

Medical Diary.

SOCIETIES.

ROYAL SOCIETY OF ARTS, John-street, Adelphi, W.C.
MONDAY, Dec. 20th.—8 P.M., Cantor Lecture:—Mr. A. C. Chapman: Micro-organisms and Some of their Industrial Uses.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

WEST LONDON POST-GRADUATE COLLEGE, West London Hospital, Hammersmith, W.
MONDAY, Dec. 20th.—2 P.M., Dr. A. Saunders: Visit to Medical Wards. Dr. G. Stewart: Medical Out-patients. Dr. Simson: Diseases of Women. Dr. Morton: X Ray Department.
TUESDAY.—10 A.M., Mr. Steadman: Dental Department. 2 P.M., Dr. Burnford: Medical Out-patients. Mr. T. Gray: Surgical Out-patients. Dr. Pernet: Skin Department. 2.30 P.M., Mr. Addison: Skin Department.
WEDNESDAY.—10 A.M., Mr. MacDonald: Genito-Urinary Department. 2 P.M., Mr. D. Armour: Visit to Surgical Wards. Mr. Sinclair: Surgical Out-patients. Mr. Gibb: Eye Department.
THURSDAY.—2 P.M., Dr. G. Stewart: Medical Out-patients. Mr. Baldwin: Orthopædic Department. Mr. MacDonald: Surgical Out-patients. Mr. B. Harman: Eye Department.
FRIDAY.—10 A.M., Dr. McDougal: Electrical Department. Mr. D. Buxton: Dental Department. 2 P.M., Dr. Burnford: Medical Out-patients. Mr. Banks Davis: Diseases of the Throat, Nose, and Ear.
Daily:—10 A.M. Ward Visits. 2 P.M., In-patient, Out-patient Clinics.

Communications, Letters, &c., to the Editor have been received from—

- A.—Messrs. Allen and Hanburys, Lond.; Mr. A. J. Austin, Lond.
B.—Dr. G. A. H. Barton, Lond.; Mr. H. Barwell, Lond.; Dr. J. S. Bolton, Nottingham; British Dental Association, Lond., Dental Sec. of; Dr. Bidou, Paris.
C.—Cleveland Hospital Council, Cleveland, Ohio; Dr. H. P. Cholmeley, Forest Row; Dr. F. G. Crookshank, Lond.; Miss G. Cowlin, Bristol; Mr. W. Clark, Lond.; Sir Frank Colyer, Lond.; Dr. F. M. Neild, Crowborough; Mr. W. Cullen, Lond.; City of London Wood-Wool Co.; Dr. G. H. Clark, Glasgow; Dr. C. Coombs, Bristol; Children's Guild of Song and Dance, Lond.
D.—Mr. H. Dickinson, Lond.; Dr. D. Douglas, Lond.; Dr. V. Dickinson, Lond.; Mr. H. P. Dunn, Lond.; Dr. J. A. Davidson Lond.
E.—Ediswan, Lond.; Dr. F. H. Edwards, Lond.; Dr. W. Edgecombe, Harrogate.
F.—Prof. J. E. S. Frazer, Lond.; Dr. A. M. Fraser, Portsmouth; Mr. W. R. Fairbrother, Lond.
G.—Mr. H. Gardiner, Lond.; Dr. P. Gully, Leysin; Great Northern Central Hospital, Lond.; Prof. T. R. Glynn, Liverpool.
H.—Harveian Society, Lond.; Home Office, Lond.; Mr. T. C. Heath, Lond.; Major W. E. Home, R.A.M.C.; Mr. C. H. Huss, Cardiff; Dr. J. Haddon, Denholm; Mr. P. B. Hoeber, New York; Dr. F. Hernaman-Johnson, Lond.; Prof. F. G. Hopkins, Cambridge; Prof. A. J. Hall, Sheffield; Mr. J. T. Henderson, Pietermaritzburg; Surg.-Vice-Admiral Sir Robert Hill, R.N.
I.—Imperial Institute, Lond., Director of.
K.—Mr. W. Kewley, Lond.
L.—Dr. R. B. Low, Lond.; Mr. J. B. Lamb, Lond.; Livingstone College, Lond.
M.—Medical Women's Federation, Lond.; Medical Officers of Schools Association, Lond., Hon. Sec. of; Mr. F. H. McMechan, Avon Lake, Ohio; Ministry of Pensions, Lond.; Sir F. Mott, Lond.; Dr. J. Moore, Paris; Mr. W. Morris, Lond.; Medical Research Council, Lond.; Mr. D. Marston, Coalville; Prof. C. S. Myers, Lond.; Middlesex Hospital, Lond., Sec.-Supt. of; Dr. J. Morley, Manchester; Metropolitan Life Insurance Co., New York; Metropolitan Asylums Board, Lond., Clerk of; Dr. J. S. McDonagh, Lond.; Mr. E. W. Morris, Lond.; Dr. E. S. McSweeney, New York.
N.—National Safety Council, Chicago; Dr. J. T. C. Nash, Norwich; National Anæsthesia Research Society, Columbus, Ohio; National Council for Combating Venereal Diseases, Lond.
O.—Dr. R. A. O'Brien, Lond.; Dr. J. Owen, Liverpool; Dr. J. Oliver, Lond.
P.—Dr. S. Phillips, Lond.
R.—Dr. B. Rasck, Christiania; Röntgen Society, Lond.; Dr. J. D. Rolleston, Lond.; Sir L. Rogers, Cambridge; Royal Institute of Public Health, Lond., Sec. of; Royal Society of Arts, Lond.; Royal Statistical Society, Lond.; Dr. W. Robertson, Mossel Bay; Dr. F. Romer, Lond.; Dr. B. A. Richmond, Lond.; Dr. J. W. Russell, Birmingham; Royal Faculty of Physicians and Surgeons, Glasgow; Royal Society, Lond.
S.—Dr. H. Stanley-Jones, Netley; School Medical Group of the Society of Medical Officers of Health, Lond.; Mr. S. H. Stewart, Whiteabbey; Dr. H. Sainsbury, Lond.; Dr. J. Sorley, Lond.; Prof. W. Stirling, Manchester; Société des Sciences Médicales et Biologiques, Montpellier; Society of Industrial Engineers, Chicago.
T.—Dr. A. O. Trotter, Lond.
U.—University College Hospital, Lond., Sec. of.
V.—Dr. H. W. Verdon, Brighton.
W.—Dr. W. B. Watson, Harrogate; Dr. E. Watson-Williams, Bristol; Dr. F. J. Waldo, Lond.; Dr. A. Warner, Leicester; Prof. G. S. Woodhead, Cambridge; Dr. G. S. Wilson, Lond.; Sir W. I. de C. Wheeler, Dublin; Dr. S. I. Welsh, Lond.; Mr. C. Wray, Lond.
Y.—Dr. H. Yellowlees, Edinburgh.

Notes, Short Comments, and Answers to Correspondents.

CLINICS FOR INEBRIATES.¹

BY JAMES A. DAVIDSON, M.D. ABERD.

CLINICS or bureaux where alcoholics can be treated as out-patients are well-known abroad, but up to now no such clinic has been opened in this country. I believe that there is a stage in certain types of alcoholics where such treatment is indicated and has a very fair chance of benefiting the patient. At The Hague Conference in 1911 Dr. Mendelssohn, the head of no less than seven bureaux in Petrograd, claimed remarkable results. Professor Kraepelin, of Heidelberg, reported that good work was being done in Germany, where 70 such institutions were working prior to the war. The reports of the clinic in Toronto were most interesting; since Canada went "dry" the clinic has been closed. The explanation of the success of these clinics appears to be that the inebriate comes comparatively early. He can consult the medical officer privately. His people need not know. The expense is not great and he can, as a rule, carry on with his work. Thus the patient is reached when in a fitter condition than if treatment were more delayed, because, as pointed out in the interim report of the Scientific Advisory Committee of the Central Control Board, "the habit of excess once formed tends to become stronger through the enfeeblement of the will which results from the drug's continued action upon the nervous system and which lessens the power to resist." The earlier the case is treated the better the results obtained.

Formation of an English Committee.

Just before the war—in 1912—some of those interested in this treatment began to realise what might be done in this country. Mr. Theodore Neild had attended The Hague Congress referred to above, and had been in direct touch with the workers in Holland, Russia, Germany, and Canada; it was through his efforts that a committee was formed with the object of starting such a clinic here. In 1914, when the Inebriates Act was before Parliament, it approached the Home Office authorities, who received the suggestion sympathetically and promised that the "guardianship clauses" would be drawn up so that it would be possible for such a clinic to act in the capacity of a "guardian" and that patients could be sent there for a period of treatment while on probation. The war broke out and the Bill was shelved; it is now understood to be "dead." But the idea was not lost sight of, and in 1918, in the fourth annual report of the Board of Control, special attention was drawn to the following causes of insanity "which might rightly be classed as largely preventable—namely, alcohol, syphilis, and mental stress," and hoped that "no effort should be spared to deal with these preventable causes and to provide means for effectual treatment in the early stages."

Recommencement of Work in 1919.

The work of Mr. Neild's committee was necessarily at a standstill during the war, but recommenced in 1919, when the committee felt that alcoholism could not easily be treated per se—that inebriety was so complex in origin that cause and effect were so indistinguishable, as, for example, in feeble-mindedness, epilepsy, and syphilis, that inebriety could not be tackled alone. Therefore a round table conference was held at which representatives of the following bodies were present: National Temperance League, Penal Reform League, Friends' Temperance Union, Inebriates' Reform and After-care Association, Eugenic Education Society, National Society for Epileptics, Central Association for Care of Mental Deficients, National Association for Care of Feeble-minded, National Society for Combating Venereal Disease, Society for Study of Inebriety.

It was agreed that further legislative power was necessary, and that particulars as to what the various bodies were doing should be collected with a view to coöperation. Considerable interest was shown in the suggestion of a clinic, and it was pretty clearly demonstrated that inebriety was only one of a group of symptoms that would require treatment. It was pointed out that the demand for the granting of a guardianship or internment might be conceded on the report of duly appointed specialists to the responsible members of the family of a weak-minded inebriate, or to a clinic acting in the capacity of a guardian. The grounds for such a demand, beyond ordinary offences against the law, should be that the man is a source of danger to his family or to others, and

¹ Being the substance of a paper recently read before the Society for the Study of Inebriety.

Communications relating to the editorial business should be addressed exclusively to the Editor of THE LANCET, 423, Strand, London, W.C.2.

that he is injuring, or is likely to injure, the welfare of a dependent through his intemperate habits.

Desirability and Objects of a Clinic.

Along similar lines an excellent scheme has been put in operation in Birmingham through the enthusiasm of the deputy chairman of the justices. To quote from an extract of the report of their general purposes committee, "they had for a long time been impressed by the futility and inadequacy of the customary methods of dealing with persons charged with crimes (including alcoholism), particularly as to the absence of any consideration of the mental condition of such persons." They therefore appointed a medical practitioner with whom the justices could confer, and suggested the establishment of a clinic for voluntary treatment, to which cases on remand in custody or remand on bail could be referred. In January, 1919, THE LANCET referred to this in a leading article,² saying that "these proposals should find general acceptance as indicating the principles to be kept in view in reforming our present methods of dealing with mental weakness which leads to anti-social conduct." Such a clinic must have at its head a doctor, expert, tactful, of strong character, and willing to conduct research. Its objects will be threefold: (1) Classification from the point of view of causation and treatment. (2) Acceptance of the responsibility of guardianship. The patient may be voluntary or may be referred to the clinic by the justices, presenting himself at fixed intervals for observation and treatment. (3) Treatment would be prescribed or carried out by the medical staff, who could go carefully into the personal and family history of the case and would examine the physical and mental condition. The assistance of a surgeon, dentist, oculist, or aurist, might be required and result in the removal of the exciting cause. In other cases advice to the patient, his family, or employer, may be all that is necessary. In more severe and chronic cases active medical treatment with drugs or the services of a psychotherapist may be useful. Not the least important of the doctor's duties will be the reference of cases found unsuitable for ambulatory treatment to a suitable institution, that every effort may be made by removal of temptation, strengthening of the will, and building up of the body prior to the patient's return to the normal conditions of life. Others will have to be referred back to the police to be dealt with, and others again to asylums. To a great extent the Tavistock Clinic lately opened in Tavistock-square, London, by Dr. Crichton Miller and others, answers these requirements. Here the patient's heredity, history, and present condition are carefully inquired into, and treatment is recommended or carried out according to the nature of the case. The patient attends without publicity and at little or no expense; while carrying on his ordinary duties he has the sympathy and advice denied him in the past. Treatment is not limited to inebriety, but is carried out in any suitable psychopathic condition. Those responsible for this great step forward surely deserve the enthusiastic support of all who are interested in the study of inebriety.

EVOLUTION AND THE FUTURE OF THE HUMAN RACE.

At a meeting of the Eugenics Education Society held at 23, Russell-square, London, on Dec. 14th Professor Arthur Dendy, F.R.S., delivered a lecture on the above subject, Major Leonard Darwin presiding.

Professor Dendy said that the present well-being and future progress, not only of the individual but of the human race in general, must depend largely upon the extent to which the laws of nature were understood and the use which was made of our knowledge of them. He believed that there was evidence of progress, but if it was to continue and we wished to avert, or even postpone, the fate to which civilisation seemed to be doomed, we had got to change our ideals and cultivate a much truer sense of values. If progress consisted merely in covering the face of the earth with railways and factories, and in destroying the peace of God with motor-cars and aeroplanes, it would seem hardly worth while to go on, and many of us might come to prefer a life of solitary contemplation in the wilderness to the society of our too-energetic fellow-men. The question was: Could we profit by the experience of the past? Could we use our knowledge to avert the inevitable setback?—assuming, of course, that it was desirable to do so.

The Need for Education.

The past history of the whole organic world taught us that success depended upon adaptation to environment, but if the adaptation of any particular race became so specialised as to result in loss of plasticity, or in other words, if the race became dependent upon the continuance of conditions over which it had no lasting control, then, when those conditions changed, the race was doomed and an opportunity given to some less specialised and of a more plastic type to take up the running on new lines and gather fresh supplies of

energy in its own way to repeat the cycle. It was not, however, only the exhaustion of our own reserves of energy and the changed conditions of life which followed that we had to fear. We had to ask ourselves whether the accumulation of capital might not be carried too far, tempting us to expend our strength in self-preservation. A man's fortune might prove a blessing or a curse to him according to the manner in which he made use of it. To the eternal question, What can we do to be saved? there was only one answer in this connexion. Educate ourselves. The most necessary items of our equipment would be physical and mental health. If we could secure them it was hardly too much to say that all else would be added to us. The improvement of national physique and the promotion of national sanity were objects worthy of all attention. Fortunately the national conscience was being awakened to the necessity of improving the conditions of life for the great mass of the people, and the question of housing had at last passed the stage of discussion and had entered upon that of action. The health of the children, the conditions of labour, and the recreation of the workers were at length receiving the attention which they ought to have received long ago. More important still, we were beginning to realise the responsibility that rested upon us for the health of future generations. The knowledge that had been gained by patient biological research during the past 50 years seemed likely to bear fruit abundantly in the near future. But teachers could only point the way. The human race would not be driven to salvation. We could only educate. Public opinion was more powerful than legislation, and if legislation in certain respects proved to be desirable it could come only as the result of conviction.

The Work of the Politician.

The evolution of every form of civilisation tended to bring with it disharmonies, and to forestall or reconcile these should be the task of the politician, but, unfortunately, he was often actuated by far different motives. But if he were not he was usually much too ignorant of the laws of nature to play the part of a successful physician. The study of biology, another name for the study of life, was perhaps the part of education which could help us most. Taking as an example the law of work Professor Dendy said that if instead of endeavouring to escape from it we once realised that work and life were the same thing we might get on much better in a world of toil. Every organism, consciously or unconsciously, worked for its living, and the moment it ceased to do so it died. But we had to see that the work was of the right kind and compatible with a reasonable amount of enjoyment. If mankind could be persuaded that love, truth, and beauty were stakes better worth playing for than motor-cars, cinematographs, and social distinctions, there need be little fear of disharmonies in the social organism. Education alone could do it. At present education had only gone far enough with the great masses of the people to make them question the foundations of the religious beliefs and moral codes by which society had hitherto been held together. They were beginning to exercise their own judgment and to reject cant and hypocrisy of every description. The people would no longer be driven by authority, but had to be led by sympathetic intelligence. He believed that science and education would come to the rescue and enable us to inaugurate a new era of rational progress. The welfare of individual members was inextricably bound up with the community as a whole, and if any section suffered all other sections would sooner or later be affected.

The Need of the Future.

The welfare of the community depended upon the wise choice of leaders, and in a democratic State, if the people were not educated, the leaders would not be chosen wisely. Leaders were required of a type very different from those who held the reins of government or sat in Parliament. We required leaders who had qualified themselves for the great work of education and who realised that the welfare of mankind depended more upon the pursuit of truth, love, and beauty than upon the extension of commerce and the pursuit of material wealth. In conclusion, he said that the great principle of evolution, whether as regarded the individual or the race, consisted in sacrifice and rebirth at more or less frequent intervals—sacrifice of all those accretions which had become effete or developed beyond the limits of usefulness, and rebirth by making a fresh start with a clean sheet.

RIVAL SOLUTIONS OF THE RAT PROBLEM.

At a recent congress of the Royal Sanitary Institute Mr. George Jennison, of the Belle Vue Zoological Gardens, Manchester, called attention to the Rodier plan for the extermination of rats by sexual selection, and drew an interesting comparison between results thereby obtained and results of the wholly destructive method in force under the Danish Rat Law at Copenhagen. The power of multiplication of the rat is due to two factors—one, the protection

² THE LANCET, 1919, i., p. 143.

afforded by man's building, and the other the fecundity of the animal itself. The first factor cannot be avoided; the second may, in Mr. Jennison's opinion, be overcome. The rate of breeding and the proportion of males to females in a litter are still matters of dispute, but the enormous damage inflicted by rats, both by destruction of foodstuffs and by spread of disease, is beyond all question. The method of combating the pest advocated by Mr. W. Rodier, of Melbourne, Australia, is to trap the animals alive, kill all females, and release all males, with the intention of making the remaining females polyandrous. The prevailing polygamy of rats gives the females leisure to bring up their young; the normal result of polygamy is a considerable preponderance of female births over male, and the practice of poisoning and shooting rats tends to destroy chiefly males, thereby increasing the discrepancy of numbers. By releasing the males and by discontinuing indiscriminate methods of slaughter, rats will be driven to commit race suicide. The males will worry the females, hamper their rearing of young, and even kill the latter. By means of this system Rodier claims absolutely to have cleared an area of 64,000 acres of rabbit-infested land in Australia. The idea was first suggested to Mr. Jennison by a gamekeeper, who had proved the converse; to replenish a depleted rabbit-warren he found it best to kill every male that came to hand. When the Rodier system came to Mr. Jennison's notice in 1915 he determined to try it upon rats at Belle Vue Zoological Gardens, where for 40 years a large and efficient room-trap had been employed, and all trapped animals killed. In less than five years the Belle Vue rats have been reduced by one half their number. To avoid a second counting of previously-trapped males a portion of the tails of the latter was removed before they were set at liberty. The results recorded at Copenhagen, where obtains what is probably the most efficient system of rat-killing in the world, show that the maximum effect was gained in the first 15 months; after that the figures only fluctuated slightly for seven years, and the war-time food shortage only assisted further reduction to the extent of one-third. Guided by his own experience, Mr. Jennison considers the best plan of campaign is now clear. When rats are very numerous apply 12 months of indiscriminate slaughter to bring the problem within workable limits, and then employ the Rodier system. The great merit of the latter is that constant vigilance is no longer required once an area is well in hand; its defect is the difficulty of execution. Rat-poisoning and rat-killing as a sport must cease; the former, indeed, is responsible for the destruction of much harmless animal life. With regard to the latter, a careful man might be allowed to shoot rats carrying food, as only the does perform that duty.

A brief reference to the Rodier system is included in Sergeant-Major E. B. Dewberry's recently published monograph¹ on rat prevention and destruction, which is, however, mainly devoted to the perfected methods of indiscriminate slaughter. The protection of food by wire netting and wire-gauze safes, removal and destruction of refuse, filling up of rat holes, and the rendering rat-proof of buildings and drains, are dealt with as preventive measures; in the matter of destruction emphasis is laid upon the inefficacy of any single method and the necessity for combined and simultaneous action over a wide area. Fullest protection is advised for the rats' natural enemies—owls, buzzards, kestrels, sparrow-hawks, rooks, crows, gulls, herons, weasels, stoats, and foxes. The mongoose is also valuable, but there is now some difficulty in its importation from India. Various poisons, the methods of their administration, the uses of fumigation, traps, and hunting are carefully discussed, and in conclusion Sergeant-Major Dewberry points out that the number of diseases found to be disseminated by rats increases as biological and medical studies proceed.

PUBLIC HEALTH IN GRENADA.

ACCORDING to the Blue-book for 1919 the estimated population is 74,490. The birth-rate for the year was 33.17 per 1000 and the death-rate 17.9. The principal causes of death were diarrhoea and enteritis (270), malaria (88), syphilis (38), premature birth and diseases of early infancy (61), pulmonary tuberculosis (64), and dysentery (77). There are three ordinary hospitals in the colony, the central institution being in St. George's, with accommodation for 140 patients. District hospitals are provided in St. Andrew's (12 beds) and in Carriacou (24 beds). Two other hospitals are situated in St. George's, one for yaws patients, with accommodation for 70, and the other a consumptive hospital with 20 beds. The latter institution is pleasantly situated at Richmond Hill at an elevation of about 600 feet above sea-level. Government dispensaries are now established in every parish and in Carriacou. A considerable sum is expended on free medicines, principally for the relief of venereal diseases and

yaws. A Government medical service, comprising a colonial surgeon, a resident surgeon for the hospital in St. George's, and 11 district medical officers, is maintained by Government. Medical attendance is given free to paupers and at reduced rates to labourers under an approved scale of charges.

Venereal Disease and Yaws.

Two special campaigns against venereal disease and yaws respectively have been giving satisfactory results. The colonial surgeon reports that the beneficial results achieved by the intensive treatment of yaws by injection of novarsenobillon in the districts have been most remarkable and beyond the most optimistic anticipations. Patients, recognising the obvious good of the treatment, come readily to the medical officers for treatment. In the period from May to the end of the year 5000 cases were injected with novarsenobillon and 808 were discharged as cured. The medical officers have evinced the greatest keenness in this work, which they have performed in the most efficient manner, and one of the results, in the opinion of the colonial surgeons, of such extensive and sustained efforts to eradicate this loathsome disease will be the possibility of closing the Yaws Hospital within a short time and its utilisation for some other purpose. The campaign instituted in 1918 against venereal diseases is being steadily proceeded with and a great deal of conscientious work is being performed by the medical staff, with gratifying results to the patients concerned and the community in general.

Ankylostomiasis.

The campaign against ankylostomiasis which was discontinued in November, 1916, has not been started again, but will be resumed by the International Health Board as soon as the colony can give a certificate that the areas to be operated on have been previously brought to a sufficient standard of sanitary efficiency. This disease is still prevalent throughout the colony. Special attention is being given to improvement of general sanitation, both in respect of the special areas which are intended to be operated under the ankylostomiasis campaign, and in the colony generally. Several sites for the erection of public latrines have been decided upon in the districts selected for operations under the International Health Board.

The rainfall, which in 1919 was 73.09 inches, varies greatly, ranging from less than 20 inches in the extreme south to about 200 inches in the mountainous region of the interior. Cultivation prospers best in the regions with a rainfall of between 60 and 120 inches annually. The fact that it is matter for special meteorological record whenever the thermometer in the shade reaches 90° or falls below 70° F. is worthy of note, as indicating a certain degree of equability in the climate. As a general rule, climatic conditions during the continuance of the trade winds, which prevail from December to June, may be said to be healthy and pleasant. The remaining months, owing to humidity and cessation of the breezes, are relaxing and enervating.

HAIR RESTORATION BY THE USE OF SPECIAL FOODSTUFFS.

THE numerous fraternity who prescribe for the common complaint of baldness usually depend on the various remedies applied locally, or they make use of so-called strengthening remedies given internally—such as arsenic or iron. N. Zuntz, the distinguished chemical physiologist of Berlin, takes a wider and, perhaps, more philosophic view as to the conditions likely to influence the growth of hair or wool. He recalls the fact that in the early decades of the nineteenth century the question was raised as to whether the woolly coat of sheep could be improved by the nature of the diet. Proceeding on the supposition that given an increased supply to the hair papillæ of the proximate organic material out of which is manufactured keratin—the organic basis of certain epidermic appendages—it might be possible to influence favourably the growth of wool and hair.

There are several varieties of the scleroprotein keratin, but they are all characterised by their large and loosely-combined sulphur in the form of cystin, and in this and other respects are easily distinguished from other proteins and even scleroproteins. They are indigestible, but may be hydrolysed, and the hydrolysed products so far as energy is concerned if added to a dietary may replace about 10 per cent. nutritive nitrogen, much after the manner of gelatin in a dietary. A. Loewy¹ records the results on four sheep and a man when these hydrolysed products were added to the daily dietary. Two of the sheep received daily in addition to their usual food 10–15 g. of these keratin derivatives. As a result the wool fibres became more firm, their cross section increased from 6.92 to 8.15 μ , and the length was increased somewhat. In man—Zuntz himself—before the experiment the daily growth of new hair—head and beard—was calculated as 5 mg. With the daily addition of 1–1.5 g. of the hydrolysed products to the dietary, in the first four weeks the amount was 6.3, and in the subsequent

¹ The Prevention and Destruction of Rats. By Elliot B. Dewberry, Sergeant-Major, R.A.M.C. 1920. London: John Bale, Sons, and Danielsson, Ltd. 2s.

¹ Allg. med. Zentral. Zeitung, No. 26, 1920.

four 9.22 mg. Even after the withdrawal of the keratin products the increase in the growth of the hair continued for several months. Naturally in a country of such inventive chemical activity and "ersatz," little time was lost in the practical application of the discovery. The hydrolysed products were put on the market under the name of "Humagsolan," and so "Humagsolan-therapie" was introduced. But obviously even this incentive to growth is not applicable to all cases of loss of hair or baldness, as pointed out by Blaschko.² If the hair papillæ are atrophied—the ground, as it were, wanting—no favourable result is to be expected, and it must be remembered that in cases of acute and rapid loss of hair there are some cases of spontaneous recovery. Blaschko came to the conclusion that the best cases for study are those where loss of hair is due to chronic seborrhœa, and that humagsolan is actively beneficial in such cases. It is also beneficial in trichorrhexis, and it was effective in one case of old atrophic disease of the nails. It will rest with the dermatologists to test the possibilities as a therapeutic keratin-stimulating and growth-furthering agent of this latest product of German organic therapeutics.

THE SEGREGATION OF EPILEPTIC CHILDREN.

At the annual meeting of the supporters of the David Lewis Manchester Epileptic Colony, situated at Warford, it was stated that great advantage would be gained if every child, rich or poor, who had reached school age, were placed in an epileptic school on the first appearance of epilepsy. A very large number of the children who went to Warford at the beginning of their illness ceased to have epileptic attacks and were now self-supporting. Moreover, the increase in well-being and the contentment seen in the patients after they had entered the colony confirmed the opinion that people who had epilepsy usually thrived best when they were assembled in colonies. At home they were somewhat abnormal; in a colony they were the normal members of their society. A legacy to the institution of £10,312—and perhaps a few thousands more—by the late Alderman Royle was announced. The year's working resulted in a loss of £142, and before the above-named legacy was received the bank overdraft amounted to £4438. The fees had been considerably raised and the committee expressed the hope that they would be able to meet expenditure completely in the future.

VACCINE TREATMENT OF EQUINE LEUCORRHOEA.

WE have received a communication from Dr. T. S. Reeves and Mr. W. R. Scott, F.R.C.V.S., relating to a case of leucorrhœa in a mare, the property of Dr. Reeves. The mare was a valuable thoroughbred, out of a half-sister of Craganour, and granddaughter of Veneration. She had had three foals, but was barren during 1919 and the winter of 1919-20, losing a good deal of flesh; the skin was tight and the coat had lost all its gloss. The general condition being very bad and looked upon as hopeless, the owner was advised to remove her from the stud. For more than two years an intermittent uterine discharge had gone on, in spite of vigorous general and local treatment, tonic and ecobolic medicines and astringent antiseptic douches being freely employed. Upon the opening of the labia the cervix also appeared to open, and a large volume of flatus was expelled; air could be sucked in and forced out with ease, demonstrating the flaccid condition of the whole organ, which had lost all contractile power. The capacity of the uterus was enormous, and the hand could easily be passed through the os. The pus discharged was light grey in colour, thin in consistency, giving off a sickly smell, and lacking adhesiveness; its reaction was strongly acid. Upon bacteriological examination smears stained with carbo-gentian violet and Gram revealed the presence of numerous epithelial cells and leucocytes—many of them so disintegrated as to be almost past recognition—staphylococci, streptococci (short forms), and a Gram-negative bacillus afterwards found to belong to the *B. coli* group. All these organisms grew vigorously, and from them a vaccine was made. A course of six ampoules was prepared; the doses, injected every six days in the region of the neck, were graduated as follows (in thousand millions): *Streptococcus brevis*, 1, 1.25, 1.5, 1.75, 2, 3; *Staphylococcus albus*, 1.25, 1.5, 2, 3, 4, 6; *Bacillus coli*, 1, 1.5, 2, 3, 4, 5. No apparent reaction followed the first injection; after the second and third there were strong negative phases, with rise of temperature and loss of appetite. The discharge remained unaltered after the second injection, but became thicker, more cream-like, and very profuse after the third. The fourth was followed by a slight negative phase, with very little constitutional disturbance; the condition was much improved, and the discharge lessened to one half-pint of viscid matter in 12 hours. The appetite was good, gloss reappeared on the coat, and there was no discharge of flatus from the uterus. After the fifth injection there was no negative phase and no discharge, and after the sixth the

patient was quite normal in every way. Recovery appears to be complete; for six months no uterine discharge has been noted, and the animal looks very fit. The writers wish to place the case on record as an example of the high specificity of vaccine therapy, adding that their experience of such cases in pre-vaccine days was most discouraging. They conclude that the extensive surface of the uterus facilitated the effort of nature towards recovery, the abnormal network of blood-vessels permitting large quantities of artificially stimulated humoral and cellular elements to reach the infective foci and hasten their destruction.

AN APPRENTICE IN CRIME.

PSYCHIATRISTS have long recognised the tendency among mental deficient towards criminality. It appears that this tendency is now being discovered and exploited by the criminal classes themselves. At a recent meeting of the Société Clinique de Médecine Mentale Drs. Marcel Briand and Borel presented a boy, aged 14, who had on many occasions been used as a tool of a professional thief. It is clear that if this practice is at all widespread two mentally deficient children without criminal tendencies in the first place may very soon acquire them. These children incapable of moral judgment as they often are, should be specially protected by society, which in defending them will at the same time be protecting its own interests.

ON THE DANGERS OF THE STREETS.

IN Paris, the cross-way where the Grands Boulevards are cut at right angles by the great highway leading to Montmartre is known to Parisians as the "Carrefour des écrases" on account of the large number of fatal accidents to foot passengers attempting to cross the streets at this spot. The accidents are largely due to the reckless and careless driving of the almost incessant cross streams of vehicular traffic in this congested area, and may also be partly due to the increase of deafness following on the war. The issue of armlets, yellow with three black spots, to the deaf, so that drivers may be warned to exercise special care, is being tried in Germany. According to the *Times* Paris correspondent it is estimated that the police records already contain notifications of more than 50,000 accidents for 1920, as against 47,856 last year and 35,630 the year before. Last year there were 99 fatal and 13,618 non-fatal accidents through street collisions in France, as against 82 and 11,828 the year before. London on the one hand and Manchester on the other seem to be emulating Paris in the number of accidents—fatal and non-fatal and most of them avoidable—as one of the results of the increase of motor-propelled vehicles of all kinds. Mr. Justice Darling the other day sentenced a taxi-cab driver to 12 months' hard labour for the manslaughter of a foot passenger by knocking him down with a taxi-cab, the judge remarking that "there are numbers of people driving taxi-cabs and motor-cars who are very careless of foot passengers, whether they are crossing the road or getting into tramway-cars. Persons who will kill people by reckless driving and are arrested by the police cannot expect to have the matter treated as a venial offence." The following table shows the number of accidents in Manchester in recent years:—

Street Accidents in Manchester.

Year.	Fatal.	Non-fatal.	Year.	Fatal.	Non-fatal.
1911	31	1168	1916	47	902
1912	36	1096	1917	48	759
1913	44	1027	1918	36	612
1914	43	1154	1919	51	897
1915	53	1132			

Should the present monthly average of 1920 be maintained until the end of the year, the total accidents for 1920 will be close on 80 fatal and 984 non-fatal. It will be observed that the proportion of fatal to non-fatal accidents is on the increase, and it is stated that most of these accidents occur within the congested street area of motor traffic—the vehicles being mechanically propelled. A noteworthy fact is that accidents rarely occur where traffic is regulated by a policeman on point duty, and we understand that Paris is now making attempts, not yet effectual, to provide a substitute for his good-humoured control in the form of an "agent" armed with a white baton but apparently not with his power of compelling obedience.

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² Deutsch. Med. Wochenschrift, No. 19, 1920.