

both day and night. Intensified observations on the sun at Kodaikanal, cosmic ray time-variation studies at the Cosmic Ray Laboratories in India, latitude and longitude determinations, exploration of the Himalayan glaciers and Indian seas will all engage the attention of our scientists during the IGY.

It is hoped that the Government of India

will give every encouragement to scientists in India to play an adequate part in this great international endeavour, and that the Indian Universities and National Laboratories too will extend every co-operation to the National Committee in organising and executing this laudable programme.

A SIMPLE DEVICE FOR PARAFFIN EMBEDDING

PARAFFIN embedding under an electric bulb is preferred by many workers. It is not only easy to operate, but is inexpensive and can be installed anywhere near an electric point. It is found to be more accurate and easier to control than the common thermostatic ovens.

After working at it for nearly nine years I have been able to introduce certain modifications and features making it safer and easier to operate. About a pound of paraffin wax is 'smoked' in a 9" long beaker of about 2.5-3" diameter. The wax should fill up three-fourth of the container. An electric bulb of not more than 60 watt is suspended above the surface of the wax. A stronger bulb is liable to melt the whole mass of the wax, which is undesirable. It is best to have a 40 watt lamp just touching the surface of the wax. A small watchglass is kept on a piece of wire-mesh which is suspended by means of thin copper wires and adjusted about 1" below the surface of the melted wax, and about ½" above the solid surface. The distance may be adjusted by a little experience and is different in rooms of different temperatures. The material for embedding is put on the watchglass. As it is kept near the surface of the solid wax and in the molten medium, it remains near the melting

point, an essential requisite for proper embedding. Temperature in this region does not rise as the latent heat of melting of wax does not allow it to go high and because the amount of wax is quite big and the source of heat is above the surface and small as well as steady, the whole of the wax never melts. Thus the material may be left in the bath without any danger of getting 'cooked' or 'roasted'.

The wax container is placed in a small wooden box, whose inner lower half is painted black and the upper white. The bulb is suspended from the top of the box and a thermometer is introduced through a hole to record the temperature near the material. Another wooden box containing a bulb of 100-50 watt is used for keeping crucibles and wax-pans, etc., so that at the time of making blocks a ready supply of melted wax may be assured. The whole apparatus with the thermometer and the bulbs costs about Rs 7 to 8. The working cost is very low and it does not require to be sent for repairs to any workshop. Another advantage is that for different types of wax with varying melting points, separate baths can be maintained.

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USE OF ANTI-MALARIALS

THE recommendations on the use of anti-malarial drugs prepared by the Malaria Sub-Committee of the Colonial Medical Research Committee have been published in a recent issue of the *British Medical Journal* (July 17, 1954).

The Committee observes that no single drug at present available is effective against all phases of the cycle of development of the malaria parasite; the preparation to be used for a particular purpose will be that active against the appropriate phase. The purposes for which anti-malarial drugs are used are:

(1) For causal prophylaxis or suppression (destruction of the parasite in the pre-erythrocytic phase or in the asexual erythrocytic phase) (2) For treatment of the overt malarial attack (destruction of the asexual parasites in the blood stream) (3) For radical cure of vivax and quartan malaria (destruction of the late exo-erythrocytic forms). (4) For prevention of transmission (destruction of the gametocytes in the peripheral circulation or interruption of sporogony in the mosquito). Details of the specific drugs to be used and the dosage are given in the article given above.