

excellent recovery. (3) A young girl, whose hair had been caught in some machinery and the *Scalp completely torn off*. The scalp was cleansed and sutured in position, but sloughed completely; an endeavour was then made to graft with the skin removed from an umbilical hernia, with the same unfortunate result, and it was now decided to graft by means of Thiersch's method. Drs. DAWES, GILL, HILL, and SMITH discussed these cases. Dr. J. W. DAWES showed a potter's handler, aged 44, who was first seen in October, 1913, suffering from a persistent brassy cough and slight dyspnoea; he was found to have an *Aneurysm of the arch of the aorta*. For the last eighteen months his condition had remained practically stationary; the blood pressure on the left side was 140, on the right 120. Dr. LIST gave a demonstration of the case in the x-ray department. Dr. G. H. SOWRY showed two sisters, aged 16 and 9, suffering from *Enlargement of lymphatic glands*, marked in the neck, smaller in the axillae and inguinal regions. They were thought to be suffering from Hodgkin's disease, but von Pirquet's reaction was positive in both cases, and there was a very strong family history of tuberculosis. The PRESIDENT also showed two girls with enlargement of the lymphatic glands in the neck, axillae, and inguinal regions. In the younger girl the spleen could be felt, and von Pirquet's reaction was negative in both girls. Dr. McDUGALL drew attention to the importance of a differential blood count in such cases. Mr. CARTER remarked upon the presence of enlarged tonsils in Dr. Sowry's patients and suggested enucleation of the tonsils. Drs. GILL, ROBINSON, and SMITH also took part in the discussion. Dr. SOWRY replied, and commented upon the x-ray treatment of Hodgkin's disease. Dr. DALY showed a man with a *Swelling of the hard palate*, which included the alveolar border and extended to the middle line; this had been present for five years and had altered very little; there was no specific history. Messrs. ALCOCK and CARTER discussed the case and considered the swelling to be of the nature of a granuloma. Dr. MITCHELL SMITH exhibited a cast from a case of *Primary tracheal or bronchial diphtheria*. A girl, aged 13, was discharged from the Isolat on Hospital on June 13th, apparently well, after a severe attack of scarlatina; she was taken ill on the night of the 20th, and was seen on the 21st. The temperature was 102.5°, pulse-rate quickened, breathing hurried and shallow, short irritable cough, little expectoration, voice very weak and whispering, no stridor; the patient looked very ill, and grey. The throat showed nothing abnormal. Examination of the chest showed diminished air supply; breath sounds on front of right chest practically abolished, on front of left chest greatly diminished, normal at back of chest; resonance on percussion normal over whole of chest. During the night the patient had a severe attack of dyspnoea, with pain below the right clavicle, which lasted until a cast similar to that shown was coughed up. On the 22nd she was very prostrate, breath sounds improved on right side, diminished on left; antidipltheritic serum 4,000 units given. On the 23rd, slight general improvement, breathing markedly improved on right chest, worse on left; antidipltheritic serum 2,000 units given. Later in the day she had a paroxysm of coughing, with pain below the left clavicle, and the cast shown was coughed up. On the 24th, marked local and general improvement. Report of bacteriological examination positive. The case was discussed by Drs. SHUFFLEBOTHAM, SELWYN-THOMAS, and WEBSTER, and Dr. SMITH replied. Mr. HARTLEY exhibited two pathological specimens: (1) *Multilocular ovarian cystoma*; (2) uterus, cervix, appendages, and portion of vagina, removed by Wertheim's operation on June 3rd, 1915, for *Carcinoma of the cervical canal*.

PROFESSOR H. H. TURNER, F.R.S., has communicated to the Royal Meteorological Society some preliminary results of an investigation on which he has been engaged for some years. He finds that meteorological history is divided into chapters, averaging 6½ years, with abrupt changes (discontinuities), apparently determined by the movement of the earth's axis. He finds that they oscillate about mean positions in a cycle of 40.5 years, which appears in Brückner's collected "cold winters" for 800 years, in Nile flood records for 1,000 years, and in measures of Californian tree rings for 520 years. The chapters are alternately hot and cold, wet and dry, as shown by rainfall and temperature records at Greenwich, Padua, and Adelaide.

## Reviews.

### MIDDLE AGE AND OLD AGE.

Dr. SEYMOUR TAYLOR's little book on *Health for the Middle Aged*<sup>1</sup> is a contribution to the series which Messrs. Methuen are issuing under the editorship of Mr. Bishop Harman. The title is a happy one, and will no doubt attract many readers, who will not be disappointed, for the volume contains plenty of sound common-sense advice expressed in a genial and readable style. What, precisely, is middle age? Most people, perhaps, would say in two decades—between 40 and 60, but Dr. Taylor inclines to the opinion of the late Dr. Southey, who assigned to middle life the period between 49 and 63. Taking into consideration the changed conditions of modern life, and the improved facilities for postponing the onset of senility, we are disposed to accept this estimate. Middle life is, both for men and for women, a somewhat critical time, and the warnings given by Dr. Taylor on the subject of diet, exercise, etc., are so reasonable and so clearly put that we feel sure they will help many to steer clear of the special dangers to which the author calls attention. Such warnings are by no means superfluous, despite the proverb which asserts that a man of 40 must either be a fool or a physician. For if we may judge by the views frequently expressed on hygienic matters by people of at least that age, to say nothing of their gastronomic exploits, the majority of the middle aged are—not physicians. And these may profit by advice read in a book which they would resent if orally administered.

If, as is suggested, the subject has hitherto been neglected in America, Dr. I. L. NASCHER, in his work on *Geriatrics: the Diseases of Old Age and their Treatment*,<sup>2</sup> has endeavoured to make up for the deficiency. He complains of the want of attention to senile diseases in the United States, where the general mental attitude towards the aged, according to him, is that "they are useless—a burden to themselves, their families, and to the community at large. Their appearance is generally unæsthetic, their actions objectionable, and their very existence an incubus to those who, in a spirit of humanity or duty, take upon themselves their care." How far this view would be generally endorsed by the Anglo-Saxon part of the American people we will not inquire. An introduction to the book has been written by that eminent veteran, Dr. A. Jacobi, who finds that much the most important contributions to this department of disease have been made by Germans, Germany in this respect having "proved its supremacy as the modern leader in medical science." We had previously supposed that the French had made the more important contributions to the discussion of the subject. Dr. Nascher's book, at any rate, makes no claim to be original. It is frankly a compilation; even its illustrations, with one or two exceptions, are borrowed from other works. It is perhaps the fault of the publisher and not of the author that so many of them are not bound up opposite to the text which refers to them. Thus a drawing illustrating fibrosis of the lung is in the section on the liver; another of the heart in the section on the intestines; while that of enlarged prostate is in the part devoted to senile alopecia. The author shows a good deal of simple faith in the effects of remedies, attaching very considerable remedial powers to the use of phosphorus. He also believes that tannic acid will control hæmorrhage in renal embolism, and he is among the few who still retain any belief in the value of pepsin administered as a drug, while, on the other hand, he is cautious to excess with belladonna and digitalis. He believes that charcoal in 5-grain doses given in a capsule will relieve flatulence, though on what principle he can expect such a result we do not understand. He says (p. 114) that the senile liver is "like the atrophic stage of cirrhosis"; but, except that the two organs may happen to be about the same size, we fail to see any resemblance. There are a good many misprints:

<sup>1</sup> *Health for the Middle Aged*. By S. Taylor, M.D., F.R.C.P. The Health Series, under the editorship of N. Bishop Harman, M.A., M.B., B.C., F.R.C.S., etc. London: Methuen and Co. 1915. Fcap. 8vo, pp. 112. 1s. net.

<sup>2</sup> *Geriatrics: the Diseases of Old Age and their Treatment*. By I. L. Nascher, M.D. With an Introduction by A. Jacobi, M.D. Philadelphia: P. Blakiston's Son and Co. 1914. (Roy. 8vo, pp. 535; 50 plates; 81 illustrations.)

quite a number of the English names are misspelt. On the obscure and difficult problem of the cause of old age or senile degeneration which so many great thinkers have given up as insoluble, Dr. Nascher ventures the suggestion that it is the result of natural cell evolution; but this is rather like the famous explanation of the sleep-giving properties of opium, "quia est in eo virtus dormitiva." The author's therapeutic views are generally what would be called sound, and he nowhere lends himself to extreme opinions.

#### THE SULPHUR MINES OF SICILY.<sup>3</sup>

The sulphur mines of Sicily give employment to 23,077 men and boys. They afford means of subsistence to upwards of 200,000 persons. Sulphur in its pure form is found in Russia, Poland, Iceland and Spain, and in the United States of America, but the richest mines are in Sicily. They yield one-eighth of the world's production. In the district of Caltanissetta alone there are 377 sulphur mines. The health and physical development of the miners are influenced by the heavy weights carried, the fatiguing and trying position of the body when at work, the absence of light, and the presence of foul air and dust. Gas explosions and landslips in the mines are also a frequent menace to life. Mine owners have been slow in introducing modern improvements. In many places little attention has been paid to hygiene. Although the first to establish a hospital for the study and treatment of occupational disease, Italy has in some respects lagged behind other nations in matters of industrial legislation. Since 1905 the number of sulphur mines has been declining. In that year they numbered 710, five years afterwards they had fallen to 379. The annual production of sulphur is 360,000 tons. The reduction in the amount of sulphur raised in Sicily is largely due to the development of mines in Louisiana. Sicily's greatest competitors are the United States of America and Mexico. Through the utilization of sulphur products in the manufacture of sulphuric acid it is hoped that the industrial prosperity of the island will revive.

Soakage of water through the strata not only causes the mines to be damp, but as the water frequently contains H<sub>2</sub>S, it not only becomes an obstacle to work, requiring to be pumped out, but also a risk to health. Absence or deficiency of ventilation is characteristic of the mines. In by far the larger number there are no double shafts whereby air can be made to circulate. The temperature of the mines is high; the men work in many instances without clothing; the work is hard, and gives rise to profuse perspiration, which is followed by considerable physical exhaustion. Owing to the free perspiration the miners suffer much from thirst. At work they drink from 3 to 4 litres of water daily; their pulse-rate is quickened and the heart's action exaggerated, the skin is frequently the seat of erythema and of boils, the teeth decay early, and the gums swell and bleed rapidly. Respiratory and intestinal catarrhs are frequent ailments.

The men who mine the ore are called *piconieri*. The mode of entrance into a mine is by an incline or by a staircase hewn out of the rock. In mining the ore the *piconiere* works in a bad position, he has to stoop considerably, and make great demands upon the muscles of his arms and loins. Many of the men suffer from varicose veins. The *piconiere* usually commences his career in boyhood as a *carusso* or carrier. The *carusso* shares the hardship of the mine with the *piconieri*. He has to carry heavy loads of sulphur on his shoulders up the stairways sometimes almost on all fours. The writer of this review has visited Sicily and been in the mines. He was much impressed with the hard life of the lads and with the risks they had to run. Add to the severity of the toil the circumstances that no stated time is allowed for meals, and that the food is poor in character—salt fish, cheese and onions, eaten when chance offers—and the trials of a sulphur miner's life can be readily imagined. To the housing of the miners little attention has been given. Overcrowding is therefore a prevailing feature. At some of the mines there are barracks; in them men and boys are housed together; they sleep on boards, covered with straw or leaves, with their clothes on. The air of the sleeping room is malodorous, and tends to intensify the

exhaustion from which the men suffer. Nervous diseases are frequent among them; so, too, is insanity. To malaria and ankylostomiasis the Sicilian miner is a frequent victim. GIORDANO attributes much of the ill-health of the men to the excessive use of alcohol and tobacco. Diseases of the lungs are common. These organs become the seat of a form of fibrosis to which Giordano has given the name of "theapneumoconiosis." Owing to the conditions under which the miners work and are housed the lungs become a ready prey to all forms of micro-organisms, including the tubercle bacillus. A large percentage of the cases of pulmonary disease therefore becomes tuberculous. The initial structural changes in the lungs are the result of the irritation caused by the sharp-pointed crystals of sulphur which have been inhaled.

Within the last few years the hardships of the sulphur miners have been lightened by obligatory insurance and by mutual help associations. A Royal Decree established ten years ago the Obligatory Insurance Syndicate among employers. For each ton of ore raised which contains 65 per cent. of sulphur one franc and a half must be added to the fund. The Red Cross Society co-operates with this fund. The reviewer can speak most encouragingly of the good effects of the two societies. The numbers of accidents had fallen three years ago from 27.95 per cent. to 17.75. Nursing homes have been established. To M. Pompcio Coloiani, brother of the statesman, belongs the credit of the establishment of the Insurance Syndicate and of the introduction of many useful reforms and means for improving the health of the miners. What Coloiani has done for the sulphur miners from a social and industrial point of view Giordano of Lercara has done from the medical standpoint. No medical man is more familiar with their ailments or knows more of the diseases from which they suffer. Giordano deserves well of his countrymen, and especially of the particular class with whom through his writings he has made us acquainted. His monograph is interesting and instructive.

#### TRAINING OF DEFECTIVE CHILDREN.

THE Department of Education, Ontario, publishes from time to time, for public information, pamphlets on educational subjects, and in the seventh of this series<sup>4</sup> Miss HELEN MACMURCHY, M.D., Inspector of Auxiliary Classes for Ontario, gives an excellent summary of what has been done for the training of children with mental and physical defects in Europe and America, in support of her thesis that there is need in Ontario for similar provision. Dealing with the matter on broad social grounds, she points out that in the case of mental defectives not only is instruction in an auxiliary class necessary during school age, but that permanent after-care is essential. It would appear from school census and other returns that the proportion of mental defectives in Ontario is small as compared with older countries—that is, about 1 in every 400 or 500 of the population, against 1 in 250 in England. Yet this mounts up to about 5,000 persons needing provision in the whole province, and the Hospital for Feeble-minded at Orillia seems to be the only institution at present available for the permanent care of such cases. In 1911 an Act was passed by the Provincial Legislature authorizing the establishment of special classes for defectives in connexion with public schools. Two special classes were opened in Toronto in 1910, with an attendance of 32, but the Chief Inspector states that from 250 to 300 require special instruction in that city. Other special classes have been formed at Fort William and at Hamilton.

Interesting hints are given as to the diagnosis of mental defectiveness and of backwardness, and considerable space is given to "word blindness" and "word deafness." The training of teachers for auxiliary classes, the equipment of the special class-rooms, the course of study appropriate for feeble intellects, and the cost of establishing such schools, are subjects dealt with in successive chapters; and the appendices contain memoranda to parents, outlines of scholastic and industrial work, sense exercises, etc., in considerable detail. The pamphlet is of handy size (8vo), well illustrated, and is furnished with an admirable bibliography and index. It is satisfactory to find that the oversea dominions are coming into line with

<sup>3</sup> *La Fisiopatologia e l'Igiene del Minatori*. Dott. Alfonso Giordano, Docente d'Igiene Min. nella Regia Università di Palermo. Roma: Tipografia Nazionale di G. Basterio E. C. Via Umbria. 1913.

<sup>4</sup> *Organization and Management of Auxiliary Classes*. By Helen MacMurchy, M.D. Department of Education, Ontario, Educational Pamphlets, No. 7, 1915. Ontario: L. K. Cameron. 1915. (Cr. 8vo, pp. 212; illustrated.)



the mother country in their arrangements for mental defectives. In New Zealand a residential special school has been established at Otakeike by Government; it now contains 150 cases, and seems likely to develop into an industrial colony. In Australia "auxiliary" school classes have been organized under the Education Act of 1911 at Melbourne and Sydney, and similar classes are contemplated in Nova Scotia and other parts of Canada. Dr. MacMurchy's little volume can be commended as furnishing in small compass much useful information about the feeble-minded class.

#### NOTES ON BOOKS.

THE third edition of Dr. CAMPBELL'S *Aids to Pathology*<sup>5</sup> includes a considerable amount of additional matter. As a sign of the times let those who were medical students in the Seventies and Eighties of the nineteenth century look into this new issue and see how the beginner must needs know what hormones are and what they mean, whilst if these veterans catch sight of the word "anaphylaxis" they will mostly, we suspect, look up the name at the proper page as indicating something of which they have never heard before. We may hold theories which happen to be current to day as liable to eclipse and extinction to-morrow, but a glance through *Aids to Pathology* will show that many new methods have come to stay. Nearly two pages of small print are, very properly, devoted to the cerebro-spinal fluid. What would Paget and Lionel Beale have thought of lumbar puncture not only described, but taught as a thing to be practised? "The procedure is quite harmless," we are told, and for that and other reasons we find directions how it should be undertaken. Although so much is expected in a publication of this class, the new and old matter are well condensed in this third edition.

The *Proceedings of the Pathological Society of Philadelphia*<sup>6</sup> for last year include instructive papers on rarer forms of disease, such as tumour of the carotid body, endothelioma of the mediastinum, and retroperitoneal sarcoma. Reports on bacteria and parasites will prove of more general interest. Drs. Allen Smith, Middleton, and Barrett issue an abstract of a report on laboratory work on the tonsils as a habitat of oral endamoebae, the complete text of which will be read with interest by experts. Smith and Barrett had previously written on the association of pyorrhoea alveolaris, in many instances, with the amoebic parasites *Endamoeba buccalis* or *gingivalis*, which are found in pyorrhoea pockets. It now appears, as a result of later researches, that the same organisms inhabit the tonsillar crypts in cases of chronic cryptal tonsillitis. The authors further dwell on the complications of tonsillitis and their relation to endamoebae and toxins derived from types of symbiotic bacteria. Drs. Rivas and Lucke detected the American hookworm, *Necator americanus*, in the faeces of an East Indian adult. There was double parasitic infestation of the intestine—namely, by *Necator* and by the fluke *Fasciolopsis buskyi*, and eggs of both parasites were detected. The *Fasciolopsis* is an Asiatic, not a New World trematode.

#### A FRENCH PIONEER IN TROPICAL DISEASES.

IN a thesis presented to the University of Paris in 1914 R. Coville deals with the career and work of C. Dellon, who was a pioneer in the study of tropical diseases. Till the seventeenth century French ships seem to have carried no doctors. When Colbert founded the French East India Company in 1664 part of the organization was a health service on sea and land and in the colonies. When the expedition of Mondevergul sailed in 1666 for Madagascar with ten ships carrying 1,700 emigrants, the company engaged three apothecaries and eight surgeons, in addition to those attached to the ships. This was the beginning of the French Naval Medical Service. C. Dellon was a surgeon in the French navy at the time of its foundation, and his name is the only one that has survived from that time. He was probably born in 1649, but the place of his birth and of his studies is unknown. In 1668 he left Port Louis in *La Fosse*, a ship of the India Company, with a crew

of 120 men, which sailed for Madagascar. On September 4th the ship reached Saint Paul in the Ile Bourbon. The heat and the want of water were beginning to make themselves felt, and scurvy broke out among the crew. But the air was so pure and healthy that only four out of eighty of those who contracted the disease died. When the period of his engagement with the company came to an end, he did not return to Europe but settled in the small Portuguese town of Daman. At first he was very successful, but this caused jealousy and he got into trouble with the Inquisition. He was tried for heresy and condemned to five years of the galleys. He was handed over to the secular power for deportation to Portugal, where he was to work out his sentence. On reaching Lisbon, however, he again fell into the clutches of the Inquisition. After many appeals for a new trial he at last succeeded in interesting Dr. Fabre, chief physician to the Queen of Portugal, in his case. The influence of Fabre, together with that of Bossuet, who befriended him, procured him his liberty. He returned to France in 1667 and wrote a narrative of his adventures which was published in Paris in 1685, together with a short treatise on ship diseases and tropical maladies as a sequel. The book went through several editions and was translated into English and German. Dellon's little essay may be regarded as one of the first treatises on the subject. Scurvy naturally holds the chief place, for it was a veritable scourge to all who went down to the sea in ships at that time and for long afterwards. Dellon attributed it to the dry burning air of the sea, to salt meat and bad water, to melancholy caused by long voyages, and to the thirst which had to be endured when in periods of calm and excessive heat the ration of water had to be reduced and the men could not wash themselves. Speaking of the prevention of scurvy, he says that the victuals taken on board must be of the best quality and the biscuit sound and easy to keep. At sea the ship must be kept very clean and "perfumed" several times a week. The sailors and travellers must observe careful hygiene; they must make provision of lemon, verjuice, dried fruit, and particularly prunes. They must avoid every kind of tainted food; they should eat little meat, and only such as had been perfectly freed from salt. Their diet should consist largely of rice, rye, and oatmeal cooked with prunes to keep the bowels reasonably free. Sugar is also recommended as being a marvellous balsam which fortifies the stomach, facilitates the expulsion of urine, and, while neutralizing the acids, softens the whole mass of blood, the thickening of which was, in his opinion, the sole or principal cause of scurvy. In addition to this, Dellon insists on minute attention to bodily cleanliness in order to promote perspiration; a special precaution recommended was carefully to wash the mouth, where the mischief began. He considered that the most important part of colonial medicine was fevers, which he classified summarily into continuous and intermittent. Among the latter the tertian and double tertian were fairly frequent and difficult to cure. He kept patients suffering from fever on low diet, giving them only plain water and *cangé*, prepared by boiling half a pound of rice in four or five pints of water; four or five small spoonfuls of this were given during the day. He makes no mention of bark. After fevers in frequency came affections of the intestine, dysentery being very common in India, contagious, difficult to cure, and often fatal. Dellon noticed that acute gastroenteritis was common in hot countries. He observed an affection which he calls "Madagascar colic"; he attributes it to the immoderate drinking of a honey wine peculiar to the country, and says the symptoms resemble those of painter's colic. Coville suggests that Dellon may have confused this disease with beri-beri, which is very common on the east coast of Madagascar, and was observed by Bontius at Java in 1642. After referring to the frequency of small-pox in India, and of anaemia in Malabar, and giving an account of snakebite, Dellon concludes by describing *bichos*, of which he said there were three varieties. Two of them, it appears, are caused by parasites, the *Filaria medinensis*, and the *chigo*, the third being a form of gangrenous inflammation of the anus. Dellon says nothing about cholera, or about diseases of the liver, the skin, and the eyes. This silence is doubtless due to the fact that he confines himself strictly to affections which had come under his own observation. He was evidently a man who thought for himself, and while not altogether

<sup>5</sup> *Aids to Pathology*. By H. Campbell, M.D., B.S.Lond., F.R.C.P. Third edition. Students' Aid Series. London: Baillière, Tindall, and Cox. 1915. (Pcap. 8vo, pp. 236. Cloth, 3s. 6d. net; paper, 3s. net.)  
<sup>6</sup> *Proceedings of the Pathological Society of Philadelphia*. New series, vol. xvii; old series, vol. xxxv (January, 1914, to January, 1915). Edited by J. A. Kolmer, M.D. Philadelphia: Wm. J. Dorran. 1915. (Roy. 8vo, pp. 100.)