## CURRENT LITERATURE

To take due notice of the current literature of leprosy is one of the most important objectives of the Journal. For the benefit of readers to whom medical libraries are not readily accessible it is intended that, so far as possible, abstracts of the more important articles shall be sufficiently full and complete to afford a clear understanding of them, rather than merely of the nature of their content.

The Contributing Editors are depended upon primarily to provide these abstracts. However, since authors' abstracts are generally to be preferred to those prepared by others, readers are invited to submit abstracts of recent papers or reports written by them which have been published elsewhere.

MARQUE AND GROSFILLEZ. Les maladies transmissibles dans les colonies françaises et territoires sous mandat, en 1931; en 1932. [Transmissible diseases in French territories.] Ann. Méd et Pharm. colon. 31 (1933), 305; and 32 (1934), 247.

In the portion of these reports devoted to leprosy one finds interesting information on epidemiology and therapy. The modern liberal system of prophylaxis has been introduced in the French colonies but as in all colonial regions the task to be accomplished is a considerable one. In many countries the leprosy infection rates per thousand are high: 4 in Niger, 6 in Togo, and even up to 20, a figure which is exceptional. In some places, as in Indo-China and French West Africa, leprosy is certainly not decreasing. Many methods of treatment have been used, chaulmoogra remaining the best. There is a tendency to use the Flacourtaceae of the country: Hydnocarpus anthelmintica (krabao) in Indo-China, H. wightiana (non-acid oil) in Pondicherry, and Caloncoba in Cameroun. More attention is given the oil than the esters, and attempts have been made to use by mouth preparations of the total seeds. In short, a new era in leprosy work has begun in the French possessions.

-ET. BURNET.

GRIZAUD. Quelques réflexions sur une léproserie de l'Atlantique (la Désirade, Guadeloupe). [On the Désirade leprosarium.] Ann. Méd. et Pharm. colon. 31 (1933) 551.

The Désirade leprosarium is a segregation institution. In spite of the improvements that have recently been made, in the minds of the medical authorities it is condemned. All the French colonies are now entering the new regime of leprosy prophylaxis.

—Et. Burnet.

Leger, M. La lèpre dans nos colonies tropicales d'Amérique. [Leprosy in our American tropical colonies.] Rev. prat. Mal. Pays chauds. 14 (1934) No. 2.

The author recounts the history of leprosy in Martinique, Guadeloupe and French Guiana, which he knows personally; the failure of the old segregation, which allowed the disease to extend; and the introduction of modern prophylaxis.

—Et. Burnet.

Tisseuil, J. Syndrome lépreux chez les malades contaminés à l'âge adulte.
[Syndrome in cases infected as adults.] Bull. Soc. Path. exot. 27 (1934)
215.

The clinical aspect of persons infected in adult life is characteristic. The face is a little swollen, with plaques of dark tint; there are macules, not numerous, on the trunk; areas of anesthesia occur on the extremities. The cubital nerves seldom hypertrophy, and bacilli are found only at a rather advanced stage of the disease.

—ET. Burnet.

BOURRAT, E. AND TALEC, D. L'huile d'Hydnocarpus Wightiana et son administration par voie buccale. [H. wightiana oil by mouth.] Rev. Méd. et Hyg. trop. (1933) Nov.-Dec.

This is an interesting contribution to the use of chaulmoogra oil by mouth. The authors use an oil which is not more than 2 to 3 per cent acid (as oleic), and give it as an emulsion. Two formulas are used, both containing the oil, gum arabic and simple syrup; in one the quantities used are 100, 60, and 200 gm., respectively, and in the other 200, 90 and 250 gm; in both formulas these ingredients are lixivated in roasted coffee, sufficient to make 1,000 cc.; 10 cc. thus contains 1 or 2 gm. of the oil. The dose is increased progressively and the patients will tolerate as much as 30 gm. of emulsion. A table is given summarizing a dozen cases. The first results are encouraging, especially in nodular leprosy.

—Et. Burnet.

André, Z. and Labernadie, V. Essais de traitement de la lèpre et de la tuberculose par des injections intraveineuses d'huile de chaulmoogra. [Treatment of leprosy and tuberculosis by chaulmoogra intravenously.] Bull. Soc. Path. exot. 26 (1933) 1236.

The authors used *H. wightiana* oil, pure or neutralized; 728 injections were given without any local or general reaction and with notable therapeutic effects.

—Et. Burnet.

FERON, J. Action d'un complexe cupro-cinnamique sur quelques manifestations de la lèpre en Ethiopie. [Effects of a cupro-cinnamic compound on certain manifestations of leprosy in Ethiopia.] Bull. Soc. Path. exot. 27 (1934) 120.

— AND LANCIEN, A. L'association du radical cinnamique et du cuivre dans le traitement de la lèpre. Compt. rend. Acad. Sci. 195 (1934) Feb. 5.

Four thousand injections of the compound referred to were made without accident. There was improvement of sensory disturbances and the general condition, but no effect on the advanced nodular cases.

—Et. Burnet.

Delanoë, E. Traitement mixte de la lèpre tubéreuse chez une femme marocaine.
[Mixed treatment of a nodular case in a Moroccan woman.] Bull. Soc.
Path. exot. 27 (1934) 127.

The author employed simultaneously novarsenobenzal, chaulmoogra oil and solganal.

—Et. Burnet.

TISSEUIL, J., AND GILLIER, R. Inoculation testiculaire de la lèpre humaine au rat. [Testicular inoculation of human leprosy in the rat.] Bull. Soc. Path. exot. 26 (1933) 1134.

The bacilli remained for very long periods, but never caused a generalized infection (contrary to the old experiments of Bayon).

—Et. Burnet.

LÉPINE, P. AND MARKIANOS, J. Sur la perméabilité de l'intestin du jeune rat au bacille de la lèpre humaine. [Permeability of the intestine of the young rat to the human leprosy bacillus.] Compt. rend. Soc. Biol. 112 (1933) 19.

Young rats, were fed human leprosy bacilli in milk; 48 hours afterward there was in the dejecta a veritable intestinal discharge. Following this, bacilli were found in the lymph nodes related to the intestinal canal in the rats 2 to 3 weeks old, not in adults. The passage occurred only through the upper third of the intestinal tract. The authors conclude that the intestine is permeable to the bacilli in sucklings, and that this is a point in support of the view held by some that leprosy is often contracted in the first years of life by the digestive tract.

—Et. Burnet.

Lépine, P., Markianos, J. and Bilfinger, M. Essais d'adaptation du bacille de Hansen à l'organisme du rat blanc. [Attempts to adapt the Hansen bacillus to the white rat.] Bull. Soc. Path. exot. 27 (1934) 373.

The bacilli, obtained from lepromas, were injected together with powdered glass into the peritoneum, and with olive oil under the skin, the purpose of these substances being to lower the general resistance. The authors found that the bacilli multiply for 9 to 12 months, and that 4 or 5 successive passages are possible. The virulence of the bacilli decreases gradually and their tinctorial properties are profoundly modified, blue-staining forms appearing.

-ET. BURNET.

Berny, P. Effet comparatif de l'iode sur le rat sain et sur le rat lépreux. [Effects of iodine in healthy and leprous rats.] Bull. Soc. Path. exot. 26 (1933) 1237.

Leprous rats are three times as sensitive as healthy rats to potassium iodide. The largest doses that are tolerated are 0.01 gm. per 6 gm. of weight in the case of the healthy animals, and 0.01 gm. per 15 gm. (0.004:6) in the leprous rat. With equal doses the toxicity seems to depend on the degree of the infection.

—ET. BURNET.

LAIGRET, J. Reproduction de la lèpre murine chez le cobaye et chez le lapin, traités par un extrait acétonique de bacilles tuberculeux. [Production of rat leprosy in guinea pigs and rabbits treated with acetone extracts of tubercle bacilli.] Compt. rend. Acad. Sci. 196 (1933) 1468.

The author has repeated with leprosy the experiments that Calmette made with tuberculosis. In the rabbits voluminous caseous nodules appeared toward

-J. LOWE.

the twentieth day. In one of two guinea pigs there was, on the 7th day, a nodule at the point of inoculation; on the 12th day, after four injections of the acetone extract, there were enlarged inguinal lymph nodes; in both of these lesions there were acid-fast bacilli, not degenerated. In the second guinea pig, killed on the 22nd day, there were a local caseous lesion full of bacilli and enlarged inguinal nodes without bacilli; there were no bacilli in the viscera. It is concluded that there was a beginning of generalization due to the acetone extract.

—ET. BURNET.

GILLIER, R. AND TISSEUIL, J. Essais de traitement de la lèpre du rat (3° série). [Treatment of rat leprosy.] Bull. Soc. Path. exot. 27 (1934) 189.

Leprous extracts are harmful. Tuberculous extracts, methylic and acetonic, have a better effect. Cobalt sulphate, ammonium sulphate, titanium oxalate, potassium oxalate, nickel chloride, cadmium chloride, caused abatement of the malady. Sodium tungstate was much inferior.

—Et. Burnet.

Bernard, P. Leucocytes et bacilles de Stefansky dans le péritoine du rat et du cobaye. [Stefansky bacillus in the peritoneum of the rat and guinea-pig.] Bull. Soc. Path. exot. 27 (1934) 12.

Intraperitoneal injection of the bacillus of rat leprosy into the rat causes an enormous exudation of lymphocytes. In the guinea-pig the lymphocytes after 4 to 24 hours give place to polynuclears, and these later are replaced by mononuclears. The bacilli have a toxic effect on the polynuclears, causing pycnosis of the nuclei; the large mononuclears take up the bacilli, often with the polynuclears which contain them.

—Et. Burnet.

Bernard, P. Localisation des bacilles de Stefansky injectés dans la veine du rat. [Localization of Stefansky bacilli injected intravenously in the rat.] Bull. Soc. Path. exot. 27 (1934) 117.

The bacilli are found in the Kupfer cells of the liver, where they are destroyed in about 24 hours. In the spleen they are captured by the macrophages of the peripheral venous sinuses. The lung, the kidney and the brain do not retain them.

—ET. BURNET.

Berny, P. Echec de la transmission aux lapins et aux cobayes des bacilles de la lèpre des rats. [Failure of transmission of rat leprosy to rabbits and guinea-pigs.] Bull. Soc. Path. exot. 27 (1934) 717.

After injection of Stefansky bacilli into rabbits and guinea-pigs the animals were treated with acetone extracts of the Koch bacillus. Abscesses formed, but there was no multiplication of the injected bacilli.

—Et. Burnet.

Muir, E. A suggested descriptive notation of leprosy cases. Lep. in India, 6 (1934) 72.

The author proposes a scheme based on seven important features, namely; (1) the resistance as shown by the leprolin test, (2) the area of skin affected, (3) the bacillary concentration in the lesions, (4) the degree of thickening of the skin, (5) the degree of thickening of nerves, (6) deformities, and (7) the sedimentation index. The findings in these respects are represented in the author's scheme by a series of letters and figures, rendering possible to these familiar

with the scheme concise description of cases.

Muir, E. Enlargement of the male breast in leprosy. Patna Jour. Med. 9 (1934) 167.

The author describes and illustrates a severe case of cutaneous leprosy in a male who showed marked enlargement of the breasts apparently associated with chronic leprous inflammation of the testes. This condition is common in India.

—J. Lowe.

CHATTERJI, S. N. Decapsulation of thickened nerve. Lep. in India, 6 (1934) 132.

The author reports good results in the treatment of leprous neuritis, and in prevention of trophic lesions, from surgical removal of the sheath from the affected portion of the nerve. This procedure has been used particularly in the ulnar and common peroneal nerves.

—J. Lowe.

CHATTERJI, S. N. Differential diagnosis between nodules of leprosy and neurofibromas. Urol. and Cutan. Rev. 38 (1934) 722.

The author states that though neurofibroma is sometimes mistaken for leprosy it is more common for leprosy with reacting nodules to be mistaken for neurofibroma, the greatest difficulty in diagnosis being when there are subcutaneous nodules. A few illustrative cases are cited, and the differential points are tabulated:

## NEUROFIBROMA

Initial lesion a nodular growth.

Nodules develop slowly and gradually.

No pain in nodules.

No inflammatory zone about nodule, Cutaneous nerves may be thickened and beaded, indicating fibromatous growth; not tender.

No fever.

Tumor sometimes pedunculated; may be soft enough to invaginate on pressure; growth progressive, never retrogressive.

Smears negative for Myco. leprae.

## LEPROSY

Usually an anesthetic lesion. Usually result from reaction, onset more

Present, at least at onset, the degree depending upon acuteness.

Present in varying degrees.

or less acute.

Same; usually tender; beading indicates formation of nerve abscesses.

May be fever with the reaction.

Nodules never pedunculated; never so soft unless suppurating; may appear and disappear irrespective of treatment. Myco. lepras numerous.

—н. w. w.

Muir, E. and Chatterji, K. R. The Bankura Leprosy Investigation Center. Lep. in India. 6 (1934) 128.

This paper describes antileprosy work on the basis of local antileprosy committees in a rural area, the people cooperating to establish leprosy clinics, to trace cases of the disease, and to secure isolation of infectious cases outside the villages or else in the patients' own homes.

—J. Lowe.

Muir, E. and Chatterji, K. R. Factors influencing the spread of leprous infection. Indian Med. Gaz. 69 (1934) 495.

This paper discusses some of the epidemiological findings of the Bankura Leprosy Investigation Center, based on the results of examination of whole populations of villages and groups of villages and attempts to trace the spread of infection. The hypothesis is advanced that the results of exposure to infection depend on the age at which exposure occurs, and the closeness of contact and the degree of infectiousness of the case. Exposure to moderately infectious cases in childhood is often followed by the development of leprosy in its progressive infective forms, whereas similar exposure in later years is followed by the development of the milder non-infectious forms of the disease, or else the disease does not develop at all. The history of leprosy in six different families is examined; the results are in keeping with this hypothesis. The authors realize the limitations of investigations of this type, where much of the evidence is based on the answers of village people to questions, but they believe that this type of investigation is of definite value. They also believe that if the views advanced are corroborated, the control of leprosy can best be brought about by isolation of infectious cases from children and young people.

-J. Lowe.

RODRIGUEZ, J. Care and management of the children of lepers. Jour. Philippine Islands Med. Assoc. 11 (1931) 484.

The author, as a result of a study of children of leprous parent developing the disease, concludes that such children who are separated from their parents after the age of 6 months should be kept under close observation for a period of at least five years, because a number of them are bound to become leprous; that the longer the period of exposure the higher the percentage so affected; and that drug treatment of children with suspicious lesions does not seem to be effective in preventing the development of the disease among them.

-J. O. Nolasco.

Rodriguez, J. Studies on early leprosy in children of lepers. II. Re-examination of cases after five years. Philippine Jour. Sci. 47 (1932) 245.

The author, continuing a study made in 1924 on 395 children born of leper parents at Culion, found in 1929 that 56 had died and 62 could not be traced. Of the 283 remaining, 81 had developed leprosy but 50 of them had been paroled, leaving 32 still leprous; 106 had been discharged to the care of relatives and 90 (including 5 "arrested", paroled cases) were under observation at the welfare asylum in Manila. Of the last group 13 had suspicious lesions. A marked diminution had been noted, since 1926, in the number becoming positive bacteriologically; this was especially attributed to early separation from the parents. Chaulmoogra treatment is claimed to be ineffective in the "suspicious" and early "clinical leper" stages. The term "Nicolas" sign" is proposed for a suspicious flushed, tense and shiny condition of the front of the legs in infants less than 2 years old.

—J. O. Nolasco.

RODRIGUEZ, J. Leprosy in Cebu, I. Philippine Jour. Sci. 45 (1931) 459.

The author gives an account of the geography, population and climate of the island of Cebu, and a brief history of leprosy there. The theory of Rogers that there is a close relationship between prevalence of leprosy and heavy rainfall is not borne out, Cebu being one of the driest islands in the Philippines. A certain correlation between density of population and prevalence of the disease is thought to have been found.

—J. O. Nolasco.

RODRIGUEZ, J. Leprosy in Cebu, II. Philippine Jour. Sci. 53 (1934) 1.

A survey of 310 control households (1,817 persons) and 213 "leper" households (1,313 persons) was made in the municipalities of Cebu and Opon. Occupation, literacy, housing, overcrowding, amount of vegetation, sanitary conditions (water supply, cleanliness, frequency of bathing, use of soap, and sewage disposal), size of family, family income, diet, and mortality were among the points considered. The author concludes that the leper households as a rule had better homes, which were not as crowded together as the controls, but that there was more overcrowding within the houses themselves and that the leper families were larger than the controls; that the leper houses had less vegetation about them than the controls; that the leper households had, on the average, drinking water of better sanitary quality and also safer means of sewage disposal than the controls but that the people were dirtier both as to surroundings and with regard to their persons, indicated by less frequency of bathing among them; that the family income was about the same in the two groups; that the leper households tended to eat more rice, which is more expensive than corn, and less vegetables and fish, but that they tended to eat more raw shell-fish and fish. The disease was not associated with any particular occupation. The proportion of illiterates among the lepers was not different from that of the general population of corresponding age and sex. It was possible to obtain an authentic history of contact with a previous case of leprosy in 80 per cent of the "positive" lepers; in 44 per cent of these cases the source of infection had lived in the same household. Among the "closed" cases the source could be traced in only 68 per cent, and in only 3 per cent had the source lived in -J. O. Nolasco. the same house.

RYRIE, G. A. The use of fluorescein in lepra reaction. Lep. Rev. 5 (1934) 12.

The intravenous injection of 10 cc. of 2 per cent of fluorescein, twice weekly, in the treatment of lepra reactions is reported on. Out of 31 cases so treated 13 recovered from the reaction stage after one or two injections, and in 15 more the fever declined by lysis after three to six injections. Ordinarily the reaction may go on for days or months and terminate either by lysis or crisis.

-L. Rogers.

RYLES, G. S. Brilliant green and crystal violet in the treatment of leprosy. Lep. Rev. 4 (1933) 113.

The writer states that reports on the antiseptic effects of brilliant green, and its combination with crystal violet to form "Bonney's blue," led him in 1932 to try these dyes intravenously in leprosy. Brilliant green was first used intradermally in strengths of 1 in 10,000 up to 1 in 2,500 in normal saline, usually in doses of 5 to 8 cc. Twenty patients received the dye on one side and hydnocarpus oil on the other, and later one-half of the patients were treated by each method. The dye was no more painful than the oil, but it may be combined with 1 per cent novocaine. The immediate effects were much the same with both methods.

—L. Rogers.

Moiser, B. Treatment at the Ngomahuru Leprosy hospital. Lep. Rev. 4 (1933) 149.

The writer gives his conclusions after four years of treatment work in Rhodesia, the results of which have proved most encouraging. At first the routine treatment was alepol, 6 per cent, given in doses 1 to 10 cc. intramuscularly twice a week; it effected some remarkable "cures" in such full doses but it is painful. The iodized esters are painless and can be given in doses up to 5 cc. with good results, but they are expensive. Microscopic examinations should be made every three months. As a rule Moiser's patients are not discharged until continuously negative results have been obtained for two years, and 260 have been so discharged in four years, but they required to be better followed up.

—L. Rogers.

Roy, A. Some problems of surgery in a leper colony. Lep. Rev. 5 (1934) 73.

The writer advocates, in addition to the usual bone operations, amputations by Syme's and other methods to remove the disabilities of crippled lepers.

-L. Rogers.

Kyrie, G. A. Leprosy in the Federated Malay States. Lep. Rev. 4 (1933) 138.

This is an abstract of the 1932 report on the federal leprosy settlement at Sungei Buloh, Federated Malay States, where the law requiring segregation of every leper "is carried out fairly strictly." The inmate population varied from 996 to 1,082; 91 cases were discharged as being not dangerous to the public after at least six months observation and at least three microscopic and clinical examinations. Alepol intravenously was not found to be efficacious, and the esters intradermally gave the best results. Mercurochrome intravenously in doses of 5 to 10 cc. of a 2 per cent solution often produced a striking effect in lepra reaction, and 10 to 20 cc. of calcium glucinate, which is non-irritating, or of eosin or fluorescein intravenously, were also of use in controlling reactions. The article concludes with the statement that there is a good deal less cynicism about treatment and a more hopeful atmosphere generally.

—L. Rogers.

Sharp, L. W. S. Leprosy in Uganda. Lep. Rev. 4 (1933) 151.

The most heavily infected areas of Uganda are the Teso and Susoga districts of the Eastern Province, and Kigezi in the extreme south-west, 400 miles from the former, with the comparatively free kingdoms of Buganda and Ankole between them. In Kigezi the leprosy rate is possibly about 8 per mille, with over 20 per cent of nodular C3 cases, which indicates a very heavy infection. A male leper commonly infects his wife and children, and a female one becomes a dangerous vagrant. The disease is believed to be increasing rapidly, with most of the inhabitants of some villages infected. Quarantine camps, treatment at dispensaries and hospitals have been tried, but the writer considers that the best plan is the voluntary leprosy colony, such as the C.M.S has established recently at Bunyonyi, Kigezi, with 300 resident cases. The patients raise their own food and become more or less self-supporting within six months. The results of twelve months trial of treatment in only a part of the patients, with the others as controls, did not show any marked results, so general care of the

patients and improved diet are considered to be the most important factors in bringing about such improvement as was noted.

—L. Rogers.

Phipson, E. S. Aden and its leprosy problem. Lep. Rev. 5 (1934) 4.

As the only civilized area in Southern Arabia, Aden attracts lepers from a wide area, and they have long been treated at a mission hospital. In 1923 a leper ward was organized by the government and was improved in 1929 to hold 25 cases. However, 30 have had to be turned away for lack of room, so the drift of Arabian cases to Aden may develop into an important problem.

-L. Rogers.

COCHRANE, R. G. Leprosy in India and Ceylon. Lep. Rev. 5 (1934) 28 and 64.

The first part of this paper deals with a tour in India, where it is still being found that the number of cases is far greater than previously thought, especially early cases that were formerly overlooked. At the All-India conference in Calcutta the preventative aspects of the problem were especially discussed. In the second part he reports on an inquiry into the leprosy problem in Ceylon, where an attempt is still being made to enforce rigid compulsory segregation of all lepers, either in institutions or in their homes. This he points out is unsatisfactory in the infective stage and unnecessary in other cases, for the majority of the admissions are late infective ones, who will have passed on the disease to others before being isolated. Children are especially affected, for in the Colombo schools three per mille were found to be infected. He therefore advises modification of the law, with (1) a medical leprosy board to decide on the isolation and discharge of cases; (2) tracing of contacts; (3) voluntary isolation of cases coming forward for examination; (4) surveys, propaganda and early treatment; (5) isolation of infective ones.

-L. Rogers.

Brown, A. K. The leprosy colony, Uzuakoli, Southern Nigeria. Lep. Rev. 5 (1934) 36.

This is the first annual report of this colony, covering 1932, when much of the work was preliminary and experimental. Within three weeks of opening there were 200 patients in the temporary camp, and the building of separate townships for the men and women was begun. Most of the cases were too advanced for satisfactory treatment, but divisional officers later recommended fairly early cases for admission, and at the end of the year there were 62 early, 199 advanced but able-bodied, and 128 advanced and disabled patients, a total of 389. From adjacent towns 98 out-patients also came for treatment. Labor is encouraged and paid for, and much building and planting of food-producing crops has been done. It is too early to say much about treatment, but the majority of the early and the able-bodied advanced cases show some improvement.

-L. Rogers.

ROGERS, L. History of the foundation and first decade's work of the British Empire Leprosy Relief Association. Lep. Rev. 5 (1934) 54 and 108.

This itself is an abstract of ten years work and should be read by any interested.

—L. Rogers.

CHIYUTO, S. AND VELASCO, F. Observations of seven hundred fifty-eight quiescent, or arrested cases of leprosy released from isolation. Jour. Philippine Islands Med. Assoc. 11 (1931) 457.

The authors tried to follow up 758 quiescent and arrested cases released from isolation on parole from 1922 to 1930; 338 of these were not traced, leaving 420 (55.5 per cent) available for study. Of these, 225 (53.6 per cent) had remained quiescent for periods ranging from less than 1 year to over 8 years, and 195 (46.4 per cent) had again become active cases of leprosy. In 361 cases in which the duration of treatment before parole was analyzed it was found that this did not seem to have any relation with the frequency of relapse. The authors suggest increasing the pre-parole period and the establishment of an agricultural colony for released cases.

—J. O. Nolasco.

Chiyuto, S. Is the histamine test valuable in the diagnosis of early leprotic macules? Mo. Bull. Philippine Health Serv. 12 (1932) 628.

The author tried the histamine test in 30 individuals, including a group of clinical lepers (all children of leprous parents), two relapsed cases, and a few moderately advanced clinical lepers. Thirty-four tests were made and correlated with biopsies of the skin lesions. It was found that 14 histologically tuberculoid lesions were all positive to histamine, while of the 20 showing only perivascular infiltration 17 were negative. In the 3 that were positive anesthesia was elicited. It is concluded that the histamine test has only a relative value, being positive when tuberculoid changes have taken place or the area is anesthetic but that it is not dependable in the early stages when there is only perivascular infiltration without neurological changes.

—J. O. Nolasco.

Manalang, C. II. Epidemiology of leprosy. Mo. Bull. Philippine Health Serv. 12 (1932) 452.

The author analyzes the opinions of different leprologists concerning the epidemiology of leprosy, pointing out the defects in the present knowledge of its spread. It is claimed that race, geography, climate, environment, occupation, diet and sex have no relation with the matter; that blood relationship is very important; that age is of extreme importance, the disease being contracted in infancy or early childhood in the home, the adult being immune; that institutional infection in adults have not been proved scientifically; that records of the spread of leprosy in certain places are unscientific and not trustworthy; that leprosy failed to spread in Minnesota because most of the lepers who emigrated there were males; that the endemicity of leprosy is largely dependent on the number of lepers (or unrecognized bacteriologically negative cases) taking care of infants, particularly the fertile female.

—J. O. Nolasco.

ATKEY, F. H. La fréquence de la lèpre dans le Soudan en relation avec le climat et le régime alimentaire. [Leprosy in the Sudan in relation with climate and diet.] Bull. Off. internat. Hyg. publ., 26 (1934) 490.

This is a study of the Anglo-Egyptian Sudan as regards race, altitude, and the economic life of the population. The factor which seems the most important in explaining the frequency of infection in this region is the lack of milk in the dietary, which is related to the absence of cattle in the tsetse fly region. [From abstract Bull. Inst. Pasteur 32 (1934) 726. See article in this JOURNAL 2 (1934) 193.]

Downes-Shaw, A. Observations on leprosy in Teso. East African Med. Jour. 10 (1934) 306.

The author has enumerated 3,000 cases of leprosy in the Teso district. Of these, 600 have been examined and 300 treated during a period of some 18 months. [From abstract Bull. Inst. Pasteur 32 (1934) 725.]

CAMPENHOUT, E. VAN. La lutte contre la lèpre au Congo belge. [Antileprosy work in the Belgian Congo.] Bull. Off. internat. Hyg. publ. 26 (1934) 497.

In the Népoko region of the Belgian Congo (north of the equator) there were found 4,600 cases among 450,000 inhabitants. The author believes that to place the lepers in agricultural villages is the best method available at present to combat the disease in endemic regions. [From abstract Bull. Inst. Pasteur 32 (1934) 726.]

YAMAMOTO, H. AND HARADA, S. A statistical observation on leprosy in the past 24 years in the skin department of the Osaka Imperial University. La Lepro, 4 (1933) 39.

In the dermatological clinic of the University of Osaka, from 1909 to 1932, a total of 104,350 patients were seen, among whom there were 2,665 with leprosy (2.55 per cent). Of these 2,039 were men and 626 women (1:3.25). The age distribution was: 11 to 20 years, 19.1 per cent; 21 to 30 years, 34.7 per cent; 31 to 40 years, 21.0 per cent; over 50 years, 11.7 per cent. Macular leprosy was the most frequent, 60.3 per cent; then nervous, 26.0 per cent; nodular, 6.7 per cent; mixed, 6.5 per cent; and mutilating 0.5 per cent. The first manifestations were in the arms in 33.9 per cent, legs 27.1 per cent, face 27.4 per cent, thorax 6.7 per cent, neck 2.2 per cent, and head 2.1 per cent. [From abstract Bull. Inst. Pasteur 32 (1934) 726.]

Baliña, P. L. Lucha antileprosa en la Argentina. [Antileprosy campaign in Argentina.] Buenos Aires, 1934, pp. 16.

This pamphlet, and a second, anonymous one, are not scientific but are interesting because they indicate the progress of antileprosy activities in the Argentine. In resumé, it has been decided to construct seven asylum-colonies. One is that at Cerrito, started long ago but delayed in opening by political influences. Construction has been started on one at Posadas in the Province of Misiones. Appropriations have been made for one in the Province of Cordoba, and for that of General Rodrigues, Province of Buenos Aires. This progress has been due in large part to the energy of Professor Baliña and the Society of Dermatology and Syphilology of Buenos Aires. [Texts of resolutions on the subject are published elsewhere in this number of the JOURNAL.]

-ET. BURNET.