# LEPROSY NEWS

Information concerning institutions, organizations and individuals connected with leprosy work, scientific or other meetings, legislative enactments, and other matters of interest.

# REPORT OF MEETING

REPORT OF THE LEPROSY CONFERENCE HELD AT BATAVIA, FEBRUARY 187H, 1936

(Conclusion)

In the discussion it was pointed out that with such widely varying forms as had been observed one had to exercise the utmost care. Diphtheroids have been incorrectly regarded as the cause of various diseases, including yellow fever. One member believed that some of the demonstrated bodies were epidermal blastomycetes, and was convinced that all the observations indicated are based upon impurities. This material is to be investigated further in conjunction with the Lepra Institute.

were examined for leprosy, cutaneous diseases, eye affections, avitaminosis, and swelling of the lymphatic glands. The blood and nasal secretion were examined for leprosy bacilli, and the Wassermann, Kahn, serum-formalin, and Takata tests were made. The investigation is not yet concluded, but there are indications that the Takata-Ara reaction should not be neglected in the epidemiological investigation of leprosy.

py, formerly a preferred subject, was not brought up for discussion. One speaker reported on an investigation into the value of a combined alepol-tuberculin treatment given to lepers at Laoesimomo (Sumatra). The theoretical basis was the idea that chaulmoogra oil would particularly attack the acid-fast stage of the leprosy virus, while the tuberculin would cause the formation of antibodies that would tend to destroy the Much-positive but nonacid-fast organisms.

The tuberculin was given in four series, injections made once a week, the dose rising from 1/1,000,000 to 1/1,000 cc. in 31 injections. After a rest period of several months a second course was given, during which the dose rose to 1/500 or even higher. During each course alepol injections were given three times a week. This treatment was applied to 101 patients, 29 taking the full double course, and 82 a single course only. The results appear to be hopeful, although all the patients so treated did not improve, and it is not yet known whether relapses will occur. The psychic condition of the patients improved considerably.

Causes of death and visceral infection.—The pathology of leprosy was discussed by but one speaker, who gave a report of 225 autopsies on patients from a leprosarium near Sourabaya, performed between 1923 and 1934 in the Pathological Department of the Medical College at Sourabaya. The causes of death were specified as follows:

Tuberculosis	61	27.5 percent
Pneumonia	39	17.3 percent
Leprosy	20	8.9 percent
Dysentery	19	8.4 percent
Nephritis	18	6.2 percent
Cirrhosis of the liver	11	4.9 percent
Endocarditis and myocarditis	10	4.4 percent
Beriberi	7	3.1 percent
Other causes	31	15.3 percent
Findings unsatisfactory	9	4.0 percent

Here, as elsewhere, tuberculosis heads the list, without including 19 other cases (8.4 per cent) in which it was present but not regarded as the cause of death. However, this frequency does not exceed that for nonlepers autopsied in Sourabaya, which does not agree with the principal returns quoted in the literature. Attention was directed to the low number of deaths due to nephritis (6 percent). The autopsies dealt with were on lepers who had not undergone intensive treatment. The number of deaths due to leprosy as such, including the cases in which the skin was greatly affected with extensions of the specific process to the liver and the spleen in the absence of other abnormalities, is relatively high.

With regard to the visceral abnormalities, attention was drawn to the absence of specific macroscopic or microscopic affections of the esophagus, lungs, stomach, intestines, pancreas, bladder and the female sex organs, which agrees with usual findings elsewhere. No abnormalities were found in the brain; the spinal cord was not examined.

In the organs that do exhibit leprous affections, there was orchitis fibrosa et leprosa in 73 men (38 percent), lepromata in the liver of 87 individuals (39 percent), lepromata in the spleen of 46 (20 percent) and leprosy of the larynx in 59 (27 percent). The male sexual glands were not examined microscopically in all cases, which accounts for the difference from the results of other investigations. Lepromata in the liver and spleen, the most characteristic and most frequent leprotic abnormalities in the inner organs, are always recognizable with the naked eye if one has learned to distinguish them; microscopically they are characterized by the lipoid-containing Virchow's giant cells. Tuberculoid leprosy of the inner organs does not exist.

With regard to the larynx, the investigation had as yet been confined to the macroscopic changes. Leprotic affection of this organ always starts at the epiglottis, which is greatly thickened by leprous granulation tissue in the mucous membrane of its unattached side at the back. In its most distinct form the epiglottis is slightly

See communication in THE JOURNAL 4 (1936) 102.

enlarged, its edge has become much thicker, and this increase of thickness continues on the back of it up to the region of the petiolus. No ulcers whatever appear and the vocal chords remain normal. If this laryngeal affection is present (in corpses one must be careful not to confuse it with edema of the glottis), the diagnosis definitely points to leprosy. In cases where the differential diagnosis with certain tuberculous skin affections (sarcoid of Boeck, erythema induratum of Bazin) presents difficulties, a laryngological investigation may be of considerable assistance.

Culture experiments (rat leprosy).—The investigations with regard to rat leprosy and other animal diseases resembling leprosy (buffalo leprosy) carried out at Batavia and Buitenzorg for several years, were not discussed except for a few remarks on unsuccessful culture experiments in rat leprosy.

Acid-resistant micro-organisms were isolated on Loewenstein's medium out of the subcutaneous lymph nodes of 200 wild rats with rat leprosy, and out of the subcutaneous closed granulations of 30 white rats with experimental rat leprosy or "soil-leprosy" in 20 percent of the cases. Cultivation studies and animal experiments proved them to be saprophytes, probably from the skin. Similar cultures were isolated by Söhngen's method from all of thirty mud samples, with which it was found possible to produce "soil leprosy."

A point of discussion was the question whether cultures of bacilli from human leprosy should be controlled by animal test before a definite statement with reference to the nature of the culture is justified. The lecturer seemed opposed to the continuation of culture experiments in human leprosy where an animal test is impossible, but favoured experiments in rat leprosy with the animal test control, thus to obtain indications that might lead to getting a culture from the causative agent of leprosy in man.

Final remarks.—Most important is the turning point in the views of leprologists in the Netherlands Indies, indicated by the considerable preponderance of discussions on the endemiological and etiological aspects of leprosy. Leprosy therapy receded into the background. While the philanthropic interest in the sufferers from leprosy is being retained, nevertheless the strictly scientific interest in the leprosy problem is constantly increasing.

The urge to investigation, which obviously results from doubts brought out in the discussions, will ultimately bear fruit. The fact that this first Netherlands Indian Leprosy Conference was held in the newly founded Institute for Leprosy Research may be regarded as an indication that its energy will be expended, not in isolated activity, but in cooperative work.

Among the positive features—though they are not all original may be mentioned the motivation for investigating the circumstances

<sup>5</sup>Published in Geneeskundig Tijdschr. v. Ned. Indie 76 (1936) No. 35.

and relative conditions in regions with much and with little leprosy, the study of the endemiological aspect of leprosy foci, the probably great significance of outdoor infections, and the doubt concerning an exclusive transmission of leprosy by direct contact from man to man.

Batavia, Java Netherlands Indies DR. P. H. J. LAMPE
Director, Queen Wilhelmina Institute
for Leprosy Research

## VISIT OF LEPROSY WORKERS TO MALAYA

The increase in the numbers of lepers that in recent years have come under hospital care in Malaya has led the government there to examine the situation, especially to determine whether the procedures in vogue should be modified. In this connection it invited Dr. John Lowe, Leprosy Research Worker under the Indian Council of the British Empire Leprosy Relief Association at the School of Tropical Medicine, Calcutta, Dr. Robert G. Cochrane, Medical Officer of the Lady Willingdon Leper Settlement, Chingleput, Madras, and Dr. H. W. Wade, Medical Director of the American Leprosy Foundation to meet with Dr. Gordon A. Ryrie, Medical Superintendent, Sungei Buloh Settlement, Kuala Lumpur to discuss local and general problems of leprosy. This meeting was held, with the cooperation of the American Leprosy Foundation, at the Sungei Buloh Settlement from February 5th to 18th, 1937.

During this period the members of the group conferred with the Government committee on leprosy policy, met with the Kuala Lumpur and Singapore branches of the British Medical Association, and discussed at Sungei Buloh many of the general problems of leprosy and the special features of the disease seen among the Malays, Chinese and Indian patients in the Settlement. The guests were impressed with the wide variations of the disease shown by these three groups of patients, and especially with certain peculiar features seen among the Chinese. Because of the general and highly informal nature of the discussions no report of them was prepared for publication.

# THE SILVER JUBILEE FUND IN MADRAS

The Silver Jubilee celebrated throughout the British Empire was made the occasion in India for the collection of a large fund for certain welfare work throughout the country. Of the amount received from each province seventy percent was returned to the local committees. A statement as to the total amount collected has not been seen, but Madras Presidency alone collected Rs. 839,735 and

received back Rs. 587,814, of which Rs. 419,867 was to be returned to the districts. Most of the money was to be utilized through the Red Cross Society. A total of Rs. 123,450 was allotted to nineteen districts, through the health authorities, for leprosy relief work, this disease constituting one of the major problems of the country. (The report of the Surgeon-General for 1934 is said to contain the following figures for persons treated in the public hospitals in that year: syphilis 111,481, leprosy 71,184, tuberculosis 66,478.)

There arose the question of precisely how this Jubilee leprosy money should be used. The usual proposal was to open more leprosy clinics, of which the official list already showed 440. Dr. Robert G. Cochrane, meeting with the Red Cross Committee, pointed out that it was admitted that many of these clinics were ill-equipped and functioning poorly, and that experience had shown that, on the whole, country outpatient clinics had not proved effective. He gave warning that a situation was developing which might prove very harmful through discouragement of those who had expended so much effort and enthusiasm in setting up the existing system. He suggested that, instead of dissipating the Silver Jubilee funds in small amounts over a wide area for purposes of questionable ultimate value, the districts be persuaded to permit them to be concentrated on two or three strategically located clinics, properly equipped and staffed, to serve as centers for study of the epidemiology and control of the disease. Through such studies more positive knowledge than is now had would be acquired, and it might be hoped that some more effective method of proceeding toward the control of the disease might be arrived at.

This suggestion was approved and adopted by the central authorities in Madras, and the proposal was duly transmitted to the district authorities in a letter of which the following is a part:

At a special conference of anti-leprosy workers held recently at the Surgeon-General's office, it was stated that the present anti-leprosy policy needed considerable modification. In view of the findings of this committee... the special committee of experts held to consider the subject of leprosy relief urge the reconsideration of the spending of the Silver Jubilee Funds. This committee consider that the greatest amount of benefit would be obtained if all the allotments were put together and the money used to construct two central clinics for the presidency. While the Committee feel that the whole presidency would be benefited as a result of concentrated study of the disease in limited areas, they recognize that there is a considerable desire that the district allotments should be spent within the districts. Therefore, it was decided to suggest as an alternative, that each district, where the sums applied for were adequate, should build a model clinic where leprosy was prevalent, so that the Group or District Leprosy Officer may be able to make an intensive study of the disease. This would arrange a course of training for medical men and others and those in charge would guide general propaganda methods. Such a center, it is con-

sidered, would have much more valuable results than a large number of small clinics all over the country, which cannot, in existing circumstances, be properly staffed and which would entail endless touring for the Group Leprosy Officer. The problem of the control of leprosy in this country is by no means cut and dried, and more knowledge is urgently required.

The last reports seen were to the effect that at least two of the major districts had rejected the proposal, insisting on establishing more "treatment sheds." One statement published was to the effect that the idea of the local committee in collecting the funds and planning its expenditure was to open a large number of clinics to treat suffering people, and not to enable an intensive study of the disease to be made by experts.

On the other hand, the district committee of Saidapet, near Madras, decided to establish a research clinic, where it is planned to pay special attention to the incidence and nature of the disease among children, though this was subject to the condition that the government or some other agency undertake to pay the recurring expenses for staff and supplies. In Madras City, according to latest reports, it was proposed that part of its allotment from the Jubilee fund be used to construct additional quarters for 100 patients at the Lady Willingdon Settlement, near Chingleput, for the exclusive use of cases primarily from the city.

## REVISTA DE COMBATE Á LEPRA

A new leprosy journal, the Revista de Combate á Lepra, has appeared in Brazil. This publication is the official organ of the Federação das Sociedades de Assistencia aos Lazaros e Defeza Contra á Lepra, and is intended particularly for popular propaganda. The first issue, dated as of September, 1936, contains three short articles: Da infancia á maioridade, by Prof. Ed. Rabello; Como se combate a lepra no Espirito Santo, by Dr. H. C. de Souza-Araujo; and Impressões sobre a Lepra no Ceará, by Dr. A. F. Rodriguez de Albuquerque. Fifty-two of its sixty-six pages are devoted to a considerable variety of miscellaneous matter. The publication office is the Palace Hotel, Room 534, Rio de Janeiro.—H. C. de S. A.

# CENTRO INTERNACIONAL DE LEPROLOGIA COURSE ON LEPROLOGY FOR 1936

POSTGRADUATE LECTURES IN CONNECTION WITH THE UNIVERSITY OF RIO DE JANEIRO UNDER THE DIRECTION OF PROF. ED. RABELLO

The following syllabus of the course given recently at the International Leprosy Center in Rio de Janeiro is a somewhat condensed form of a translation from the Portuguese by Dr. H. C. de Souza Araujo. The course, announced as especially designed for the preparation of technical workers for the public health services, opened on July 13, 1936, and was intended to end on October 15, but it actually required a month more than that to complete it. Eighty-six doctors and medical students enrolled for the course, for which there was no charge.

INAUGURAL LECTURE: Present state of the leprosy problem in Argentina.—
PROF. PEDRO L. BALIÑA.

Introduction: Leprosy and the public health; early diagnosis and treatment in prophylaxis; insufficiency of laboratory methods for early diagnosis, etc.—Prof. Ed. Rabello.

#### A. PROPEDEUTIC DERMATOLOGY WITH APPLICATION TO LEPROSY

1. General cutaneous symptomatology: eruptive elements, cutaneous symdromes, etc.—Dr. J. Motta. Anatomy and general physiopathology of the skin.—Dr. H. Portugal. 2. General dermatological diagnosis, methods of examination.—Dr. J. Motta. 3. Cutaneous syndromes produced by leprosy or that may be confused with it. Erythemas, dyschromias, tuberculous and nodular dermatoses, atrophies, scleroses and hypertrophies.—Dr. Rabello, Jr. Erythematous-scaly dermatoses.—Dr. B. Gonçalves. Papular and ulcerous dermatoses.—Dr. Costa, Jr. Bullous dermatoses, keratoses and hyperkeratoses.—Dr. Pereira Rego. 4. Neurology in leprosy; nervous syndromes that may be confused with leprosy.—Dr. F. MacDowell.

## B. ETIOLOGY AND PATHOLOGY

1. Etiology. Determining causes: Mycobacterium leprae, morphology, biology, cultivation and inoculation; leprosy of animals.—Dr. Souza Araujo. Accessory causes: mesological factors, race, sex, age, predisposition and previous diseases, deficient food, poor bodily hygiene, promiscuity. Sources of infection: infectious lesions, modes of emission and propagation, type of the disease. Transmission: contagion and inheritance factors of contagion, portal of entry and ways of dissemination.—Prof. Ed. Rabello. 2. Pathological anatomy.—Dr. H. Portugal. 3. Clinical study. Typical and atypical forms, tuberculoid leprosy, variations in evolution lepra reaction.-Dr. J. Motta. 4. General pathology. Incubation, distribution through the body, latency, generalization, alterations of infected tissues, toxic action, action at a distance, pathology of different stages and forms, relation of number of bacilli and histological structure, tropism of the infection, mixed leprosy, resistance, immunity and allergy and their influence in individuals and groups, prognosis and curability, causes of death.—Dr. Rabello, Jr. 5. Biochemistry.-Dr. G. G. VILLELA. 6. Laboratory diagnosis and biology.—Drs. H. Portugal AND J. MACHADO. 7. Clinical and differential diagnosis.—Dr. RAMOS E. SILVA. 8. General therapeusis of leprosy.—Prof. Aguiar Pupo. 9. Chemistry and pharmaceutics of chaulmoogra derivatives.—Drs. H. I. Cole and H. T. Cardoso.

## C. GEOGRAPHY AND STATISTICS

Distribution: in the world, in South America.—Dr. Souza Araujo. Census: methods and difficulties, epidemiological surveys and other methods, skin-diseases clinics.—Drs. Souza Araujo and A. Rodrigues.

#### D. EPIDEMIOLOGY

Ancient origin and primitive foci, expansion and decrease in Eastern Europe, transmission to other countries, Brazil. Prevalence of endemic leprosy, influencing conditions, variations in predominance of the clinical forms, comparison with epidemiology of rat leprosy, local applications.—Drs. Souza Araujo and A. Rodrigues.

#### E. PROPHYLAXIS

1. Notification, factors which facilitate or hinder.—Dr. J. Motta. 2. Early diagnosis, clinical, laboratory, biological: Difficulty of discovering recent cases, atypical forms, classification of cases.—Drs. J. Motta and H. Portugal. 3. Isolation. Methods employed, their value and advantages and inconveniences.—Prof. Ed. Rabello. Demonstration of the organization of a leprosarium.—Dr. Th. de Almeida. 4. Supervision. Lepers isolated in domiciles and attending dispensaries, contacts, suspects, children of lepers, etc.—Dr. J. Motta. 5. Prophylactic treatment, clinical cure, diminution of infecting power and importance in prophylaxis, organization of treatment, methods employed, application to isolated lepers and at dispensaries.—Dr. H. Portugal. 6. Sanitary education. Diffusion of knowledge, methods employed, instruction of doctors and nurses.—Dr. Carlos Sá. 7. Private cooperation in prophylaxis; results in Brazil.—Prof. Ed. Rabello. 8. Basis of an actual program of prophylaxis, its application in Brazil.—Prof. Ed. Rabello.

#### SPECIAL LECTURES

In São Paulo: 1. Administrative organization of the Leprosy Department in São Paulo.—Dr. Salles Gomes. 2. Technical organization of the prophylasis of leprosy in São Paulo.—Dr. Nelson de Souza Campos. 3. Laboratory researches in leprosy.—Dr. A. Martins de Castro. 4. Organization of a leprosarium.—Dr. Manoel de Abreu. 5. Experience in the therapeusis of leprosy in São Paulo.—Dr. Lauro Souza Lima. 6. Murine leprosy.—Dr. J. M. Gomes. In Rio de Janeiro: 7. Alterations of the finger prints in leprosy.—Prof. A. Aleixo.

## PRACTICAL WORK

1. Examination of lepers in accordance with a theorical program.-Drs. RABELLO, JR., B. GONÇALVES, COSTA JUNIOR AND PEREIRA REGO. 2. Demonstration of the clinical forms of leprosy.—Drs. H. Moura Costa and Ferreira Da Rosa. 3. Clinical, laboratory and biological diagnosis; early diagnosis; classification of cases.-Drs. H. Portugal and J. Machado. 4. Technique of treatment, selection of patients, chaulmoogra treatment, auxiliary medication, etc.-Drs. H. MOURA COSTA AND FERREIRA DA ROSA. 5. Technique of physiotherapy and minor surgery in leprosy.—Drs. Souza Araujo and Henrique Rocha. 6. Demonstration of the preparation of chaulmoogra derivatives.—Drs. H. I. Cole and H. T. CARDOSO. 7. Demonstration of the organization and administration of leprosaria. Individual reports by the students.—Dr. Theophilo de Almeida. 8. Technique of treatment in leprosaria. - Dr. H. Moura Costa. 9. Organization and administration of preventoria. Individual records.—Prof. Aguiar Pupo (São Paulo) AND DR. JOAQUIM MOTTA (Rio). 10. Organization of prophylactic services and dispensaries. (a) Organization and administration of the dispensaries. (b) Discovery and supervision of leprosy cases, suspects and communicants. Supervision records.-Dr. H. Portugal. 11. Epidemiological survey, system and records, analysis of cards filed in the Center—Drs. Souza Araujo and A. Rodrigues. 12. Examination of skin diseases patients for the discovery of leprosy cases.—Dr. Costa, Jr. 13. Selection of patients to be isolated in leprosaria, in domiciles, or to be treated in dispensaries.—Dr. H. Portugal. 14. Treatment of non-bacillary cases and, conditionally, of bacillary ones under supervision and of those isolated at home. Individual records.—Dr. H. Portugal. 15. Practice of individual and collective sanitary education.—Dr. Carlos Sá.

The practical work referred to above will be done in the Clinica Dermatologica of the Faculty (Pavilhão São Miguel), the Hospital-Colonia de Curupaity, the dispensaries of the Health Centers and the preventoria Santa Therezinha (São Paulo), and Abrigo Feliz. An excursion will be made to São Paulo for demonstration of the organization of leprosy prophylaxis in a State; and other demonstrations and conferences will be held there.

For the realization of this program, the cooperation of the Departamento de Prophylaxia da Lepra of São Paulo, the Institute of Hygiene, the Cadeira de Clinica Dermatosyphilographica of the Faculty of Medicine, and the Asylo Santa Therezinha of São Paulo has been obtained.

The pupils who attend two-thirds of the lectures and of the practical work will be permitted to take an examination, and those who demonstrate their ability will receive a certificate of attendance and ability. There is a large probability that these certificates will be sufficient to permit the candidates to act as specialists in leprology in the technical services of the Directoria Geral de Saúde and Assistencia Medico-Social.

#### MASSACRE OF LEPERS

Early in April the international news agencies in China reported that on the morning of Easter Sunday some sixty lepers had been assassinated in cold blood at Yeungkong, a city in Kwangtung, South China, located on the coast about half-way between Hong Kong and the Luichow Peninsula. The lepers so disposed of were inmates of a settlement that was established outside the city some twenty years ago by the American Presbyterian Mission. During recent months there had been reports of a number of smaller incidents of the same nature in Kwangtung, but reliable information concerning them had not been obtained by persons in China interested in the welfare of lepers. With regard to the last and worst of these outrages full and accurate details were forthcoming, and the affair was given official cognizance by the Chinese Medical Association. The following account is taken from the North China Daily News of April 6, 1937.

About three weeks ago, an officer in command of the troops in the neighbour-hood of Yeung Kong, or Yang Kiang as it is also known, adopted a very hostile attitude towards the lepers and publicly threatened to shoot any that were seen about the place. He informed the local authorities to this effect, whereupon a meeting was immediately called to which the civil and military authorities were invited to attend in an attempt to see what could be done. The civil authorities attended, but owing to the absence of the military officials nothing could be done.

Four days before the massacre, a notification was issued by the military authorities to the effect that all lepers in the colony would receive ten cents a day, and, in the light of future events, it seems evident that this was done to try and get as many as possible into the settlement before the order to "Kill" was given. Each inmate of the settlement had to sign his or her name when receiving the money.

This continued on Thursday, Friday and Saturday, but on Easter Sunday, after the lepers had assembled to receive their money, a large band of soldiers rushed in from every side. The lepers were bound individually, dragged out of the settlement and shot. Two trenches were dug, and the bodies of the men were thrown into one and the women into another. Lime was poured over them and the trenches were then filled up again. It is estimated that between fifty and sixty were murdered, between fifteen and twenty of them being women.

The soldiers then returned to the settlement, and proceeded to break open everything and steal what money could be found. Most of the settlement, with the exception of the chapel, was burnt before the soldiers left.

This occurrence was reported to the Chinese Medical Association at its annual meeting, which was held during the first week of April. The point was stressed that the soldiers were the sole parties responsible for the outrage; the civil authorities taking no part in it; they had always shown a helpful attitude towards the leper settlement. In addition, the massacre was in direct defiance of an order issued by the civil authorities of Canton who, as a result of representations made to them over a year ago, issued instructions, which were posted in every town including Yeung Kong, that the molestation of lepers was to stop. The Association adopted the following resolutions:

That the Chinese Medical Association, in session at the Medical Centre, Shanghai, has heard with dismay of the premeditated murder of lepers in the Yueng Kong hospital leper settlement and the subsequent looting of the settlement by soldiers;

That, apart from the natural abhorrence of such cruelties, this and similar acts, in direct contravention of the orders of the Canton authorities, as expressed in their published injunctions, strictly forbidding the molestation of lepers, do more than anything else to spread the disease by driving every leper into hiding;

And that immediate steps be taken by the officers of this conference to approach the proper authorities in Nanking and Canton urging that suitable penalties be imposed on the murderers, that steps be taken to protect the lepers, and especially to prevent the molestation of those undergoing medical treatment.

Shortly afterward (April 9), the press agencies in Shanghai reported another incident in which soldiers caught a leper boy, aged 11 years, in a village near Yeungkong, dragged him through the streets to the scene of the mass execution, forced him to kneel and shot him.

# LEPROSARIA IN JAPAN

A brief statement concerning all of the leprosaria in Japan—five prefectural, four national and seven private—is contained in a

recent annual report on leprosy work in that country, issued by the Secretary for Japan of the American Mission to Lepers (Mr. A. Oltmans, 5 Meiji Gakuin, Tokyo). That report is recommended to anyone desiring to obtain a general idea of the institutions in Japan engaged in the care of the leprous. A tabulation contained in it is reproduced here in part.

Name and	Number of patients, 1934				Expenses,
location	Male	Female	Children	Total	1934 (Yen)
1. National leprosaria Aiseien, Nagashima Kuryu Rakusenen, Kusatsu Kyushu, Kagoshima Okinawa, Liukyo Islands	715 218 75 1008 203 88 4 295 (Under construction at time of (Statistics not available; small)			70,000 report)	
Totals	918	306	79	1303	70,000
2. Prefectural leprosaria Zensei Byoin, Tokyo Hokubu Hoyoin, Aomori Sotojima Ryoyojo, Osaka Oshima Ryoyojo, Oshima Kyushu Ryoyojo, Kumamoto	710 366 (Inst. 377 602	300 177 itution de 121 255	40 24 stroyed by 29 31	1050 567 typhoon) 527 888	236,193 114,339 193,818
Totals	2055	853	124	3032	544,350
3. Private hospitals St. Barnabas, Kusatsu  Ihaien, Tokyo  Fukusei Byoin, Koyama  Jinkyo Raibyoin, Minobu(a)  Kaishun Byoin, Kumamoto  Tairoin, Kumamoto  St. Barnabas, Fukuoka(c)	103 91 84 70 53 63 4	60 25 32 18 27 19	14 5	177 119 121 88 80 82 5	47,865 23,726 23,812 10,528 49,465 18,994 1,315
Totals	468	185	19	672	175,705
Тотаів	3441	1344	222	5007	790,055

In 1935 it was decided that the Sotojima leprosarium, which was located near Osaka until it was destroyed by a typhoon in 1934, should be rebuilt on Nagashima Island, adjacent to the Aisien colony, because all other proposals for its location had met with strenuous objections. The situation will be unique, with two leprosaria actually contiguous but entirely separate in support and operation. Aisien (like three others mentioned in the tabulation) is supported by the national government, while Sotojima is one of the five regional institutions, each maintained by a group of prefectures.

d Number of patients includes those in the Kyushu branch (27 patients).

b Including aid given to 225 lepers in the Locchoo Islands.

c The most recently established and smallest of the private hospitals.

d Total for eleven institutions only. Average expenditures per patient: National (Kuryu Rakusenen only) yen 237; prefectural (three) yen 180; private hospitals (not including Kaishun Byoin) yen 213.

Each year the Empress Dowager makes donations from her private funds to the leprosaria in Japan, and last year representatives of all of them were called to the Imperial palace to receive these gifts. Catholic papers reported especially the gifts to the two Catholic leprosaria, one at Gotemba (Kagama), and the other at Kumomoto; they received 3,000 and 2,500 yen, respectively, and will receive the same amount annually for the next five years.

#### **NEWS ITEMS**

The campaign in Japan.-Dr. M. Miyagawa reported at the general meeting (1936) of the Japan Leprosy Association, according to the Journal of the American Medical Association, to the effect that the campaign against leprosy in that country has entered a period of activity, having left the period of investigation behind. This is shown in the increased number of antileprosy societies which sympathize with the lepers. An unsolved problem is that of finding out the exact number of lepers in this country. Five official investigations have been made by the Home Office since 1904, and according to the official figures the number of lepers has considerably decreased: 1904, 30,357; 1906, 23,851; 1919, 16,261; 1925, 15,351; 1930, 14,741; 1935, 15,274. But the official reports cannot be said to be correct, for many cases are supposed to be concealed. Dr. M. Murata gives entirely different figures, and says that there are 1.09 lepers per thousand of population, which means that there are over 62,000 of them here. He insists that leprosy has never decreased but is on the increase. There are eight government and public and seven private leprosy sanatoriums. These fifteen can accommodate 5,938 lepers. Within the coming five years 10,000 beds are expected to be given over to the lepers, for the Leprosy Prevention Association, which was organized in 1930, is going to become active. One petition was filed with the government that a special prison for leper criminals should be built.

Appropriation in Japan.—"It is satisfactory to note... that the Government has appropriated nearly twelve million yen for the improvement of public health," states an editorial in the Japan Weekly Chronicle, though that amount "may appear microscopic in comparison with the naval and military allotments, which run into many hundreds of millions..." Of the new grant, three millions a year is to be expended on the prevention of tuberculosis and the same amount on leprosy. Reports with regard to leprosy are sometimes optimistic, and it has been stated that lepers are never seen on the streets, but it was not long since that, in response to persistent agitation by private citizens, thirty-eight were removed from their stations where they begged on the streets of Kobe alone. With the new appropriation it is hoped that all lepers not taken care of in their own homes will be provided for in the leprosaria.

Trouble at Kaishun.—Shortly after the affair at Nagashima some twenty of the inmates of the Kaishun Leper Hospital at Kumamoto, Kyushu, founded by the late Miss Riddel, started an agitation demanding better food and other supplies, abolishment of compulsory worship, increased remuneration for labor and dismissal of one of the officials. After passing a resolution in favor of transferring to the local official leprosarium they carried out a demonstration. Miss Wright, who succeeded Miss Riddel in charge of the institution, and others succeeded in settling the situation. It is stated that there were indications that the strike at Nagashima may have stimulated the trouble at Kumamoto.

National leprosarium of Shanghai.—This institution, located at Dah Zan, in the outskirts of the city, was formally opened on December 14, 1936. Representatives of the National Health Administration and the three municipal areas, and many others attended the ceremony, says the Chinese Medical Journal. The main object of this institution, designed to administer to lepers from Shanghai and pledged not to import cases, is to give doctors and nurses adequate training in leprosy work. The wards are divided into three classes, the patients in the first-class wards to pay \$30 a month (Shanghai currency), the second class \$20, and third \$15, though provisions are made for indigent patients who will be taught a useful trade in the workshops. The buildings of the institution, seen recently by the writer of this note, are exceptionally well constructed. The inmates' houses are uniform, the differences for the three classes of patients being in the number of patients per room; each first-class patient has a room to himself. One has a feeling almost of extravagance on inspecting the various buildings, from the central one, which contains the offices and clinic rooms on the ground floor and the hospital rooms on the upper one, and the capacious church, to the workshops, but for success in inducing paying patients to take up residence in such an institution something better than the average is, of course, necessary.

Rotary Club aids in Siam.—In an address dealing with the work of the Rotary Club in Bangkok, Dr. George McFarland, its president, stated that in the past the club had given generously to the leper work there and asked that the gifts be continued, according to an article in the Bangkok Times Weekly Mail, sent us by Dr. R. L. Pendelton. "Money is needed; old clothes and supplies are needed; greater government support is needed, but that can only come, in a democratic country, where public opinion is aroused. We can do much along this line. Three leper hospitals in Siam offer us a chance to get behind this enterprise. The Government will gladly do all public opinion supports along this line. We can mould public opinion." Other reports from the same source record donations of money and supplies received by the two private leprosaria, the Chengmai Leper Asylum (which received from the government a grant-in-aid of 10,000 ticals for 1936-37) and the Nakon Leper Home and Clinic.

A reluctant patient.—There was a scene in a police court in Bombay, Times of India reports, when a leper who was ordered to be sent to the Acworth asylum threatened to commit suicide if he was forced to go there. When the magistrate ordered him to be sent to the asylum the leper threw a rope around his head and began to strangle himself. His plea was that he should be allowed to go to his native place. The man staged two demonstrations before he was forcibly put into an ambulance and taken to the asylum.

Sierra Leone, 1934.—The annual report of the Medical and Sanitary Department for 1934, quoted by the Journal of Tropical Medicine and Hygiene, states that in that year the number of cases reported was 212, a few more than in the preceding year. A survey had been commenced and reliable figures were expected to be available in 1935; until then it was considered unwise to make any further statement as to incidence of the disease, but it was known to be spreading in the Colony and the Protectorate.

Leprous teachers in Cuba.—The president of the Liga Antileprosa de Cuba, Mrs. Florinda N. Borrell, according to the Diario de la Marina, has addressed the Secretary of Sanitation and Charity calling attention to the problem occasioned by the fact that in the Department of Education there are several teachers who have been diag-

nosed as having leprosy. A case referred to specifically is that of a teacher who, though his face and hands showed manifest evidence of the disease, had charge of the distribution of school lunches. These circumstances, it is pointed out, indicate how extensive the disease is in Cuba.

Instituto Oswaldo Cruz.—The following note on the founding of this institute, with which the Centro International de Leprologia is so closely connected, is taken from the Journal of the American Medical Association. Ceremonies were held at the Instituto Oswald Cruz, of Manguinhos, May 7 [1936], to celebrate the thirty-sixth anniversary of the foundation of the institute. Dr. Cardoso Fontes, director of the institute, made a speech in memory of Baron de Pedro Affonso, founder of the institute in 1898. Some cases of bubonic plague developed in Rio de Janeiro in 1898 and the Baron de Pedro Affonso, with the collaboration of Oswaldo Cruz, Figueiredo Vasoncellos, Ismael da Rocha and Henrique de Toledo Dodisworth, as well as of the government, went to Europe and came back with the necessary equipment for production of antiplague serums and vaccines in this country. From that time to the present the work of the institute has been valuable.

Brazil as a center for study.—Dr. Solomón Schujman, of Rosario, Argentina, writing of his visit to Brazil, says that he finds that country a very satisfactory place for the study of leprosy. In the State of São Paulo, he says, the antileprosy campaign is undoubtedly one of the most perfect and complete in the world. There are "all types of establishments that science advises and all are very well organized": four regional stations for bacillus-positive cases with 5,000 inmates, one sanatorium with 500 beds for moderately advanced cases, two preventoria with more than 400 beds where children of lepers are placed after birth, and eleven dispensaries where bacteriologically negative cases are treated and where released cases and relatives of lepers are observed. A meeting of the physicians of the Department of Leprosy of the state was held in October. The official subjects were epidemiology and lepra reaction; nearly thirty papers were read. A report of this meeting is promised. The course on leprology at the Centro Internacional de Leprologia in Rio de Janeiro, under the direction of Professor Rabello is impressive both for its extent and its quality.

Marriage at Curupaity, Brazil.—According to a note published by R. di Primio, the patients in the Hospital-Colonia de Curupaity may, under special circumstances and as a reward for regularity of treatment, good conduct and other merits, be allowed to marry though they are required to sign a declaration that all children they may have shall be separated from them. Such patients in their spare time must build themselves plain but picturesque bungalows for the married people's quarter. This is done with materials furnished by the administration, and with the help of their fellow patients.

Private activity in Northern Brazil.—Ladies of the Brazilian Federation of Antileprosy Societies have recently visited the northern portion of the country to extend propaganda and to establish new centers of activity, according to Brazil-Medico. Substantial contributions of money were obtained in Pernambuco and Parahyba.

Leprosy in Paraguay.—Leprosy is not widely diffused in Paraguay, there existing only sporadic cases in various zones, especially in the north of the Republic, stated a report to the IX Pan-American Sanitary Conference. In Asuncion, from 1927 to 1933, there were 55 deaths from the disease reported, an average of 8 a year; 38 were men and more than one-half were over 50 years of age. [A physician who has had personal experience in Paraguay informs us that for political (immigration policy)

reasons the publication of information about leprosy is prohibited in that country. No census of lepers has ever been made, "but I could give a different account from this one."]

Venezuela, appropriation for leprosy work.—The Venezuelan Congress, according to Dr. Martin Vegas, appropriated a total of 12,000,000 bolivares (U.S.\$3,000,000) for health and sanitary work for the year 1936-37, of which 1,700,000 bolivares (U.S. \$425,000) are for leprosy. This compares with 1,200,000 bolivares (U.S. \$300,000) for the preceding year.

Leprosy in Mexico.—Of the 2,763 lepers registered in the Republic of Mexico, it is stated in Higiene, the majority of them natives, 1,564 are under treatment, mostly in dispensaries established by the committees for the prophylaxis of leprosy. Work has been begun to establish the first leprosarium in the country, which is to be situated at Tiritzicuaro, Michoacán. Recently there have been reorganized 39 municipal committees for leprosy prophylaxis, presided over by the medical officer of public health and infant welfare. Of the lepers 719 practice professions or trades, 1,355 have open lesions, and 2,006 are in poor circumstances socially and economically. It may be said that there is one leper to every 6,758 inhabitants, and to every 804 sq. km., there being dense foci in the Federal District, in Guanajuato, Jalisco, Michoacán, Sinaloa, Colima, Yucatán, Coahuila, San Luis Potosi, and Guerrero.

Protests in Monterrey.—Several news clippings from Mexico indicate that in Monterrey agitation has been started to induce the government to do something about the presence of lepers in the cities. Tuzan reported that lepers from the oil fields invade the town and make themselves obnoxious and that the authorities "only resort to writing about them." In Monterrey itself they go about in public "with the evident knowledge of some of the health officials." Some come out from the infectious wards of the civil hospitals and engage in various activities, but protests had evoked the statement that there is no law by which that could be prevented.

Thieves and lepers.—Of several oddities recently reported, one is the theft of the 300-pound safe of the Amatakulu Leper Institution in Zululand, Natal, by robbers to whom the nature of the institution held no terrors. The safe was carried off and rifled, and its documents were scattered over the veld. Bolder have been pilferers at Dr. Gushue-Taylor's new colony near Tohoku, Formosa, where robbers have repeatedly stolen building materials and supplies, even hooking through the windows of the cottages the clothing and other poor possessions of the inmates. However, when a group of men stealing firewood on the hillside was surrounded by several of the inmates, who promised not to touch them if they would submit to being escorted to the colony administrator, the pilferers went along without resistance. Of different tenor is a report from Rumania, where four armed men on horseback entered the leper camp at Tikilesti and plundered the safe. Accounts vary, but one has it that they were unaware of the nature of the malady from which the inmates were suffering and in the raid struggled with the leprous cashier and secretary, and that the main concern of the police was to prevent the robbers thus contaminated from contacting and infecting other people. Shortly afterward one of them was found dead by suicide. He had committed the robbery to buy gems for his sweetheart, but she, learning where he had got the money, drove him from her house and "scrubbed it from top to cellar to protect herself against infection."

A correction.—In a recent issue of The Journal it was stated that Dr. E. R. Kellesberger is in charge of a leper colony at Luebo, in the Belgian Congo. This, he informs us, is erroneous. The agricultural colony of which he is in charge is

connected with the medical department of the Bibanga station of the American Presbyterian Congo Mission. Bibanga is 400 miles east of Luebo, in the highlying Lomami District and in the northwest corner of the Katanga region. The leper work at Luebo is under the direction of Dr. T. T. Stixrud, that at Lubondai is under Dr. George Cousar, that at Bulape, north of Luebo, under Dr. J. Chapman, and that at Mutoto, east of Luebo, under Dr. T. Smith, all of the same mission.