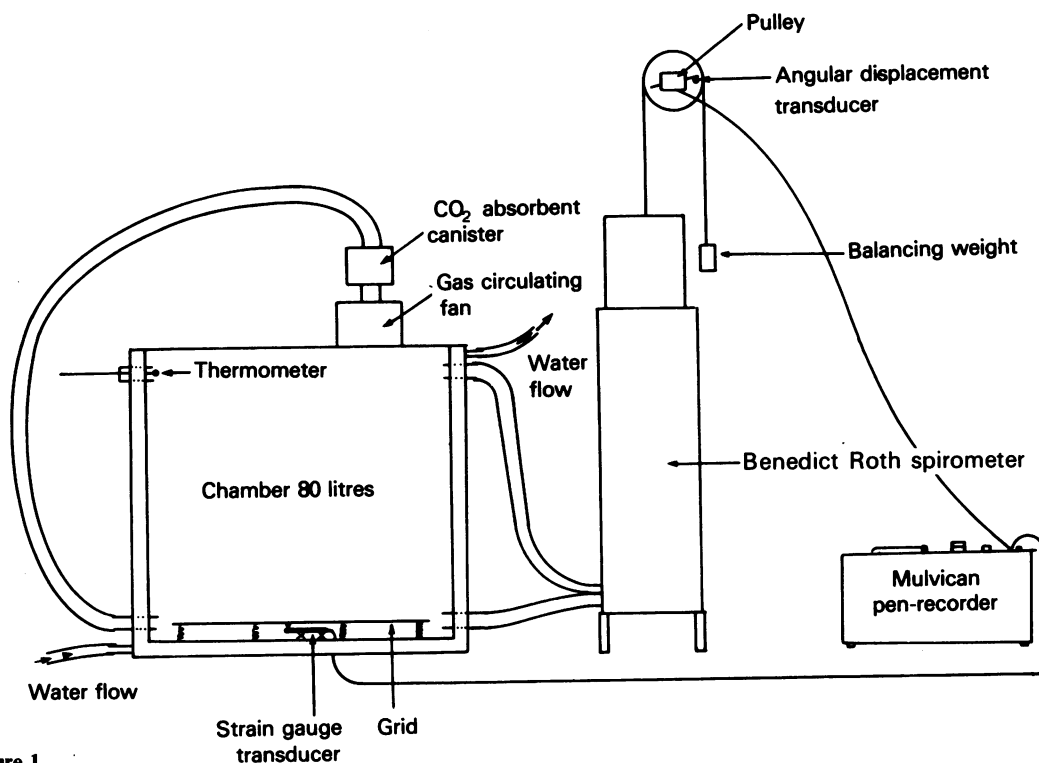


Figure 1