not encumbered by any bibliography and contains few references. The opening chapters on anatomy and physiology are excellent. So on the whole are those relating to pregnancy; except that we are rather startled at being told that a greatly distended bladder presents intermittent contractions like those of a pregnant uterus. (p. 134.) Our experience has hitherto been that a distended bladder fluctuates and does not intermittently contract. The description of the mechanism of labour contains some errors. The writer states that "the suboccipito-bregmatic is the plane which engages in complete flexion of the head;" and that the suboccipito-frontal is "of little practical importance." (p. 179.) Now the diameter obstetrically important is that which is the largest that has to pass through the genital canal; and this, when the vertex presents, is according to Dr. Jewett's own measurements, the suboccipito-frontal, for he gives the suboccipito-frontal as $4\frac{3}{8}$ in., the suboccipito-bregmatic as $3\frac{1}{2}$ in. It is then the suboccipito-bregmatic and not the suboccipito-frontal that is "of little practical importance." Dr. Buckmaster, who continues the subject, adopts Schroeder's diagrams of the retraction ring, but commits himself to no statements as to its situation, and does not mention that many think it identical with the os internum. The obliquity of Naegele is described, but not explained; and there is no mention of the demonstration by Pinard that posterior obliquity is often present in the beginning of labour. Dr. Jewett inculcates well the importance, and clearly describes the methods, of abdominal palpation in pregnancy, and of antiseptics. He mentions no method of directly measuring the true conjugate, but figures a pelvimeter for measuring the thickness of the symphysis, a proceeding that some people think impracticable upon the living woman owing to there being unfortunately a bladder and urethra in the way. The article on the puerperal state by Dr. Hunter Robb is excellent, but it gives a longer lease of life to an error which has been copied from book to book for years, but was shown to be erroneous in the *Transactions of the Obstetrical Society of London* ten years ago; we refer to Gassner's estimate of the amount of the lochia—an estimate based only on two cases, both of them pathological, and corrected by Giles in 1893. The chapter on embryotomy is one of the least satisfactory in the book. The beginner is not helped by being given his choice between three or four different instruments for each purpose; and the fact that the writer does not clearly tell the reader which is the best suggests that he has not had experience enough to enable him to decide. If the learner wishes to perforate, he is given his choice between the trephine and the scissors perforator. Oldham's, the best of all perforators, is not mentioned. Braun's decollator is said to be the "most efficient instrument" for its purpose. This is a statement no one could make who had used Ramsbotham's sharp hook. Cephalotripsy is said to be only efficient in the minor degrees of pelvic contraction—a statement which is explained by the drawing of the very inferior American cephalotribe which is given. If the author were to try Braxton Hicks's instrument, we think he would alter his judgment as to cephalotripsy.

HYGIENE AND PUBLIC HEALTH.

PROFESSOR CORFIELD has printed in a handy volume his Milroy lectures on the *Etiology of Typhoid Fever and its Prevention*⁴ delivered before the Royal College of Physicians of London last year. The table of contents gives perhaps the best conception of the scope of the work. In the first lecture the history of the recognition of the disease is given and a general view of its pathology presented. In the second lecture the part played by general insanitary conditions by polluted water and by milk is described. Under each of these headings a graphic summary of well-known epidemics is given, and it cannot be too often emphasized that the reading of lucid accounts of epidemics is more instructive from a practical standpoint than textbook instruction can possibly be. In the third lecture are described various miscellaneous causes of typhoid fever, as oysters and other shellfish, ice-cream, fried fish (?), ginger beer, raw vegetables, while the relationship of typhoid fever to sewer air, to subsoil water, and to direct contagion are all discussed in the same lecture. The book presents an admirable conspectus of epidemics of typhoid fever, and will therefore be found invaluable to those wishing for convenient reference to the literature of this subject. Our only complaint is that the descriptions of epidemics are somewhat too much curtailed, and that descriptions are given and author's

views are summarized with a too infrequent application of the criticism for which Professor Corfield's very exceptional experience makes him specially fitted. The very full table of contents makes reference to any particular epidemic or cause of disease an easy task.

THE OVERCROWDING OF THE MEDICAL PROFESSION.

By WILLIAM GORDON, M.D.,
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The number of medical men in England and Wales is now considerably in excess of the needs of the population. In 1887 Mr. Rivington drew attention to the overcrowded state of the profession, and showed its seriousness;¹ but the overcrowding is much worse now than it was in 1887. Whilst in 1880 there were 0.59 medical men to every 1,000 of the population, in 1900 there were 0.70 per 1,000. (Table I.)

TABLE I.—Ratio of Numbers of Medical Men to Population in England and Wales. (The Numbers of Medical Men are from the "Medical Directory.")

Year.	Number of Medical Men.	Estimated Population.	Number of Medical Men per 1,000 of Population.
1871	14,684	22,782,802	0.64
1872	—	23,067,835	—
1873	—	23,356,414	—
1874	—	23,648,600	—
1875	—	23,944,459	—
1876	—	24,244,010	—
1877	—	24,547,309	—
1878	—	24,854,397	—
1879	—	25,165,336	—
1880	15,211	25,768,666	0.59
1881	15,116	26,055,460	—
1882	15,304	26,413,861	—
1883	15,460	26,770,744	—
1884	16,102	27,132,499	—
1885	16,624	27,490,041	—
1886	16,978	27,870,586	—
1887	17,395	28,150,169	—
1888	17,803	28,628,804	—
1889	18,236	29,015,613	—
1890	18,702	29,001,018	0.64
1891	19,021	29,081,047	—
1892	19,319	29,405,054	—
1893	19,870	29,731,100	—
1894	20,487	30,060,763	—
1895	21,055	30,383,047	—
1896	21,565	30,717,355	—
1897	22,135	31,055,355	—
1898	22,567	31,397,078	—
1899	22,714	31,742,588	—
1900	23,025	32,526,075	0.70
1901	23,471	Not yet published	—
1902	23,707	"	—
1903	23,917	"	—

But in those twenty years the public health had greatly improved, owing to causes quite unconnected with the number of medical men; and consequently, in 1900, a given number of persons afforded less work for medical men than in 1880. The annual death-returns furnish the only available statistics of the general decrease of illness. The method will be imperfect, but we shall, I think, certainly gain a truer estimate of the progress of the overcrowding from a comparison of the numbers of medical men with the total number of deaths than is afforded by the above comparison of the numbers of medical men with the numbers of the population. Taking five years' averages of the total annual deaths at each date, there were, in 1880, 29 medical men in England and Wales to every 1,000 deaths, whereas, in 1900, there were 41 medical men per 1,000 deaths. (Table II.) In other words, *taking total annual deaths as roughly proportional to total annual medical work, if the average income of a medical man was £410 a year in 1880, in 1900 it would have fallen to £290 a year!*

The effect of this growing poverty, together with the growing strain of more elaborate clinical methods, on the medical profession, is evident from the Registrar-General's returns.² The mortality amongst medical men is much higher than that amongst members of other professions. *The death-rate from nervous diseases is excessive and increasing, although alcoholism is insufficient to account for this, and is decreasing.*³ *The death-rate from suicide is enormous, and is notably increasing.*⁴ In 1892 suicide amongst medical men was to suicide amongst occupied males generally as 41 to 14! (Table III.) Indirect effects of such overcrowding are obvious.

⁴ *The Etiology of Typhoid Fever and its Prevention.* By W. H. Corfield, M.A., M.D., &c. London: H. K. Lewis, 1902. (Demy 8vo, pp. 129, 28. 6d.)

The effect on the public is very bad also. *Too many medical men are no gain to the public, and the loss of the services of many men of higher calibre, who would enter the profession if its overcrowding did not deter them, is a most serious loss. The admission of boys of 16 is a grave evil.*

It will be obvious that "possible depletion of the profession" cannot, in face of these facts, be made a ground for delaying the adoption of the only too moderate suggestions of the British Medical Association for remedying the present grave defects in the age limit, standard, and scope requirements in preliminary general education examinations for medical students.⁵

I append the tables of figures and the references on which the foregoing is based; also a chart which makes clear at a glance the continuous progress of the overcrowding. My best thanks are due to Mr. Elliston for the statistics of population, annual deaths, and numbers of medical men, which he has so kindly placed at my disposal, and to Dr. Deas for his official permission to use them in this paper.

TABLE II.—Ratio of Numbers of Medical Men to Total Deaths in England and Wales.

Year.	Number of Medical Men.	Total Deaths in Whole Population.	Number of Medical Men per 1,000 Deaths. (Averages of Five Years Deaths.)
1871	14,684	514,870	29
		Average of five preceding years = 499,348	Death-rate per 1,000 in 1871 = 22.6
1872	—	492,265	—
1873	—	492,520	—
1874	—	526,532	—
1875	—	546,453	—
1876	—	510,315	—
1877	—	500,496	—
1878	—	539,872	—
1879	—	526,255	—
1880	15,211	528,624	29
		Average of five preceding years = 521,112	Death-rate per 1,000 in 1880 = 20.5
1881	15,116	491,935	—
1882	15,304	516,654	—
1883	15,460	522,907	—
1884	16,192	530,828	—
1885	16,644	522,750	—
1886	16,978	537,276	—
1887	17,395	530,758	—
1888	17,893	510,971	—
1889	18,236	518,355	—
1890	18,792	562,284	35
		Average of five preceding years = 531,921	Death-rate per 1,000 in 1890 = 19.5
1891	19,021	587,925	—
1892	19,319	559,684	—
1893	19,870	569,958	—
1894	20,487	498,827	—
1895	21,055	568,997	—
1896	21,565	526,727	—
1897	22,135	541,487	—
1898	22,567	551,141	—
1899	22,714	581,799	—
1900	23,025	587,830	41
		Average of five preceding years = 557,927*	Death-rate per 1,000 in 1900 = 18.2

* No later figures yet published.

TABLE III.—Showing Effects of Overstrain on Medical Men. Comparative Mortality Figures, 1890-92. (Supplement to Registrar-General's Report, 1897).

Occupation.	All Causes.	Alcohol.	Nervous Diseases.	Suicide.
Occupied males ...	953	13	82	14
Clergymen ...	533	2	69	7
Lawyers ...	821	12	104	18
Schoolmasters ...	604	8	71	15
Medical men ...	966	14	122	41

REFERENCES.

¹ W. Rivington, Carmichael Prize Essay, 1887, p. 912. ² Supplement to the 35th Annual Report of the Registrar-General, 1897, Part II, pp. xxiii, xxiv, cxlv, cxlv. ³ Op. cit., pp. xxiv, cxlv. ⁴ Op. cit., pp. xxiii, cxlv. ⁵ (1) That it is undesirable that any one should be registered as a medical student until he or she has attained the age of 17. (2) That the standard of the examination in preliminary general education required by the General Medical Council should be suitable for candidates of 17 years of age, and not lower than that required at present for the Oxford or Cambridge senior local examinations. (3) That the examination should include a pass and an honours division as in the University local examinations, the subjects for

the pass to comprise at least Latin, mathematics (comprising arithmetic, algebra, and geometry), English grammar, literature and essay writing, history, geography, and either French or German; the honours division to include Greek and physical science as compulsory subjects. (4) That the present system of multiple examining Boards is most undesirable, and that it is essential, in order to secure uniformity of standard, that the Medical Acts should be amended so that the General Medical Council should be empowered to appoint a single examining Board, which should hold its examinations, as often as necessary, at multiple centres simultaneously.

This chart illustrates the progressive overcrowding of the medical profession since 1880. The ratio between medical men and population has been taken as 0.6 to 1,000, and that between medical men and total deaths as 30 to 1,000, that is, approximately the ratios existing in 1880; but as both of these ratios are slightly in excess of what they were in 1880, the increase of overcrowding since 1880 is represented as rather less than it really is.

A STATE BOARD OF BARBERS IN PENNSYLVANIA.—The sanitary reform of the art and mystery of barbers proceeds apace in the United States. A Bill creating a State Board of Barbers in Pennsylvania has, we learn from *American Medicine*, passed the Pennsylvania Legislature, and is now ready for the signature of the Governor. It creates a State Board of two master and three journeymen barbers, who shall formulate sanitary rules and regulations for the government of barbers. Every barber at present engaged in his occupation in first, second, and third-class cities, and in boroughs of 10,000 population, must pay a licence fee of 1 dollar to the Secretary of the Board. Barbers throughout the State are almost unanimous in approval of the Bill, as they think that it will tend to drive the cheap barber and his usually inexperienced workmen out of the field. Every shop must be provided with up-to-date sanitary appliances.

PHYSICAL EDUCATION IN ITALY.—A Board has just been appointed by the Italian Minister of Public Instruction to see that the new law relative to physical training in schools and universities is efficiently carried out. The President of the Board is Commendatore Angelo Mosso, Professor of Physiology in the University of Turin.