

will emit a musical note which at first with each succeeding note will become lower. I usually count four or five notes—less than an octave. When a certain point in the solution is reached the reverse takes place, namely, that the musical notes will become higher and higher until the solute is entirely dissolved or reaches a point of saturation. I repeated the experiment a number of times and found that between the first contact of the above solute with the solvent until solution or saturation has been effected I could distinguish a change in the scale about three or four octaves. Salt, sodium citrate and ammonium chloride will produce the same effect while undergoing solution. Sugar and sodium phosphate does not produce any difference in the musical notes whatsoever.

Further experiments with Epsom salts disclosed, to my surprise and astonishment, the fact that there are in the market two kinds of Epsom salts; one which will emit musical notes during the solution and another will not. Whether there is a difference in the crystalline form of these salts I do not know. It reminded me of the story of Pasteur's work on the asymmetry which characterized the tartrates of many substances. I have demonstrated this phenomenon before many physicians and druggists and none of them, they all assured me, have ever noticed it before.

Have I been the first man to hear these sounds? I dare not presume that this simple phenomenon has never been observed before. I wonder, however, whether the research workers on the subject of "Solutions" have utilized this acoustic phenomenon in their work and whether there is any literature on this subject. The available literature in our public and medical libraries has no reference to this subject. If my observations are correct, then a new field for research is open for investigation.

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QUOTATIONS

THE MARCH TO HEALTH

THE decennial supplement of the *Registrar-General* contains a new national life-table for England and Wales. This table is the work of the government actuary, Sir Alfred Watson, and is based on the figures of the population returned in the 1921 census and on the average number of deaths recorded in the three years 1920, 1921 and 1922. The new table confirms the opinion which is generally held, that "the vitality of the nation has been steadily improving." A rough measure of the improvement is afforded by a comparison of the "expectation of life" as indicated in the life-tables of 1906, 1911 and 1921 (the new table), respectively. In 1906 a male child at birth had an expectation of life of 48.53 years. In 1911 the ex-

pectation of life at birth had risen to 51.50 years. The new table gives an expectation of life of 55.62 years. The figures relating to female children at birth are, respectively, 52.38, 55.35 and 59.58. It is pointed out in the report that improvement in the rate of mortality is specially marked at the youngest ages. The probability of a child's dying in the first year of life, for example, has decreased by about forty per cent. during the fifteen years between 1906 and 1921. Curiously enough an appreciable deterioration has occurred in the rate of mortality of women between the ages of eighteen and twenty-seven. This deterioration, however, does not affect married women. It may be that, in recent years, young women have been engaging in tasks which impose too great a strain upon their physical constitutions; in any case, it seems possible that woman's place in the industrial and commercial worlds can not be determined solely by woman's enthusiasm to enter and share these worlds. A further commentary on woman's strength as a worker and wage-earner may possibly be afforded by the fact that rates of mortality are invariably heavier among widows than among single women or wives. The report deals at considerable length with mortality in different geographical areas of the country and confirms the prevailing view that the rate of mortality varies both with the geographical distribution of the people and with the density of the population. But of these two the geographical is the preponderating influence. In all the areas examined the difference between the death-rate of county boroughs and that of rural districts is greater among males than among females, but the point is emphasized that this difference does not appear to be due to the greater strain of working conditions to which men are subjected, but to the relatively favorable mortality experience of the male population of rural areas. The healthy conditions of country life, in other words, are enjoyed to a greater extent by men than by women, whereas in towns the two sexes are subjected, as a general rule, to the same kinds of conditions.—*The London Times*.

SCIENTIFIC BOOKS

Fogs and Clouds. By WILLIAM J. HUMPHREYS. Baltimore, The Williams and Wilkins Company, 1926. 98 pp. of text, 93 illus.

OF the text, one may enthusiastically say that if laymen could avail themselves of the privilege of reading Dr. Humphreys's lucid account of how these fogs and clouds come into and pass out of being, of the everchanging play of atmospheric processes that control their everchanging forms, a widespread intelligent interest in them might soon be expected. The book is in its author's best style. There is about