ANNOTATIONS

THE MATERNITY AND CHILD WELFARE MOVEMENT[1]

ALTHOUGH Dr. McCleary refers occasionally to the development of measures intended to safeguard the health of mothers and young children which have taken place in other countries, and which have been mutually stimulating, his main thesis is to trace the progress which has been made in these fields in England and Wales.

This study will be especially helpful to those in England who are interested in present-day activities on behalf of mothers and children, but because of the close relationship between the United States and Great Britain in the expansion of public health in general, including maternity and child hygiene, this book will be gratefully received by students and workers on this side of the Atlantic.

The author discusses his subject under the following headings: The Origins of the Maternity and Child Welfare Movement; Progress of the Movement During the War; Health Visiting; The Maternity and Child Welfare Centre; The Provision of Antenatal Care; The Unmarried Mother and Her Child; The Protection of the Unwanted Baby; The Preschool Child; How the State Recognition of Midwives Was Secured; The Working of the Midwives Acts; Maternal Mortality and Morbidity; The New Attack on Infant Mortality; The Administration of Maternity and Child Welfare Services; The Outlook.

Interest of the public on behalf of the child was perhaps first aroused from a realization that many little children were being exploited in industry, and that others were frequently being abused in unsupervised foster homes. This concern was reflected in the United States by the formation in 1876 of the Society for the Prevention of Cruelty to Children. Organized efforts to reduce the deaths of infants took form as the culmination of a long series of studies and protests by physicians

[1] McCleary, G.F., M.D.: THE MATERNITY AND CHILD WELFARE MOVEMENT. London, P. S. King and Son, Ltd., 1935.

and health officers, indicating that the number of infant deaths particularly from diarrheal diseases was excessive and largely preventable. The writer shows that the salvage of infant life through the Consultation de Nourrissons instituted by Budin, and the Gouttes de Lait by Variot and Dufour in France, made a profound impression in other countries, and led to the establishment of similar activities in England and elsewhere. These services demonstrated clearly that periodic medical supervision of the infant and proper diet would save many lives even amid unfavorable home surroundings.

The interest in reducing the deaths of infants was further aroused in England by the first National Congress on Infant Mortality in 1906, following which additional maternity and child welfare centers were established. In this same year, the United States Bureau of the Census published a report calling attention to the appalling loss of infant life in this country. The movement in England was greatly stimulated by the Notification of Births Act of 1907—extended in 1915—which made it possible for the proper authorities to learn within thirty-six hours of the birth of a baby, and to make prompt arrangements for its supervision. The World War tended to increase rather than diminish activities on behalf of mothers and children in England; the importance of child life was more than ever realized. It is to be noted in this connection that it was just after the war that the examination of millions of children during Children's Year (1918-1919), was carried on in this country under the auspices of the United States Federal Children's Bureau.

From this time health centers tended to increase in England, both in numbers and in facilities. Many became elaborately organized, furnishing various specialized services in addition to those of the doctor and health visitor. The passage in 1918 of the Maternity and Child Welfare Act in England was an important milestone in the progress of the movement. This Act permitted the National Government to assist local authorities in carrying on approved maternal and child health activities up to fifty per cent of their own expenditure, a procedure that was paralleled some years later in the United States in the passage of the Sheppard-Towner Act. Dr. McCleary feels that the success of maternal and child health activities in England has depended in large part upon the services of trained women, known as health visitors. These differ somewhat from the public health nurses who

have contributed so largely to the success of the movement on this side of the Atlantic. The first health visitors began as volunteers in 1862. For some time definite courses of training have been required, and the number of workers has increased until there are now about six thousand of these trained health visitors who are identified with official and volunteer organizations. The qualifications and courses of training are outlined.

It was, of course, long known that much of the infant mortality of the first month results from conditions present before the birth of the child. That many of these conditions could be diagnosed and successfully treated was forcefully and repeatedly demonstrated early in the century by the distinguished Scotch obstetrician, Dr. J. W. Ballantyne. His interest in the mother and newly-born child resulted in bringing to many mothers antenatal care through home visits, rest homes or hospitals, and through special prenatal clinics, the first of which were established in Edinburgh in 1915, and likewise in London, the same year. This phase of the movement grew slowly, but at present over forty per cent of women delivered in England attend prenatal clinics.

The extent of illegitimacy, its effect upon the infant mortality rate, the ways by which indifference and prejudice have been gradually overcome, and the legal rights of the young unmarried mother secured and the unwanted baby cared for in properly supervised institutions or foster homes, are described in the chapters on these subjects.

Experience in England, as outlined in the section on the preschool child, confirms that in this country that a reduction in infant mortality is accompanied by an even greater decrease in the death rate of older children up to five years. This has apparently been brought about by methods effective in saving the lives of infants. Our own experience has shown, however, that the problem of the older children is one not of mortality alone, but of preventable morbidity, and of the frequency of remediable physical defects. The school service in England and in this country is too often the receiver of damaged goods.

Various methods of supervising the health of toddlers are discussed, such as the day nursery, the nursery school, the nursery class, a part of the school system for children over three years, playgrounds, and attendance at child consultations. All of these activities have their counterparts in this country. The difficulty of securing needed corrective treatment apparently is present in both countries.

The steps which led to the enactment of the Midwifery Act in England, and the operation of the Act, are described in detail. Midwifery is probably the oldest known profession. For centuries, what we speak of today as midwifery, as distinguished from obstetrical practice, was engaged in often by untrained, ignorant women. The author shows that it was only after many years of controversy among the profession, lay workers, and in Parliament, that the Midwifery Act was passed in England in 1902. The Act provides for certification by a Central Midwifery Board with authority to set up standards of training and supervision. The required course has been extended from three to twelve months, and can be given in a number of different centers.

Although much progress is shown to have been made in establishing the midwife as a member of a recognized profession, her fees are small, and her work has not been coordinated satisfactorily with the maternity and child health movement. However, the experience in England should prove valuable in many of our own states, where little has yet been done to provide training for the midwife, upon whom many rural women depend.

In the chapter devoted to maternal mortality and morbidity, the author points out that notwithstanding all that has been done in England for the protection of motherhood, the death rate from diseases incident to pregnancy is higher than it was twenty years ago. This is true also in the United States, and it may be explained by a probable higher incidence of abortions; by a lower birth rate with the greater proportion of first births associated with higher risks, and by more accurate accounting.

The author quotes the report made to the Ministry of Health by a special committee on maternal mortality and morbidity, to the effect that fully one-half of all maternal deaths are preventable, that they do not occur in well-conducted clinics, and are due in general to four avoidable causes:

1. Omission or inadequacy of antenatal care.
2. Error of judgment in management of cases.
3. Lack of reasonable facilities.
4. Ignorance of the patient or her friends.

Those who are familiar with the situation are painfully aware that similar conditions prevail in many parts of the United States. The

need for more general antenatal care, for additional hospital beds for abnormal cases, for improved training of students and midwives, which are recommended, have been constantly urged by teachers of obstetrics in the United States. The British Committee proposes the development of existing agencies into a "National Maternity Service," in which hospital services, specialists, general practitioners, midwives, and health officers are all to be associated as interdependent units. One would like to see such a Utopian maternity program in operation in every state in the Union.

In the section on infant mortality, the author refers to the well-known fact that the reduction in infant death rates in recent years in England (from 156 in 1900 to 64 in 1933), has been due to a marked decrease in the deaths from diarrheal diseases, and to a less degree to those from respiratory diseases. The methods proved effective in preventing enteritis and pneumonia will not greatly reduce the deaths in the first few days and weeks of life. These can be curtailed only by antenatal and natal care of the mother, which will also tend to diminish abortions and stillbirths. Protecting the unborn child so that it may be born well and at term through proper supervision of the mother is described as the "new attack on infant mortality."

The author describes briefly the administration of maternity and child welfare services in England and Wales under the Ministry of Health. Local health activities are carried on through administrative counties and county boroughs, each with a council and a staff of physicians, health visitors and other workers. Volunteer bodies often cooperate with the official staff and may take over a special form of activity. This plan of local public health services has furnished the model upon which the whole-time health units in our own country have been based.

As our author looks toward the future, he considers the setting up of a national maternity service a most pressing need, as a means not only of reducing morbidity and mortality among childbearing women, but of diminishing stillbirths and neonatal deaths. He also urges more continuous supervision of the preschool child from infancy to the school period.

Dr. McCleary has traced for his readers the rise and growth of measures which have promoted the health of mothers and children in England and Wales. It seems at times that he has introduced an un-

necessary multiplicity of dates and details confusing to one not familiar with English social and political practice, and there is also an apparent lack of logical sequence in his chapters. The book does, however, enable one interested in present-day services of maternity and child hygiene to understand more clearly the various origins of the movement, and the many factors contributing to this development. With this knowledge, the reader should have increased confidence that the maternity and child welfare movement will continue to expand in England, and let us hope also in this country, until adequate provision is made for every mother and young child.

J. H. Mason Knox, M.D.

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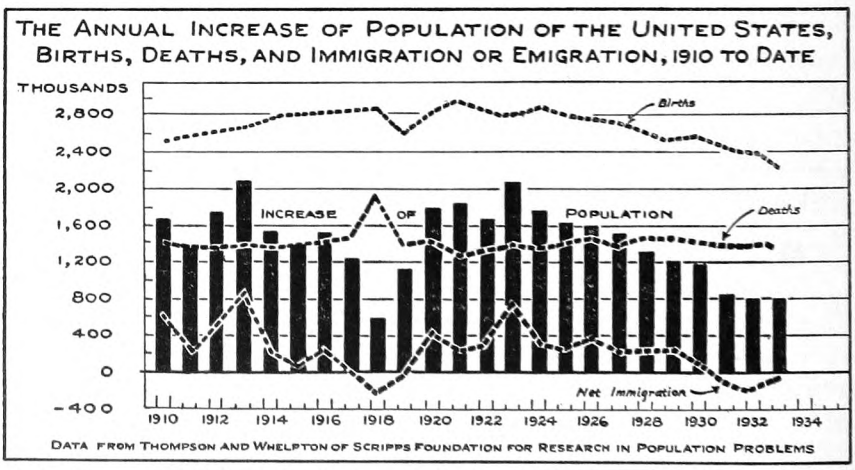
THE OUTLOOK FOR POPULATION[1]

A concise and graphic summary of the slowing up of our population growth is afforded by a chapter, "The Outlook for Population," cooperatively prepared by O. E. Baker and Nettie P. Bradshaw,

Fig. 1. Ten years ago the population of the United States was increasing about 1,800,000 a year. Now the increase is only 800,000. A stationary population is approaching rapidly. The number of births has been trending downward since 1921. There are now fully 11 per cent fewer children under 5 years of age than when the census was taken nearly 5 years ago, and 9 per cent fewer 5 to 10 years of age. The number of deaths remains almost stationary, but must increase soon because of the rapid increase of old people.



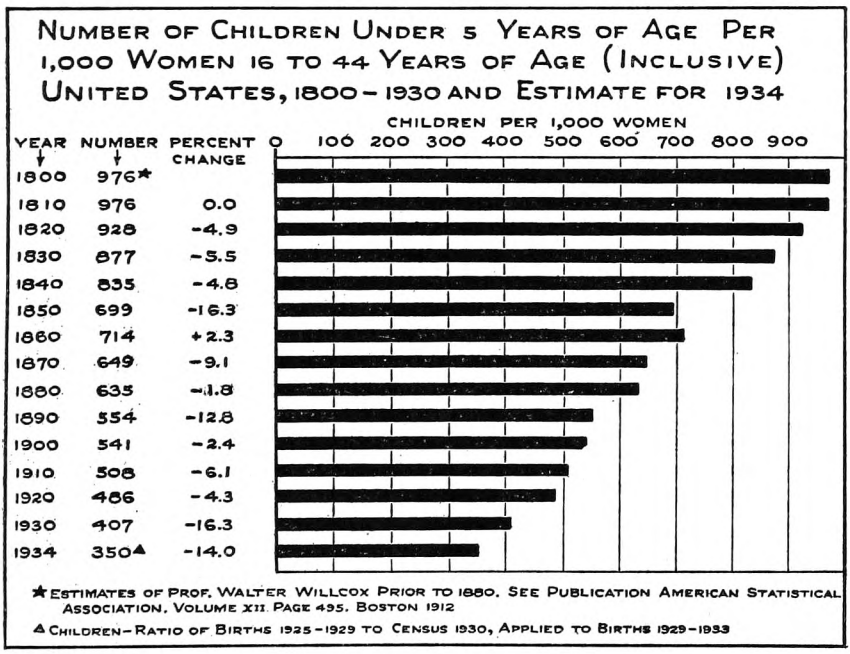
[1] A chapter included in the Report of the Land Planning Committee (Part II of the general reports of the National Resources Board), Washington, Government Printing Office, 1934, pp. 92-97.

United States Department of Agriculture, and Warren S. Thompson and J. B. Dennison of the Scripps Foundation for Research in Population Problems. The chapter was included in the Report of the Land Planning Committee of the National Resources Board for its intimate bearing on policies of land utilization, discussed in other sections of the general report.

Several charts together with the authors' comments are sufficient to tell the story of what is taking place in our population growth. While the growth of population in this country has probably been without precedent in the history of the world, the rates of increase are now diminishing and a stationary, or perhaps a declining population, is approaching. This condition is due partly to our immigration restrictions and partly to the decline of the birth rate.

The annual increase of population, as shown by the bars in Figure 1,

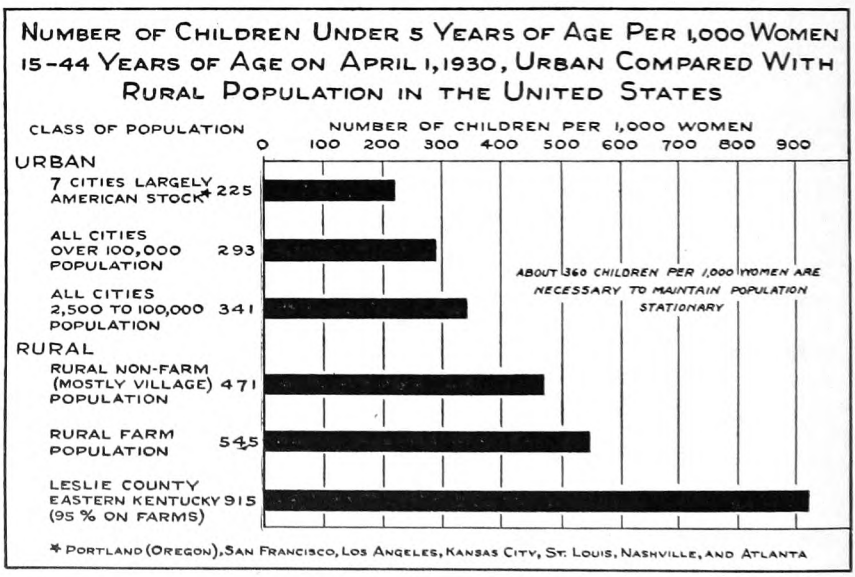
Fig. 2. The birth rate, as measured by the ratio of children under 5 to women of child-bearing age, has been decreasing in the United States for more than a century. From 1920 to 1930, the decline was over twice as rapid as in previous decades, except those ending in 1850, 1870, and 1890, when it is evident there was an abnormal under-enumeration of young children. From 1930 to 1934, the decline was almost as great as in any previous decade. The significant fact shown by the graph is that the declining birth rate is a long-time trend, and that the rate of decline has become more rapid in recent years.



was over 2,000,000 in 1923 and only 800,000 in 1933. From the lower line of the chart it will be seen that in 1923 the net immigration (excess of arrivals in the United States over departures) was almost 800,000. From the time of the quota laws (in effect after July 1, 1924) until 1929, the net immigration was approximately 250,000 per year. Since 1931, due to the depression and consequent administrative restrictions, the outward movement has actually exceeded the inward movement.

While the decline in the birth rate has been of long duration, the rate of decline in recent years has been very conspicuous (*see* Figure 2). In fact, from 1921 to 1933[2] there was a marked decline in the actual annual number of births (*see* Figure 1). This decline averaged about

Fig. 3. About 360 children under 5 years of age per 1,000 women 15 to 45 years of age (childbearing age) are required to maintain population stationary at the 1930 expectation of life in the United States of 62 years. In 1930, the seven cities largely of American stock, represented in the top bar of the graph, lacked, therefore, about 38 per cent of having enough children to maintain their population permanently without accessions from outside, and all cities of over 100,000 population had a deficit of nearly 20 per cent, while the smaller cities had a deficit of about 6 per cent. On the other hand, the rural non-farm (mostly village and suburban) population had a surplus of 30 per cent, and the farm population a surplus of 50 per cent. In 1932, urban deficit and rural surplus about balanced.



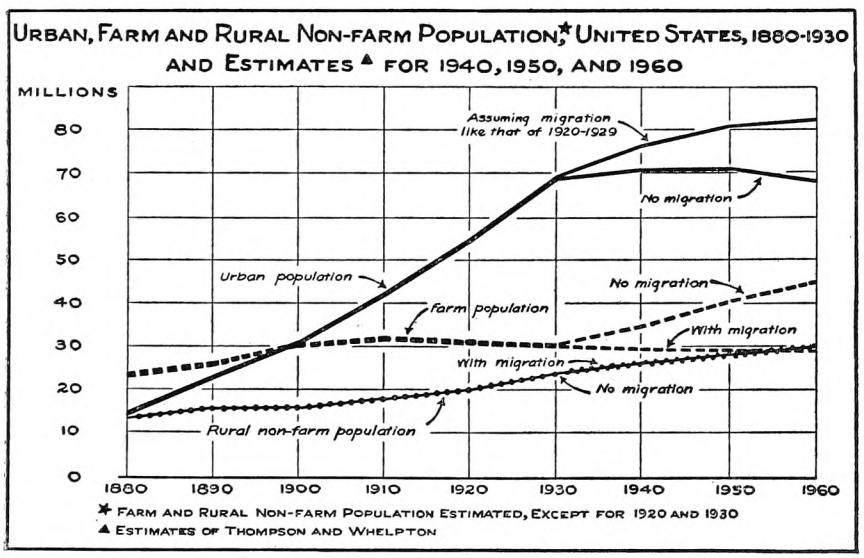
[2] Since the report was published, official figures have indicated a slight rise in the 1934 birth rate, due perhaps to marriages which had been postponed during the earlier years of the depression.

50,000 per year in 1922-1929 and 100,000 per year in 1930-1933.

Factors such as social status, rural-urban residence, migration, and age-composition, have important bearing on the birth rate and on the future size and characteristics of our population. Studies of the Milbank Memorial Fund are cited to indicate that "families of business men average 5 to 10 per cent more children than those of professional men, skilled laborers a quarter to a third more than business men, and unskilled laborers about a fourth more than skilled laborers."

It is clearly indicated in Figure 3 that urban centers are not reproducing their numbers but must depend upon the rural regions for replenishment. The extent of rural-urban migration will probably exert much influence on the natural increase in the United States

Fig 4. During the half century, 1880-1930, urban population in the United States increased more than fourfold, rural non-farm population (estimated prior to 1920) nearly doubled, and rural farm population increased scarcely a half. Practically all of this increase in farm population took place before 1910, little change in number occurring between 1910 and 1930. Looking to the future, and using Dr. Thompson's assumptions as to births and deaths, with no net immigration from foreign lands, it appears that the urban population, under the assumption of no internal migration, will increase less than 3 per cent by 1945 and then decline slowly; rural non-farm population will increase gradually until after 1960, by which year it will be about one-fourth larger than in 1930, while rural farm population will increase by about a half. But assuming the continuation of the 1920-1929 migration, urban population will continue to increase until after 1960, by which year it will be nearly 20 per cent larger than in 1930, rural non-farm population will increase about the same as if no migration occurred, while farm population will slowly but constantly decline.



because urban residence will serve as a deterrent to birth rates of the migrants. Therefore, in presenting estimates of the future growth of urban, farm, and rural non-farm population, two widely different assumptions of the extent of migration are made (*see* Figure 4). The true growth will probably lie between the extremes presented.

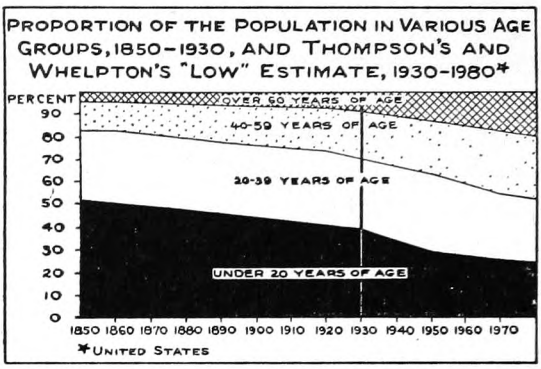


Fig. 5. In 1870, over half the population was under 20 years of age, but in 1930 less than 40 per cent. By 1950, these children and young people probably will constitute only 30 per cent of the population and by 1980 or before, only 25 per cent. In 1870, about 5 per cent of the population was over 60 years of age. By 1930, the proportion had risen to 8.6 per cent. By 1950, these old people will constitute 13 per cent of the population, and by 1980 probably 20 per cent. In 1870, about 45 per cent of the population was between 20 and 60 years of age, which may be considered the productive years of life, taking the people as a whole. By 1930, people in these productive ages constituted 52.6 per cent of the total population. By 1950, they will constitute about 57 per cent, and by 1980 perhaps 55 per cent. During the next few decades, when population will be almost stationary, a larger proportion of the population will be of productive age than in the past, or, probably, in the more distant future.

An important corollary of the declining birth rate and cessation of immigration is the aging of our population shown in Figure 5. The decrease in the proportion of young people will have its repercussions in birth rates of the future, while the increasing proportion of older people presents economic and social problems for social engineers of tomorrow.

Students of population differ in their attitudes concerning the implications of an approaching stationary or declining population. Even those who do not share in the grave concern manifested by some students will agree that fundamental changes must accompany such trends of population. In the past, commercial planning and much of the population thinking have been geared to the prospect of rapidly increasing population. However, students who view the present trends with interest but not with despair probably base their stand on the belief that readjustments can be made gradually and that the "good life" of the individual need not be curtailed in a stationary population.

CLYDE V. KISER

THE EFFICACY OF THE SCHOOL MEDICAL EXAMINATION

THE school medical examination has become so routine a health procedure in the public school system that any challenge of its efficacy almost smacks of heresy. Yet recently its efficacy is being questioned more and more frequently. A few references to the chorus of doubts may be pertinent:

Franzen, in his studies of school health procedures, arrived at the conclusion that "thorough examinations by the physician are very desirable but very rare."[1]

Downes, reporting upon a study of defects and diseases as discovered through medical examinations and as revealed by sickness experience in a group of children in the Olean, New York, schools, pointed out:

> If the fairly common assumption were true, that a medical examination, as a method of revealing hidden defects and impairments, is an adequate means of appraising the health of the individual, one should expect a fairly consistent and high correlation between the existence of defects or impairments and the incidence of actual sickness during a period of 2 years in a group of school children. This was not found to be the case in the experience recorded.[2]

In England, doubts are being expressed as to the value of school medical inspection as conducted there. Cronk,[3] in a recent article, asserts that the existing routine, in which every child is examined thrice in its school life, is wasteful of the physician's time, is superficial, and is unnecessary for most children.

Kerr, in his review of Cronk's paper, comments that the paper "observes in practice conditions of failure predicted at the outset of the school system, when the pursuit of school hygiene was abandoned for medical inspection 'on the broad basis of public health.' "[4]

The attitude of the healthy skeptic as regards this public health pro-

[1] Franzen, Raymond: An Evaluation of School Health Procedures. American Child Health Association School Health Research Monograph No. V., p. 72.

[2] Downes, Jean: Sickness Records in School Hygiene. *American Journal of Public Health,* November, 1930, p. 1204.

[3] Cronk, H. L.: School Medical Inspection. *Public Health,* 1930, 48, pp. 253-7.

[4] Kerr, James: *Bulletin of Hygiene* (London) July, 1935, pp. 422-423.

cedure is expressed by Burke, writing from Canada in a recent article. He said:

> It seems to me that on this continent the guiding minds in school medical inspection are, after twenty years, still trying, by the mere finding of physical defects in school children, to justify their work and its subsequent cost to the public in both the upkeep of the machinery and the direct cost to the families in correcting the defects so found. I think the time is overdue for taking the machine apart to see how it is constituted, to determine carefully its efficiency, and, above all, to see whether it is headed in the right direction.[5]

The cost of medical inspection or examination is so gigantic that the procedure calls for scientific appraisal of its value. Probably there will be few who would demand its abolition. Some of the more important aspects of the question which need clarification and evaluation are: (1) improvement in quality of the medical examination itself; (2) the determination of when and where it can be used to real advantage; and (3) its proper place in a program of school hygiene and its coordination with health services to preschool children as well as to school children, including health education and the training of teachers in hygiene and public health.

EDGAR SYDENSTRICKER

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METHODS AND MATERIALS OF HEALTH EDUCATION

IT IS difficult in the rapidly growing field of school health education to keep pace with modern trends. Teachers left with the responsibility of developing effective programs often find a conflict between methods by which they, in their own school days, were "taught health" and the present-day philosophy that health education is the "sum of all experiences which favorably influence habits, attitudes, and knowledge relating to individual, community, and racial health." They are confused with the vast amount of health educational material that comes in their direction and often lack bases for properly evaluating it in terms of the well-rounded growth and development of the whole child.

[5] Burke, F. S.: The Preschool Child and School Medical Inspection. *Canadian Public Health Journal,* April, 1933, p. 170.

A recently published book, METHODS AND MATERIALS OF HEALTH EDUCATION,[1] by Dr. Jesse Feiring Williams and Miss Fannie B. Shaw, does much to clarify for both teachers in training and in service the present trends in school health education. Drawing freely from many sources, the authors summarize the channels through which, and the methods by which, health education may function effectively in a school.

The early sections of the book include chapters on the most recent definitions and terms employed in health education and an analysis of the nature of the child. Of special interest from the standpoint of public health is the summary of the economics of illness.

The main sections of the book "deal with the three aspects of health education, namely healthful school living, health service, and health instruction." Particularly helpful are chapters on "Rôle of Official and Non-official Organizations in Health Education," "Materials for Teaching Health," and "The Health of the Teacher."

If health is to "flow from the kind of living that goes on" then all experiences with health significance in the child's day must be recognized and utilized by the teacher in her educational program. In the chapter dealing with healthful school living accepted standards for school buildings are presented briefly and well. Classroom experiences influencing health behavior and conditions of the school organization essential for health are also included. A very excellent and much needed discussion is given of the basic causes of disciplinary problems, school failures, and fatigue. One should read with care what is said about such problems as the hygiene of writing and drawing and the importance of planning the day's program to avoid overfatigue. It is regrettable, however, that in this section there is no mention of the ways in which the children themselves may take part in studying the problems of healthful school living and in planning improvements in the school environment and its use. One must wait for such suggestions in the chapters on "Health Instruction" and, more particularly, on "Materials for Teaching Health."

An outstanding contribution of the book is its inclusion of numerous criteria for selecting and evaluating health education procedures and materials. Authoritative sources are quoted on such points as essential

[1] Williams, Jesse F. and Shaw, Fannie B.: METHODS AND MATERIALS OF HEALTH EDUCATION. New York, Thomas Nelson and Sons, 1935.

qualifications and duties of health counselors, guiding principles for developing correlations, types of health education materials potentially dynamic, and guides for selecting health textbooks and for using such other teaching aids as the radio, posters, charts, graphs, and the like.

Although the book is intended primarily as a textbook for teacher-training institutions it should be a helpful reference book for principals, teachers in service, nurses, and others interested in school health education.

RUTH E. GROUT

ERRATUM for article entitled, "The Age Incidence of Tuberculosis and Its Significance for the Administrator," by Jean Downes and reprinted from the Milbank Memorial Fund *Quarterly,* Vol. xiii, No. 2, April, 1935.

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Please change the vertical scale for Figure 2 to read 5, 10, 15, and 20 per 10,000 instead of 10, 20, 30, and 40 per 10,000.