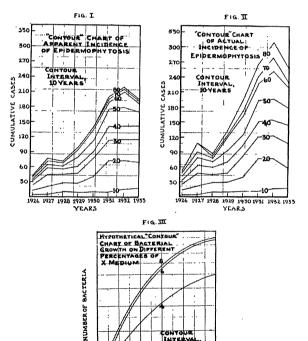
points do not bound areas in continuous space. This figure we have labeled a "Contour Chart of Apparent Incidence," since age groups of population were not considered.

Fig. II is similar to Fig. I, with the exception that age groups of population have been taken into account. It is therefore called a "Contour Chart of Actual Incidence." In order to take the age group of population into account the following formula was used:  $\frac{P}{U} = F$ , where P (Peak) is the age group of largest number and U the age group for which the factor F is desired. This factor is then multiplied by the number of cases in the particular age group concerned so as to correct for variation in age groups of population.

In the above figures it will be noted that the lower incidence is in the lower and higher age groups. This



is accounted for by less chance of exposure to the etiological agent. In addition, in the higher age group difficulty in getting to clinics might lead to greater neglect of a minor ailment. It will be noted in these charts that there is a somewhat general distribution of the disease indicating lack of development of immune bodies to the etiological agent. If, instead of epidermophytosis, we should plot chicken-pox the incidence would be large and almost entirely in the younger age group, indicating great contagion and

8% 7% 6% 5% X MEDIUM development of immunity. Thus Fig. II is a chart taking into consideration not only yearly incidence with reference to age groups but also with reference to age group distribution of population, contagiousness of the disease and development of immunity to the disease. Many uses can be made of contour charts. For example, a hospital or public health department might plot diseases on the abscissa, cumulative cases on the ordinate and years or months on the chart and thus keep a record of the diseases in which they were interested or they might plot diseases on the abscissa, cumulative cases on the ordinate and age groups on the chart.

In Fig. III I have plotted on the abscissa concentration in percentages of a medium which we will call X, on the ordinate increase in the number of organisms and on the chart two hourly intervals. Semi-logarithmic paper is used so as to show proportionate increase with reference to the actual number of organisms present. In this instance the lines may be considered as bounding areas in continuous space and the term contour as used in a stricter sense than in the previous figures. This, too, is a compact way of recording and tabulating the data obtained.

In conclusion, I have submitted a chart which is considered of great value in recording public health and other data. It is simple and inclusive. While it might be considered in the category of composite charts the term "Contour Chart" is more descriptive and indicates that the increments on the chart are equal. It is felt that the "Actual Contour Chart" will encourage workers to take into consideration oftener such factors as age groups of population, etc., and thus promote the publication of more significant data.

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