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PEOPLE'S HEALTH

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PEOPLE'S HEALTH

A Pioneer in the Field of Public Health

Vol. II SEPTEMBER, 1948 No. 12

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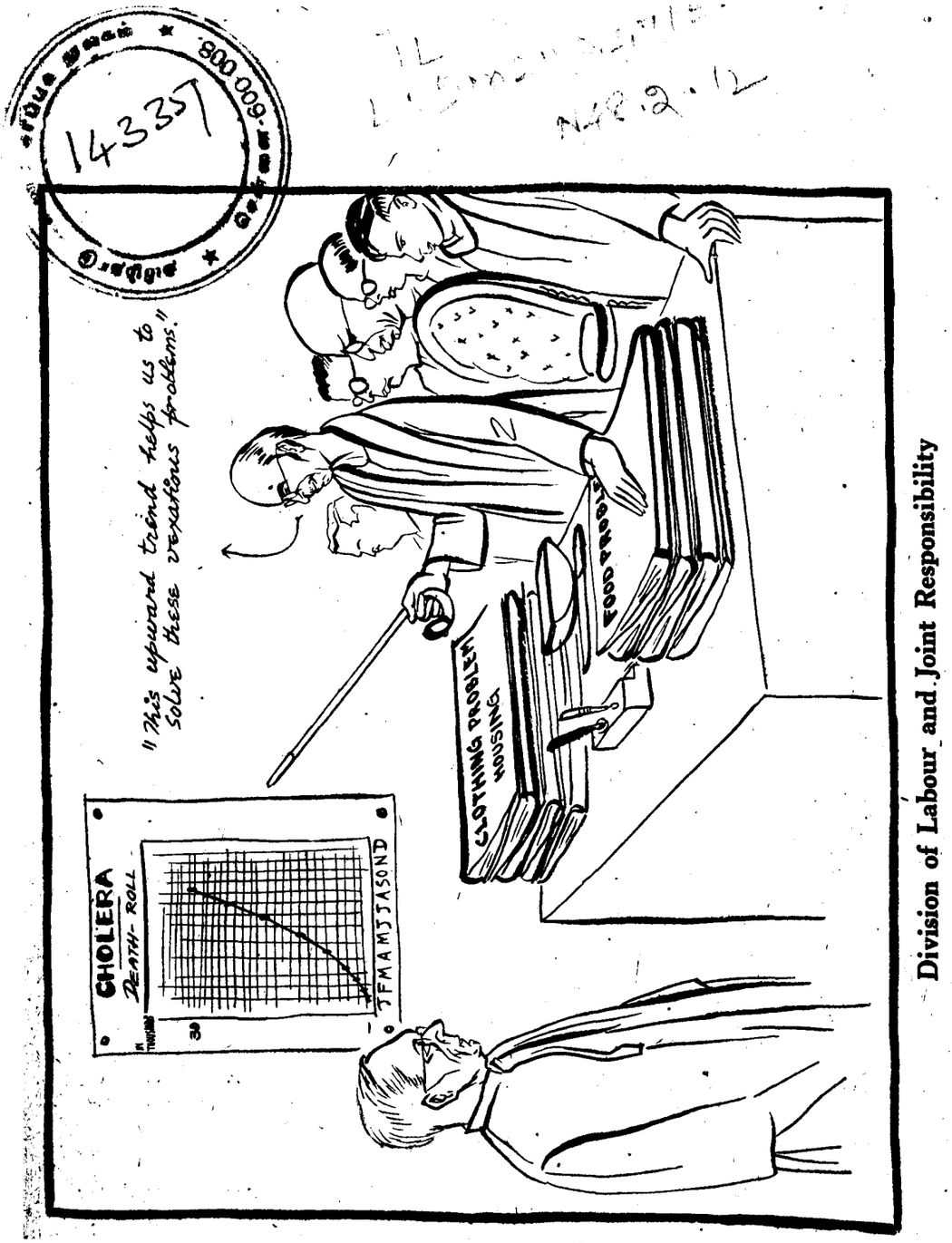


Division of Labour and Joint Responsibility

PEOPLE'S HEALTH

VOL. II No. 12 SEPTEMBER, 1948 ISSUED MONTHLY

EDITORIAL . . .

Is the State aware of the importance of National Health? If so, what effective steps are being taken to ensure it?

CHOLERA SITUATION IN MADRAS PRESIDENCY

We were compelled to comment at some length on the subject in the August issue of *People's Health*. We wrote to the Madras Premier, the Food Minister and the Minister for Health, inviting their pointed attention to the grave situation. We did so in the interest of the safety of the people. We have not as yet been favoured with any information as to the action taken on our representation. Our popular Ministers appeal at every turn for public cooperation. They are entitled to do so. The people are equally entitled to expect them to reply to their representations.

The food situation is fast developing into a crisis. On housing, much is talked and little is done. Clothing continues to be a vexed problem. There are of course other vexatious problems facing our popular Ministry. From their inaction on so vital a problem as cholera, are we not entitled to question whether they are hoping to get over the problems facing them by invoking the assistance of the Goddess of Epidemics to come to their rescue? People cannot be expected to feel secure that their safety is safe at the hands of the Public Health Department. It has already given a rude shock to the people by the so-called scientific explanation given for the sudden and widespread epidemic of cholera which broke out in Salem town. As we have pointed out, it is high time that the department

retrieves its fast dwindling prestige. But how?

Public Cleansing

STANDARDISATION OF EQUIPMENT WHERE PIGEON-HOLED?

We drew pointed attention to the fact that the Board of Public Health, Madras, passed a resolution quite a long time ago that the tools and plants for public cleansing should be standardised. (*Vide* page 116, No. 3, Vol. II December, 1947). We enquired as to what happened to the resolution of the Board. From the delay in implementing the resolution of the Board, we were constrained to come to the conclusion that the responsibility for it should have been thrown on "experts" who were apparently unequal to the task. We pleaded that no time should be lost in implementing the resolution of the Board. What action has been taken by the authorities concerned is not known?

The Commissioner of the Corporation of Madras had to go to the Ministry of Health, England, to get some literature on the standard dust-bin employed in that country. He has also made arrangements to manufacture a few of them as an experimental measure. The "experts" in our country, are there only in name. When the administrators do not derive the benefit of employing "experts", what are they to do? They are compelled to act on their own initiative drawing expert knowledge from their own commonsense.

CONDITIONS NOT COMPARABLE

Anyone whe knows the composition of house refuse in Great Britain and in other western countries generally, the way in which the housewife reduces it to a minimum, the way in which it is stored temporarily in the premises and the intervals at which the dust-bins are cleared, would readily recognise that the conditions obtaining in this country, widely vary from those in the west.

The "experts" in the field should adapt the principles governing the subject to suit our own conditions. Slavishly copying the designs which have proved successful elsewhere cannot serve the purpose in view. May we appeal to the Ministry of Health, Madras, to look into the matter and see where the subject is pigeon-holed? The primitive or rather medieval methods of public cleansing are universal in our country. What applies to Madras Province applies equally to the rest of India. The Ministry of Health in each Province would do well to give consideration to this aspect of sanitation. Otherwise, our roads and streets would continue to present a disgusting appearance of uncleanliness, apart from forming fruitful sources of epidemics and the propagation thereof.

People and Cities

Apropos His Excellency Sri C. Rajagopalachari's remarks on the inordinate growth of metropolitan cities at the cost of the rest of the country in the course of his reply to the civic address presented by the Corporation of Madras, we think it will be of interest to our readers to read the following extract from A. G. G.'s sketch of Prof. Geddes, the well-known scholar and town planning expert, who had intimate contacts with our country and who had left valuable records of how towns should be planned with due regard to architectural no less than hygienic and health considerations. Says A. G. G:

> "He (Geddes) is, before all things, the prophet of citizenship. He is the enemy of the great capital that absorbs all the power and authority and splendour of the State to itself, leaving the rest to become vast overgrown factories, hewers of wood and drawers of water to the insolent capital. We want proud defiant cities all through the land. What is the evil of France today? It is in the centralised power of Paris imposing its unobstructed will, the creation of a few politicians and journalists, upon a great nation.... The chief value of Home Rule in his eyes is that it will qualify this tyranny of the capital."

It will thus be seen that C. R.'s advice is reinforced by a great authority on the subject of town planning. As in the case of Mountain and Muhammad, the miracle that we should now perform under modern conditions is to reverse the process whereby metropolitan centres grow unwieldy and out of all proportion, and encourage the coming up of provincial centres each capable of developing a proud independent life, each rich in its own culture and traditions and each not subservient to the might of the central capital.

A SIMPLE SOLUTION

How this is to be brought about is the question to which we must devise an answer. One of the simplest methods that suggest themselves to us is to promote a system of decentralisation of governmental activity which in its turn will inevitably promote a corresponding decentralisation of national acitivities as well. Mahatma Gandhi, it will be remembered, was untiring in his propaganda in favour of village reconstruction. In one of its logical developments, it was intended to provide an evolutionary answer to the tyranny of the modern capital or metropolis. Thanks to the inventions and discoveries of science and the sensational multiplication and improvements in the means of communication, mere physical distance is no longer a handicap to the efficient discharge of functions.

Therefore, it seems to us, that it should be a step in the right direction if Government would take the initiative and plan the establishment at different centres in the Province of different head offices for different sections of governmental activity. For instance, so far as the Madras Presidency is concerned, there is no reason why the Agricultural Department should not be centralised at Coimbatore, the Electrical Department at Mettur, the Judicial Department at Madras, the Army at Bangalore or Wellington and so on. The principle is such that it is capable of being applied *mutadis mutandis* to every other Province in Indian Union as well as to the various units of the acceding States. The effect of this dispersion would be to enable the growth of cities in the various places each one of which will assume the importance of a metropolis and proceed to develop an individuality which will make it contribute its own unique share to the spread of civic life under favourable conditions.

CHECK THIS TENDENCY

Throughout the world today, we have seen the phenomenon of the great cities uniformly tending to grow greater and greater until it is not uncommon for us to hear of greater London and London, greater Berlin and Berlin, greater Paris and Paris and so on. In India, first steps have already been taken towards the development of what is known as Greater Bombay. The way in which Madras has been swelling beyond its original boundaries and is now straggling towards Chingleput at one end and Arkonam at another, points to the inevitable destiny that is in store for it, unless something is done to check it betimes. Our Corporation is using the argument of this growth as a justification for greater and greater doles or grants from Government towards the provision of civic amenities ; but, curiously enough, the more taxes are levied, the less is the extent which the promised advantages are provided. It is very like the blind, lame, dumb or deaf beggar or the lazy drone, pretending to be a disabled or deformed person going about begging for alms, capitalising the fact of his infirmity, real or assumed, so that he may live and thrive upon it. Our cities ask more and more for Government aid for admittedly laudable purposes but without ever being in a position to supply the facilities even after getting the Government grant. Economically speaking, it ought to be clear to any man of commonsense that an increasing margin of income need not automatically ensure an increased flow of amenities ; because, the limiting factor is capacity to provide a particular amenity.

Commonsense should have dictated that it was wholly undesirable to extend the limits of the City of Madras when the Corporation was unable to provide even the primary amenities of water-supply and drainage throughout the existing city limits. Having committed a blunder, the Corporation attempts to capitalise it by pleading at every turn that with the extended limits of the city, more amenities have to be provided and hence more funds are required. The Corporation has acted in a hurry and it should now necessarily repent at leisure. Some steps should be taken immediately to divide the city into manageable areas and decentralise the local administration. No business can be transacted in a Corporation of this magnitude. Experience has shown it.

A rational solution is to fall back upon the other alternative and encourage people to migrate to subsidiary centres by offering counter-attractions and the means of livelihood spread over greater areas than by concentrating everything in one place without solving any single problem. Above all, the strategic necessities of the present and future with air-warfare, as an inescapable reality, would seem to indicate the urgent necessity for the development of multi-pointed centre as a safety device to avoid mammoth destruction rained down on our metropolitan monsters in the event of a war.

For all these reasons, we hope that while experts in town planning, public health and local self-government are engaged in their several occupations and duties, they would bear in mind the need to integrate their activities with a view to the future requirements of our cities in the light of the wholesome advice given by His Excellency Sri C. Rajagopalachari which was anticipatorily furnished in such remarkable and memorable words by one of the greatest modern town planning experts.

"Hanuman"

IN THE WAR AGAINST MALARIA

The Madras Ministry has recently purchased an aeroplane and has christened it '*Hanuman*'.

Hanuman of the epic fame symbolises service. Let us hope *Hanuman* would similarly render service to the country. Although the aeroplane might have been primarily intended to transport Ministers and high officers of the State from one place to another to save time, yet, it is possible to utilise it for other useful purposes too. For instance, reconnoitring an area from air to visualize the potentialities of big engineering projects is an important preliminary before discussing the merits of a scheme. Engineers' plans may or may not carry conviction to the laymen-administrators ; but if they get a chance of seeing the area from air, they would be in a better position to assess the usefulness of a proposed project.

Inaccessible malarial tracts may not lend themselves readily for economical execution of anti-malarial engineering works. In such areas, malaria can be kept well under control by spraying insecticides from air. In the Madras Presidency, there are malarial tracts which could be rendered fit for human habitation by creating clouds of insecticides from air. Experience elsewhere has proved beyond doubt that this method has helped to reclaim many a malarial tract.

It is good that the new aeroplane has been ordered to be grounded at Minambakam instead of at Bangalore. This should enable the Ministry to keep it fully engaged, on services of the type described above which would justify the name given to it; for *Hanuman's* joy rides were in the interests of alleviating human suffering.

Bill of Human Rights

CONCEPT OF "HEALTH"

In the July issue of *People's Health*, we put forward a plea for a strong Ministry of Health at the Centre with statutory powers of control over the health activities of the Provinces and the acceding States. We pleaded that, in the proposed constitution of India, suitable provision should be made to ensure this. We are glad to note that at the recent Health Ministers' Conference in New Delhi, a resolution was passed somewhat on the lines which we suggested.

It would be interesting to note here that the United Nations Commission on Human Rights which met in Geneva in December, 1947, has incorporated in the Charter of Human Rights, the following article :

> "Everyone, without distinction as to economic and social conditions, has the right to the preservation of his health through the highest standards of food, clothing, housing and medical care which the resources of the State and community can provide.
>
> The responsibility of the State and community for the health and safety of its people can be fulfilled only by provision of adequate health and social measures."

AN APPEAL TO OUR SUBSCRIBERS

"The journal is an adventure on the part of a crusader-spirited member of the permanent service who seeks to help democracy in one of its important functions":—says C. R. How can the journal achieve this aim without your active assistance and cooperation?

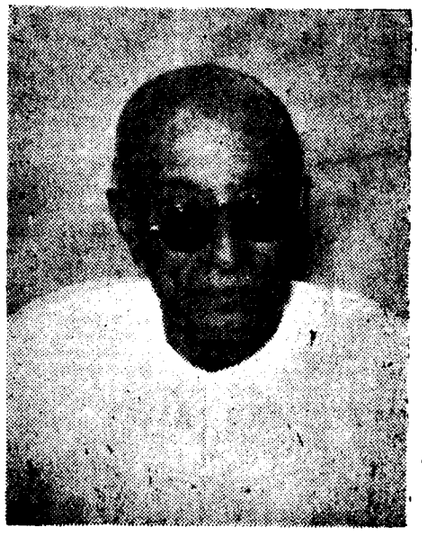
The cost of publishing the magazine is soaring up day by day. The supply of paper is also getting scarce. You will be helping the publishers by doing them a favour by giving advance intimation before the 10th October, 1948 your decision to continue as annual subscriber. If no intimation is received by that date, we take it that you are willing to continue as a subscriber and we shall despatch your copy of the magazine as usual. Kindly note that we do not enrol subscribers for part of the year.

Vol. III commences from October, 1948.

Manager, "People's Health"

SECOND HEALTH MINISTERS' CONFERENCE

GOVERNOR-GENERAL'S MESSAGE

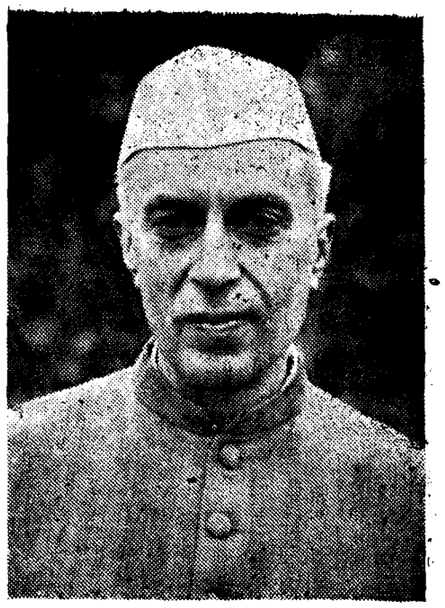


by

His Excellency
Shri C. RAJAGOPALACHARI
Governor-General of India

The social service departments of the Government are appropriately under the leadership of a woman. Her enlightened guidance can achieve great things if the standards of administration in day-to-day work improve in a real sense. This will happen if, in their work, officials of these departments realise that theirs is the missionary side of the State organization. May the words of the Prime Minister bring about a new crusading spirit that is so necessary at the present juncture. Only thus, can we make up for lost time.

PRIME MINISTER'S ADDRESS



by

PANDIT NEHRU

Prime Minister of India

The Government of India have decided to institute a separate housing department under the Ministry of Health to tackle the difficult problem of housing which has been made much worse on 'account of the influx of a large number of refugees", said the Hon'ble Pandit Jawaharlal Nehru, the Prime Minister, inaugurating the Second Health Ministers' Conference in New Delhi, on 2-8-48. The Hon'ble Rajkumari Amrit Kaur, Minister for Health, presided. Health Ministers and other high officials from the following provinces are attending this Conference which will last for four days :—Madras, West Bengal, Bombay, the United Provinces, the East Punjab, the C.P., Bihar, Orissa, Assam, Delhi, Ajmer Merwara, Coorg, Himachal Pradesh, Cochin, Baroda, Travancore, Mysore, Patiala, Saurashtra, Vindya Pradesh, Rajasthan, Matsya, Madhya Bharat, and Kashmir.

The Prime Minister added that the Government were shortly starting a factory for building pre-fabricated houses. This would only be one of the ways of tackling the difficult situation. Pre-fabrication would eliminate the need of steel and to a large extent also of cement which were in short supply. The cost of a pre-fabricated tenement consisting of two small rooms, a kitchen, bath room, small verandah and courtyard would be in the neighbourhood of Rs. 2,500. These houses will be cool and durable. He advised Provinces and States to start similar Housing Departments.

The Prime Minister then touched upon the problem of nutrition. A large portion of the population of this country, he said, did not get sufficient nourishment and without this it would be impossible to fight ill-health and disease. He stated that arrangements for meals in schools should be improved, for children's health was a matter of first priority, as they are the citizens of the future. Recently he had visited, the Prime Minister said, an institution in Madras called Asoka Vihar, which provided free medical aid and attendance for children and their families for just one anna a month per child. This experiment seemed to him to be admirable.

The Prime Minister deplored the absence of vital statistics in this country specially in the field of health. The collection of statistics had become an extremely technical affair and only people with expert training in the line could perform the job satisfactorily. The Statistical Institute near Calcutta under Professor Mahalanobis was doing excellent work which proved that we had excellent human material if only we could organise it.

The Prime Minister congratulated the personnel of the Indian Delegation and especially its leader, the Health Minister, which recently attended the World Health Assembly in Geneva. He was glad that India had secured a place on the Executive Board of the Organisation and of the decision to establish the headquarters of the Regional Bureau for South-East Asia in India. This was no small responsibility but India will stoutly shoulder it.

"Most countries now were thinking in terms of socialising their health services and India would also have to think this out from the point of view of giving relief to the masses", the Prime Minister concluded.

ADDRESS

by

RAJKUMARI AMRIT KAUR

Minister of Health, Government of India

This is the second Conference of Health Ministers but we are meeting today under circumstances somewhat different from those under which the first Conference met in October, 1946 under the Chairmanship of Sir Shafaat Ahmad Khan. At that time a so-called National Government had been formed at the Centre only a few weeks previously under the leadership of our present Prime Minister. But that Government had perforce to function, to a large extent, under an unstable equilibrium. The position is entirely changed today. We are independent and free to shape our destiny in any manner we deem desirable in the interests of the country. Vast changes, fraught with both good and evil, have taken place including the partition of the country, an exchange of population between India and Pakistan on a scale perhaps unprecedented in the history of the world and a consolidation of the country as a whole through the merging of the States in the Indian Union, a regrouping of these States into large administrative units and the possibility, in due course, of an even more rationalistic transformation by

the creation of linguistic provinces bringing together contiguous territories of States and of the existing Provinces on the basis of a common mother-tongue. A common language will, from our point of view, help greatly in the campaign for improved health by facilitating education of the people in the hygienic mode of living and by promoting that wider education in citizenship which is essential for enabling the individual to realise his or her own responsibility for the maintenance of the health of the community.

There is some indication that an important feature of the changes that are taking place in the administration of the States—may be their willing transfer of power to the Central Government in order to bring themselves in line with the relationship that exists between the Provinces and the Centre. I would strongly urge that this transference should take place early because all the different units of the Indian Union should have the same relationship with the Central Government if uniformity in health or indeed any administration is to be secured.

These great developments, which have taken place, could not have been dreamt of even a year ago and, in spite of the sufferings and sorrow through which millions of our people have had to pass, let us remember that the events of the past year have also brought to us the opportunity for reconstructing national life according to our desires and in a manner calculated to promote, to the highest possible level, the health and welfare of our people. It is of this opportunity and of the added responsibility that it lays on our shoulders that I am thinking today when we have met together to discuss health problems of common interest to us all and to define the lines of action to be taken in order to secure a progressive realisation of satisfactory solutions to these problems.

There is so much of preventible sickness and mortality around us that there is no room for apathy as in the past and, in spite of all our handicaps in the way of inadequate funds and of trained personnel, we must plan and execute a determined drive to overcome all obstacles and to provide, as early as possible, all those health services for the care of the sick and for preventive health work which medical science and administrative organisation have helped to develop in the progressive countries of the world. An outstanding example of what can be achieved in this field within a period of 25 or 30 years is the accomplishment of the U.S.S.R. which, starting at the time of the Revolution with conditions perhaps even worse than those of India today, has built up in the succeeding years a health organisation which would appear to be more complete in its integration of preventive and curative medicine than in other countries and to have succeeded in extending, progressively, health protection to the many millions of its inhabitants over its extensive territories. Our present difficulties need not therefore discourage us. If we can only bring to our tasks an indomitable will and the courage and determination to succeed, we shall, I am sure, be able to find ways and means of overcoming all obstacles and to proceed, by successive stages, to the fulfilment of our desires.

We have a long agenda with 15 items for the Conference. They include a variety of subjects such as the organisation of health service for industrial workers, the problem of raising the standard of nutrition in the country as a whole, tuberculosis, leprosy, postgraduate training in India and abroad of medical and other health personnel, rural medical relief, health services for refugees and the employment of health workers among them, the production of drugs, vitamins, harmones, surgical instruments and other medical appliances and their supply to governmental and other institutions, an all-India Medical Register, blindness, the problem of improving Indian vital statistics, the control of

man-made malaria and construction of back-to-back houses in industrial and slum areas and railway quarters.

Even with this wide range of subjects it has not been possible to cover certain other important fields of health activity and let me, therefore, make references, during this short address, to some of these matters. The subjects included in the agenda will no doubt receive full attention from the Conference during the four days of its deliberations.

INTERNATIONAL HEALTH WORK

India's international health obligations are assuming increasing importance and our country has a great part to play, in collaborating with other nations and particularly with those included in the South-East Asian group, for the promotion of cooperative effort designed to improve the health of the people. As you are all aware, I had the privilege of leading the Indian Delegation to the recent meetings of the first World Health Assembly in Geneva and I am glad to say that we were able to contribute our share to the deliberations of that Assembly. India was chosen unanimously as the country in the South-East Asia zone in which the headquarters of one of the Regional Bureaux under the World Health Organisation will be located. The Mysore Government has offered assistance on a generous scale for the establishment of this Regional Bureau and this offer has been gratefully accepted and communicated to the World Health Assembly. India has also been given a seat on the Executive Board of the Organisation and shares this privilege with Ceylon. The countries that have expressed their willingness to join our Regional Bureau are Afghanistan, Burma, Ceylon and Siam. The British delegate, while expressing his view that Malaya should come into this group, indicated at the same time that the decision would be left to the Government of Malaya. I hope they will decide to join our group. Indo-China has decided to go with China and the Far Eastern group and Indonesia is also joining that group. Pakistan decided to link herself with the Muslim countries of the Middle East. With the location of a Bureau in Mysore, however, India has now the opportunity of playing an important role in the development of health measures and the carrying our of experiments and research in South-Eastern Asia as a whole.

Reference may also be made to the fact that the Children's Emergency Fund, an organisation which has been established under the United Nations, has, I believe, agreed to the allocation of $ 750,000 to India for promoting health measures among mothers and children, and particularly refugees. It is also expected that further substantial financial help may be forthcoming for the development of BCG vaccination and anti-tuberculosis work in our country.

I may add that we have had a considerable measure of goodwill extended to us by the representatives of the various countries attending the Conference,—I may mention in particular the authorities of Switzerland, in whose territory the headquarters of W.H.O. are located as also those of the United Kingdom where I went immediately after my work at Geneva was over. The Health Minister of Britain with whom I had the privilege of having long talks gave me ample assurance of the help his Government and Ministry would be willing to give us not only in the matter of places for our students in their teaching institutions for postgraduate studies but also in regard to sympathy and understanding which are so necessary for our young folk when they go to a foreign country. Having recently had the opportunity in both Switzerland and U.K. of seeing some of their most recent models of maternity and child welfare centres, children's hospitals of which, alas! there is almost a complete lack in our country, training centres for nurses and nurse-midwives, rural hospitals, etc.,

I am sure our medical students and all members of the medical profession who go abroad should make it a point of seeing all the good institutions they can, especially in rural areas, so that we may be able to adopt all that is suitable in them for our needs.

I was much struck by the enormous use that is being made in both these countries of travelling vans for every branch of medical aid. We have to insist on the improvement of communications in rural areas so that we too may utilise as soon as possible this method of relief until such time as we are able to build village hospitals and dispensaries. And while on the subject of building we must rely on and explore using as much local material as possible and not think always or so much in terms of building for a very long period.

I must pay a tribute to the excellent work done by the different members of the Indian Delegation at the Conference, They participated fully in the work of the World Health Assembly through representation on its various Committees and Commissions and the impression that I have come away with is that our efforts at constructive work have been well received and fully appreciated by the countries represented there.

NEED FOR CO-OPERATION

The Bhore Committee stressed wisely that progress in health administration should be built up on the basis of full cooperation between the Centre and the component units of the Federation of India and recommended, for securing such cooperation, the establishment of a Central Board of Health consisting of the Health Ministers of the Centre and the Provinces. The functions to be performed in the sphere of health fall broadly into three groups :—

(*a*) those which should be performed by the Centre, *e.g.*, India's international health obligations ;

(*b*) those which fall in the domain of each of the component units of the Federation ; and

(*c*) those which require co-operation between the Centre and the different units and, in many cases, coordination of regional activity by the Centre in the interests of all.

It will be seen that these three groups represent the existing division of functions between the Central Government and the Provinces in the three lists of subjects, Federal, Provincial and Concurrent respectively. Subjects which belong to the Concurrent List include such important ones as control of inter-provincial spread of disease, regulation of the medical profession, labour welfare and factory legislation. Examples of other matters requiring close co-operation between the Central Government and Provincial and State Administrations are control of food and drugs so as to establish and maintain common standards of purity and of quality throughout India and the creation of teaching and research centres designed to serve the needs of the country as a whole. The Bhore Committee, while discussing this problem of co-operation, stated :—

> "We desire to see the whole field of possible cooperation examined on a wide basis and a common programme of action drawn up under the auspices of the Central Board of Health. Into such a programme can be fitted the measures which are to be taken by the Centre, including the assistance to be given by it to the Provinces, for the discharge of its own inter-provincial quarantine functions."

The Bhore Committee also suggested the creation of an inter-provincial fund for the carrying out of these measures.

I have not so far taken up this matter because, in the transition stage in which we are at present, with territorial and administrative changes of an important character taking place in different parts of the country, it seemed wise to postpone the establishment of the Central Board of Health until the component parts of the Federation become more definitely defined in shape and until the distribution of powers and functions between the Centre and these units is settled. When this stage is reached, I am sure that the Conference will agree that early steps should be taken for the establishment of the proposed organisation. It will also be necessary to invest it with sufficient powers and funds to enable it to function efficiently.

Another step which I deem essential for assisting the harmonious development of co-operation is a planned programme of exchange of officers, for agreed periods of a few years, between the Centre and the Provinces and States. Central officers should be conversant with the health problems of these administrations and it is to the advantage of the officers serving under these Governments to gain experience of work at the Centre. We have not thought out the details of such a programme of exchange, but it seems to me that the proposal is in the interest of all parties concerned and that, if the principle is deemed acceptable, details can be worked out in due course as part of our general scheme of development of health services in the country. At the Centre itself a considerable strengthening of technical advisers will be necessary if it is to perform adequately its functions of giving advice and of co-ordinating health activities over the country as a whole. This matter is now receiving attention.

REFUGEE RELIEF AND REHABILITATION

I need hardly stress that refugee relief and rehabilitation must for some time continue to claim the highest priority among our pressing problems. The early resettlement of health workers among them has exercised our minds considerably. Of a total of 948 doctors who have registered their names with us, it has been possible for us to employ only 230. We are thankful to Provincial Governments for all the help that has already been given and we realise fully the difficulty of absorbing outsiders, when there is insistent demand for the distribution of the realtively small numbers of posts that exist to those who are qualified among the local people. In the circumstances, I would only urge that the resettlement of these refugees should, as far as possible, receive continuous attention from Provincial Governments. In the States, however, it should be possible to absorb a relatively larger number of all classes of health workers especially if, under the new administrations that have come into being, a much needed expansion of health services is attempted in the interests of the people whose medical needs have, in many cases, been neglected in the past to as great if not an even greater extent than in the rural areas of our Provinces.

I may add that, in these resettlement programmes, the claims of war-service candidates should also be considered. The war, with all the suffering that it entailed, brought exceptional opportunities of professional work to a number of our doctors and nurses with facilities to use modern developments in their respective fields and, in many cases, under the guidance of experts from abroad, who were brought over as Consultants in their own specialities. Some of these war-service medical officers have been sent overseas for post-graduate training as candidates of the Central Government under the scheme which we have worked during the past few years in collaboration with the provinces and I would urge that the possibility of utilising their services in suitable posts on their return, particularly in the new medical colleges that are being established, should be considered.

I feel I must refer to the two Committees which have recently been set up by the Centre—one to report on the up-grading of existing medical teaching institutes. Reference at some length has already been made to this Committee in the memorandum on the training of health personnel. The other, known as the Environmental Hygiene Committee, has been set up to suggest ways and means of improving health standards in rural areas. Because of financial stringency our dream of bringing into being an All-India Medical Institute at Delhi has had to be postponed for the time being. Nevertheless, it is our intention to promote without delay the development of post-graduate training facilities in as many fields of medicine as possible and the setting up of the up-grading Committee has had this specific purpose in view. Likewise, too, long have we all been guilty of neglecting the sanitation of towns and more specially of our rural areas. The Environmental Hygiene Committee will, it is hoped, assist us all in the solution of this vital problem. I am, therefore, eagerly looking forward to the reports of both these Committees so that we may be able to take action on their recommendations as soon as possible.

I am extremely anxious to bring into being at once Nursing Councils, both Provincial and Central, in order to give a definite impetus to the proper training of this important arm of medical personnel. I want likewise the speedy formation of Dental and Pharmacy Councils. These two branches of the medical professions may not be neglected any longer either and I do appeal to the Provinces to help me to speed up action in all these three spheres.

[Ordinarily the interest our people take in health matters, is depressingly meagre. The publicity given to the proceedings of the Health Ministers' Conference and similar conferences is equally depressing. We had been searching in vain newspapers and magazines published in our country to get a reasonably accurate and tolerably complete proceedings of the first Health Ministers' Conference. Either the proceedings of these Conferences should be printed and distributed freely or they should be published in full in some newspaper or magazine. This procedure would help to rouse the interest of people in matters pertaining to the Nation's Health.

We are indebted to all concerned for the facilities afforded to us for publishing the proceedings of the Second Health Ministers' Conference. At the moment, the proceedings are being examined and discussed by an independent study circle. We hope to be able to publish the observations of the study circle in October issue of the Magazine. In the meanwhile, our readers would be interested to peruse the proceedings published above. *Ed., P. H.*]

RESOLUTIONS Passed at the Second Health Ministers' Conference

Co-operation between the Centre, Provinces and States

1. The Conference places on record its firm conviction that the utmost possible co-operation between the Centre, Provinces and States is essential in order to promote a planned programme of action for improving the public health. There is so much of preventible sickness and mortality in the country today that the development of the measures necessary for ensuring such co-operation should engage the immediate attention of all Governments. The Conference feels that the Centre should play a much more prominent part than in the past in certain fields of health administration, particularly in the control of inter-provincial spread of disease, the maintenance of desirable standards of purity and of quality as regards food and drugs, the establishment of centres for the training of health personnel and for medical research in a manner designed to serve the needs of India as a whole and the development of the measures necessary to meet large-scale emergencies such as floods, famine and earthquake which may create conditions well beyond the capacity of individual Provinces or States to deal with. The Centre should also function as a clearing house for information on all matters relating to the public health in order that Provincial and State health authorities may be kept informed of the latest developments in health practice in other parts of the world.

2. The Conference recommends that, in order to establish co-operative effort between Governments on a sound basis, the States should fall in line with the Provinces by transferring to the Centre such health functions as now constitute common ground for Central and Provincial action. It is only in this way that the formulation and execution of health policies on a uniform basis throughout the Indian Union become possible.

3. The Conference further recommends that in the interests of establishing co-operation between the Centre, Provinces and States on a sound basis, three steps should be taken without delay; a considerable strengthening of the technical organisation under the Central Ministry of Health, an exchange for a limited number of years, of officers at different levels of administration between the Centre and the Provinces and States and, above all, the establishment of a Central Board of Health, on which the Central, Provincial and State Governments are represented. This Board should be invested with sufficient powers and funds to enable it to function efficiently. Legislative sanction, if necessary, should be obtained for the establishment and maintenance of the Board.

4. The Conference feels that it is no exaggeration to state that it is only by the Centre acting with imagination and sympathy and extending its help to bring together the different administrative units of the Indian Union, with their varying resources and differing levels of health development, that the past neglect of the public health and particularly of that of rural India can be rectified and an improved state of affairs brought into being within a resonable period of time. The Conference cannot therefore commend too strongly the adoption of the measures it is now recommending to Governments for their serious consideration.

INDUSTRIAL HEALTH

(*a*) The Conference approves of the broad outlines of the scheme for the development of an industrial health service put forward in the "Memorandum on the Formation of an Integral Industrial Health Organisation in India." For the present, in view of the undeveloped nature of medical relief available to the community as a whole, it is desirable to include, as part of the industrial health scheme, provision for medical relief also. In the working of the scheme the closest possible co-operation between the Employees' State Insurance Corporation and Provincial Governments is essential and the Conference recommends that such co-operation should be established and maintained at the highest possible level.

(*b*) In future of time the objective should be to reduce, in proportion to the expansion of health services for the general population, the provision now made for medical relief under the industrial health organisation and to enable the latter to take up, in an increasing measure, its legitimate tasks of controlling the health hazards of the employee in his working environment, provision for rehabilitation, research into industrial health problems and the training of the required health personnel.

(*c*) The Conference resolves that steps should be taken to establish Chairs in Industrial Medicine in selected medical colleges together with the provision of a certain number of beds, in order that work in connection with the investigation of industrial health conditions, detection and treatment of occupational disease, measures necessary for prevention and rehabilitation work, can all be undertaken. A programme of training for various types of personnel required under the industrial health scheme should also be built up in association with these centres. In addition, it is essential to develop the existing training facilities at the All-India Institute of Hygiene and Public Health and make it also a centre for teaching and research.

In view of the Employees' State Insurance Act and the imminent enactment of the Factories Act, 1948, immediate steps should be taken by Provinces to initiate schemes for the training of such medical, nursing and other staff as are envisaged in the above legislative measures for the welfare of factory workers.

(*d*) A Medical Branch should be established in the Inspectorate of Factories under the Labour Ministries of the Centre and Provinces for reasons set out in the Memorandum.

(*e*) This Conference resolves that lady doctors should be appointed as Medical Inspectors of Factories in the Inspectorates of Factories, Central and Provincial, with a view to formulating schemes for the promotion of measures for the health, safety and welfare of women and children workers in factories.

(*f*) This Conference commends for consideration by the Central Legislature an amendment of Clause 3, Section 45, in the Bill to consolidate and amend the law regulating labour in factories now under consideration. This amendment is for the purpose of so enlarging the composition of the proposed unit under the clause as to permit of the inclusion of certain types of health workers, who will be concerned with the sanitation of the factory and the supervision of the working environment of the employee in respect of his health, safety and welfare. The clause should be amended as shown below.

> "In every factory wherein more than 500 workers are ordinarily employed there shall be provided and maintained one ambulance room of the prescribed size containing the prescribed equipment and in charge of such medical and nursing staff as may be prescribed. In addition, there shall be provided and maintained such other types of health staff and equipment as may be prescribed for its supervision of the sanitation of the factory and of the working environment of the employee in respect of his health, safety and welfare. This staff should be under the technical control of the local health authority."

NUTRITION

(*a*) The important part that sound nutrition plays in improving the health and working capacity of the people is universally recognised, in India in framing a national health programme, it is necessary to remember that large sections of the inhabitants of this country are living in a chronic state of malnutrition and undernutrition and that the rectification of this state of affairs is essential for obtaining the full benefit of expanded health services and other measures that may be adopted for raising the standard of health of the people.

(*b*) *Formation of Nutrition Committees.*—The national nutritional problem is so vast that its solution will require the united efforts of the people and the Governments. Within individual Governments the activities of a number of ministries have to be co-ordinated and strengthened. The Inter-departmental Committee at the Centre in collaboration with the Nutrition Advisory Committee of the Indian Research Fund Association should formulate nutrition programmes for the country. The Provincial Governments should also set up Nutrition Committees representing the Departments concerned and also nutrition experts to formulate and implement nutrition programmes for the requirements of their respective provinces.

(*c*) *Nutrition Units in Health Departments.* The Conference approves of the recommendation by the Bhore Committee that nutrition units should be considered as integral parts of the Health Departments at the Centre and in the Provinces, their main functions being to survey and determination of the extent and nature of nutrition problems in local areas and amongst specific groups of population as well as active participation in the starting and conduct of nutrition programmes undertaken by Governmental and private agencies and in the assessment of results achieved by these programmes.

(*d*) *Community feeding programmes.*—Immediate attention should be directed towards improvement of the nutrition of infants, children of the pre-school age, the school-going population, expectant and nursing mothers and people engaged in heavy manual labour. The utilisation of maternity and child welfare centres for supplying supplementary food to children and mothers should be practised on as wide a scale as possible.

School meal programmes should be developed on a large scale. The objective should be to provide at midday, a meal of balanced diet with adequate calorific value, particularly in the rural areas where children have often to walk long distances to the school and back to their homes without any adequate provision for nourishment during the school hours. Wherever possible, parents who are able to pay should be made to contribute towards school feeding programmes, but the quality and quantity of the food supplied to the school children should be on a uniform scale in any area. The nutrition section of the Health Directorate in each province should take an active interest in the inauguration of such schemes and advise on the best ways of spending money set apart for the purpose. A beginning should be made in the province by provision of midday meals to children in primary schools.

It is urged that the Central and Provincial Governments should do all that they can to popularise the canteen movement in factories and offices in their respective spheres.

(*e*) *Education in Nutrition.*—Education of the people in nutrition should be an important activity of the Health Departments of all Governments and every available method should be utilised for the purpose.

(*f*) While it is impossible to maintain standards of health without sufficient and proper food, this Conference views with anxiety the rising costs of foodstuffs and requests the Central and Provincial and State Governments to take such measures as will bring prices within the reach of the common man.

(*g*) Measures designed to promote an improvement in the quality and purity of food supplied to the people are essential. For ensuring purity strict enforcement of the provisions of existing Food Adulteration Acts, with such amendments as may be necessary to make these enactments more effective however necessary, is required. For improving quality, legislation on the lines of the Agricultural Marketing Act, which covers only agricultural products, will be necessary. The Conference recommends that necessary legislation should be undertaken and that its enforcement as well as of the Agricultural Marketing Act should receive the earnest attention of all Governments.

TUBERCULOSIS

(*a*) *Provincial Tuberculosis Organisation.*—The Conference recommends the appointment of a Provincial Tuberculosis Officer with suitable subordinate staff under him in each province as an essential step towards the formulation of an anti-tuberculosis scheme and its implementation in successive stages.

(*b*) *The Establishment of Demonstration Centres.*—(i) One or two demonstration centres with tuberculosis hospitals and clinics should, it is recommended, be established in each province on the lines indicated in the Memorandum. The work of these institutions should be upplemented by mobile tuberculosis clinics, which should be based on the demonstration centres and should work in the neighbouring rural areas.

(ii) Voluntary effort has a large part to play in supplementing the work of Governments in the campaign against tuberculosis. For this purpose local committees should be formed in each demonstration centre from among the local population. These committees should be responsible for ensuring that the sick are provided with such comfort as are necessary both in the hospital and in the homes. These committees can, in addition, assist in domicilary treatment, especially in cases where the bread-winner is sick and isolation of children is necessary.

(iii) After-car ecolonies for patients discharged from hospitals and sanatoria are necessary for preventing relapse, and, in the working of these colonies also, local committees can play an important part by the provision of extra food, milk and other comforts and by assisting the patients to secure suitable employment on release from institutions.

(*c*) *B.C.G. Vaccination.*—(i) The development of a B.C.G. Vaccination programme forms an important part of the anti-tuberculosis campaign. The Conference therefore recommends the scheme put forward by the Central Government whereby B.C.G. vaccination will be started, as the first stage in the programme, at Madanapalle, and in the cities of Madras, Bombay, Calcutta, Delhi, Baroda and Mysore and such other centres as may have facilities for the same, to the Provincial and State Governments concerned and expresses the hope that these Governments will extend their full co-operation in the execution of the scheme.

(ii) In view of the importance of securing adequate control over the use of this method of protecting the people against tuberculosis the Conference stresses the importance of the manufacture of the vaccine always being under governmental control and for the time being, under that of the Central Government. The administration of the vaccine to the people should also be controlled by Governments.

(iii) In order to ensure that the effects of B.C.G. vaccine on the incidence of tuberculosis is studied properly it is essential that, at least during the present stage of the programme, a certain group of people, who have been vaccinated and who are relatively stable in their movements should, in each area, be kept under observation so as to obtain reliable data regarding the incidence of the disease among the members of this group.

(*d*) *The training of personnel for anti-tuberculosis work.*—The establishment of centres for the training of personnel is of great importance. There are at present only two recognised training centres in the country, at Madras and at Delhi respectively. The Conference recommends that training centres should be established as early as possible, in Calcutta, Bombay and Amritsar.

(*e*) *Specific recommendations for individual provinces.*—The suggestions put forward in Appendix I of the memorandum for developing anti-tuberculosis measures in individual provinces are based on the plans included in their five-year programme. These suggestions are commended to the Provincial Governments concerned for serious consideration.

(*f*) *Non-pulmonary tuberculosis.*—The Conference further recommends the taking of necessary steps for the diagnosis and treatment not only of pulmonary tuberculoseis but also of other forms of tuberculosis.

LEPROSY

The Conference recognises the magnitude, urgency and importance of the leprosy problem in India and recommends, for the consideration of Governments, the adoption of the following measures :

(1) *Provincial leprosy organisation.*—The creation of the post of a Provincial Leprosy Officer under each Health Department in each province is strongly recommended. In those provinces in which the preventive and curative health functions are combined in the same administrative head, the Director of Health Services, the Leprosy Officer will naturally be on the staff of the Director. In certain provinces the posts of administrative heads of medical and public health departments are separate. In such cases the question arises as to which officer should control the activities of the Provincial leprosy organisation and its head, the Provincial Leprosy Officer. Taking into consideration the importance of the preventive aspect of the campaign, it is recommended that the Provincial leprosy organisation may be attached to the Director of Public Health and a necessary corollary to this decision would be that the institutions for the treatment of the disease will also have to be brought under the control of the Director of Public Health. Under each Provincial Leprosy Officer there should be a Provincial Survey Officer whose function would be to collect and correlate data regarding the prevalence of the disease in various parts of the Provinces. In each district there should also be a Leprosy Unit covering both curative and preventive aspects of the problem. To every district headquarters hospital, should be attached a medical officer in charge of the curative side of leprosy. There should be accommodation in the hospital for the admission of at least 25-30 patients. Working side by side with this officer, there should also be a district survey officer whose duty it would be to investigate the position of leprosy with regard to its incidence, local factors influencing increase or decrease of the prevalence of the disease as well as the possibility of setting up leprosy preventive schemes.

(2) *Leprosy institutions.*—The organisation of leprosy institutions on an adequate scale

is essential as part of the campaign against the disease. A modern leprosy institution should provide for adults' and children's sections, a section for research and another for investigation into the methods of occupational therapy and methods of relief and rehabilitation of patients who are deformed. These institutions should not be of the type of "leper asylums" where two or three hundred patients are housed with inadequate medical attention and insufficient arrangements for their comfort.

The practical application of the sulphone group of drugs on a sufficiently large scale to secure results which might prove conclusive is essential. It is urged that the import of these drugs, particularly for experimental purposes, should be unrestricted especially when they are supplied to persons who are known to be specialists in the disease.

(3) *Control of leprosy in groups of villages.*—Leprosy, unlike tuberculosis, is largely a village disease. The vital need in leprosy control is planned experimental work in selected groups of highly endemic villages, directed towards the control and gradual elimination of leprosy in those groups of villages. Every case in an area should be accounted for, and every infective case taught to observe the necessary preventive precautions chiefly by adopting one or other of the recognised methods of isolation, *viz.*:

(*a*) home isolation;
(*b*) group isolation in agricultural and occupational colonies.
(*c*) night isolation;
(*d*) institutional isolation.

Such measures should be made enforceable by law, in the selected epidemic areas.

The whole scheme should have for its central object the protection of children that are constantly exposed to infection in their homes and surroundings.

(4) *Organisation of leprosy teaching.*—In medical colleges and teaching hospitals attached to them there should be leprosy units in charge of persons well versed in leprology in order to develop undergraduate and post-graduate training on sound lines. The organisation of refresher courses to workers in leprosy is equally important.

(5) (*a*) *Organisation of social assistance and welfare.*—The modern trend in medicine is to relate the illness of a patient to his social background and to study those conditions and causes which govern the spread of the disease in the community. The problem of leprosy can also be solved only if this approach towards the elucidation of its causes and their effective control is adopted. The social welfare officer should therefore be trained to participate in leprosy prevention and treatment. Provision should be made for the training of such officers. The functions of these officers will include investigation of the social, economic, dietetic and other factors in respect of individual patients and participation in the measures designed to control the adverse effects of these factors. The social welfare officer will also be responsible for organising occupational therapy so that patients who have the disease and are liable to be crippled by it will be enabled to earn a living.

(*b*) *Stimulation of Voluntary Effort.*—Though leprosy work is primarily a responsibility of Government, we cannot hope to achieve much progress without the help of voluntary work. Voluntary work must be stimulated by special and generous aims.

(6) *Educational propaganda.*—This should preferably be done by voluntary leprosy organisations such as the All-India Leprosy Organisation (The Akil Bharata Kushta Samiti) recently founded and through the Indian Council of the British Empire Leprosy Relief Association.

(7) *Child leprosy.*—Children are much more liable to leprosy infection than older persons and the most important measure for the control of the disease is prevention of infection of children. Child leprosy investigation units and sanatoria should be established. Special sections for children should also be created in existing leprosy institutions. It is impossible to segregate child cases of leprosy under village conditions and institutional isolation will be necessary.

(8.) The Conference recommends the establishment of a committee to report at a very early date on the steps to be taken on the creation of an All-India Leprosy Teaching Research Institute and authorise the Chairman to establish this Committee.

TRAINING OF MEDICAL NURSING AND ANCILLARY PERSONNEL

(*a*) The Conference notes with satisfaction that Provincial and State Governments are taking steps to improve medical education by conversion of schools into colleges, establishment of new colleges and introduction of the double-shift system in the case of certain provinces. This process of development should, it is recommended, be pursued with vigour in view of the need for producing, within the period of the next five to ten years, an adequate number of doctors to permit of a reasonable expansion of health services in the country, particularly in the rural areas.

(*b*) The Conference is gratified to learn that the intention of the Central Government is to promote, in collaboration with Provincial and State Governments, the development of postgraduate education in all branches of medical science as speedily as possible. The appointment of the Up-grading Committee, in order to explore the possibility of improving existing centres of teaching and research in such a manner as to make them function as institutions to serve the purposes of the country as a whole, is particularly noted with satisfaction. The Conference emphasises that, as soon as circumstances permit, the establishment of the All-India Medical Institute should also be taken up.

(*c*) The training of health personnel other than doctors such as nurses, midwives, sanitary inspectors and health visitors is of the utmost importance because they can perform a variety of diagnostic, curative and preventive functions under the direction and supervision of doctors. The Bhore Committee estimated that, within a period of 25 years, while a fourfold increase of doctors was necessary, the corresponding increase in respect of nurses and health visitors should be hundred times in each case and about twenty times in the case of midwives. The extent of sickness and mortality existing in the country can perhaps be halved by the employment of properly trained people of these types in sufficient large numbers. It is, therefore, urged that Governments should concentrate, as much as possible, on the training of non-medical health workers during the next five to ten years.

(*d*) The general position regarding nursing is far from satisfactory. Some of the main impediments to the improvement of the nursing profession in the country are unsatisfactory conditions of pay and housing and lack of essential amenities for trainees as well as for nurses employed in service. Considerable efforts to improve these conditions are, therefore, required if a proper supply of nurses is to be ensured. A definite raising of the status of the nursing profession and the conferment of gazetted rank on those members of the nursing service who hold a nursing degree or hold the more responsible nursing posts are also necessary if suitable women are to be attracted to this service.

(*e*) The position of dentistry in India is even more backward than that of medicine. No health service can be considered complete unless adequate provision for dental care and oral hygiene is made available to the people. There is, therefore, urgent need for producing more dentists as well as for developing a dental service in association with the general health service

of the country. After the partition, there is only one Dental College of university status in the country. In order to raise the standard of dental education and to permit of the rapid production of dentists, the Conference recommends that other dental teaching institutions in India should, as soon as possible, be raised to the status of University Colleges and that the establishment of new Dental Colleges in association with existing medical colleges should be taken up early in as many Provinces and States as possible.

(*f*) An expansion of dental service to the people is equally necessary and the objective for the near future should be to establish a proper dental hospital at the headquarters of each Province, to create dental clinics in association with every district headquarter hospital and to provide dental service for the rural population through travelling dental clinics centred on the dental institutions at the provincial headquarters and at the headquarters of the districts. The development of adequate dental services as part of school health programmes is also very important.

(*g*) The Conference recommends that each Medical College in the Provinces should set apart one seat in the case of small colleges and two seats in the case of large colleges for the admission of Indians from abroad, who have their domicile in those countries, that the allotment of seats should be left to the Central Ministry of Health and that capitation fee should not be charged in respect of these students. The Conference further recommends that conditions for the admission of such students should be laid down by the Central Government.

(*h*) The Conference also recommends that, similarly, one seat in the smaller medical colleges and two seats in the larger colleges should be reserved for students nominated by the Central Government from among those in Centrally Administered Areas and from among the sons and daughters of Central Government servants serving in Delhi and in the Provinces. The Conference also recommends that no capitation fee should be charged in respect of such students.

RURAL MEDICAL RELIEF

The Conference notes with satisfaction that Provincial and State Governments are increasingly aware of the urgency and importance of developing adequate medical relief in the rural areas and that these Governments have made various attempts in the past and have also put forward new proposals to achieve this purpose. After a full consideration of the problem the Conference is of the opinion that a service which is designed to provide only curative measures for the rural areas will not meet the requirements of the people and that the organisation of an integrated curative and preventive health service is essential. Such a scheme has been put forward by the Bhore Committee but, for financial and other reasons, Governments have not found it possible to implement this scheme within the last few years. Nevertheless, in view of the need to ensure that developments take place on sound lines, it is urged that the whole question should be reviewed and suitable recommendations made to the Central and Provincial Governments in order to assist them in taking decisions on this important question. The appointment of a suitable committee for the purpose by the Chairman is recommended.

HEALTH MEASURES FOR REFUGEES

The Conference places on record its appreciation of the work so far accomplished in the task of providing health protection to the displaced millions from Pakistan and of the fact that some progress has been made in finding employment for doctors and other health workers among them. The most urgent need is now to take measures to disperse the refugees, who

are concentrated in camps, over different parts of the country so as to permit of their assimilation by the general population and their return to normal settled life. Side by side with this, it will be essential to develop health services also. In this direction and in the development of similar services for the large Unions of States which have been formed, it should be possible to absorb a large part of the remaining health personnel and the Conference urges that Governments should do all they can to achieve this end.

PROHIBITION OF PRIVATE PRACTICE BY GOVERNMENT MEDICAL OFFICERS

The question of controlling or of prohibiting private practice by Government doctors is one of great complexity. As an ultimate objective it is essential that India should, as pointed out by the Prime Minister in his opening speech, fall in line with other countries and work towards the socialisation of its health services so as to make health protection of the proper quality and in adequate quantity available to all irrespective of their ability to pay for such services. Socialised health service would include within its scope the newer conception of preventive health work on behalf of the healthy in order to promote positive health as much provision of medical care to the sick. When such a service extends its operations over the country as a whole there would be relatively little room for private practice and the ultimate objective would therefore seem to be in the direction of practically complete prohibition of private practice. In the meantime taking into consideration existing conditions this Conference is of the opinion that prohibition can be introduced only in stages and that in the meanwhile salaries of medical officers should be increased. It therefore recommends that Governments should explore the possibility of restricting private practice by doctors in their service in successive stages. In this connection the suggestion put forward by the U.P. Reorganisation Committee for the establishment of Pay Clinics is commended for consideration by Governments. This scheme will make the services of well-qualified government doctors available to a larger section of the community than at present and will also provide some monetary payment to these doctors and institutions.

Conditions in respect of the existing scales of pay and of availability of doctors vary considerably in the Provinces and States and therefore individual Governments will have to work out their own schemes for the gradual enforcement of prohibition of private practice. It is recommended that, where the existing privilege of private practice is completely withdrawn, the system adopted by the Government of India, in Delhi hospitals, of granting 25 per cent of the pay of the doctors concerned in lieu of practice may be adopted in the Provinces and States. The Conference is further strongly of the opinion that as medical officers of the Public Health Department are not in many cases adequately paid at present, the granting of the 25% suggested above should be made in addition to their existing scales of pay with a view to attracting a better type of officers. Where existing scales of pay for Public Health Officers compare unfavourably with those of corresponding officers in the Medical Department, the pay of Public Health Officers should be raised to the level of those in the Medical Department before the 25% increase recommended above is added.

DRUGS AND MEDICAL APPLIANCES

The Conference notes with satisfaction that the Drugs Act and the Drugs Rules have been brought into force in all the Provinces and some States. In view of the importance of Drugs standards control on a uniform basis all over India the Conference recommends that legislation

on the lines of the Drugs Act and of the Drugs Rules thereunder should be promoted in the other States also.

It is important that the Central and the Provincial and State Governments should take all possible steps for the effective enforcement of the Drugs Act. In particular, early attention should be devoted to the setting up of Provincial drugs laboratories, a strong and adequate inspectorate for the control of the manufacture, distribution and sale of drugs and of the necessary machinery for issuing licences.

Regarding the manufacture of essential drugs and appliances, the Conference urges that early steps should be taken under Governmental auspices to set up factories for making essential drugs like the sulpha drugs, synthetic anti-malarials, penicillin and streptomycin. As also for the manufacture of vitamins and hormones the ultimate objective should be to make the country self sufficient in the supply of these drugs.

ALL-INDIA MEDICAL REGISTER

The Conference recommends that, in consultation with the Medical Council of India, the Central Government should take early steps to create an All-India Medical Register which should include medical licentiates also. The Conference is of the opinion that the standard of licentiate medical education should be raised to a University degree as early as possible and that the matter should be revised at the next Conference of Health Ministers when the period of enrolment of medical licentiates into this register be fixed.

MALARIOGENIC ACTIVITIES OF THE RAILWAY AND WORKS DEPARTMENTS

1. Railway and road construction was often undertaken in the past without due regard to public health principles, thereby creating malariogenic conditions on a large scale. These have resulted mainly from the creation of isolated borrow-pits, high embankments and roads and railways which interfere with the natural drainage of the country in the absence of adequate provision for the rapid disposal of spill and flood water. Consequently large tracts of the country have become subject to varying degrees of prevalence of malaria. The Conference recommends that the Government of India should make it a condition that railway projects for extension of lines, material alterations to existing lines and all projects costing Rs. 5,000 or more including construction or extension of embankments should first be referred to the Director of Malaria Institute of India in regard to the malariological aspects of these works. The Director should consult the Provincial or State Government concerned where the works are to be executed in the territories of a Province or State, and obtain concurrence of that Government regarding his own proposals for meeting the malariogenic problems associated with these works and, in particular, the adequacy of the waterways provided in the project concerned and their suitability from the public health point of view. In the case of works of an urgent nature such as repairs to breaches in a railway embankment for which it would not be possible to obtain the views of the Director, Malaria Institute and the concurrence of the Provincial or State Government beforehand, the Director and the Government concerned should be intimated as soon as possible after the works are started and their recommendations for remedying the defects, if any, from the public health point of view, should be given effect to. Similar conditions should also be laid down for observance by other Central Government departments and all departments of Provincial and State Governments which are concerned with engineering operations likely to produce malariogenic conditions.

It is essential that such consultations should be done as expeditiously as possible in order not to cause unnecessary delay in proceeding with important railway construction.

2. In accordance with the recommendations of the Committee set up by the Government of India in 1946 to suggest measures to control man-made malaria no engineering project of any description undertaken under Governmental or other auspices should be started without adequate consideration being given to its malariological aspects and without provision, in the original estimates for the project, for the necessary anti-malarial works.

3. This Conference further recommends that in addition to the recommendations of the said Committee, Railways, Road Boards, Canal Construction Boards and other Departments concerned should also note the following directions for the guidance of all engineering works :—

(i) When the Railways have to cross the natural spillways of a river in deltaic areas or cross the natural lines of drainage in non-deltaic areas and when high embankments have to be built, ample provision should be made for the free passage of water through the embankment by means of culverts and bridges.

(ii) Such damage to health as is being done by existing embankments should be rectified without delay.

(iii) Existing borrowpits should be made into continuous and properly graded channels leading, as far as possible, to the nearest drainage channel or tank.

(iv) In the construction of bridges and culverts, the Railway should provide such waterways as will secure the maximum afflux of 12 inches* in an ordinary flood and not exceeding two feet* in an exceptional flood. In the event of afflux being afterwards found to exceed these limits, the Railway Administration concerned should be prepared to provide additional waterways to bring the afflux within permissible limits, *i.e.*, 12 inches* in ordinary floods and two feet* in exceptional floods.

(v) The construction of paved floors under bridges over rivers and channels should be avoided as far as possible. When they are unavoidable, their levels should conform to the pre-existing bed level, upstream and downstream.

(vi) In the interests of the public health, all depressions holding water within the jurisdiction of the Railway and other Public Departments should be kept free of aquatic vegetation.

(vii) Should *khals*, rivers, *bils* and tanks owned by the Railway be leased out, the following clause should be included in the terms of the lease :

> "That the lessee will hold himself responsible for keeping the leased-out *khal*, river and/or tank free of aquatic vegetation. In case of failure to do so, the lease shall stand cancelled and the lessee shall not be entitled to any compensation for the cancellation of the lease."

(viii) There should be close co-operation between the health authorities of Railways, Provincial Governments and local bodies in order to ensure that the necessary anti-malaria measures are carried out effectively.

(ix) A suitable course in malariology for engineers should be established in as many Engineering Colleges as possible.

(x) The Conference also recommends for consideration by Railway Administrations the desirability of planting trees near the boundary of railway land and not in a manner to

*After the Conference the Director of Health Services reported that, so far as the province of West Bengal was concerned he had ascertained the views of the authorities of the Irrigation and other Engineering Departments and that these authorities were of the opinion that the basis on which they had been working so far, namely, 6 inches in the case of ordinary floods and 12 inches in the case of extraordinary floods should be adhered to.

interfere with the work of the railways. Such afforestation is likely to be of value in reducing the level of sub-soil water and will therefore probably prove to be a useful anti-malaria measure. The planting of trees should, however, be done in such a manner as not to permit of the resulting shade affecting the neighbouring land which is not in the possession of the Railway administration.

BLINDNESS IN INDIA

The care of the blind and prevention of blindness constitute problems of the utmost importance and the united efforts of the people and of Governments will be required for the solution of these problems. A special committee on blindness under the joint auspices of the Central Advisory Board of Health and of Education has estimated that over two-thirds of the cases of blindness in India are preventible. The need for an intensive campaign to control the causes responsible for blindness is therefore evident and the Conference recommends that concentrated efforts in this direction should be undertaken without delay.

2. A country-wide attack on eye diseases should be organised by bringing treatment facilities down to the remotest villages. Additional eye hospitals and eye wards attached to general hospitals are urgently needed throughout India. In order to carry treatment facilities to the rural areas it is recommended that fully equipped and well staffed *Mobile Eye Clinics*, based on these institutions, should be organised for work in the surrounding villages. Eye camps can be established in selected places for limited periods and concentrated efforts can be made to deal with as many eye cases as possible.

3. In order to assist in the development of such treatment facilities the Conference recommends that steps should be taken to institute post graduate degrees and diplomas in as many teaching medical centres as possible.

4. The Conference notes with satisfaction that the Government of India proposes to appoint a special Adviser in Ophthalmology and commends similar action to Provincial and State Governments. These officers will help in the organisation of the campaign against blindness and eye diseases on sound lines including the education of the people in the hygiene of the eye.

5. As regards the care of the blind, it is recommended that Governments should, instead of spreading out effort on too wide a scale, concentrate attention on the provision of (1) more schools for the blind at the schoolgoing ages, (2) workshops for the training and permanent employment of employable adult blind under conditions affording adequate care, and (3) Braille libraries and homes for the unemployed blind.

6. The education of blind children should be part and parcel of State educational system. It should assist the present schools for the blind by subsidies or grants, provided the quality of the work done in these institutions is considered satisfactory by the Governments concerned.

IMPROVEMENT OF THE MACHINERY FOR THE REGISTRATION OF THE VITAL STATISTICS

(*a*) The importance of promoting the development of vital statistics on sound lines cannot be over-emphasised. Vital statistics constitute the foundation on which all constructive work in the field of public health and in many other fields of administration must be built up. Preventive and curative measures can be formulated on sound lines only if they are based on reasonably correct information regarding the age and composition of the people as well as the nature and incidence of sickness in the community. Existing vital statistics in India are defective both as a result of large omissions in the registration of births, deaths and other

vital events as well as from the incorrect recording of the causes of death and of cases of communicable disease which are notifiable. Every effort is therefore required by all concerned to improve registration and compilation of vital statistics.

(*b*) The recommendations put forward by the Bhore Committee, after a detailed examination of the problem, are recommended to Governments for adoption and, in particular, the following :—

(i) the appointment of a Registrar-General of Vital and Population Statistics attached to the Central Ministry of Health and responsible for the carrying out of the functions recommended by the Bhore Committee ;

(ii) (*a*) the creation of Provincial and State organisations under the charge of a Registrar of Vital and Population Statistics with district organisations on the lines suggested by the Committee.

In view of inadequacy of funds and of trained personnel it is suggested that the district organisation should be introduced, in the beginning, in one or two selected districts in each Province or State. The broad outline of work suggested for the district organisation by the Bhore Committee will have to be tried out in actual practice in order to ensure that the scheme develops on lines suited to local conditions and, from this point of view also, a gradual development of the district organisation seems desirable ;

(*b*) As an immediate step, arrangements be made for centralising the compilation of the vital statistics in the provinces, that is, the vital statistical returns should be sent from the groups of villages or Union Boards or from the Thana as the case may be direct to the Statistical Section of the Health Directorate for final compilation. After the final compilation, the Centre can send out information to all concerned.

(*c*) The Conference resolved to appoint a committee to revise the existing forms for vital statistics returns and to devise new forms so as to ensure the compilation of statistical information on uniform lines throughout the country and in a manner suited to the crude nature of the data which alone are available under existing conditions. The Committee should also make recommendations for the practical applications of the proposals put forward by the Bhore Committee in regard to the district vital statistics organisation. The following will constitute the Committee :—

Dr. Bannerjea.
Dr. Mathew.
Dr. Chandrasekharia.
Dr. Tampi.
Dr. Chatterji.
Dr. Raja.

(iii) the creation of a medical section in the office of the Registrar-General

(Continued on page 612)

PHYSICIANS AND SCHOOLS

Proceedings of the Conference on the Cooperation of the Physician in the School Health and Physical Education Program

Report of Section IV. Pre-Service and In-Service Education

Education's health programme is bigger than that generally thought of as "health teaching," "health service," "physical education and recreation," and should permeate the whole school curriculum and programme and involve all the people in the community. Consequently, an effective programme can be carried out only when there is teamwork of all the diverse groups involved. There is a distinct need for all working in the schools to understand educational philosophy and the community as a whole with all its resources available for assistance in the programme.

PRE-SERVICE EDUCATION

There is a close inter-relationship between in-service and pre-service training. There should be at least in-service training of all groups including the parents, but the training discussed in this report will be largely special training of the health service personnel and teachers, which they should have separately. Also listed will be the team work training procedures required. All such workers should have experience in field work as part of their pre-service training.

IN MEDICAL SCHOOLS

Since every practising physician plays some part in the school health programme and may serve as school physician, medical schools should give additional training to medical students to cover more adequately the following points:

1. The realtionship of the physician to the community, his great influence in forming public opinion in matters of health, his responsibility in community planning including the promotion of health education in schools.

2. The part of the physician in the school health programme even when he is not a member of the school personnel.

3. The physiology of exercise and the function of physical activities and physical education in health and education.

4. The importance of making the pediatric examination the type to be used when examinations are performed in the schools.

5. The administrative policies of schools and how the school physician may function as a medical adviser rather than merely as a medical inspector.

The requirements of additional pre-service training beyond the above for physicians may be difficult to enforce until such time as salaries of school physicians make a career of school health service more attractive to physicians.

IN SCHOOLS OF PUBLIC HEALTH

Schools of public health should give increased emphasis in the training of health educators, physicians, and nurses in school health, the basic philosophy of general education, school organization, and school administration.

IN SCHOOLS OF PUBLIC HEALTH NURSING

The training of school nurses should be founded upon the training given to prepare a graduate nurse as a generalized public health nurse. Emphasis should be placed upon child development. Field work should include time in rural as well as city public health and school programmes. Additional training should be given to orient the nurse in school work. At the start of her employment as a school nurse, she should be given guidance in the following:

1. Her status and function in the school.

2. Her obligations to other community organizations.

3. Her duty to participate in teacher groups and their work.

The possibility of training selected nurses also as teachers so that they can teach hygiene or act as health co-ordinators should be explored further.

IN TEACHER-EDUCATION INSTITUTIONS

1. Teachers' colleges and other teacher-training institutions should give health the importance it merits. The colleges should develop health services for students and faculty and should develop the proper attitude of the college toward its place in the health programme and the duties and obligations of teachers in this programme.

2. The college should lead teachers to realize that all teachers should contribute to the health programme whether they are health teachers or teachers of other subjects, and that it is each teacher's duty to determine how he can best contribute to the health programme. Teachers should be so motivated in pre-service training in health that they will make their full contribution to the health programme in spite of such difficulties as (*a*) a crowded curriculum, (*b*) overstressing of the standard curriculum subjects such as reading and arithmetic, (*c*) parents being more interested in the scholastic attainments of their children than in their health or their health habits, (*d*) overloading of the teacher with a multiplicity of duties.

3. A coordinating council on a college level will stimulate an interest in health by inculcating health in the general curriculum.

4. The study of child health and development may be used in motivation of the teachers in training to appreciate the health problems of school children.

5. The demand for the training of teachers in health is more effective if it comes from the general supervisor and school administrator, and not from a specialist in health and physical education.

6. All community services and facilities must be utilized in any good health education programme. The teachers' college should exemplify this by tying up with all pertinent community agencies in its service area.

II. IN-SERVICE EDUCATION

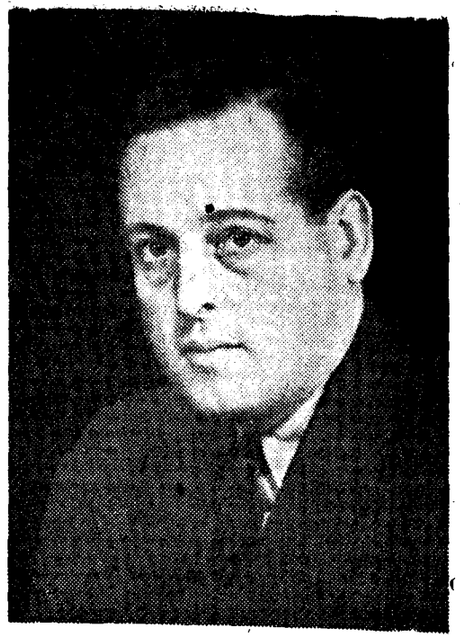
1. There should be planning and in-service training conferences, institutes, and workshops involving teachers, physicians, nurses, dentists, dental hygienists and others interested in the community health programme to work out problems related to the specific community. The calling of representatives of these groups together could be instituted by any one of the groups. There are many advantages in having a state planning conference to bolster local efforts in this work.

2. There should be a school health committee in each local academy of medicine or county medical society to assist in planning the school and community health programme.

By courtesy—'Health and Physical Education.

PREVENTING WATER POLLUTION

Chemical and Bacteriological Work in Britain



by
COMMANDER TAN COX

Britain is not a large country—well under 100,000 square miles—but over its surface run a surprising number of rivers and canals of more than five miles in length. In England alone there are about 1,200.

These small waterways play an important part in the daily lives of the people, for it is they that supply the bulk of the fresh water and they too that are largely responsible for carrying away the waste. With the population and industrial installations increasing as fast as they are, these are essential matters and as the pollution of one small source of water may affect a very large area, it is equally essential that the scientific control of purity of the freshwater and sterility of the waste should be maintained throughout the country. In Britain this is ensured by scientists of the Water Pollution Research Board, and I know of no country where the sources of running water are safer.

WIDE APPLICATIONS

It is as much the concern of this Board to prevent pollution when new industries are set up as to cure it when it occurs. Its investigational work is very largely chemical, although there are also important biological aspects especially bacteriological. The subjects of this year's report, just received, illustrate how wide are the applications: the re-use of seawater for cleansing mussels, biological filtration of sewage, control of filter flies, waste containing oil, waste containing cyanide, manufacture of DDT, of sugar beet and so on.

The mussel story is an interesting one. These shellfish are eaten more frequently in Britain now than before the war. For many years it has been normal for them to be cleansed of bacteria before they are sold. This process involves batches of the shellfish, supported on wooden grids, being immersed in an open tank of chlorine-sterilised seawater for two successive periods each lasting from 16 to 20 hours. During these immersions they themselves eject bacteria and waste which are washed out of the tanks by streams of water.

This process is altogether satisfactory where fresh batches of seawater can be used for each cycle of purification, but the percentage of seawater must be 63 or higher, for the mussels only eject the undesirable matter actively at that concentration.

CHLORINE TREATMENT

Now mussels are to be found plentifully in British estuaries, where they are more accessible than on the coast, but in some estuaries suitable seawater can be obtained at spring tides but not at neap tides, and in others the water is less saline—certainly not salt enough for the mussels to clean themselves properly. The water-pollution scientists, therefore, carried out experiments to see if it were possible to treat seawater so that if it were once brought to such places, it could be re-used for cleansing successive batches of mussels. They did this in a Welsh estuary and the results were entirely satisfactory.

The method developed is for the seawater, after each cleansing operation, instead of being discharged into the sea, to be treated with chlorine and then by aeration with diffused air. This aeration removes the excess chlorine and carbon dioxide and replaces the dissolved oxygen which has been removed from solution in the water by the life processes of the mussels. In the medium-size plant, 26 successive batches of mussels were cleansed in the same seawater as satisfactorily as though fresh seawater had been used for each batch. Following on this success it is probable that the method will soon be adopted on a large scale on some of the British estuaries.

So far as purely chemical work is concerned, good results have also been obtained in dealing with an increasingly serious cause of pollution—the discharge of oily waste from engineering factories. The problem is two-fold: firstly, to devise a simple method for treating waste emulsified oils (particularly oils used in cutting and floor washings) to produce a liquid free from oil and suitable for discharging into a sewer; secondly, to prevent the contamination of surface water, and hence streams by leakage of oil from storage bays, by oil dripping on open roads and by

general carelessness in the disposal of waste oil.

OIL FROM WASTE

In the final scale test of the methods proposed, the machine shops of the factory being studied were connected by a special oil draining system to the tanks of the treatment plant. Here, in the first four tanks, the floating oil and suspended solid material were removed; in the second four tanks remaining emulsion (in which the oil was not, of course, lying on the surface) was treated in a batch process with aluminium sulphate and sulphuric acid. This caused the oil to separate out in the form of a semi-solid scum which could be burnt in the factory incinerator. From the flotation tanks, however, 2,500 gallons of saleable oil were recovered each month from an average volume of about 71,000 gallons of total waste water.

The second part of the problem—pollution of surface water by oil—was dealt with by sealing manhole covers and bringing all surface water in the vicinity to a common point at which an oil interception tank was built.

Thus are the small streams, which ultimately give us our water supply, kept pure.

(*Continued from page 607*)

Resolution Passed at the Second Health Ministers' Conference—Continued.

and in those of the Provincial and State Registrars on the lines recommended by the Committee;

(iv) the development of facilities for statistical training of a high order in the universities and in certain other centres where such training is now in progress is strongly recommended.

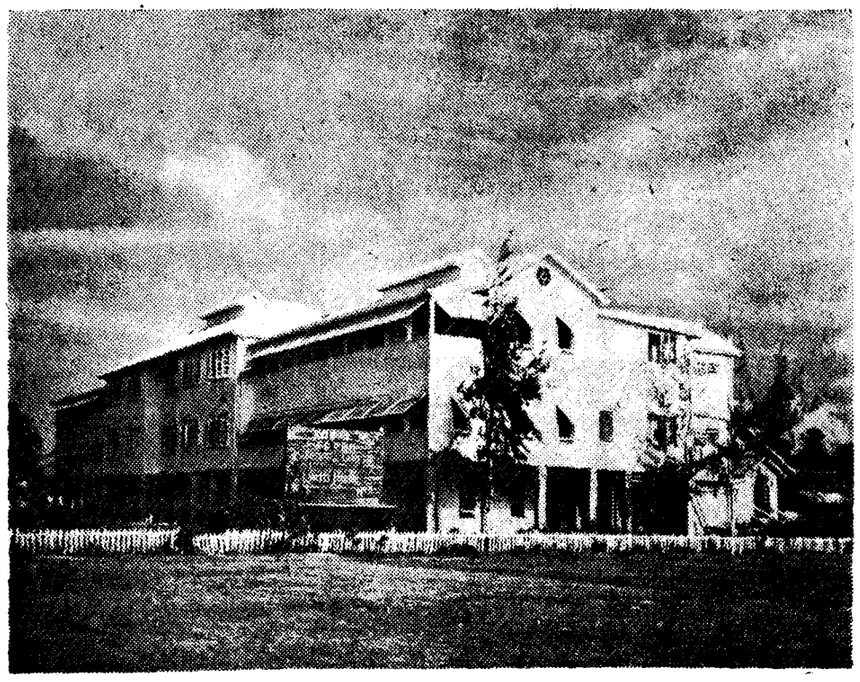
PROHIBITING CONSTRUCTION OF BACK-TO-BACK OR ILL-VENTILATED HOUSES

Back-to-back and ill-ventilated houses, which are still a common feature in many industrial and railway areas, are all important sources of diseases of the respiratory system, and specially of tuberculosis of the lungs. This Conference strongly recommends that the construction of back-to-back and lean-to structures and of buildings without adequate provision for "through ventilation" should be prohibited. Such prohibition should apply to all houses built by Government, Railways, local bodies, employers of labour, building societies and all other organisations interested in housing construction. The necessary legal provisions should be made to make this restriction universally applicable and such restriction be enforced through the issue of directives from the Central, Provincial and State Governments to all concerned.

NEW HOPE FOR LEPERS

Mahaica Leprosarium

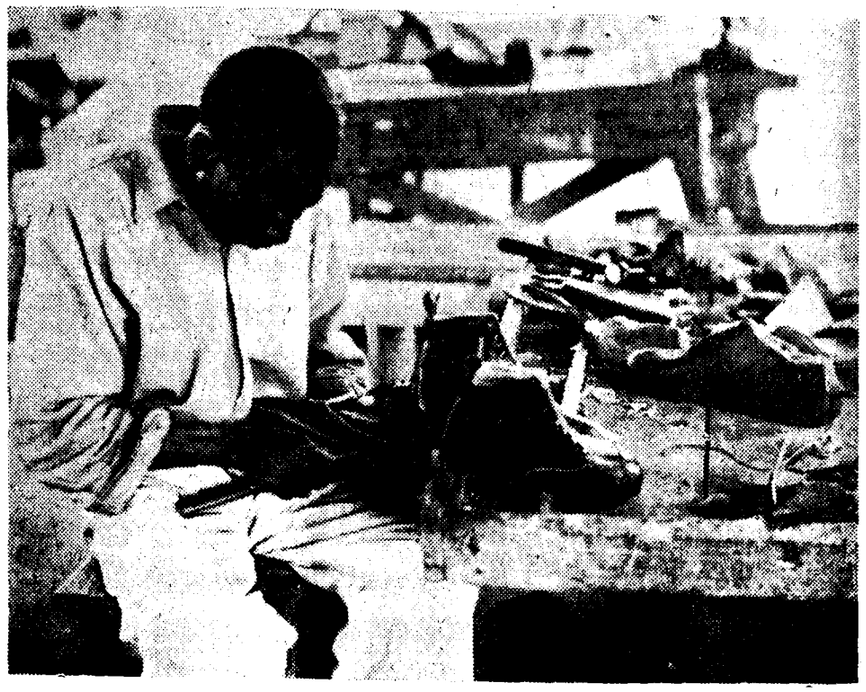
A Symbol of Humanity



THE NEW INFIRMARY. This building was blessed by the Bishop of British Guiana, Rt. Rev. A. J. Knight, at Mahaica, on Jan 15, 1948. It is equipped with all modern conveniences

Close by the cosmopolitan capital of Georgetown, British Guiana, Britain's only colony on the Continent of South America, is the *Mahaica Leprosarium*.

Seventy-five years ago, *Mahaica* was shunned; but today its gates stand open to those afflicted with the dreaded malady as a haven of hope, comfort and industry. The *Mahaica*



Inmates of the Mahaica Leprosarium, British Guiana, have a lot to keep them busy. Here is an inmate working as a shoemaker. Most of his shoes are sold to fellow inmates.

Leprosarium is the most advanced medical centre of its kind in the Colonies of the British Empire, largely through the tireless efforts of one man, Dr. L. H. Wharton, M.B.E., who was recently honoured by The King for his contribution to the alleviation of suffering among mankind.

Dr. Wharton has done much leprosy research and has developed drugs which are showing increasing evidence of being the best curatives known for leprosy. Those afflicted, the rich and the poor, are going to *Mahaica* from all parts of the West Indies. For those who cannot pay, and they are in the majority, all treatment, comforts and privileges are available free of charge. Those who can pay do so, but that buys them no special privileges. There is no distinction between the rich and the poor.

Dr. L. H. Wharton, M.B.E., Medical Superintendent of the Mahaica Hospital and Mrs. Andrew Cowe Martin approaching the female section of the compound.

The hospital is assisted by His Majesty's Government. Patients, where possible, are employed if they wish or are taught trades. There is a canteen. Cricket is played and kiddies romp about doing all the things children love. Sisters of Charity look after them with loving care for leprosy has taken its toll among babies, too. There are religious facilities, and a theatre for movies, plays and concerts.

Not long ago, Sir Charles Woolley, Governor of British Guiana, and Lady Woolley visited Dr. Wharton and the inmates. Sir Charles, long sympathetic with lepers in his service of the Colonial Empire, has promised the Doctor that his grand effort will not bog down for lack of funds.

To the variety of races which populate British Guiana and the West Indies—Negro, East

Girls of the Leprosarium at Mahaica Hospital, British Guiana, enjoying afternoon recreation. Standing by is Dr. L. H. Wharton, Medical Superintendent.

Indian, Central American, Portuguese, Chinese—Mahaica fills a want that has been gravely needed in the Caribbean tropics.

From the age of seven to the age of 70, males and females, are being treated by Dr. Wharton's wonder drugs and the black days of waiting for death in insanitary, unhappy conditions are past.

Mahaica Leprosarium is truly a symbol of humanity.

Dr. L. H. Wharton, Medical Superintendent (right), His Excellency the Governor of British Guiana (centre), Sir Charles Woolly with Lady Woolly immediately behind Sir Charles. A Sister of Mercy, Captain Jeff, A.D.C. to the Governor (left) and H.E.'s police escort. The Doctor is showing the Governor a seed of the Chaulmoogra tree in the hospital compound. The oil from this seed was used many years ago to treat leprosy.

A CENTURY OF PUBLIC HEALTH*

1848-1948

Social advances frequently reflect the reaction of society to danger. They also occur when the conscience of society is quickened by the zeal of the reformer. A century ago, these two engines of reform were represented in England by a largescale outbreak of cholera; and by a one-man war waged by Edwin Chadwick against insanitation. We remember Edwin Chadwick to-day and honour his memory as the Father of our Public Health system. There had been even earlier pioneers. To name but three, Dr. James Lind, who identified ship, hospital and prison fever as one and the same, namely, typhus; Dr. Richard Mead, who proposed "local Councils of Health" to cope with epidemics; and the celebrated Jenner, with his vaccines. But it is to that great sanitarian Edwin Chadwick that we owe the first Act of Parliament ever designed to control disease, and to safeguard public health.

BOARD OF HEALTH

The Public Health Act of 1848 established the new General Board of Health, invested with power to form local sanitary areas under local boards of health. It excluded London. Its main defect was that it was mainly permissive. In the same year the Nuisances Removal and Disease Prevention Act was passed, conferring powers of nuisance abatement. The purpose of the General Board of Health was to implement these Acts, and such local authorities as chose to promote public health measures submitted them for approval. In 1831-33 cholera carried off 31,000. Soon after the passing of the Act of 1848, cholera once more broke out; 54,000 perished. By 1853 the Board had 182 local areas fighting filth.

The ensuing decades unfolded a pattern familiar in British institutional reform. There was slow progress by trial and error; there was obscurantism and interested opposition, and there was compromise. But slowly, and mainly thanks to a small number of men of goodwill, the great service as we know it to-day began to be articulated. It is interesting to-day to recall how one of the great obstacles was the attitude of local authorities to central government directives. Another aspect was the slowness in harnessing the medical profession for public health service. Despite these impediments and limitations, the work went forward until the Local Government Board, through its many facets, was controlling sanitation, sewerage, isolation hospitals, poor law infirmaries, public vaccination, water supply and river pollution, food and drug purity, slaughter-houses, public baths and wash-houses, cemeteries and crematoria. It was registering births and deaths and organising maternity and child welfare; and its officers ranged from medical officers to sanitary inspectors, public analysts and health visitors.

In addition to the Local Government Board there were a large number of other competent authorities dealing with public health. In 1858, so that the public might know the standing of a practitioner, a Medical Register was instituted by the Privy Council, which body also sponsored a midwifery service. Next, the Home Office began to administer the Factory and Workshop Acts; the Prison Medical services; the appointment of Medical Referees and certifying surgeons; and the control of asylums for the insane.

* Extracts from a brochure published by the organisers of the Public Health and Municipal Engineering Congress and Exhibition, 1948, which is to be held at Olympia during November, 1948.

SCIENCE AND ENGINEERING

The advance of science over a century has played a part even greater than the awakening of the social conscience and political instincts of the nation in the development of public health in Britain. The next greatest factor perhaps has been the native skill and ingenuity in engineering. For many years now behind the public conscience there has been the forceful backing of engineers and industrialists eager to direct their knowledge, skill and resources to the improvement of the public health and municipal engineering services. Nowhere else in the world was the ground more favourable for development; here was a highly industrialised country well in the van of progress in civil, mechanical and electrical engineering and well equipped to adapt itself to the needs of the crowded communities which industry itself was creating.

Water is probably the most vitally important single public service indispensable for a sanitary community. A few cities and towns in England managed their own water supplies from early times; otherwise the country's water supplies came from many privately owned water undertakings. Reform came when these undertakings were transferred to public ownership when the process, now virtually complete, of municipalisation was begun. To-day, more than eighty per cent. of the population of Great Britain has house-piped water. Our water is abundant, pure and cheap. The British Waterworks Association represents 400 public undertakings and 7,754 parishes enjoying piped water. Present trends include (*a*) the grouping of local authorities for regionally planned water undertakings, (*b*) the piping of abundant supplies from remote artificial reservoirs to great centres of population, and (*c*) new ideas in pipe-line construction and in plumbing, including the use of new materials.

SEWAGE DISPOSAL

The water-carriage system is now universally in use in cities and towns and even in some villages. The sewage is carried from the point of discharge to underground sewers where it is conveyed by gravity or pump to distant disposal points. Sewage purification is effected by either natural or—more generally—artificial means, that is, by chemical treatment and artificial filtration. Modern practice tends towards the aerated sludge process, which is inoffensive, and has the further advantage of yielding valuable fertilisers. Immense strides have been made in Britain in methods and equipment for large and small population groups, including plant for small groups of houses in the rural areas.

The city streets and highways of the United Kingdom have a high reputation. Their cleanliness, which is taken for granted, is due to the methods of a succession of able road engineers and to mechanised methods of street cleaning. The collection of house refuse is also highly mechanised. Leading British commercial motor manufacturers make all types of refuse-collection vehicles. At least one firm makes nothing else. The disposal of the refuse is dealt with hygienically either by incineration or by the application of the refuse with and without treatment to the land under controlled conditions, as a result of which otherwise derelict land has been turned into a useful public purpose.

HOUSING

Yet another and one of the most important phases of the attack on disease as compared with conditions of one hundred years ago has been the clearing away of the hovels in which the masses were forced to live in those days. These have been replaced by houses properly planned and spaced to permit of a maximum of sunshine and air and to minimise the possibility of disease spreading. The dwellings are equipped with proper water and sanitary and other services to

promote the comfort of those living in them. The result is that to-day every town in the country has its colony, or colonies, of modern, comfortable homes in which the people can take a pride in their upkeep. These colonies are constantly being added to and further improved as experience dictates. The dwellings comprise prefabricated bungalows (which the Government has supplied in large numbers), two-storey houses built of brick, concrete, steel, aluminium and even of wood—not to mention large blocks of self-contained flats—and demonstrate how new systems and methods are supplementing the old English traditional style of housing.

No local authority in Britain would now pass the plans of any house without provision for private ablution. Baths are now made in standard sizes to suit the smallest prefabricated house or the mansion. Nearly every community has public baths, wash-houses and laundries, and several British firms specialise in the design and manufacture of the equipment. From these essentials to the amenities was but a step; and now the open-air swimming-pool, or Lido, with facilities for games and refreshment and swimming instruction for school-children, is a common place.

The State properly regards its children as its greatest asset and guards their health even from birth. Ante-natal clinics, child welfare centres, school meals and milk; medical and dental care, proper play facilities, school playgrounds, municipal parks and playgrounds—these are the common places of our towns to-day and call for highly specialised work by architects, builders and manufacturers of materials and equipment working in close co-operation with the medical and teaching professions. An increasing number of local authorities are designing houses or flats specially to suit old people.

PUBLIC HEALTH TO-DAY

To-day the well-being of the citizen is the subject of a great and growing body of law, designed for the single purpose of creating optimum conditions for abundant health, for prevention is the first law of the sanitarian. One result may be seen in a death rate of 11.4 per thousand, lower than any other country in the world. The new National Health Act is designed to bring about in Britain still more facilities for treatment at clinics and hospitals and the construction and equipment of them will keep the industries concerned alert for new ideas and busy for many years to come.

In every department of public health and municipal engineering mentioned in the foregoing pages, British industry has something worthwhile to show to the world and her experts have ideas and plans for further developments. Much was learned in war-time by local authorities and the industries serving them, when evacuation from vulnerable centres brought a great influx of population to certain areas; when bombing made it necessary to create emergency services overnight; and when Britain became an over-populated armed camp.

By courtesy—"Sanitation"

"Books are Weapons in the War of Ideas." "Some Books are to be tasted, others to be swallowed and some few to be chewed and digested. . . . and some to be eschewed!"

Census and Statistics in India

Author : S. Chandrasekhar.
Publishers : Annamalai University, Annamalainagar, India.
Published : 1948.
Pages : 32—Size—9½″×6½″.
Price : Re. 1.

THIS small booklet is a summary of two lectures delivered by Dr. Chandrasekhar before the Economic Honours Association of the Annamalai University in January, 1948. It is therefore in the nature of an elementary introduction to Population Statistics in India.

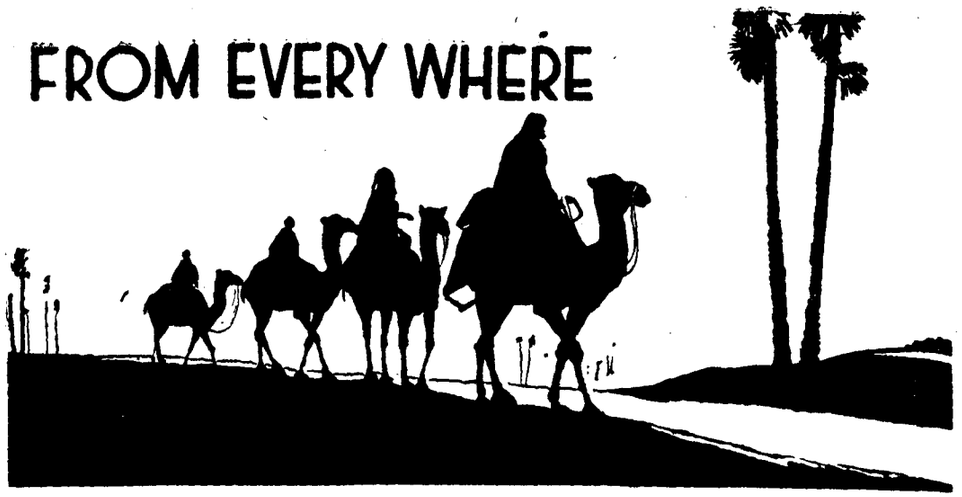
Beginning with a brief history of census operations in India, he proceeds to point out a few of the defects which should be remedied. His appreciation of work done is as generous as his criticism is moderate. In such an address to the students, it is natural that the author should not proceed to details or to embark on any large or detailed constructive proposals for the reform not only of the census but of statistical procedures in India. The need for a proper understanding of the object and uses of social statistics and of the proper method of getting such data are no doubt universal, but are of special importance in our country at the present stage.

Dr. Chandrasekhar, who is now with the UNESCO and therefore in a position to make suggestions not only for this country but for a wider world, will, we hope, utilize these opportunities for giving all possible advice for building a sound foundation for this work. It is also essential that the procedure adopted in various countries should be uniform, with such modifications as may be needed by local circumstances, in order that the data collected may be comparable and may yield useful results to workers in all fields of social activity.

Guidance is necessary not only on matters of broad policy but on matters of method and procedure. Unbiased data are difficult to get even under the best circumstances and with the best of intentions. A great deal of tact and persuasiveness is necessary to convince Governments of the usefulness of spending money on such projects. An instance in point is the report of Bowley & Robertson Committee in regard to Census of Production in India. The financial demands made by those recommendations were very modest indeed. Nevertheless, the Government of India of the time do not think it worth the while to act on those recommendations.

This is not the occasion to elaborate further the methods by which such a desirable end can be achieved. We, however, recommend this booklet to all students who are for the first time studying the subject of Census and Statistics in India. It is extremely readable, it does not hide the wood for the trees and it offers a sane starting point for further study. The cost is extremely modest being a rupee.

T. V. RAMAMURTI.



WHAT DO THEY SAY ABOUT IT?

Readers can contribute to this section. They are requested to send extracts of current literature which, in their view, would interest the people. —*Ed., P.H.*

VITAMINS HAVE OWN FLAVORS AROMAS

Vitamins have appetizing flavors and aromas of their own, which stimulate consumption of essential foods and help to maintain good health, it was reported at the American Chemical Society's national meeting in a paper presented by L. C. Cartwright and R. A. Nanz of Foster D. Snell, Inc.

Ascorbic acid, or vitamin C, contained in citrus fruit, has been found to possess a pleasant, slightly acid flavor believed to carry over into the aroma of food, the report continued, adding:

"Paprika, used widely in the diet of many European people, contains a large amount of ascorbic acid. Hungarian foods, pleasing and aromatic, have a stable flavor and are bodied by the presence of this spice."

Vitamin E, the anti-sterility factor, also stabilizes flavor components, the report stated. Bread and other wheat products, especially those containing the wheat germ, are high in E content and can trace some of their tempting flavor to this source, it was noted.

"There can be no question but that thiamin (vitamin B-1) has an easily detectable odor," the paper declared. "This odor, a component in the aroma of such foods as those containing pork and wheat products, plays a big part in making them desirable, with the result that they are consumed in larger quantities and contribute the desirable added nutritive factor of thiamin to the diet. Certain nuts are high in thiamin and have a very attractive flavor."

(*Extracts from "Science Digest," July,* '48)

SPARE THE CHILD

Question.—What is the present concept regarding physical punishment of children by a teacher? Is it believed justified in extreme cases? What may be objectionable features? —*Georgia.*

Answer.—Use of the natural positive rewards to be found in satisfying activity has to some extent replaced the negative motivation of

punishment in our public schools. Educators today emphasize the value of guidance, and stress the importance of seeking out underlying causes of pupil behaviour problems. The cruder forms of corporal punishment that sometimes result in bodily harm have been eliminated almost everywhere. Some educators defend the rare use of physical punishment upon a particularly remiss pupil and the courts have generally held that reasonable punishment for acts detrimental to the best interests of the school is within the authority of the teacher. All agree, however, that common resort to physical force is undesirable.

The reaction produced by severe punishment is primarily fear. While this is a compelling factor, and often is sufficient to make the pupil "behave", it may be accompanied by loss of pupil initiative and development of inhibitions that deter educational achievement. Mental and spiritual "whippings", in the forms of sarcasm and ridicule, may be even more of a hindrance to satisfactory pupil progress. As a matter of fact, from the mental hygiene point of view, grave harm may result from such methods.

Recent investigations appear to show that a judicious combination of praise and restraint is better than either used alone. Friendly reproof with constructive suggestion was found to be the most effective combination. In the school environment this is normally the boundary line. Beyond that, emotional blocks may arise. There is created a dislike for schools, and sometimes even complete defeat of the aims of education.

(*From HYGEIA, February* 1948.)

HEALTH PRINCIPLES

The following principles are basic to the happiness, harmonious relations and security of all peoples:

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.

The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest cooperation of individuals and States.

The achievement of any State in the promotion and protection of health is of value to all.

Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.

Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.

The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.

Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people.

Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

(*Extracts from Vol. I, of "The United Nations Chronicle" of the World Health Organization, Geneva.*)

HEALTH AND HOUSING

"Health and good housing are partners", says the *Quarterly Bulletin* of the Louisiana State health department . . . Housing is "one o the more important unsolved public health problems in the United States" . . . The

relationship lies in "the prevention of overcrowding and thus, indirectly, the prevention of such diseases as tuberculosis, the respiratory infections, emotional disturbances and the contagious diseases of childhood . . . . "

The bitterest piece of statistics, this writer has ever seen, is a Public Health Service graph of tuberculosis deaths against average rent in the various census districts of Chicago. As one would expect, the death curve comes down as average rent and housing quality rise.

But one notoriously congested district breaks flagrantly away from the general pattern. It is inhabited principally by Negroes, whose inability to find homes outside the area increases overcrowding and rent and depresses the quality of housing.

There, though the average home rent is higher than in some other Chicago areas, annual deaths of tuberculosis jump to a figure that cannot be expressed by the mathematics of the "median curve" and instead appears as an isolated dot high in the upper left-hand corner of the graph.

Nor is that fact of merely humanitarian or "sentimental" interest. That area, like its counterparts in many other American communities, is not self contained; thousands of its residents work in industries and homes in other areas. Until such community foci of infection are cleared up, as physicians have urged for years, their more fortunate neighbours are not safe. . . .

The penalty of bad housing, says the Louisiana *Quarterly Bulletin*, is "human erosion".

—*ELLWOOD DOUGLASS.*

(*From 'HYGEIA' January* 1948.)

A SURVEY OF MEN NURSES

It is understandable that the New York State Nurses' Association should be the first to conduct a survey of men nurses (*Men Nurses, Education and Employment*, New York State, April, 1948), for 22 of the 43 schools of nursing in the United States which admit men are within the State. Over 600 men have graduated from the New York schools in the past ten years.

Areas of service include boys' schools, blood banks, health departments, and the Department of Correction, in addition to more familiar activities such as employment in industry, mental hospitals, general hospitals and private duty nursing. The survey points out that the greatest drawback to basic education of men nurses is the problem of housing: the greatest drawback to general employment of graduates is due to the need in many agencies to make their employment selective.

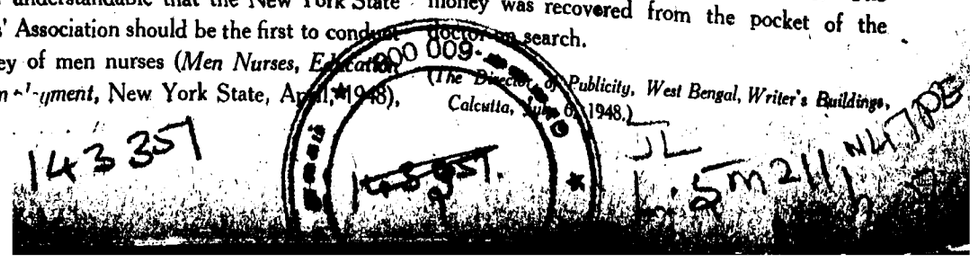
The survey concludes that more male nurses are needed and that there are strong arguments for recruiting men into the nursing profession.

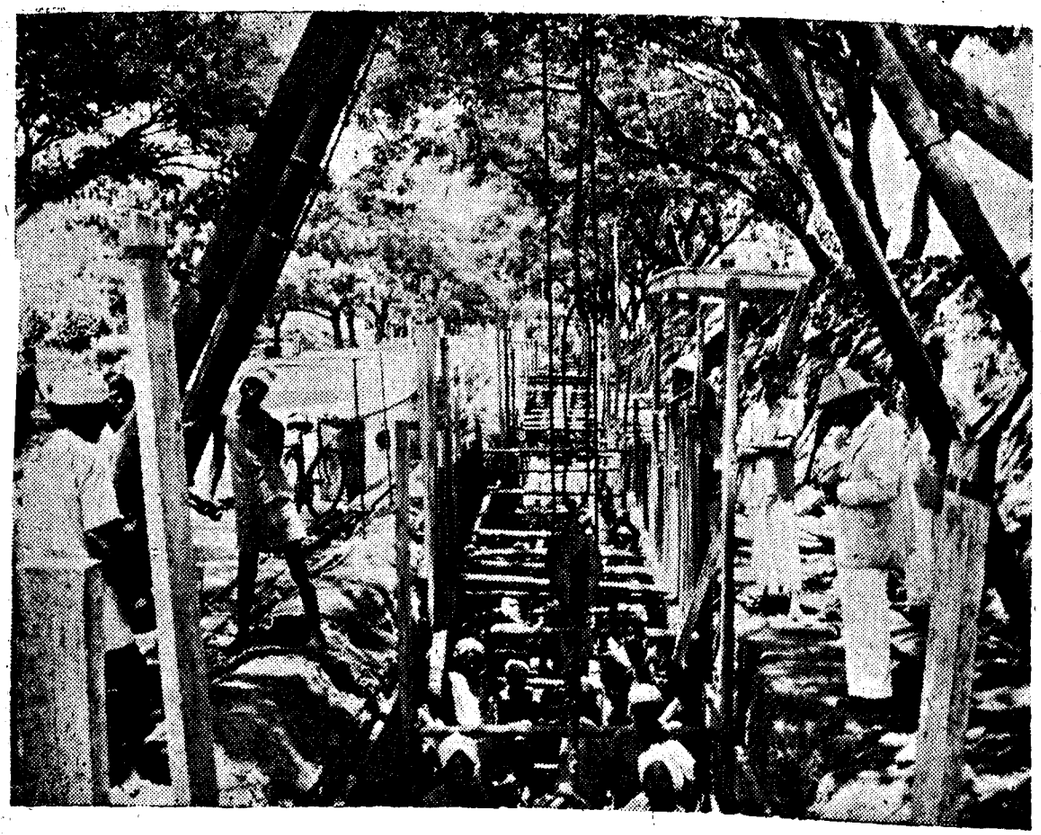
(*'American Journal of Public Health'-July* '48)

DOCTOR TRAPPED FOR DISHONEST PRACTICE

Dr. R. N. Chakrabarty, Assistant Surgeon of Uluberia, was trapped while accepting an illegal gratification from a party who had taken to him for post-mortem examination a case of suicide as recommended by the Police. It is alleged that doctor first refused to hold the post-mortem examination and demanded illegal gratification to the extent of Rs. 100. The party declined to pay this sum and, on negotiation which followed, the doctor reduced the demand to Rs. 40. In the meantime the party on the pretext of bringing the money went and informed the Police who laid the trap. The money was accepted first by the compounder who handed over the same to the doctor. The money was recovered from the pocket of the doctor on search.

(*The Director of Publicity, West Bengal, Writer's Buildings, Calcutta, July 6, 1948.*)





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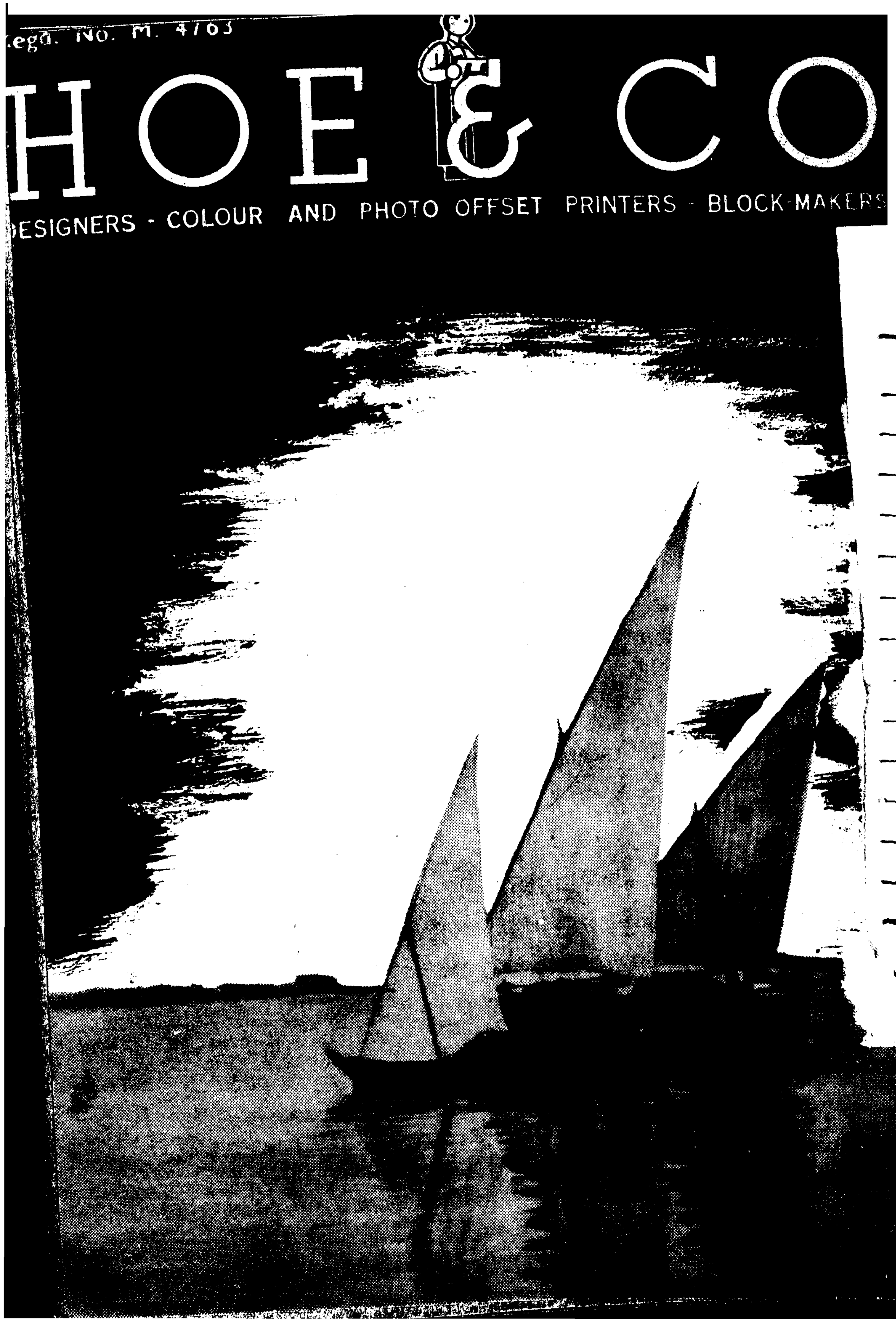
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