

bones respectively, while Rogers gives 20 per cent and 38 per cent for the same tissues. Here both brain and skeletal tissues seem to have escaped. The absence of metastasis to liver, brain and bone is a noteworthy feature.

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TWO SUGGESTIONS FROM A LABORATORY IN INDIA.

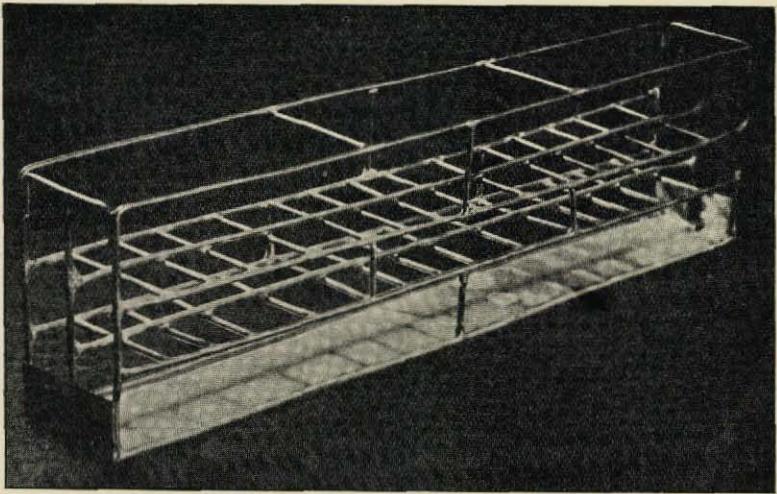
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THE following two suggestions are handed on to those interested in laboratories and disease prevention, in spite of the fact that they may be regarded by those who are not so interested as the work of a crank. The first if adopted would save a good deal of money in incubators, and the second much disease. Both save trouble, and have been found of service.

(1) INCUBATOR SPACE.

It has always been a matter of surprise to me that incubator makers do not provide several alternative means of accommodating culture tubes, etc., so that the greatest possible use may be made of the space available. They get over the difficulty of suiting everybody by providing no means at all, with the result that incubators are as a rule thoughtlessly packed, space is wasted, and demands are made for more incubators. This doubtless suits the incubator makers, but the difficulty may frequently be got over at an expense infinitesimal when compared with that of getting an extra incubator from the makers in England. Until recently, sets of sugars were incubated by me in ordinary round cigarette tins placed side by side on the incubator shelves, and the waste of space was such that only thirty-two tins could be fitted into the ordinary small Hearson incubator used in military laboratories, and in addition considerable time was lost in arranging the tubes of each set for ready observation. Recently a sugar-tube rack was devised with the help of Lieutenant-Colonel G. R. Lynn, D.S.O., I.M.S., in order to avoid waste of time in arranging the various "sugar tubes" when dealing with large numbers of intestinal organisms, and to economize incubator space. By its use the sugar tubes are kept in the incubator in any desired order ready for inspection, and the rack has only to be taken out of the incubator, inspected, and returned for further incubation without the troublesome necessity of having to arrange each tube separately day by day. The racks are made to fit the incubator, and in the small Hearson there is room for twelve racks, giving accommodation for seventy-two organisms, each put up in

glucose, lactose, mannite, peptone water and broth, and each set separated by a special crossbar. This crossbar marks off a compartment on each side for five tubes, and there are three such compartments on each side of the rack, *vide* illustration. Each rack consists of a tin base with wire uprights, and it can be made by any tinsmith for one rupee. For the incubator above mentioned the length of each rack is 11 inches by $1\frac{1}{2}$ inches wide and 3 inches high. A strip of cleaned X-ray film is attached to each side of the rack, on which particulars of each organism may be entered with a grease pencil. This can be used again and again as the marks are easily removed with xylol.



SUGAR-TUBE RACK.

For a single incubator, six racks are required, which fill the bottom of the incubator completely, leaving a shelf for plates, odd tubes, etc. In order to make the best use of this space, special tins $3\frac{1}{2}$ inches square can be obtained from a tinsmith for four annas per tin, and it will be found that these fit in side by side with stacked rows of 4-inch plates, so that all available space is utilized.

(2) GRAPH COMPARATOR.

This is devised to simplify the reading of a complicated series of curves recording the incidence of various diseases and their possible causes. For example, a chart showing the weekly incidence of dysentery, diarrhoea, sore throat, etc., with their relation to atmospheric dust, temperature, humidity, rainfall, number of flies, etc., would be impossible to read easily. By using the comparator described herewith, however, the relation between any two or more of these can readily be estimated.

The graphs are made on cleaned X-ray films with ink or grease pencil,

using one film for each disease and one or two for climatic and atmospheric conditions, e.g., a standard size for each chart is adopted. The base and side lines are traced from the original standard chart, and once begun it is as simple to make the weekly entry on the separate films as on one chart. The films are fitted into slots in the uprights of a frame, and can be conveniently kept in the frame if six or seven slots are provided, the whole being excluded from dust by a lid on the top. To compare the incidence of say pharyngitis and atmospheric dust, one removes all other films from the frame, and examines by transmitted light.

Old X-ray films cost us nothing, and are easily cleaned by dipping in hot water, and removing the sensitized portion with soft cotton-wool. The frame costs two rupees.

If desired, more permanent records may be made by using glass-writing ink made by adding tinct. benzoin. co. to any laboratory stain.

Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 309.)

XIII.—A GREAT DAY'S SPORT.

I had been thinking of starting up the opposite valley with the gun (there were chikor about and our food supplies were very low), when R. arrived back. I was so glad I had not gone out. He had his legs massaged and drank pots of lemon tea while I heard all about the day. They had climbed all morning and had seen two small herds far away, one herd of five and the other of about seven animals. They decided to do a long detour to get nearer to the far herd to see with the telescope if there were any good heads. Suddenly there appeared from below still another herd of three ewes and two big rams. R. and the three men were clambering among rocks and looking down on them; luckily the wind was blowing up and not down. The local shikari spotted them at once, motioned to R. to drop, and R. had to whistle to Khazir But, who was some distance ahead; the animals were within easy range. The biggest one was shot first and never moved, shot through the heart. This of course did not prevent the tiffin coolie from rushing down and cutting its throat to make it fit food for the true Mussulman. The law of Islam forbids the eating of flesh or fowl killed in any other way; fish they say has already been prepared by Allah, having a slit at the gills.