A SIMPLE INEXPENSIVE BACTERIAL COLONY COUNTING DEVICE

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SIMS AND JORDAN¹ have described a method of counting bacterial colonies which utilises an electromagnetic device for automatic counting. Fig. 1 illustrates an apparatus simplified by using

a mechanical counter in place of the electromagnetic type. The design of SIMS AND JORDAN is further improved upon by the built-in illumination provided.

The counter, C, is a Veeder model operated by a lever carrying two spring coils, S_1 and S_2 , a Uno pen (Size 2) U, being attached to the coil by a piece of rubber tubing. The counting procedure is as follows:-

The pen, filled with suitable marking fluid, such as Indian ink, is pulled down towards the Petri dish to mark with a dot the position of a colony. Just before the pen reaches the dish the counter lever registers a count and simultaneously produces an audible click. The spring, S_2 , enables the pen to reach any point on the dish, which remains in a fixed position. As the pen touches the dish, a second click is heard. Finally the spring S_1 returns the lever to its resting position (producing a third click) when the downward pull is released, ready for the next count. The rhythmic sequence of the three clicks on counting provides an audible proof of the faultless working of the procedure.

The Petri Dish, P, need not be marked out in squares, as there is no possibility of counting a colony twice or forgetting the number of colonies counted.

The lamp house, H, is made from a tin box, the bottom being removed and ventilation holes drilled near the top. A 25 Watt Lamp, L, gives the right lighting and very little heat. The Petri dish rests upon an opalescent plate, O, secured over a hole in the top of the box, and is thus viewed in diffuse light.

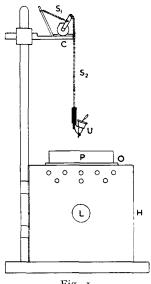


Fig. 1.

REFERENCE

¹ A. L. SIMS AND R. C. JORDAN, J. Sci. Instrum., 18 (1941) 243.

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ISOLATION OF SUCCINIC DEHYDROGENASE FROM BEEF HEART MITOCHONDRIA

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The main electron transport system of aerobic cells is associated with particles readily sedimentable in low gravitational fields and insoluble in aqueous media at neutral or acid pH1. Our present knowledge of this system is based almost exclusively on studies of the behaviour of mixtures

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