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A Statistical Inquiry into the Causes of Death within the Burgh of Govan for Thirty-five years, 1864-1898. By W. G. Barras, M.D. Glasgow: John Crawford. 1899.

This inquiry was presented by its author to the Corporation of Govan as a report, and an enormous amount of labour has been entailed in its production, since it bristles with figures from beginning to end. The year 1864 punctuates the commencement of the report, because in that year Govan was instituted a police burgh, under the Act of 1862; the estimated population for that year being 9,058. While Dr. Barras has noted the various means by which intercensal populations may be calculated, and has laid some stress upon the method, which he denominates “an apparently correct” one, viz., “by adding to the population, as determined by the last census, one-tenth of the increase between that figure and that of the census immediately preceding it, for each year elapsing from the last enumeration, and adding to that one
quarter of the annual rate of increase,” he has, notwithstanding, fallen back upon the only method applicable to rapidly growing centres of population, that of multiplying the number of inhabitants per house, as obtained at the previous census, into the number of inhabited houses in each given intercensal year, and adding the “floating” population of ships and lodging-houses.

The population of Govan in the census of 1861 was 7,637; in 1891, 62,911; and in 1898 it was estimated as 72,755; so that in thirty-seven years it has increased nearly tenfold. From these figures, anyone accustomed to statistical returns of population, would, at a glance, reach the conclusion that Govan was the seat of large industrial operations. The comparison of the populations of 1861, 1871, 1881, and 1891, showing respectively the figures 7,637, 18,667, 49,560, and 62,911, makes that fact abundantly self-evident; and everyone acquainted with Govan knows that the great industrial attraction has been ship-building. During the thirty-five years covered by the inquiry, the total number of deaths was 31,640, the death-rate per 1,000 per annum of the first year, 1864, being 33·22, and of the last, 1898, 16·08. In Table XVII we observe that the author calculates his death-rates, not from the exact figures of the populations as estimated by himself, but from the nearest slump figures, higher or lower; for example, the estimated figure for 1865 is 9,637, but the figure from which the death-rate is estimated is 10,000; for 1881, 49,560, and 50,000 respectively; and for 1898, 72,755, and 73,000. The effect of this upon the calculated death-rate for 1898, for example, is to lower the figure to 16·08 from 16·13 per 1,000 per annum. It is true that slump figures are more easy to work with, but their use makes the results arrived at not exactly comparable with the like returns of other populous places, even assuming all other things to be equal. We miss, moreover, any tables indicative of the age and sex incidence in the population of Govan, factors which are, sometimes, of not inconsiderable importance in such calculations; of less importance when in respect of a given place, relative comparison is simply being made of the death-rate of one year as compared with another, but essential when the death-rate of Govan, for example, is compared with the rate for Scotland generally, and with those of the eight chief Scottish burghs particularly, as is done in a table on page 17. We turn with much interest to the deaths from “miasmatic” diseases. In Table XVII we have the figures, in each of the thirty-five years of the inquiry, of (α) the number of deaths per annum,
(b) the deaths from zymotic diseases, and (c) the annual death-rates per 1,000 of population; in Table IX, a return of the annual death-rates and number of deaths from the principal zymotic diseases—to compare with the like return of these diseases by the registrar-general; and in the text, page 20, a statement by the author that "the total deaths during the period of thirty-five years from miasmatic affections number 4,857, being equal to 15·3 per cent of the total deaths from all causes. Those from the notifiable diseases amount to 3,295, or 10·4 per cent; from the non-notifiable, 1,562, or 4·9 per cent." We note discrepancies in these returns, which call for a moment's attention. In Table XVII, under the head of Specific Febrile or Zymotic Diseases, we get a total of 5,787 deaths out of the total 316,400 deaths from all causes; in Table IX, a total of 5,427 (not 5,428 as in the Table); and in the text, at page 20, a total of 4,857. In Table XVII this total is obtained by adding the returns of the notifiable and non-notifiable zymotic diseases, including in the latter, diarrhoeal, dysentery, malaria, venereal diseases, septic diseases returned as pyaemia and septicaemia, and hydrophobia. In Table IX the total of 5,427 is obtained by omitting the deaths from erysipelas, puerperal fever, relapsing fever, cholera, influenza, chicken-pox, cerebro-spinal fever, mumps, and leprosy. In the text the total of 4,857 is obtained by adding the notifiable diseases scheduled in the "Notification Act," with the addition of measles, which is also notifiable in Govan, and the non-notifiable diseases, which, however, do not include diarrhoeal diseases and dysentery. In Table XVII the death-rate of zymotic diseases is only given as the "death-rate from notifiable infectious diseases," the figure for this being 2·73—the average of thirty-five years—the figure for each year being estimated per 1,000 of population of each year; in Table IX it is returned as 4·14 per 1,000 per annum of the population, or 17·15 per cent of the total deaths; and in the text, the death-rate of the notifiable diseases is returned as 10·4 per cent, and of the non-notifiable diseases as 4·9 per cent of the total deaths. We are thus left to choose, having carefully considered the component factors of each return, which result, we shall adopt. We submit that the figures from the text are not correct, since they take no account of diarrhoeal diseases, &c., and those of Table IX are in like condition, since they omit count of deaths from cholera, erysipelas, and the other diseases enumerated above under that table. Indeed, it appears to us, that the true total zymotic death-rate ought to be returned as 17·9 per cent of
the total deaths from all causes, calculated upon the returns of the notifiable and the non-notifiable diseases, including in the latter, diarrhoeal diseases and dysentery, numbering in all 5,664 of the total of 31,640 deaths from all causes. We should have been glad to see some return of the incidence of sex and age in the usual age-periods for the population of Govan, more especially as the occupations involved in ship-building employ a large amount of adolescent and young adult male labour. At the same time, we congratulate Dr. Barras upon his first essay into the field of statistics.

Eighth Annual Report of the Medical Officer of Health of the County of Lanark, 1898. By John T. Wilson, M.D., D.P.H. Glasgow: Robert Anderson. 1899.

This is a very interesting and complete account of the various aspects of the work of health officials in this important county, and includes such subjects as vital statistics, the prevalence and fatality of infectious diseases, general sanitation, prevention of river pollution, and many others, accompanied, in not a few instances, by valuable reports. The population of the county has increased by some 9,000 persons since the previous year, calculated on the basis of inhabited houses, the main incidence of increase being in the Middle Ward. Birth-rates were below those of previous years, and the general death-rate was lower than that of the average of previous years. As is but too commonly the fact, the non-notifiable infectious diseases—whooping-cough, measles, and diarrhoea—were responsible for the major part of the zymotic death-toll. During the year scarlet fever was especially prevalent in the Upper and Middle Wards; in the former, the morbidity-rate or ratio of attack per 1,000 of population being 14.1, contrasted with 7.4 in the previous six years. Of the outbreaks of zymotic disease during 1898, the following are the most noteworthy, viz.:—Diphtheria in Lesmahagow, but with only 4 deaths in 57 cases; scarlet fever in Carluke, 231 cases; in Larkhall, 278 cases; in Avondale Parish, 68 cases; and in Glasford Parish, 38 cases. In this last epidemic, one of the earliest cases occurred in a dairy farm, and remained unrecognised for four weeks. The milk from this farm was sent daily to a neighbouring town dairy for sale, and caused a limited outbreak of the disease in that town. A milk epidemic
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of enteric fever broke out in Larkhall, and extended to 100 cases. Dr. Wilson's report on the subject is most interesting reading. The epidemic began to prevail in the week ending 24th September, and continued until the week ending the 15th October. Enquiries as to the milk-supply of the houses first attacked pointed to a certain dairy. Visitation of this dairy on the 4th October revealed illness of the dairyman and one of his sons, from what was, without medical aid, supposed to be influenza. The illness of the former was diagnosed as enteric fever, and that of the latter, who was by this time supposed to have recovered, was proved by Widal's test to have been the same. The sale of milk was immediately stopped, and, twelve days thereafter, the epidemic ceased. Both of the above dairymen were very properly prosecuted, and were convicted. In the beginning of 1898, the county, for the first time, was enabled to take full advantage of its isolation hospitals, and there are few, if any, hospitals better equipped for this purpose than the Middle Ward Hospital at Motherwell. Diphtheria cases treated in this hospital during the year—13 in number—all recovered. Antitoxin was used in all the cases, the average amount used being 1,750 units. Diarrhoeal diseases were more prevalent in the Middle Ward during 1898 than for the previous ten years. They caused 303 deaths, of which the very large bulk was of infants under one year.

The water-supplies of the county are receiving considerable attention by the Health Department, and many analyses are performed in the laboratory of the medical officer of health. This is, in our view, as it ought to be, since no one is better able to interpret the results of such analyses than he who is familiar with the surroundings of the sources of supply. The operation of the Food and Drugs Acts seems, however, to be limited in the county to the analysis of milk. While praiseworthy attention is given to this, it would appear as if all other foods were totally neglected, which is not fulfilling the intention of these Acts. A sensible improvement has taken place in the character of coal-washing effluents since this subject was taken in hand, and it is satisfactory to think that there is now a forward movement with respect to the purification of the Clyde as it passes through the county. Space forbids, however, to deal with other subjects, of which, however, it may be said, that they are carefully treated. We congratulate the Health Department of the county upon a good record of work well done.
Hygiene and Public Health. By B. Arthur Whitelegge, M.D., B.Sc. Lond. Seventh Thousand. London: Cassell & Co., Ltd. 1899.

The popularity and usefulness of this manual are demonstrated by the number of editions through which it has already passed. In former issues of the Journal, reviews, more or less elaborate, have already appeared, and it will suffice now to simply indicate wherein this edition differs from the previous. Generally speaking, the changes consist of incorporation into the text of the most recent developments in hygiene and practical sanitation, together with such legislative enactments which have recently been passed and which bear upon the subject. Taking at random the chapter on disinfection of rooms, we find that the author, although he gives no clue as to his opinion of the value of, or need for, aërial disinfection, continues to give the usual elaborate information respecting the means employed in this country for fumigation, but dismisses in a few lines the more effective Continental methods; and this is all the more surprising when he states at p. 256 that “disinfection of the air of a room is practically ensured by the free ventilation which in any case must be effected.” If this be so—and it is the doctrine now taught by the most experienced sanitarians—is it not full time when the older doctrine should receive its dismissal, since it is usually more or less inefficient, assuming even that the room atmosphere is infective, and, therefore, delusive. The sooner we get back to the plentiful use of whitewash, soap and water, and elbow-grease, the better.

The author has incorporated the main provisions of the Vaccination Act of 1898 in the present edition. Altogether, the manual treats of the main subjects of hygiene and vital statistics; and the different tables and data, complementary of the text, will be found by the reader of considerable helpfulness. It is a safe guide for the student of public health.

Aids to the Analysis of Food and Drugs. Second Edition.
By T. H. Pearmain and C. G. Moor, M.A., F.C.S., F.I.C.
London: Baillière, Tindal & Cox. 1899.

The first edition of this work having already been reviewed in this Journal, detailed consideration of this edition is not now called for. The manual is well suited for those who are
working in a public health laboratory, not only from the range of work covered, but also by reason of the lucid treatment of each process. As contrasted with the first edition, many of the subjects in this have been rewritten and enlarged, whereas the department devoted to the examination of drugs has been curtailed. It may be added, in a word, that this work leads up to the more elaborate works of the same or other authors on the like subject. The chemical and physical data at the end of the volume will prove very handy to the student. We heartily commend the book.

Transactions of the Edinburgh Obstetrical Society. Vol. XXIV. Edinburgh: Oliver & Boyd. 1899.

UNDOUBTEDLY the most valuable contributions to this volume of the Edinburgh Obstetrical Transactions are the personal experiences of Dr. Halliday Croom on the ultimate results, as regards prolongation of life and mitigation of suffering, of vaginal hysterectomy for cancer of the uterus. Of the cases that Dr. Croom has operated upon (fourteen) nine have lived longer than eighteen months. Although the cases, as he says, were "most carefully selected," his opinion is that they died "with greater suffering than if they had been left alone." One is not surprised that Dr. Croom's statements have rather startled gynaecologists. There is nothing new in the other papers although many of them possess considerable interest.

Transactions of the Obstetrical Society of London. Vol. XL. Part IV. London: Published by the Society. 1899.

THIS part of the volume for 1898 is of special interest and value because of the number of contributions on extra-uterine pregnancy. The two most important of these are by Dr. Cullingworth ("Early Ectopic Gestation Complicated by Fibromyoma") and by Mr. Bland Sutton ("On Some Cases of Tubal Pregnancy"). In the latter paper Mr. Sutton makes two most important statements—the first is "a gravid Fallopian tube may discharge a mole into the pelvic cavity through its ccelomic ostium and return to its natural size and shape;" the second is "a healthy Fallopian tube is more liable to become gravid than one that has been inflamed." Many most
important points are taken up in the two papers referred to, and in the discussions by the Fellows that followed the reading of them.

The Universal Illusion of Free Will and Criminal Responsibility. By A. Hamon. London: The University Press, Limited. 1899.

M. Hamon's logic-mill grindeth indeed with a clatter, and the only thing that survives the destructive process is determinism. Facts observed, he says, and inevitable deductions reduce to nothing the argumentation in favour of free will and impose the doctrine of determinism. Positive science demonstrates that determinism is the truth. Hitherto poor humanity has been the victim of countless delusions. It fondly imagined that there were such realities as individual identity, moral liberty, responsibility, merit and demerit, recompense and punishment. All illusion. Its imagination has been leading it a "waefu' gate," but the doctors, the anthropologians, the philosophers, the sociologists, are going to put it in the way of truth. First, certain cherished ideas of our civilised time will have to go, the idea that the consciousness of a phenomenon proves its existence, that product of the imagination called God (it surprises us that the author should condescend to use the capital letter), the existence of the honest or even healthy man, or of anything immaterial in the human being. And then, when positive science has dispelled all these illusions, and when "social reactivity" is substituted for "social responsibility," the regeneration of society will become an accomplished fact.

Independence, fearless outspokenness, deadly earnestness, certainly characterise M. Hamon's writing, but it seems to us that some of his arguments might quite legitimately be used to call in question some of his own assertions. For example, if the consciousness of a phenomenon does not prove its existence, by what means does he arrive at the conclusion that determinism is a fact, that matter, force and life subsist without being created and without being destroyed, and that the only liberty the human being possesses is that of acting according to his own will, his own tastes, his leading inclinations or his own motives? If the personality of man is the resultant of all the ancestral, cosmic and social surroundings, and if he needs must act and be as it is determined, then,
if the citizen, the bourgeois, the socially privileged person efface the man of science, the philistine be anxious not to change the judicial system, and if “with all their might lawyers oppose the intrusion into their midst of scientific ideas,” they cannot rightly be held blamable.

Illusion or no illusion, the idea of responsibility constitutes the basis of all social contract, and it is doubtful if M. Hamon’s assertions will have much influence in altering that characteristic of our civilised times.

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**Darwin on Trial. By “Democritus.” London: The University Press, Limited.**

The man of science is of pushful disposition, and sometimes the ordinary average man considers that the haste which he makes to force his ideas upon an unprogressive public is not quite seemly. Hence differences of opinion result, and the man-before-his-time is apt to run his head against the stone wall of things-as-they-are with results disastrous to himself. A certain book, intended, quite conscientiously in the opinion of right-thinking people, only for the seriously minded, was found by the authorities to be purchasable by all and sundry, and as the result of proceedings the sale was stopped. An outcry (this book to wit) is raised by certain people who see in the action of the constituted authority an attempt to interfere with the liberty of publication of scientific works. No right-minded person has ever, we believe, impugned the good faith of the author of this book, or been otherwise than sorry for him. The Press which published the book, and which appears (to judge by the list of its publications) to exist with the object of propagating certain advanced views, intimates that it still undertakes the prompt execution of orders through Paris. The terms, decency and indecency, are purely relative and vary in significance from age to age, but the clandestine sale to the general public of books dealing with certain delicate questions is not, at the present time at least, considered fitting or proper, and the supposed safeguard of “this book is a scientific work intended for medical men, lawyers, and teachers; it should not be placed into the hands of the general public,” is a mere farce, and in reality one of the most efficacious advertisements.