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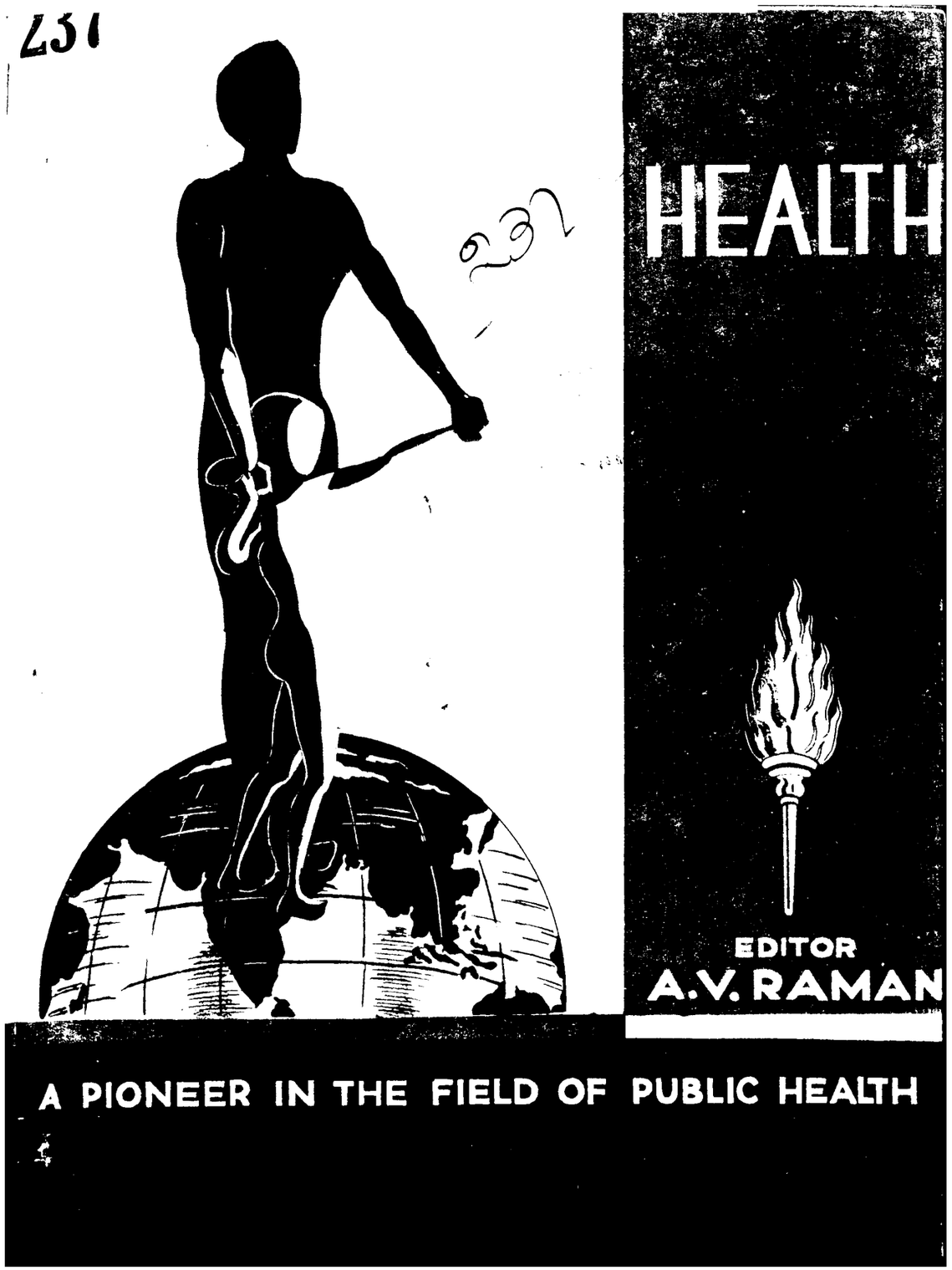
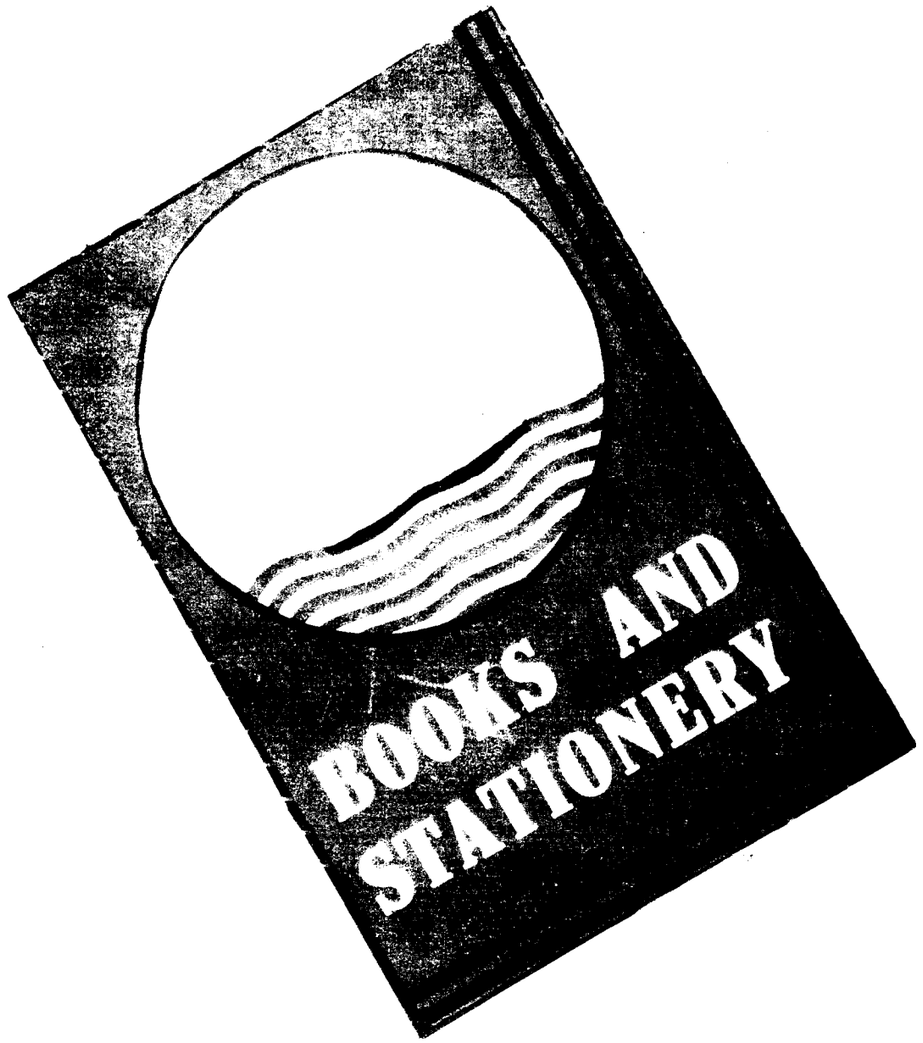

HEALTH
EDITOR
A.V. RAMAN
A PIONEER IN THE FIELD OF PUBLIC HEALTH



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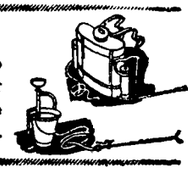

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PEOPLE'S HEALTH

A Pioneer in the Field of Public Health

Vol. II OCTOBER, 1947 No. 1

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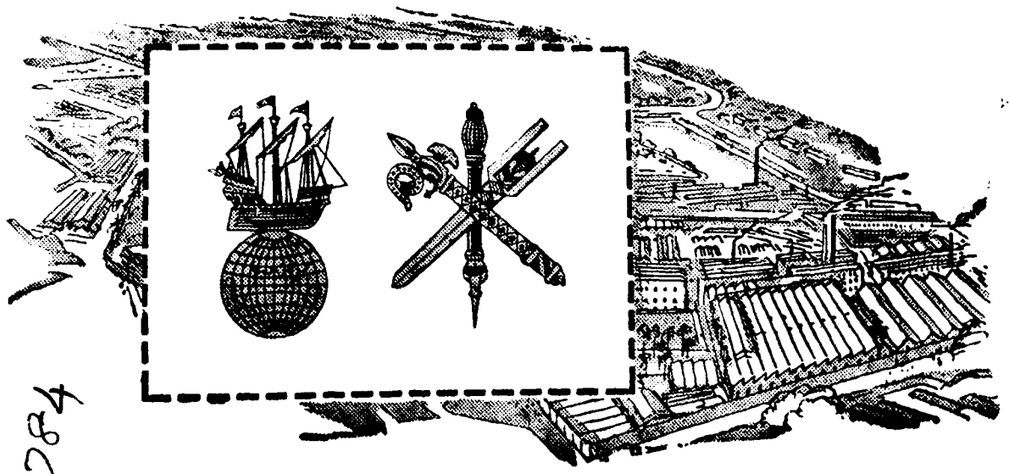


ACKNOWLEDGMENTS.

TO all contributors, official and non-official; To friends and well-wishers, inspired by zeal for public good; To editors of contemporaries who have put 'People's Health' on their exchange-lists; To the Authors, Editors and Publishers from whose publications extracts and reprints have been given for the benefit of readers; To governments, Provincial and Central, domestic and foreign, who have sent their bulletins and communiques; To the Madras Law Journal Press and to Messrs. Hoe & Co., for invaluable assistance and co-operation in printing the magazine; To the cartoonists and other artists who willingly assisted but refused to be remunerated; And to all who have directly or indirectly made the public conscious of the pioneer role of this magazine, during the first year of its existence; I render my heartfelt and grateful thanks.

I solicit their Continued Co-operation & Encouragement.

I do so in the conviction that by sharing my burden, they lighten my task.

Public Service may not receive bouquets, but may even get stray brickbats!

Public Co-operation is the best reward for public service.

A. V. Raman. 1/10/47

Madras 14.
1st October, 1947.

Editor,
People's Health.

The First Mile-stone

A PIONEER IN THE FIELD OF PUBLIC HEALTH

PEOPLE'S HEALTH

VOL. II
No. 1

OCTOBER, 1947

ISSUED MONTHLY

A nation yet, the rulers and the ruled—
Some sense of duty, something of a faith,
Some reverence for the laws ourselves have made,
Some patient force to change them when we will,
Some civic manhood firm against the crowd—

TENNYSON

THE FIRST MILE-STONE

LOOKING BACK

IT is now a year since I made my bow to the public ; and it seems a convenient point at which to make a pause for a brief retrospect as well as to define once again the aims and objects of this journal.

I had made it clear at the very beginning—and I trust I have since been proving it in every one of the issues of this magazine—that my first and last aim in bringing it out was to make it serve the cause of propaganda in favour of the primary objectives of national well-being. The word ' propaganda ' has unfortunately fallen into bad company ; but, in its best sense, it is one of the greatest duties of all of us, whether individually or in corporate groups, to help in the dissemination of right ideas and right thoughts so that right action might flow from them.

THE OLD ORDER

There can be no two opinions on the primacy of national health as crucial to all kinds of progress which we are ambitious to achieve as a nation. It was in that sense that I decided to run this as a propagandist magazine. The need for such propaganda is also clear when we view the appalling conditions of ignorance, ill-health and incidence of mortality at all levels which obtain throughout our country. In this connection, I think it pertinent to draw attention to the fact, one of the reasons for our failure to make any progress in the old order, was, that the old government not only failed to co-ordinate its activities under nation-building departments, but was also seized by a spirit of passivity and apathy in regard to them. It should not be forgotten that research of a kind and the organization of the public health deapartment in its rudiments were the work of the old order ; nor do we grudge paying tribute to the work of its outstanding officers, scientists, research workers, field-workers and others, as also to the accumulation by them of valuable data in regard to the etiology of diseases like Malaria, Kalaazar, and others.

FABIAN TACTICS

But it must be frankly stated that the British Government treated India as a vast laboratory, and if any benefits have accrued to us, they have been incidental to the system by which we provided opportunities for British talent to work in what is undoubtedly a humanitarian sphere, though not necessarily inspired by a conscious humanitarian motive. However, I do not wish to labour this point any further except to draw the inevitable conclusion that their contribution to the building up of a public health service or organization has been inadequate both in structure and in conception to the needs of our vast country. The public health objectives of the old order and the formulation of first principles bearing on preventive medicine were both inspired by the doctrine of what may be described as a sort of scientific *laissez faire*. It would have been ludicrous but for the tragic results which are apparent to-day. What I mean is that, while the principles of public health were well known, those at the top made no attempt to implement them, since it was not considered a primary duty of the State. Actually, untenable or unconvincing reasons such as lack of personnel and lack of finance concealed a calculated evasion of the problem indefinitely.

THE WORK AHEAD

Now, in a Free India, the problem of preparing the ideological background which would make public health service an efficient branch of administration has not become any easier, while its urgency has become more apparent. What we need is the formulation of a ' Master Plan ' with sufficient elasticity in the various joints to enable its being suitably adapted to the changing conditions of the country from region to region. Among the reasons which made this an uphill task, may be mentioned the following :

OFFICIAL FRIGIDITY

I regret to say that there still persists, in an aggravated form, bureaucratic hostility to the conception of public health as a educative branch of activity inspired by the spirit of service to the lowly and down-trodden, the ignorant and the diseased. There is sensitiveness to criticism in direct proportion to the justice and disinterestedness of it. Officialdom is finding refuge in the charge that such criticism tends to impair the morale of the service. It is but the old plea of prestige in different terms.

Officialdom still continues to be impervious to new ideas which is the mark of people who are in favour of the *status quo*. Most of the officers' time and much of the department's work are taken up with a languid discharge of lifeless routine duties.

LACK OF CO-ORDINATION

There is little *liaison* between policy-makers and executing instruments. The policy-makers to-day are, or should be, reformers, evangels and missionaries. Picked as they are by the suffrages of the people, they cannot be expected to have the necessary technical knowledge. But if their hearts, and, what is more important, their minds are in the right place, they can frame their policies in broad outlines, and then turn them over to the executive for being implemented loyally, efficiently and without truncation. It cannot be said that this consummation has yet been reached. There are too many vested interests, too many dark corners and too many bottle-necks in the routine channels of procedure to make for expeditious and effective discharge of functions.

ANARCHY

Inter-or extra-provincial eccentricities and angles militate against standardisation or the evolution of uniform general principles or the pooling of national resources for profitable redistribution. Attempts by individuals ensconced in brief authority to put spokes in the wheel and prevent this Magazine coming into existence or functioning usefully for fear of the most chastening of all public forces, namely, publicity, have been made, and, I trust, squarely countered. Only those in service conversant with service routine know the enormous scope for mischief that exists in the routine procedure of Government to sabotage far-reaching plans and schemes conceived in a spirit of service and having for its aim the improvement of the lot of the people. I have been amused rather than annoyed at the variety of reception accorded to this journal by such individuals as well as different administrations in the country.

CIVICS AND POLITICS

In view of the foregoing considerations which can be seen at a glance to be vital to our national well-being, and in view of the obstacles that are still to be overcome, it is unreasonable to expect a magazine of this type to become a best seller or even an ordinary business proposition. But, speaking without reservations, I am personally gratified and grateful to my public for the variety and quality of the response which I have been receiving both from domestic and foreign quarters. The educative aspect of public health propaganda has to be sustained under non-official auspices in the interests of its own effectiveness. The State in its turn must recognise that such non-official initiative largely relieves it of one of its own fundamental obligations. Indeed, it was in this view that I was given permit for the paper needed for this pioneer effort at a time when conditions were stringent on account of the war.

One of the great purposes underlying the institution and extension of the self-governing principle in civic political affairs is to make the task of national regeneration a responsibility of the nation through its accredited national representatives, functioning largely on an honorary basis. With the low percentage of our literacy and the great extent of our poverty, only non-official agencies can start with the necessary fund of good will to secure the ear of the public in matters pertaining to public welfare.

OUR ULTIMATE AIM

At the end of the first world war, Lloyd George won a sweeping electoral victory by raising, among other slogans, one that he would build as many homes as are needed in England to make it fit for heroes to live in. He remarked that an A-1 country could not be made up of C-3 people. Similarly, I may say, that an A-1 country cannot be kept going with the physique and stamina of a C-3 people, which we today unfortunately are. There is, I gladly acknowledge, much, if amorphous, good will on top. There is also , I claim, a good deal of earnest but ignorant zeal at lower levels; but as these two never meet, the prevailing conditions are not propitious for making the public health-conscious. Tragic irrelevancies usurp priorities, dissipate our infant resources and bid fair to leave us at last much more debilitated all round than we ever were in the past. The urgencies of many unsolved and some insoluble political problems confuse and dissipate our energies. The great calamities that are being witnessed in the North bid fair to leave disastrous repercussions on the maintenance of public health in the country as a whole, even in its most rudimentary form. For, the staggering problem of millions on the move, cannot be solved merely by changing their habitation. There are other consequences arising from them which will tax to the severest, the resources of our available national public health intelligence and wisdom.

MY RESOLVE

However, I intend to press forward on my journey, and continue to devote my hours to this magazine, as my only and sufficient job during the remainder of my life. I do so in the hope that the magazine will traverse all the future mile-stones with a speed accelerated by my faith in my country and my hope in the future of my countrymen. The only reward I covet is an increasing response to my message as much from men of good will, men of light and leading as from the people at large.

" To Strive, to Seek, to Find, and not to Yield ".

A. Y. Ramam. 1/9/47

EDITOR.

EDITORIAL . . .

Food and Fanaticism.

Food scarcity has been with us for sometime now. Despite the experiences of the Bengal Famine and the war-time controls and distribution, there seems to be little prospect of conditions being any the better soon. This situation is all the more disappointing when we remember two pertinent factors. One is the fairly good harvest of last year and the other is the more important fact of our having gained control over our destinies. While we run here and there in search of food grains, join every fanciful group which is set up to meet world scarcity by mere discussion and no achievement, the staple food ration is being whittled down relentlessly. A state of chronic sub-minimal nutrition for which this country has long been notorious is followed by actual partial starvation. The poorer section of the community—and almost the entire population of the country falls under this category—now find it impossible to eke out their rations to the full week. Semi-starvation is a stark naked fact which has become the inevitable experience of every one but the plutocrat who can still with supreme indifference pay the black market. This by itself is a development of the most dangerous significance for the well-being of the population and the prosperity of the country.

INSANITATION OF CAMPS INVITATION TO CHOLERA

As though this were not enough, the recent communal pogroms in certain parts of the country resulting in the most disorganized and panicky movement of population on a scale scarcely recorded in history has worsened the situation. We draw the attention of our readers to the reports of Mahatmaji's visits to the refugee camps. At every place, Gandhiji had to hang his head in shame at the insanitary conditions prevailing. The inevitable aftermath of this gross negligence has shown its evil head with malicious promptitude. Cholera has broken out among the refugees. With semi-starvation so widely prevalent, the epidemic bids fair to rapidly spread its tenatcles over every province and claim its victims in thousands.

CRIMINALLY REMISS

We have been remiss—one is inclined to say 'criminally remiss'—in two respects. Knowing well the advancing breakdown in our food situation, no step has been taken in the Provincial or the All-India field to pool those foods which are essential to the health of the population—foods

which nutritionists usually term 'protective foods'. True we have never had enough of these classes of essentials; but what we had had not been assessed, and conserved. Little has been done to increase their production; and nothing at all to regulate their distribution among that section of the population which needs them most. Benefitting by the experience of the last war, Great Britain began its preparations for the recent war, not so much by improving her fighting resources, but by giving top priority to the feeding of the civil population. One of the most important steps in this "Food Programme" is the entire control and distribution of protective foods, especially milk. Its use was reserved for the children, nursing and expectant mothers and the sick. Britain knew very well that the health of the civil population should be maintained for the sake of morale and production during the war. She also knew that the immediate results of a war-time fall in the nutritional standard is the increased incidence of wasting diseases, especially tuberculosis. She was painfully aware that the vigour and strength of the future population who form the backbone of the country's defence depended on the nutritional foundations laid in the most rapidly growing early ages. And above all, Britain had the wits and the guts to put into practice what she had learnt at some cost. We on the other hand have been woefully negligent. It is true that Central and Provincial Governments are making superhuman efforts to procure and distribute the staple food grains. Food Ministers have toiled hard in this respect. But have the respective Ministries of Health made any systematic attempt to assess the ill-effects of mal-nutrition and to provide for the safety of special sections who form the basis of the future State? To mention one instance, our milk supply is admittedly inadequate. But even the little that is available does not go to the needy. The rich and the robust who revel in their frequent potations of tea and coffee consume a good bit, and the expectant and nursing mothers and the growing child are denied this most useful and nourishing food.

TOO LITTLE AND TOO LATE!

Another blinker in the eye of the Government is the apparent indifference of the Ministeries of Health to the effects of malnutrition on the health of the public. Every one knows that a fall in the nutritional status is reflected progressively in increased incidence of certain common diseases, greater prevalence of deficiency diseases, and higher mortality under almost all causes of death. Deaths from starvation occur much later. Are we assessing now to what extent

these ill-effects are present in our population? Are we taking any steps by way of special remedial treatment or other measures to deal with such ill-effects as and when they arise? We trust most health departments have Nutrition Officers—at any rate Madras had had one for the past three years in the Health Department and another in the Food Department. Is it not the first task of these officers to carry out a complete system of dietary, weight and clinical surveys, especially in the deficit areas, keep an eye on the situation and give timely warning to the Government of the early appearance of ill-effects so that remedial measures can be initiated in time? May we urge upon the Ministry of Health to take a lively interest in the food situation and see that what could be done is done promptly? Let not the charge: "Too little and too late!" be laid at the door of the Health Ministry.

BEWARE AND PREPARE

The Cholera outbreak among the refugees is an event of portentous significance. The scourge has already shown its head in the Madras Province, and we are hearing reports every day of fresh areas to which it has spread. Our 'experts' have been experts in one respect only and that is in running after an epidemic after it has broken out. We have seldom been famous for anticipatory counter-measures. Cholera outbreaks have always caught us "unawares"—and have always found us "wanting". Neither in personnel, nor in equipment, nor in organization have we been at all prepared in advance to meet an emergency. We frantically improvise things at the last moment, dash here and there with pathetic panic, drive the personnel blindly without helping them and wait for Dame Nature to effect the natural subsidence of the epidemic. With threatening starvation, movement of population, and the premature outbreak of cholera in many places, it will be the deepest tragedy were we once again to be caught unprepared. It should be the first task of the Minister of Health to see that what could be done in advance is done really in advance. All medical and health personnel available in employment or unemployed should be pooled, engaged in advance even at the risk of being kept partly idle for some time. They should be paid amply and kept in reserve at practically each district centre. Supplies of drugs, disinfectants and equipment should be ample. They should be commandeered at once and a liberal stock kept at all district headquarters. During the last severe epidemic, preparation and distribution of cholera vaccine was overstrained almost to breaking point. Expansion to maximum limits, fullest production and

maintenance of stocks at every centre are essential and should be organized at once. *Of course the basic precaution which is assumed, namely that, all available sources of drinking water-supply should be rendered safe and maintained safe at all times or at least well in advance of an epidemic, should not remain a pious assumption but must be an accomplished fact.* The Army is an organization which is most admirably equipped to cater to the health of large masses of people. They have perfect equipment for the purpose which in peace time is almost idle. Now that we have the full plenitude of power, we should not hesitate to make the freest use of all army facilities for civilian purposes. Especially in transport which is one of the main difficulties in the way of epidemic control, the army is the best source to tap in an emergency. No red tape or tradition should stand in the way.

PERSONAL LIABILITY OF 'EXPERTS'.

Fighting an epidemic is far more serious than fighting the enemy in a war. It should be planned and organized on similar lines and should be carried out with the same thoroughness, promptitude and disregard for official routine as a military campaign. The Minister of Health should forthwith call on the Director of Public Health, the Surgeon-General and the Sanitary Engineer to sit together and work out the plan, and see that it is carried out at once. Writing of periodical reports based on wrong figures which have filtered through several desks, issuing of placid bulletins, or drafting of old fashioned inspection notes with the aid of camp clerks, burdened with pompous platitudes, finding fault with this and that, and giving no help at all to the toiler in the field who bears the brunt of the burden—these have been the *'bete noir'* of our superior officers! It is up to the Minister of Health to impress on his 'experts' that what is wanted is constructive planning, efficient organization and helpful lead as from a "general staff". It is for the Minister to hold his officers personally responsible for proper execution of the programmes. Officers who are unable to rise up to this should be relentlessly liquidated.

Let us not lock the door after the horse is stolen. Let as be *forewarned and forearmed too!*

* * *

Tragic Paradox Again!

Our readers would not have forgotten the sorry spectacle in the days of the depression before the last war, of poverty and plenty stalking many lands simultaneously. It was least expected that a National Government should in these days deliberately

recreate such a tragic paradox again. The Bhore Committee drew up an elaborate scheme of Post-war Development in Public Health. In the course of its discussion, it had necessarily to draw attention to the need for more personnel if expansion of services is to be undertaken. Our 'popular' Government in its supreme wisdom ignored the main recommendations and promptly took up the incidental and perhaps inconsequential ones. As the first step in post-war development, it created, with almost indecent haste, two new medical Colleges, in the Madras Presidency. Adequate thought does not seem to have been bestowed on the commitments involved, or on the urgency or priority of the measure; nor does a general sense of values seem to have prevailed. More medical men will be needed only if there are more institutions or services. With the organisation maintained rigidly at *status quo*, none but the most fatuous would think of increasing the personnel. Well nigh 1800 medical men from this province went to the armed services during the war. Despite this drain, the civilian institutions and services were also kept fairly manned during the war. The rapid demobilisation has thrown back an appreciable number of medical men, for utilization for civil needs. We read in a recent press *communique* that the Madras Public Services Commission has interviewed more than 500 candidates for about 200 vacancies. The patent fact in this announcement is the inability of the Government to employ over 300 medical men who are readily available on the spot. And yet Government is eager to spend some lakhs on turning out more medical men! We may not accuse the Government of the machiavellian intention of flooding the medical market so that they can procure their requirements at cheaper rates. What then is the reason for producing more when you cannot consume what you have already?

FIRST THINGS FIRST

Sanity and commonsense would show that with the expenditure on the two new medical Colleges, enough expansion of services is possible to absorb the medical men now available and those turned out by the existing institutions. Ordinary administrative prudence would demand that existing institutions must be brought at least to the minimum standards of efficiency before new institutions are opened.

It is criminal waste of the technical talent on the spot. We hope that the Ministries of Health in the country would see that all men in the medical profession are utilised. We are glad that the Madras Minister of Health voiced similar sentiments while presiding over the College Day celebrations at the Madras Medical College.

* * *

Medical Examination of Medical Students.

A report which recently appeared in the Press runs:

> "Following reports that a number of medical students and nurses contract tuberculosis during their period of study and training, the Government have approved of the proposals of the Surgeon-General for their being medically examined annually. Under the scheme, the Superintendents of hospitals attached to Medical Colleges should arrange for the medical examination of medical students on their admission to the Colleges and for medical examination of all other students who are already on the rolls of the colleges, by the physicians of the hospitals, in convenient batches. In cases where there is suspicion of tuberculosis, X-Ray examination or screening will be done. A similar procedure will be followed by the Superintendents of the hospitals in the case of pupil-nurses. No fees will be charged for the medical as well as the X-Ray examination."

'Charity begins at home', and we are glad that the Surgeon-General came forward with this proposal to protect the students of medicine and nursing, and that this proposal was accepted and implemented by the Government. While recording our appreciation, we should also express a few doubts which occur to us in this connection; we do it in the hope that the doubts will be cleared by the authorities.

TELL US WHY

Our first question is why is it that medical and nursing students contract tuberculosis. Is it a peculiar feature of this class of pupils or is it a feature common to other schools, and colleges? Do they merely get 'infected' or do they develop the disease itself? Is this because of greater chances of contact or is it due to any other factor which operates adversely in the case of medical and nursing students and not in others?

"PREVENTIVE BIAS"?

Our second doubt arises from the oft-repeated-and never-adopted dictum that medical training must be really for preventive work rather than for curative work. The Bhore Committee evidently took it for granted that our medical training is already preventive; otherwise, they would not have abandoned the training of Health Officers while meticuluously providing for all kinds of unheard-of specialities. Are our medical and nursing students now trained in the art of prevention or not? If they are, why are they not made to practice what they are taught in their own cases first? Is it not this class of personnel whom one should expect to escape a communicable disease easily? Should we not be ashamed to say that we are training people for preventive work who cannot prevent themselves from falling victims to infection?

IS EXAMINATION ENOUGH ?

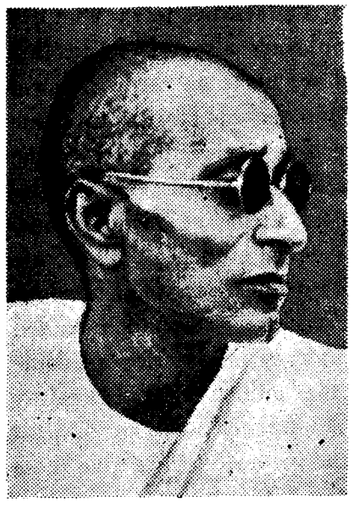
Tuberculosis control, no doubt, starts with " case-finding ". But it does not stop there. Detection of infection is but the first step. It must be promptly followed by specific remedial measures by way of treatment, and general remedies such as improvement of living conditions. There is nothing in the Press communique to indicate that this more important further work was thought of, or has been provided for. The State is responsible for the health of the people ; as such the duty is cast on it to provide the relief, and not content itself with the mere detection of a defect. Will the authorities tell us why this has not been done ? Why have not Government ordered free treatment and other free assistance in all cases brought to light by the medical and other examinations which they have ordered to be done ?

NO SPECIAL FAVOURS PLEASE !

The next doubt that assails us is why Government should single out the medical and nursing students alone for the grant of this facility. Surely, this extremely limited section of the public are not the ' pet children ' of the Ministry of Health ! It is the theme of every development and the policy of every government to hold the employer responsible–in a large measure though not solely–for the welfare of the employees. Our Governments have not lagged behind in urging this on industrial employers, blissfully forgetting all the while that the Government itself is the largest employer. It passes our comprehension why the Ministry of Health had not thought fit to extend similar facilities to all Government employees, why it has quietly ignored the vast mass of non-gazetted servants and the hordes of menial personnel. Are the Government aware of the appalling conditions in which they live and toil ? This class of hard-worked, nay overworked, public servants live with their families, not infrequently large ones, as co-tenants in dwellings which deserve to be summarily condemned as unfit for human habitation. Their living conditions are so deplorably insanitary that they are constantly exposed to the infection of tuberculosis. They are as a class under-fed. Their working conditions are worse. In recent times, new offices have been created. The dearth of accommodation is noticeable everywhere. Existing offices are hopelessly congested. In consequence, any available building, whether fit for accommodating a public office or not, is hired out, and the men are packed like sardines in small, ill-lighted, ill-vetilated rooms. During the working hours they inhale the dust and fumes arising from the rotting records among which they are buried. The conditions in which these men live and toil for the State do not reflect credit on the administration.

AN APPEAL

If only all Government servants, especially the lower-paid personnel, are given the same facility of being examined free, we are certain that the appalling conditions in which they live and the extent of tuberculosis which they and their families contract in consequence will be a revelation to the Government. Surely the Ministry of Health cannot in all conscience ask an industrial employer to do that for his employees which the Government itself fails to do for its employees. It will be to its own interest, to the interest of its employees, and to the public interest to extend the facility of free examination and treatment to all Government servants without exception. It would be a better example if Government will be a bit more gracious and afford the facilities to the families of its employees also. It is in this spirit that we make an earnest appeal to the Minister of Health to come forward without delay to cater to the needs of all Government personnel by extending to them the facilities now given to medical students. The State maintains a medical service at fabulous cost. That service though intended for the poor is in practice available only to the influential and wealthy few. It should not at all be difficult to make the medical service give these free facilities to Government employees and their families. By doing so, the Government will be setting an example *to others and at the same time give the right fillip to tuberculosis control work*. If the State ensures sound health to its employees, it is bound to enhance the efficiency of their service to the State. They will serve better and serve with a smile in their faces !



An Adventure of a Crusader-Spirited Member of the Permanent Service

by

His Excellency
Mr. C. RAJAGOPALACHARI
Governor of West Bengal.

After a full and energetic career in the public health engineering service for over thirty years, Mr. Raman has decided to pour his experience and zeal into a new form. He desires to educate the public and those responsible for serving the people in the principles and the technique of public health through a journal solely devoted to public health. Mr. Raman is perhaps over-sensitive to errors and defects in public service, but it is better to err on the safe side in such matters and one need not be sorry. 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 most important functions. The journal should be read not with a view to find out wherein the editor or publishers or printers have gone wrong but to see how the children of this land can be given more and more of clean civilized living physical conditions and to understand what Mr. Raman thinks on that problem.

C. Rajagopalachari

14.10.47

MADRAS.

AN APPRECIATION AND AN APPEAL

by

The Hon'ble
Mr. A. B. SHETTY, M.L.A.
Minister for Health, Madras.

Fort St. George, 4th October, 1947,

*I have been reading with pleasure and profit "People's Health" during the last few months, from the very first issue of the magazine. Sri A. V. Raman, the talented Editor of this journal has made Health as 'live' as Politics. The valuable articles which distinguished men contribute to this magazine will amply repay perusal. The publication of a high class popular journal like this, serves a very useful purpose. It promotes health education among the people and helps the campaign of preventive medicine. It arouses the interest of health workers, in all problems of current interest and gives them up-to-date scientific information about the great progress that is being made at present in public health work. By focussing attention on important matters like environmental sanitation this journal has given an impetus to Government to take up the question of Water-supply and Drainage in right earnest. **The journal is a pioneer in the field of public health and it is the only magazine of its kind in the country. It is not run as a commercial venture.** It deserves the active support and co-operation of all individuals and public bodies who believe in the utility of a health campaign.*

A. B. Shetty

OUR TASK AHEAD

by

Colonel S. L. BHATIA,

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Surgeon-General with the Government of Madras.

WE publish with pleasure the appeal* of Col. Bhatia to the medical profession to reorient their attitude in the discharge of their duty to people in a Free India. The moving terms of it, particularly the felicitous excerpts from Pandit Nehru's memorable address on the 15th August, 1947, must stir a responsive echo in the hearts of all readers.

The monstrosity of the present system of private practice in medicine is that it gives the medical men a 'vested interest' in disease which they defend desperately at every turn. In Sweden, the most civilised country in Western Europe, a private doctor is paid an agreed fee for keeping his patients in good health throughout the year. He gains nothing and has more to do when there is illness in the family. We are told that in China the doctor is paid only when the members of a family keep good health. We consider it altogether immoral for State medical officers to demand compensation when they are denied private practice. We appeal to the medical profession to pause and consider whether the time has not come for it to be less obsessed with a monopoly interest in disease! —*(Ed. P. H.)*

We meet today on a great historic occasion. Less than a week ago, on the 15th of August to be precise, India achieved its cherished goal of Independence. Thus at last came the fulfilment of a dream which we had dreamt for generations. The words of Pandit Jawaharlal Nehru, our great leader who is at the helm of affairs, addressed to the nation on that day are still ringing in our ears. "It is a fateful moment for us in India, for all Asia, and for the world", he said, "A new Star rises, the Star of Freedom in the East; a new hope comes into being, a vision long cherished materialises. May the Star never set, and that hope never be betrayed". He continues, "The future beckons to us. Whither do we go and what shall be our endeavour? To bring freedom and opportunity to the common man, to the peasants and workers of India. To fight and end poverty and ignorance and disease. To build up a prosperous, democratic and progressive nation, and to create social economic and political institutions, which will ensure justice and fullness of life to every man and woman....We have hard days ahead. There is no resting for any one of us till we redeem our pledge in full, till we make all the people of India what destiny intended them to be. We are citizens of a great country, on the verge of bold advance and we have to live up to that high standard".

These noble words should ever remain a source of inspiration to us all. Please note, that Panditji has said that we are to fight and end poverty and ignorance and disease. The fight against disease is largely the task of the medical profession. I am here to make an appeal to you, and through you to the entire medical profession in India to fight against disease. We must all pledge ourselves to the service of the Motherland and do all we can to make our India the healthiest and the most prosperous land on Earth.

This is indeed, a time for greatness, great resolutions and great ideals. In our onward march, there is need to recall the fundamental principles of human life and conduct, and to seek inspiration in our past culture and traditions. The conquest of disease is but a part of the conquest which we must seek in other spheres of human existence. A co-ordinated effort is therefore necessary.

The magnitude of the task for us in the medical profession can be judged by the present state of public health in India. I give the following statistics from the Bhore Committee's Report :—

(1) The death rate in India (1937) is 22.4, one of the highest in the world, as compared with 12.4 in England and 11.2 in the U.S.A.

(2) The Infantile mortality rate in India (1937) is 162, as compared with 58 in England and 54 in the U.S.A.

(3) The expectation of life at birth in India for males is 26.81 as compared with 58.74 in England and 59.12 in U.S.A.

* An address delivered by him at a meeting of the Medical Society of the Andhra Medical College, Vizagapatam.

The figure for females in India is 26.56 as compared with 62.88 in England and 62.67 in U.S.A.

(4) The maternal deaths in India total annually 200,000.

(5) Malaria is India's Enemy No. 1. It has been estimated that at least 100 million individuals suffer from Malaria every year in our country. It was responsible for about 37% of the average annual number of deaths here between the years 1932 and 1941.

(6) Next to Malaria, Tuberculosis is our biggest medical problem. There are at least 500,000 deaths from Tuberculosis annually in India and at least 2,500,000 active cases of the diseases in the country.

(7) Then there are epidemic diseases, such as Small-pox, Cholera, Plague, which still account for a large number of deaths. Among the different countries of the world for which statistics are available, India ranks high as one of the largest reservoirs of infection of these 3 diseases. We also have to take serious note of Leprosy, Hookworm Disease, Filariasis, and above all Cancer and Mental Disorders.

(8) The health of mothers and children, of school children, and of the industrial workers is at a low level.

(9) And finally the nutrition of our people is at a dangerously low level. Owing to insufficient and ill-balanced diet, a large amount of ill-health prevails. Apart from various deficiency diseases, people become an easy prey to various infectious diseases owing to lack of vitality and bodily resistance.

The above picture of the health conditions in our country is indeed, a very sombre one. What are the causes of this awful state of affairs? The answer as given very rightly by the Bhore Committee is that the maintenance of the public health requires the fulfilment of certain fundamental conditions, which include *the provision of an environment conducive to healthful living*, adequate nutrition, the availability of health protection to all members of the community, irrespective of their ability to pay for it, and the active co-operation of the people in the maintenance of their own health. The large amount of preventible suffering and mortality in the country is mainly the result of an inadequacy of provision in respect of these fundamental factors. *Environmental sanitation is at a low level in most parts of the country*; malnutrition and under-nutrition reduce the vitality and power of resistance of an appreciable section of the population; and the existing health services are altogether inadequate to meet the needs of the people; while lack of general education and health education add materially to the difficulty of overcoming the indifference and apathy with which the people tolerate the insanitary conditions around them and the large amount of sickness that prevails.

To deal with this situation, which requires immediate attention, the Bhore Committee has given us a convenient blue print which can be easily adopted to meet the needs of the different parts of India. This means vast expansion of our health services for medical relief in both urban and rural areas, expansion of our hospitals and dispensaries, so as to provide adequate bed accommodation for the patients, a vast increase in the number of trained doctors, nurses, midwives, pharmacists and other personel.

We must enlarge our conception of the nation's health. Professor Sigerist thus describes the attitude of the Soviet Government towards the health of the people :

> "Health is one of the goods of life to which man has a right; whenever this concept prevails the logical sequence is to make all measures for the protection and restoration of health accessible to all, free of charge; medicine like education is then no longer a trade; it becomes a public function of the State".

This modern trend, which is noticeable in England also, is towards the provision by the Government of a complete health service for all, irrespective of their ability to pay; and we must adopt it here in India.

There is need for the greatest possible co-operation between the health services provided by Government and the people whom they serve. The Physician has a great role to play in the future so far as the welfare of the community is concerned. According to an eminent medical historian, the physician is a :

> "Scientist and social worker, ready to co-operate in team work, in close touch with the people whom he disinterestedly serves, a friend and leader who directs all his efforts towards the prevention of disease, and becomes a therapist where prevention has broken down,—the social Physician protecting the people, and guiding them to a healthier and happier life."

This should be the spirit in which we medical men have to work.

Medicine is a very potent instrument for the promotion of international good will. It is cosmopolitan and knows no boundaries of caste, creed or colour. It is universal in its mission to alleviate human suffering. We sometimes perhaps fail to realise that human beings all over the world are equally liable to suffer from disease and injury. This is how a poet describes the equality of suffering :

> "If here to-day the cloud of thunder lours
> To-morrow it will hie on far behests ;
> The flesh will grieve on other bones than ours
> Soon, and the Soul will mourn in other breasts."

At this great and crucial moment in the world's history and more so in the

history of our country, there is need for boldness of thought and largeness of vision. A free India has a great part to play in bringing about peace and good will among the Nations. The medical profession by virtue of its noble ideals of charity and endeavour to bring health and healing to mankind, as a whole, can make to it a unique contribution of inestimable value.

This is then our task ahead,—to prevent all preventible diseases in India. To provide adequate facilities for the treatment of all sick persons in town or in country, rich or poor alike. To provide the best possible training for our Doctors, Nurses and other personnel required for the health services. To raise the standard of nutrition of our people. To impart health education, so that all become health-minded. To make our Motherland, the healthiest land on Earth. To perform our duties in a spirit of kindness, grace and goodwill and charity in thought and deed towards all mankind, without any distinction of caste, colour and creed and thus promote harmony, understanding and peace amongst all the people on this Earth.

In this noble task I wish you the best of luck and success.

DISEASE KNOWS NO FRONTIERS.

Work on this world-wide scale would seem to be justified by the growing propinquity of human life. With every new method of transportation the people of all countries—and their diseases—are brought closer together. There is no difference in influenza or in scarlet fever between Rumania and the United States ; and yellow fever, given the chance, could ravage India as easily as it has ravaged South America and Africa.

Disease knows no frontiers and has never been the respector of flags. In this field of public health, more clearly perhaps than in any other phase of human effort, one sees the complete inadequacy and meaninglessness of the conception of the absolute sovereignty of the State.

* * * *

It is only in an atmosphere of freedom that the lamp of science and learning can be kept alight. In all the history of the race, knowledge has never flowered in a subject people. It is only free men who dare to think, and it is only through free thought that the soul of a people can be kept alive.

(From the reviews of the Rockefeller Foundation.)

GOSPEL OF HEALTH

by

V. V. SRINIVASA AIYANGAR, *B.A., B.L.,*
Advocate

(Continued from page 615, Vol. I., No. 12)

WAKING from Sleep :—It seems that most people attach no importance whatsoever to waking from sleep. We shall deal with sleep itself separately when we come in due course to speak of retiring to bed and sleep at night after the avocations of the day. In this matter of waking up, as in so many other matters, the practice of individuals differs considerably.

First let us take the hour of waking up. In the case of most people, it does not appear that waking up from sleep is the same thing as the getting up from bed ; just as before the sun actually rises in the morning, there is the break of dawn and the gradual brightening, of the skies in the East, even so generally speaking, complete waking up is preceded by the gradual degrees of returning to consciousness, especially if the sleep during the night had not been either sufficiently long or was not completely sound or undisturbed. Most men, it is seen, love to linger on in the bed even after waking up from sleep, unwilling to leave the bed and take at once to the avocations of the morning. The true test of one having had good long sound sleep, is the synchronising of waking up from sleep and getting up from bed. When sleeping soundly,we do not consciously enjoy sleep. Such enjoyment is to some extent possible between retirement at night and the actual falling into sound sleep. The interval, the length of which is more or less different to different men, being the time when, after all the strain and worry of the day's work, one stretches himself on

the bed to rest his body and rest his mind and give this human organism of ours repose and almost complete unconsciousness which is absolutely necessary for the maintenance of the system in health and energy. There are some people who cannot and will not get out of bed as soon as they wake up. I do not suppose, there is anything very wrong about inclination to continue to be tossing on the bed and trying to enjoy the luxury, not indeed of sleep, but of conscious surviving sleepiness. If indeed the getting out of bed or rather jumping out of bed, should be regarded as the test of ideally good and efficient health, there can be no doubt that practice of leaving the bed as soon as one wakes up, should be welcomed. In any case, however, this intervening period between waking up and getting out of bed should not be unduly prolonged, or be allowed to develop into a bad habit. It must be realised that such process is unnecessary for health. It is really in the nature of a self-indulgence by a person whose will to work, is only of the lazy sort. Like all personal indulgences, it is a questionable merit.

The hour of waking —At what hour in the morning, should one wake up? The general rule may be taken to be that it is indicated by nature, viz., like most other members of the animal world, " With the Dawn ". From that it may be clearly inferred, that for all living beings the rule is naturally that of waking up with the first rays of the dawn. We are no doubt aware of persons who love to linger in sleep till even the sun is far advanced in the skies till 8 or even 9 A.M. Europeans when they came into this country kept up their practice of keeping to bed till late in the morning, even though the conditions and exigencies of climate here do not require such postponement. There are of course those who after a late dinner at night love to spend several hours even past midnight in the Club, theatre or dance and so forth, and naturally therefore such of them as begin to sleep after midnight have necessarily to remain in bed in order to make up the requisite hours of sleep and rest. The wise rule, however, which has been embodied in the wisdom of the ancients, both Eastern and Western, would appear to be " early to bed and early to rise ". It would therefore be regarded as a kind of universal rule of wisdom. But in all these matters, the personal equation, is one not to be disregarded. There are persons who, for instance, are fond of books and reading, and who cannot bring themselves to enjoy their reading except in the quiet and silence of the night. Allowing, however, for all

personal idiosyncrasies, there can be no doubt that waking up with the dawn and getting out of bed at the same time, should be regarded as the ideal to which every one should if possible approximate or endeavour to approximate. The regulation of life is a question of habit. An ancient Sanskrit stanza, says that, in this body of ours which is full of many defects and faults, there is however one great redeeming quality and that is its tendency to form habits ; because howsoever one bringeth it up, it follows him implicity in that way. Prof. William James of America, has, I believe, written at least two long chapters on 'Habit' in his 'Principles of Psychology'. The two long chapters which, reading more than half a century ago I found to be more interesting than any novel, even as in other cases there can be no doubt about the necessity and wisdom of forming good habits with regard to waking up from sleep and getting out of bed.

After waking up :—It is a very ancient habit, which is scrupulously practised by many orthodox persons, till recently, to sit on the bed which has been slept on, if need be, after answering any calls of nature and washing the face and mouth to repeat certain names of God and also prayers and Stotras especially in Sanskrit. This is a valuable practice and cannot be too highly commended. I shall however presently say something about it, but I should like to point out the unknown and unappreciated value of a practice which I have made my own, during many decades past and that is this :

If the sleep over night should happen to have been quite sound, then on waking up one has necessarily to collect oneself and to recollect what he is, where he is, and so forth. In one sense indeed, taking into consideration the vastness and immensity of even the unknown universe of space and time, infinite as it is called, an impossible event to be conceived by the human mind, man seems to be quite insignificant, small or perhaps like what may be called the atom of an atom. But in another sense every individual human being, is himself the centre of his universe, because the world he lives in, moves and has his being, is in an important sense his own creation and making, and may indeed be said to be in the very centre of that universe. If on waking up from sleep and in the process of realising who, what, and where he is, a person should cultivate the habit and develope the practice, for the purpose of his own realisation as it were, and of placing himself in this vast universe of time and space and ceaseless movement everywhere, he should be able

to spread out his personality so to say throughout, as far as possible into the past, present and future of time and into entire universe of space mentally, he will find in course of time, that that is a mental and spiritual exercise which is calculated to imbue him with exaltation, a fulfilment and a potency, which challenges description or definition of any kind. I know that readers may be sceptical about it—some may even be proned to scoff. I know one will feel that it is a practice, the benefits of which would tend gradually to develop into enormous proportions, as drops of water combining together make a flood. This practice of spreading out, so to say, his personality through the universe of space and time and then concentrating it in the small proportions of one's own individuality seems to me to partake of a psychic and spiritual process of concentration. Just to give an example, it is well known how a magnifying glass, held out open to the rays of the sun serves at a particular distance and angle to gather together by refraction all the rays of the sun falling on it and to concentrate them all at one point, and it is also well known, how that one point becomes by reason of the concentrated heat, so powerful as to set fire to any small objects which are capable of being ignited easily. There are in the Vedas many passages where the expressions Ayathanam Veda and Ayathanavan Bhavathi are repeated like chorus. It is to be regretted, that few even vedantic scholars have been able to understand and appreciate the true meaning and significance of such passages. It seems to me however that all such passages of which there seem to be hundreds, are merely calculated to bring home to the thinking mind of man, the unspeakable value of some psychic exercises. Perhaps a word of explanation or illustration will be useful in this connection. It is well known that the trees which grow on the soil of earth spread out in the course of growing bigger and bigger their roots in the soil, far and near, both by taking the roots well into the depths of the soil, as also laterally even on the surface of the surrounding earth. It is wonderful to contemplate why and for what purpose this process is adopted in nature. For one thing, it is such roots that become embodied in the soil all round, that serve to keep the tree from falling and in position, even like the ropes with which a tent that is pitched is made to remain in position, by being tied to pegs all round. But the roots of living trees also perform numerous other functions, such as absorption from the soil of mineral and other matters, which are necessary for the building up and growth of the tree. It is also necessary for the purpose of enabling the tree

to absorb for itself the moisture to be found in the earth for its own purpose of growth. It may be said without fear of contradiction that though a man does not spread roots physically as a tree does, he does spread out innumerable roots all round mentally, that is to say, in other words, by his cognition, by his feelings, by his work, by the spreading out of his magnetic and other personal powers and influences and, so to say, psychically and spiritually. When the scriptures speak of a person who understands the vastness of certain spheres of existence in the Universe such as waters, heat, light, etc., and speaks of such a man becoming an Ayathanvan, I have no doubt in my mind that what is intended to be taught and conveyed is that such process of spreading out his personality, psychically and spiritually makes the man himself, so to say, become rooted in the vastness of space and time, and at the same time, imbue with potency or in other words, becoming a powerful personality. This kind of psychic exercise is recommended as a specially valuable practice almost immediately on waking up. There can be no doubt, that if this kind of psychic exercise is practised even during other times of the day—and this is a kind of yoga—it will prove of great value, but it is submitted that the exercise is most effective and beneficial for a person immediately on waking up from what we may call the death of sleep. As good habits have their untold value and the practice of reciting some favourite hymns or stotras, the first thing in the morning on waking up is a practice which every person man or woman may inculcate for oneself, but at the same time, it seems to me necessary, that these repetition of divine names or recitation of stotras in whatever language it may be should not be merely mechanical unaccompanied by any understanding of the meaning or beauty of what is spoken or recited, but be productive of the highest possible benefit, over the recitation or pronouncement and should be characterised and attended by an intense, mental appreciation of the wonderful significance, that is attached to the words and expressions used. So far for the psychic exercise necessary for man and invaluable to him, to be practised immediately on waking up from sleep. I shall deal with the requisite physical exercise, in my next article.

Death's younger brother, and so like him, that I never dare trust him without my prayers.
Sir T. Browne.

REASONS FOR THE BACKWARD STATE OF PUBLIC HEALTH IN INDIA

by

Rao Bahadur
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THE study of Public Health in India and in the other progressive self-governing countries is a study in contrast. It is very depressing but interesting to compare the progress made in Public Health during the last one hundred years of British administration in India with that in England during the same period. It was about one hundred years ago that the first steps were taken to organize public health measures in England. It is stated that the stimulus for it was an epidemic of cholera. Chadwick and Symon and the Victorian Sanitarians, who planned the broad lines for the progress of public health, will ever be remembered. Compare the organized medical profession of England which has become the all powerful social service organization of that country today with the state of the medical profession in India. It is surprising why a people who have been able to do so much in their own country for the progress of Public Health have failed miserably in India.

What is the reason for the marked difference between the Public Health progress in England and that in India? In the opinion of General Megaw, who was the Director of the Calcutta School of Tropical Medicine and later D.G., I.M.S., in England sanitation has achieved its victories not merely by the preventive measures taken against disease but also because the public co-operated, and an improvement in the economic standards of living was taking place at the same time as the work of disease prevention; whereas in India the progress in Public Health has been poor, because it was difficult to pour the new wine of scientific sanitation into the old bottles of antiquated customs and superstitious beliefs.

But General Megaw's reason by implication condemns the Indians as a non-co-operating uncivilised people. It is however gratifying to see that his statement is flatly contradicted by no less on authority than Col. W. G. King, the best part of whose service was spent in laying sound foundations of Public Health in this Presidency, which brought him into intimate contact with the people; he says, "the average educated Indian is not only capable of grasping the benefit of but of receiving, with very much

gratitude, health education by practical demonstration of sanitary works of the community". To condemn a people without educating them and providing for them sanitary amenities is most unbecoming and unkind.

It cannot be doubted that education is the most desirable ally of sanitation, though it might be contended, not without some reason, that the educational policy of the alien Government has not pursued profitable paths. This is realized by the present popular government and the people. They have awakened to a consciousness that all is not well with education in this country and that it needs a re-orientation and reform in all its branches.

A SHORT HISTORY OF PUBLIC HEALTH POLICY IN INDIA

Col. King had rightly remarked that Politics cannot disregard Political Economy, nor Political Economy disregard Sanitation—in its broadest sense—as applicable to man and beast; and that, if sanitation be an integral part of politics, equally must laws be evolved for restraint of the selfish instincts of the individuals, which endanger the health of their neighbours and their corollary multiples of communities and nations.

From the early days of the East India Company, officers of the Indian Civil Service played the role of politicians in the Central and Local Governments, and these politicians were provided with sanitary advisers. In 1859, a Royal Commission was appointed to enquire into the heavy mortality among the officers and ranks of the British and Indian troops. The Commission issued a report in 1863. In 1864 Sanitary Commissions were appointed for Madras, Bengal, and Bombay. The Sanitary Commissioners of Madras and Bengal recommended the organization of the Public Health Service. This was safely pigeon-holed with the remark that the funds must be provided by the Provincial Governments. The Sanitary Department was represented as an unproductive department and Politics showed no sympathy with it. The plea that education should precede sanitation was advanced to prevent any public health progress. The Government considered it inadvisable to force public health on a population that was by presumption resisting the innovation. It wanted to create goodwill by curing diseases and by widening education to prepare, as it were, the ground on which the seeds of Public Health could be sown later.

In 1869, the appointment of the Sanitary Commissioner was transferred from the Military to the Civil Medical Department. A junior Army Medical Officer was considered enough and was placed in a subordinate position to the Surgeon-General. Sometime later plague broke out and the Plague Commission, which was constituted to enquire into this disease, recommended that the Sanitary Commissioner should have a status of equality with the Surgeon-General, the Head of Curative Medicine. The Sanitary Commissioner became the Head of the Sanitary Department. Subsequently, within a few years the Sanitary Commissioner was again made a subordinate of the Surgeon-General. Later, his name was changed from that of the Sanitary Commissioner to that of Director of Public Health, a really ironical title to a person to whom the direction of Public Health policy is not entrusted even now. In like manner, the Public Health Commissioner of the Government of India was made a subordinate of the Director-General of the Indian Medical Service.

PUBLIC HEALTH IN THE MADRAS PRESIDENCY

In 1889 the Madras University undertook to institute the qualification of Licentiate in Sanitary Science, which was later designated Bachelor of Sanitary Science, a qualification equivalent to

that of D. P. H. in Great Britain. Other Indian Universities followed the example of the Madras University. Civil Assistant Surgeons qualified themselves for degrees in Sanitary Scienee. Sanitary Inspectors were trained. At an earlier date Col. King recommended the appointment of qualified men for Public Health work in Municipalities and District Boards. In those days, the District Medical Officer was also the Sanitary Officer of the District. I have held such an appointment.

From personal experience I may state that no District Medical and Sanitary Officer could have carried out satisfactorily either the medical or the sanitary duties. He clamoured for a special assistant for the discharge of the sanitary duties. Civil Assistant Surgeons were thereafter appointed as Sanitary Assistants. The Surgeon-General appointed these officers and kept them under his control and discipline. The Local Boards protested that those who paid the piper should have the right to call for the tune. The Sanitary Commissioner was a mere passive witness in this ugly squabble for power.

Later, steps were taken to start a regular Public Health Service ; almost every Municipality and District Board was compelled to entertain a medical officer qualified in Public Health to look after the sanitation of the local bodies concerned. These District Health Officers and Municipal Health Officers were placed under the control of the Director of Public Health. Subsequently, Assistant Directors of Public Health were appointed. This Presidency is greatly indebted to Col. Russell for the inauguration and expansion of the present Public Health Service. Madras took the lead in public health-organization and set an example to the other provinces.

It should however be acknowledged that public health appointments under Municipalities and Local Boards were at the beginning not attractive. Even now, these appointments are not sought after but they are taken up because more lucrative ones are not available for qualified men. The report of the Ministry of Local Self-Government for 1921, contains the following statements :

> "The reluctance of professional men to accept service under Municipal Council is a menace to the future of sanitation of this Presidency . . . . Even men qualified as sanitary inspectors avoid service under local bodies, if they can get other employment."

Things have improved since, but the improvement is due to unemployment and overcrowding in the profession.

The important impediments to Public Health progress have been the *laissez faire* policy of the I.C.S. officers, who put the cart before the horse, in taking a brief for education to precede sanitation and the unseemly and ill-advised squabbles for power among the administrative officers of the Indian Medical Service.

PLEA FOR A PLANNED PUBLIC HEALTH POLICY.

Dr. Jameson has said that a service like the Indian Medical Service which is based essentially on the military needs of a country, in which promotion goes by seniority and a Director-General holds office only for four years, is hardly flexible enough for modern civil administration. He says further, "One looks almost in vain for evidence that Public Health problems are really the concern of those connected with the Central Government of India. . . . India, contrary to the experience of most great countries of the world, seems to feel no need for a strong Department of Public Health in its Central Government." In the discussion on Dr. Jameson's paper, Col. Megaw observed as follows :—

> "I think throughout the paper, there ran a suggestion that the Public Health Officers belonging to the Indian Medical Service have not organized a co-ordinated policy of Public Health for India. They certainly have not done so ; but the reason is not lack of will nor lack of energy, but the fact that the administrative system in India has deprived them of even the limited influence, which they once had in the affairs of the Central Government . . . Prof. Jameson points out that the Indian Medical Service has been allowed to develop especially along clinical rather than Public Health lines. But "allowed" is not the right word ; the service has been "compelled" by force of circumstances to develop along clinical lines. The members of the Indian Medical Service are recruited to do certain work which is allotted to them ; they have not been engaged to frame the administrative policy of Government. Members of the service consider that as a great pity but the fact remains that they have not had much to do with administration and practically nothing to do with the development of policy."

In the above discussion Sir Malcolm Watson has said that the Government itself has never put the public health of the people first and that the fault lay primarily not with the officers of the Indian Medical Service but with the Civil headquarters and the Military headquarters.

Without apportioning the blame for the poor progress in Public Health between the officers of the I.M.S. and the I.C.S., it is enough if we realise that we as a nation are still at the bottom of the Public Health ladder. The officers of the Indian Medical Service have been put into many extraordinary jobs. "They operated telegraphs in India ; they ran mints ; they superintended jails ; they directed Botanical and Geological (and Zoological) surveys ; apart from these things, their chief duties have been to look after the health of the Army in peace and war, and in Civil life to develop hospitals and medical schools, carry on research, and act as advisers in Public Health matters."

But things changed subsequently with the Indian Medical Service but not with the Indian Civil Service.

We must reckon with the fact that 'Preventive Medicine' has come to occupy a higher place in other progressive countries than that assigned to 'Bottle Medicine'. 'Medicine' is defined as "the art of curing, preventing and alleviating disease". This is due to a general realization that the physician should be equally interested in both Curative and Preventive-Medicine. The example set by such eminent persons as Dr. Jameson, Col. King, General Megaw, Col. Russell and others should be followed by the members of the medical and health services. The profession and the public should realize the fact that the most essential factor in the development of Public Health is the question of cost. To the question of Sir William Osler why malaria should not be stamped out of India as it was done in Panama, Sir Leonard Rogers is reported to have pointed out the impossibility of doing so, because in most municipalities in India the whole of the work-teaching, hospitals, schools, roads, sanitation—had to be paid for out of an income of 2 or 3 shillings per head of the population.

PUBLIC HEALTH *vs.* PUBLIC EXPENDITURE.

A healthy nation is largely a question of money. Health has to be purchased with money. Like all other good things it cannot be had for the mere asking. A nation must be healthy to become wealthy and it is only wealthy nations

that have attained to high standards of health. Judicious expenditure of wealth can create health. The absence of health inevitably leads to absence of wealth of the nation as of the individual. Every one should remember that the "first wealth is health" and that "within human limits health is purchasable by communities".

Medical and Public Health Departments are accused of being mere spending departments and the Indian Civil Service officers of Government, who are the guardians of the purse, have not shown much practical sympathy except in theoretical appreciations. Capitalists and bankers, industrialists and organisers of big concerns have given proofs of a better appreciation of economics—savings and dividends—than those who have guided Public Health in this country.

I earnestly hope that the truth of Col. Russell's statement, that in no sphere of human activity can richer dividends be earned than by judicious investment in the preservation and promotion of the health of the people, will be fully understood.

Cruel catastrophies, harrowing horrors of famines and highly sponsored appeals for the treatment of the sick have proved successful in arousing public sympathy and in the collection of the necessary funds. But the voice of the appeal of Preventive Medicine seems to be a cry in the wilderness. Philanthropists have come forward to endow beds or build wards or dispensaries but I am yet to hear of a single endowment by any one in this country for an Institute of Preventive Medicine, the services of which are non-spectacular. Preventive medicine, though despised to-day in India, will be enthroned in its proper place to-morrow. Our philanthropists will, I hope, bear in their mind the saying of Sydenham that the effect, even the slightest reduction in the incidence of sickness, suffering and death must always be a matter of greater felicity than the riches of a Tantalus or a Croesus.

The Bhore Committee Report is now before the popular Governments. Let us wait and see how far the recommendations of this expert body will be implemented. The report cannot be shelved.

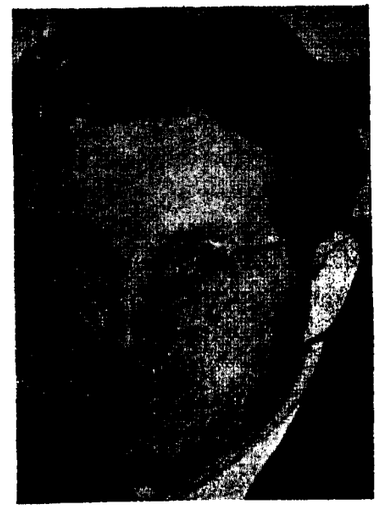
In implementing the various recommendations of the Committee, the authorities should show a Sense of Values and put first things fiirst.

LAND OF OPPORTUNITY.

In the Soviet Union all factories mines, railways and shipping, land and trading organisations are the property of the people as a whole. The economic and social life of the country is planned in the public interest. Complete equality enables citizens, irrespective of their race, or nationality, to participate in governing the State according to their ability. Complete equality of sexes, "equal pay for equal work", is a fundamental law. Equal opportunity for education is provided universally the school-leaving age is in process of being raised to seventeen, and payment is made to students at universities. Work is provided for all; unemployment is non-existent; economic crises have ceased, prices steadily fall and wages rise. The maximum working day is eight hours, the average day under seven. All workers receive a paid holiday of at least two weeks year. Free medical attention is provided for all; all worker receive wages while sick, as though they were at work. Women receive a prolonged leave of absence with full pay when off work both before and after childbirth. No citizen profits anything from the manufacture of arms. The Soviet Union stands for democracy peace, and the right of nations to self-determination.

(From "The Socialist sixth of the world"—By the Dean of Canterbury).

ENVIRONMENTAL CONTROL AND PREVENTIVE MEDICINE



by

Chas. L. SENN

Engineer-Director,
Buream of Sanitation,
Los Angeles City Health Department

WE can no longer look forward to the dramatic and almost magic elimination of widespread typhoid epidemics, brought about by the rather simple process of adding chlorine to the contaminated community drinking water supply. Further reduction in communicable disease by environmental control can only be brought about by intensive efforts on the part of public health workers, coupled with community support and public participation. Improved environment, however, means more than a reduction in communicable disease. Sanitary science may be defined as that branch of knowledge pertaining to factors that promote and preserve a healthful existence.

Methods, materials and facilities for improving sanitation are being developed at so rapid a rate that research and laboratory facilities are barely able to keep abreast of the demand for information. As in medical science, we must be cautious and accept or recommend new materials only after effectiveness is proven and their dangers have been explored. DDT when properly applied, we all know is a miraculous killer of bedbugs, fleas, lice, mosquitoes and a number of other insects. Fortunately it does not appear to be as toxic as many other insecticides of inferior quality. At the Riverside Experiment Station, 700 new organic insecticides are being tested. They represent but a small fraction of the many thousands being experimentally developed each year. Some are reported to be 10 to 40 times as toxic as DDT to flies, roaches and mosquito

larvæ. War-time developed ANTU and "1080" should go far toward controlling our rat population. However, when we consider the toxicity of ANTU for dogs and cats and the extreme toxicity of "1080" for humans and animals, we should be especially careful in their use on publicly financed control programs. In the development stage, we understand is a rat poison as deadly as "1080" but when mixed as a bait it retains its toxicity only over night. The ultimate goal is a chemical highly toxic to rats but as relatively harmless to humans and domestic animals as red squill.

Quaternary ammonium compounds appear to have many advantages over the chlorine solutions used for germicidal treatment of glasses at our cocktail bars and soda fountains. A local survey showed satisfactorily low bacterial rim counts at 85% of the bars where quarternary ammonium compounds were being used. Only 35% of the glasses had satisfactory counts at bars where owners provided chlorine sanitizing agents. The survey showed the difference was due to inadequate chlorine concentrations: that due to their relative freedom from taste and odor many bartenders will voluntarily use quaternary ammonium compounds, but because of customer complaints refuse to use adequate amounts of chlorine. Much research is being done in the field of dishwashing machines and equipment. Surprisingly, at the APHA meeting, Dr. Walter Mallmann reported only 1 to 8 leading makes of machines are properly designed. Manufacturers are expected to redesign machines to overcome defects.

Ultraviolet, ozone, propylene and ethylene glycol have been hailed as tools for practically wiping out airborne infections. The Public Health Service is urging caution in recommending these air sanitizing materials and devices, until further research is completed. So, in the advancing field of sanitary science we must be alert to accept proved chemicals, methods and equipment. We need a recognized central clearing house for reliable data and information; an "Underwriters Laboratory" for sanitation products. Already a major advance toward this goal has been made in the formation of the National Sanitation Foundation at the University of Michigan, where the answers to many of our questions are now being sought.

Perhaps our biggest task lies in educating the public and public officials to the urgent need for improvements. This is definitely a long range project where we cannot expect results by old-time legal enforcement methods. If we consider the field of food sanitation we realize we cannot wipe out food poisoning by simply requiring clean, modern

kitchens. We must actually teach food establishment managers and employees the fundamentals of food poisoning prevention; the importance of personal hygiene; of keeping foods hot or cold. We must show them how to obtain clean, sparkling, safe eating utensils. In many instances this involves complete changing of the habits developed through years of practice of unsafe procedures. To illustrate:

One of the common sources of food poisoning is cream-filled pastry. A main cause was the practice of allowing the filling to cool, then using bare hands to scoop the filling into the crust. Most of the members of the baking industry have now been convinced that pie crust can be filled while cream fillings are kept at near boiling temperatures. This avoids seeding the custard with millions of staphylococcus organisms from an infected finger, with salmonella from a carrier who returned from the toilet room to scooping custard filling with unwashed hands.

In the field of rodent and insect control we must also rely upon public support and co-operation. While DDT is highly effective in controlling adult flies, we must continue to stress the fundamental principles of eliminating flybreeding piles of uncovered organic materials. Even though we were to use *ANTU*, "1080" and other rat poisons in wide scale public extermination projects, rat control would be only temporary and partially effective. We must rely upon the public to ratproof their premises, get rid of the rat-harboring areas and to keep garbage chicken feed and other rat foods where they are not accessible to rats. Just as school children are made fire prevention conscious through the educational programs of alert fire departments working through the public and parochial schools *so we, in public health, must make the child sanitation conscious* if we are to accomplish real sanitation in our communities.

In accordance with our expanded definition of environmental control we must accept our responsibility in air sanitation. We need not enter into the controversial question of the direct effect of air pollution on the incidence of specific diseases. We can agree that city dwellers are just as entitled to clear, wholesome air to breathe as they are to pure water, milk and food. Public health methods of working with industry in developing corrective measures, plus fearless prosecution when education fails, are getting results. Industrial hygiene equipment and methods form an ideal foundation for research. We must boldly and wholeheartedly attack air pollution in the same manner as public health workers of a generation ago developed safe,

clean water supplies from polluted streams.

We have not completely accomplished the task of providing safe milk. In Los Angeles, between 5% and 10% of the fluid milk supply is still unpasteurized. * Dr. Wynn, a few years ago, showed that at least 2/3 of our brucellosis is due to raw milk; that in Los Angeles there are 7 times as many cases of brucellosis as at San Francisco where all milk is pasteurized. We must continue to teach the fundamental principle "the only safe milk is pasteurized milk."

Undoubtedly the one field of environmental control requiring the greatest amount of effort, *education and public support is housing*.

Disease prevention week should be the starting point for a relentless and forceful attack on disease breeding slums. Health workers know, and their records show, people from overcrowded, insanitary, dilapidated slums face many disease hazards not shared by those more fortunate persons who live in better residential areas.

Tuberculosis, spread in crowded living quarters, is quick to take its toll among people who have no real facilities for rest, relaxation and preparation of nutritious, balanced diets. Venereal disease rates mount when large numbers of unrelated people are exposed to the intimacy resulting from shared toilet and bathing facilities, lack space for privacy and have no available facilities for wholesome recreation. When rats multiply in crowded, dilapidated buildings their fleas spread typhus. There is little wonder that public health nurses working in slum areas find so many cases of lice, impetigo and scabies among children from buildings without running hot water and where old plumbing systems are frequently inoperative.

Health officers must take the role of active leaders in insisting on cleaning up slums by drastic rat control programs, by requiring the best possible maintenance of existing housing, by molding public opinion so new housing is made available for the doubled-up, large families living in small apartments, for families living in single rooms and for occupants of buildings deteriorated beyond repair.

When the Los Angeles City Board of Health Commissioners was hearing evidence that resulted in condemnation proceedings concerning a 55-family apartment building that was grossly insanitary, heavily infested with cockroaches bedbugs and rats, the Police Department reported the building was known to them as a "dive" where they had numerous complaints of prostitution, fights and other acts of

* July 15, 1944, issue of California's Health.

lawlessness, immorality and juvenile delinquency. The district public health nurse reported numerous children from the building were infested with lice and scabies, no doubt because practically all baths in the building were inoperative. Those that were in working order did not even have running hot water connections. Juvenile girls were reported as the sources of numerous cases of syphilis and gonorrhea. Two or three cases of active tuberculosis were living in the building. How many more cases of mild illnesses not reported to the Health Department could be attributed to families attempting to store perishable foods in unrefrigerated, cockroach and rat-infested cupboards? How much reduction in general health could be attributed to persons being constantly annoyed by the bedbugs, by rats gnawing, chewing and running in bedrooms and living quarters? How much effect on mental health could we expect when five or six people eat, sleep and live in a single room?

We must abandon the idea of relying upon complaints as a sole cause for investigation of housing conditions. We recall visiting a building where 50 families shared community toilet and bath facilities. The entire drainage system for the baths and for all but one of the toilets was completely blocked and had been in that condition for ten days. The hot water heater had been out of order for several weeks. Approximately 150 persons were attempting to use a single water closet. When we asked the tenants why they had not complained they stated they were afraid the health department would condemn and vacate the building; that they would have no place to go.

Many condemnation actions are due to inadequacy of ordinary court procedures. Health officers should decry long legal delays that permit the continuance of such conditions while owners utilize every possible legal device to gain continuances. Judges need enlightenmen so penalties for convicted landlords are much more severe than the customary $25·00 or $50·00 fine. Adequate staffs of sanitarians should routinely patrol our bad housing areas. In co-operation with the public health nurse they should teach the fundamentals of sanitation to building occupants. They should secure the co-operation of owners and managers and, where education fails, they should take drastic legal action to require maintenance of decent standards.

TREATING TROUBLED MINDS

And for those who fear mental symptoms the psychiatrists offer an encouraging discovery.

by
DYSON CARTER

MENTAL illness is one of the great tragedies of modern civilisation, ominous because it is sharply on the increase. The First World War shattered the idea that only weak people go neurotic. Medical science knew this 25 years ago, and knew that it applied to civilian life in peace time. But almost no preventive research was carried on. Then came World War II. Startling changes came about--a new approach to mental ills, of tremendous consequence to the People's World. The greatest advance has been in the field of actual treatment.

Why did psychiatry surge ahead so rapidly in wartime?

Early in the war a great number of mental cases were reported. Mentally ill soldiers, sailors and airmen had to be cured, and fast. Older methods of treatment were hopeless. In a remarkably short time all psychiatric knowledge was pooled to speed the drive towards effective treatments.

How similar are the mental disturbances of war and peace we can see by running over typical cases.

Commonest of all is the "neurasthenic." He suffers from mental and physical fatigue, irritability, insomnia, and depression. Then come the neurotics obsessed by fears and doubts, unable to make decisions, behaving with exaggerated care and exactness. Next, the familiar "hypochondriacs," who pay constant attention to their bodies and magnify every twinge and twitch into a grave disease.

Hysteria victims are common. Their symptoms are not what you and

I might suppose. Rather than laughing or crying uncontrollably, these sufferers usually have paralysis or jerking movements in some part of the body. They can often be cured with dramatic swiftness. Not so easy to help are the "anxiety neurotics" whose mental disturbance is deeply rooted in some long past experience.

The first and vital duty of the psychiatrist is to seeth at the patient gets a thorough medical going-over. Injury, diseases like arthritis, ailments of the lungs, heart, glands and kidneys —these and many more can masquerade as mind trouble.

We think of hypnosis as a vaudeville stunt. Actually it has become a valuable psychiatric treatment method. In many desperate cases it works complete cures in three or four weeks. The biggest difficulty is to convince the patient of the truth about hypnosis. To be hypnortised doesn't mean that you have a weak will. Or that you will be in the power of the hypnotist. Or that you may never wake up. It is a truly scientific mental treatment that helps many formerly baffling, pitiful cases. It works in a perfectly simple way by bringing deeply repressive experiences and fears up into the conscious mind.

Of course, hypnosis works only with certain mental ills. Still, it is typical of what war psychiatry accomplished in simplifying and speeding up curative treatment. We all remember the fad for psycho-analysis, with its emphasis on secret sexual worries and desires. This treatment often required no less than two years, and few analysts could handle more than a dozen or so cases at a time. Therefore it held out no hope whatever to millions of sufferers. Now we find medical science attacking the very basis of psycho-analysis.

Thus Dr. Abraham Myerson, a, famed Harvard psychiatrist, emphasises the all-important role of the body itself. "No mind floats in thin air," he reminds those psychologists who were placing too much stress on the emotions as the cause of sickness. Says Dr. Myerson: "It is not so much the emotional experience as it is the *result in the body* which gives fear, disgust or any other emotion its importance in bringing about illness."

This same scientist clearly expresses the new approach to the troubled mind. It is by treatment of the body. He says: "There are medicines which increase energy, others which help produce sleep, still others which improve nutrition. These are frequently necessary . . . and in most cases of real mental sickness they are vital."

What does this mean in terms of practical cures for mental disease?

Dr. William Sargant, psychiatrist in London's Maudsely Hospital, should know. He handled thousands of cases after Dunkirk and through the blitz.

First, Dr. Sargant and his co-workers found that the main thing was simply to get a mental sufferer to look like his or her normal self. In nearly every case this means making up severe loss of weight. And if the patient can't or wont' eat? The answer lies in two simple drugs. Sodium amytal, to put the patient into deep, restful sleep, for as long as ten days if necessary. And small amounts of insulin to change the body's chemical processes so that intense hunger develops.

Even without artificial sleep, using modified insulin therapy Dr. Sargant has made scores of nervous wrecks eat a hearty breakfast . . . followed immediately by two pounds of buttered mashed potatoes, every day for weeks! More serious cases are fed on a similar heroic scale while they sleep day and night with the help of amytal.

This insulin treatment should not be confused with "insulin shock." Heavy doses of insulin and metrazol are used for serious mental diseases. But they are being replaced by the latest and much safer weapon: electric shock. This produces convulsions that bring about in specific ailments of the mind, marked and often complete cures. In Ontario hospitals, for example, the electric shock treatment has restored to health 90 per cent. of the cases given it.

Dr. Myerson tried **electric shock** for women overcome by extreme grief following the loss of husbands on the war front. One case had been unsuccessfully treated by drugs, hormones, vitamins, psychoanalysis, a change of scene and even commitment to a mental hospital. She became worse, and attempted suicide, feeling that there was not a thing left in her life. Dr. Myerson gave her five electric shocks. Quickly she became entirely normal and even resumed her work as a musician.

Another outstanding advance—which has nothing to do with cures—goes by the impressive name of "The Minnesota Multi-Phasic Personality Inventory." This is one of the first accurate, scientific methods of diagnosing men and women for mental trouble. It is economical and fast, quickly indicating whether the subject is normal, approaching a mental condition, or abnormal.

Although it took years of research to develop, the Inventory is very simple. It consists of 550 cards. Each card carries a printed statement referring to the body, habits, family, home, sexual matters, job, religion, etc. The person undergoing the test sits alone

and reads the cards, sorting them into three piles according to whether he believes them true, false, or cannot-say-which. A trained observer, who need not be a doctor, quickly studies the three piles and from them draws a chart of the patient's mental condition.

The psychiatrists have a very encouraging discovery for all those who are afraid of developing mental symptoms. Far from being a danger, the neurotically inclined person is often very valuable. He or she is generally more intelligent than average, with more imagination, pep, enthusiasm, diligence, the guts to see ambitious projects through to success.

The hope of civilisation lies in providing new, effective treatments on a mass scale for all who are mentally ill, and in guiding those who have abnormal tendencies so that real illness of the mind can be prevented. Now for the first time these things are possible.

(*From "Digest of Digests."*)

THE PROMOTION OF POSITIVE MENTAL HEALTH.

The pursuit of positive mental health requires the harmonious development of man's physical, emotional and intellectual equipment. Measures designed to create and maintain an environment conducive to healthful living and to control the specific causes responsible for all forms of physical and mental ill-health are essential for promoting such development. The comprehensive programme of health reconstruction which we have recommended in this report, will, if implemented, constitute in itself no small contribution to the development of positive mental health in a community. Apart from the provision for the prevention and cure of specific forms of ill-health, physical and mental, many of our proposals, e.g., those dealing with health and physical education, the social aspects of our programmes for mothers and children, for the schoolgoing population and for industrial workers, the removal of slums and the creation of parks and other facilities for promoting community life should also help to raise the level of mental health in the community.

(*The Bhore Committee Recommendations, Vol. II., pp.* 215–16).

EXAMPLE AND PRECEPT

by

Mrs. S A. MALKANI, M.SC.

A famous Chinese Author moaned in his old age and said "If I had grandchild to play with in my old age, I'd have been happier than I am with my one thousand volumes of writings." The Bhore Committee has produced a voluminous report and made many recommendations regarding schools and colleges. These recommendations will take years to implement, if at all, they could be. Shall we wait till the Governmental Juggernath moves? Or, shall we put our shoulder to the wheel straight away? Life is a hurdle race. The little experiment I relate will, perhaps, help to start new lines with plenty of hope to skip over and clear the hurdles.

Over two years ago, I took over as head of a Girls' School. The first day I went round my round of inspection. I entered one of the class-rooms. The stench that greeted a welcome as I entered the class room, tickled my diaphragm to the vomit-point if I may borrow the boil point of the centigrade thermometer. The picture-aspect of the little girls was anything but pleasant. The dress looked worn for several days, the hair undone, dirt on the feet, dirt in the nails, unwashed bodies, integrated to sigma stench (to borrow from Integral Calculus) that greeted the welcome to me. I felt depressed at this condition and my first impulse was to escape the unpleasant. Having overcome my first shock, I thought over the problem. In contemplating on the task, I thought that I should address the authorities about what should be done. And the Summary of the Bhore Committee recommendations passed rapidly on the screen of my mind. But to do this was not to attempt the work. That will not

amount to any accomplishment. So I decided to accept the existing material and concentrated my mind in the shape of things to be done. This was a good step from a fault-finding quarrel with the material.

I felt that talking at the girls will not help. This is just what even the children have begun to resent, leave aside the adolescents of the higher classes. So, I decided that I myself should be the 'shape of things to be' for all the girls. The old adage "Example is better than precept" came to my mind for trial. So, I took extra care to dress more fastidiously, put on fine shoes and even painted my nails and used an extra costly scent. I called a few of the girls in my office and pretended to inspect their hands and nails. But this was actually to give an opportunity to the children to see at close qarters what care and cleanliness of the body can be like. And very mildly did I suggest that the nails can be easily cleaned and the dress washed in soap and the hair done to the advantage of a happy appearance.

To-day, the girls dress in a clean dress, daily bath has become routine, the nails are clean and the feet carry no mud. The stench is gone for ever from their lives. No lecturing would have accomplished this. And I am entitled to rank this achievement to a prayer for 'Cleanliness is next to Godliness.'

HEALTH EDUCATION IN INDIA.

"....the teacher is in many cases, hardly an example to the students in the matter of personal hygiene. In the case of children and even adults, example is much more important than precept in influencing the life and conduct of those who are to be taught. We would not place the blame wholly on the teacher. In many parts of the country the primary school teacher is so inadequately paid that, with his responsibilities for the maintenance of a wife and children, his standard of living necessarily becames low as well as the level of personal hygiene which he is able to keep up. School children when trained in such unsatifactory surroundings and under the influence of teachers, whose example may exert no beneficial influence on them, must naturally fail to profit by the theoritical teaching of hygiene imparted to them."

(*The Bhore Committee Recommendations, Vol. II.. pp.* 86–87.)

THE GERM THAT BAFFLES SCIENCE

by

AUDREY RUSSELL

IT is considered practically certain that we get the common cold from a virus, a germ so small that it cannot be seen or in any way identified ; so, every fortnight, several samples of what may be the cold virus are taken to Harvard Hospital, near Salisbury, packed in solid carbon-dioxide snow to keep them alive, then thawed out and dropped into the noses of volunteers. There are no injections or inoculations, or anything like that, and the virus is given once only on the third day. They wait three days in case the patient happens to be getting a cold, anyway, and they must be sure of knowing whether the cold has come from the trial fluid or not.

After that, everyone sits back and waits to see what happens—or rather, the doctors examine the volunteers, night and morning, and the human guinea-pigs, subject to certain discipline, go out for long walks, read books, and work for exams., or listen to the radio. The doctor in charge told me that some of them seemed positively disappointed when they failed to develop as much as a sniffle. They come to get a cold, and feel cheated if they do not—almost guilty that they are not pulling their weight. But only a certain percentage have been given infectious material ; the rest have had a harmless fluid so that they can act as controls if the virus "takes" in the others.

Everyone I spoke to on the last day of the trial was sorry it was over. They had found it such a good holiday that they wanted to come again, in spite of the isolation. This isolation is necessarily very strict indeed, and anyone breaking the parole is just given his railway ticket and asked to leave at once. Because solitary confinement would be almost intolerable to most people, the volunteers are isolated, in pairs—two men or two women friends, or a husband and wife, live in the self-contained huts, with two bedrooms, bathroom, sitting-room and dining-room.

The only people they speak to face to face, are the doctor and matron who visit them each day, wearing masks and gowns. They have to look after their own quarters themselves, but hot food is left in large thermos containers outside the doors at mealtimes. In the cupboard there is a good supply of coffee, cocoa, and tea, which they can make themselves. They get a pint of beer or cider a day, three daily papers, and three shillings a day pocket-money, to be spent after they leave.

When they go out for walks, they must be very careful not to let anyone speak to them or come within the regulation thirty-two feet. A young student told me that this is not as easy as it sounds, even on Salisbury Plain. Everyone seems to want to stop and have a chat in the country, he said. He added that he nearly ruined everything one day, when a man called out to him to catch his dog. He grabbed the dog's collar, but remembered in time, and had the presence of mind to let it go as the owner came running up

For the energetic, there is badminton and patter-tennis. The games room can be booked, provided an hour has elapsed since the last couple played there. In that hour, the winds of the plain sweep through the open windows and the racquests and bats lie steeped in disinfectant. By the way, shuttlecocks do not take kindly to liquid, and all players are given their own. You can play golf, too, at the links nearby, provided you fix up by telephone to pay the green fees later and do not have a caddie.

The life of the common-cold volunteer is a pretty good one, at the moment. The hard work is being done by the bacteriologists who are trying to isolate the germ, and eventually to make a vaccine to help get rid of a complaint which wastes 40,000,000 workdays a year.

Besides the human experiments, reserarch is going on in the hospital laboratories. Although a progress report is promised this summer, the research workers are thinking in terms of years before achieveing concrete results by finally tracking down that elusive germ.

(*From "London Calling.", Ackts. to Digest of Digests.*)

Pioneers in Public Health

TO OUR YOUNG FRIENDS

by

MOHAN

COMRADES !

May all be healthy and happy !

I had mentioned about one Dr. James Simpson in a previous article. Can you tell me in which one? It is about this Dr. James Young Simpson or rather Sir James Young Simpson that I propose to tell you about this month.

You are all familiar with surgical operations. Either you yourself or somebody else in your family must have undergone an operation sometime or other. You must have realised how painful it must have been to get your flesh cut by the surgeon's scalpel. But if you ask the person who was operated he will say "Oh ! I felt no pain at all." That is because he was unconscious when the surgeons operated upon him. How did they make him unconscious and save him from suffering the most horrible pains? The answer is *Chloroform.* Who discovered this great drug? None other than our hero of the month—Sir James Simpson.

* * *

SIR JAMES SIMPSON

James Simpson was born in the 7th of June in the year 1811. He was the seventh child to a poor baker of the town, Bathgate, in Linlithgow, Scotland. When he was only fourteen years of age he was sent to the University of Edinburgh to study Arts. As is the practice even here, two years later, he started on his medical studies. Three years later he obtained his L. C. S. and M. D. degrees. Simpson exhibited a great interest in the subject at the University. He even wrote theses on matters of grave medical importance. One of these theses so impressed Dr. John Thomson, the Professor of Pathology of the University, that James was offered his assistant-ship. Simpson was even asked to act as the Professor of Pathology on the illness of Dr. Thomson. In February 1840, he was appointed as the 'Professor of Medicine and Midwifery.'

* * *

During all these years Simpson had observed that the people in hospitals suffered great agony due to unbearable pain. He also heard that, in America, doctors had experimented with a substance called ether. Patients were asked to inhale ether vapour and soon unconscious. Simpson also saw one Robert Liston make his patients inhale sulphuric ether to render them unconscious. This was in 1846.

* * *

Since then, Simpson himself used ether effectively in midwifery. But he was not at all satisfied with it. He wanted a more powerful anaesthetic. He and two of his friends set out on the task of discovering this anaesthetic. They had instructed the local chemist to send them samples of all chemicals. They expected to discover something by the process of elimination. Late at night, he and the two friends would sit up and inhale the samples of chemicals they received from all over the land. For ten months they tried but were unsuccessful. None of the chemicals had the property of ether. When they were about to give up the experiments as hopeless, late one night in November 1947 Simpson remembered the little sample bottle that a chemist from Liverpool had sent him, and which he had thrown into the waste paper basket in despair ! They searched out that small bottle, and each had a whiff. At first, when they had inhaled this drug, they talked heartily for sometime. But soon a heavy sleep came over them and they fell into a sound slumber which lasted several hours. Simpson who was the first to recover from the effects, exclaimed joyously "This is far stronger and better than ether." When the two friends awoke, they were also greatly pleased. Gradually more persons were invited to inhale this and all

experienced the same reaction. Even Simpson's neice submitted to the test. These tests and their constant reaction, showed that the drug was just what Simpson wanted—a strong anaesthetic. The risk which these three young medical men subjected themselves to cannot be exaggerated. They might have, in their perilous experiments, fatally inhaled some poisonous gas. An unseen Power seems to protect those who boldly seek Truth !

* * *

Simpson read a paper on " Chloroform " to the medico-chirurgical Society of Edinburgh. In this paper, Simpson traced the history of anaesthetics which culminated in chloroform—the drug he had discovered. He urged that it should be unsparingly used in surgical and obstretical operations. Of course, there were controversies ; but Simpson proved correct, and chloroform was introduced in surgery, and relieved the pain of thousands. Simpson was appointed as a Physician to the Queen in Scotland. Besides the discovery of chloroform, Simpson has done a lot of work in other fields of medicine as well. He has written many papers on Medicine and Archaelogy. What a combination of taste !

* * *

Though Simpson gets all the credit for discovering chloroform, really, his Liverpool friend and Chemist must have been the first ever to know of that drug in England. In France also, about the same time, Prof. Dumas, of whom I have mentioned previously, found out that drug. But Simpson was the first to use effectively chloroform in operations, and naturally deserved the credit that he got. Prof. Dumas when he heard of Simpson's success, was truly delighted and not in the least Jealous, which shows the high character of scientists and pioneers in those good, old days.

* * *

Though chloroform is indeed a great drug, it has its own risks as well. A slight overdosage may result in immediate death. It is therefore being used nowadays, only in prolonged surgical operations, and what is known as local anaesthesia is administered for operations of short duration. By this new technique, only the part affected and to be operated upon is numbed, and the patient is quite conscious. But this does not detract from the greatness of Simpson's discovery.

Coming back to James Simpson, he was made a baronet in 1866. He died in Edinburgh on the 6th May 1870, when he was just about fifty-nine. He was given a public funeral and a statue in his memory was erected in Edinburgh.

Your Loving Comrade.
BROTHER MOHAN.

READERS' FORUM

This section is open to readers for their frank, free and fearless expression of views on all aspects of people's health.

Typewritten letters facilitate work.

Rationing of paper restricts space. Brevity is the soul of wit. Please remember that " People's Health " is above communal, party or personal politics. (*Ed., P.H.*)

THE LAW MAKERS ARE THE LAW BREAKERS !

SIR,

I am sending the following for your kind consideration as I feel that it is a very important matter to be brought to your special notice.

The Tambaram Tuberculosis Sanatorium was first established by Dr. C. Muthu and is now being run by the Government of Madras. In order that the area round the Sanatorium might not be spoiled by contamination from the surroundings, the Government of Madras have passed an Act known as The Tambaram Tuberculosis Sanatorium (Regulation of Buildings) Act, 1943. Under this Act rules were framed for construction of buildings within an area of about one mile round about the Sanatorium. Nobody is allowed to build, rebuild, repair or modify any building in this area without the previous sanction of the Sanatorium Local Authority which insists that sewage and sullage water should be properly disposed of by constructing septic tanks and other sanitary arrangements. These rules were made with a view to see that no insanitary condition or foul odours emanate which will affect the Sanatoirum ultimately.

Within the said Tambaram Sanatorium area the South Indian Railway authorities have selected a spot where they dump nightsoil collected from the Railway Colony. The Tambaram Railway Colony itself is more than a mile and a half from the Sanatorium and the spot selected for dumping nightsoil and manufacture of poudrette is within the Sanatorium Tuberculosis Sanatorium area-about 2 furlongs from the southern gate of the Sanatorium. Here the nightsoil is deposited in trenches wherefrom intolerable bad odour emanates and in certain seasons when the wind is favourable the whole Sanatorium area is enveloped in this foul odour.

Before the acquisition of this land for nightsoil dumping, two or three tanneries were attempted to be constructed in the Sanatorium Area; but by the timely and active action of the Sanatorium authorities the tanneries were not allowed to spring up.

When this plot of land now used as nightsoil dump was proposed to be acquired, protests were made by the villagers of Chittalapakkam that the proposed site is in the catchment area of the Chittlapakkam Tank and that it would be contaminated, but the District Health authorities thought otherwise and the land was therefore acquired for dumping nightsoil.

For some time past, the dumping is very active and I understand that the Sanatorium authorities have complained about this to the South Indian Railway authorities and so far no effect is visible. It is even rumoured that the Health authorities of the Government of Madras have approved of the present site and that the construction of a Sewage Farm is being planned by the South Indian Railway authorities ! If this is true, either the Government Health authorities who recommended this site were not aware of the existence of the Tambaram Tuberculosis Sanatorium within two furlongs of the place, or knowing its existence had not the vision. Viewed dispassionately, it looks as if while one Department of Government is spending considerable sums of money every year to maintain the Sanatorium, there are other departments of the Government who act to nullify its usefulness.

I hear that Government of Madras is proposing to spend five or six lakhs of rupees this year to improve the Sanatorium. I also hear that the South Indian Railway authorities are also proposing to have a sewage farm in the Sanatorium area. As a layman, I feel that both cannot co-exist and before huge sums are spent, it is better that the Government should reconsider which proposal they are going to carry out, a better Sanatorium or a Sewage Farm to the Tambaram Railway Colony.

"One Interested."

MADRAS,
Dated, 24th September 1947.

WE have been persistently pressing that there is no justification whatever for our *medical* health experts dabbling in environmental sanitation. They wishfully hope that the training of Public Health Engineers in this country would be put off indefinitely so that they may engage their time and thought to a subject beyond their capacity and training, to the prejudice of their ligitimate work. The Ministries of Health in the country should lose no

time in relieving this class of 'experts' of duties relating to sanitation. Any Engineer worth the name could perform these duties more efficiently and economically. It is not complimentary to the medical public health experts that they should be content to drive the conservancy carts and the labourers instead of doing a job for which they are trained.

The instance brought to light in the foregoing letter, to say the least of it, is scandalous. When our medical public health experts are incapable of facing squarely a situation caused by difficult circumstances, they try to wriggle out of it on some spurious plea or other. The protests of the Tambaram Sanatorium authorities and the public cannot be surely brushed aside as though the creation of the public nuisance is but a 'technical' offence. The health authorities cannot disregard the rules which they have themselves made in public interest. If they do, they set a bad example for others to copy !

That they are incapable of dealing with the situation, is obvious. Otherwise, the nuisance complained of, could not have been created. The Railway authorities are not certainly empowered by the Indian Railways Act, to cause a public nuisance and thereby jeopardise public health and safety.

We hope that the local officers of the health department will lose no further time in effectively abating this public nuisance. —(*Ed.* P.H.)

MEDICAL EXAMINATION OF STUDENTS

SIR,

The Madras Government is to be heartily congratulated for passing orders regarding the annual examination of medical students and nurses to detect early tuberculosis among them. It is not widely known among lay people that the medical students and nurses expose themselves to risk of infection with tubercle bacillus in the course of their work. Much work along this line has been done in all civilized countries. The Madras Government is probably the first provincial Government in India to recognise this and to take preventive measures.

There is a certain amount of awakening among our people in this province to the great danger of tuberculosis. The rapid progress made by the Rajaji sanatorium at Trichinopoly is only an evidence of this. On September 19th Dr. P. V. Benjamin, Medical Superintendent, Arogyavaram Sanatorium and technical adviser to the Tuberculosis Association of India,

speaking under the auspices of the Madras University Extension Board at Madanapalle pleaded for the appointment of a Provincial Tuberculosis Officer for organising anti-tuberculosis work and for co-ordinatting the activities of the clinics, hospitals and sanatoria in the province. It is high time for the Government to appoint such an officer to bring about greater co-operation between the people and the Government and also to co-ordinate the work carried out by different agencies. The officer so chosen should be a live wire; not a person selected merely because of academic qualifications. The success of any tuberculosis control programme depends on the foundation of trained and dedicated persons, not on words and not even on schemes.

COONOOR, "TUBERCLE."
2-10-1947.

COCANADA,
9*th October*, 1947.

Dr. H. R. Sadashiva Rao, Retired District Medical Officer, writes:

A committee has been set up to examine the working of the Town Planning Act. It is quite likely that a set of proposals will emerge from the committee in due course. How far they will be implemented by our Ministry is a matter which time only ought to show. From the way in which the present rules prescribed for municipal councils for building purposes are being observed in many places, the prospect of success in regard to the obedience of the rules seems small. My experience of this place, Cocanada and other places in the Presidency, does not justify the hopes of improvement of position, so long as the average mass mentality prevails. Civic sense of sanitation and domestic cleanliness should undergo a revolution by education and ceaseless propaganda. There is no public co-operation now. Without it, nothing could succeed.

What does a house builder do? He applies for a building licensce to the municipality, by sending a plan. It is approved perhaps after modifications according to rules. It comes back to builder. He begins building and by the time he completes, he modifies plan in construction; does not leave enough space all round according to rules; the place gets crowded up. He gets notice after notice about his deviations from municipality; he sleeps over them. The municipality's business begins and ends with giving notices and warnings! In rare cases, prosecutions are instituted. All manner of evasions and manoeuvres by builder are practised. When it comes to the question of demolishing the unauthorised works, then the real scuffle begins.

But what does really happen is that the builder runs up to Madras, gets round somebody in the Secretariat or Town Planning Office and tries to get the order of demolition or penalty quashed to the bitter chagrin of the municipal authorities. I leave you, Editor, and the public to judge the repercussions on the municipal authorities. Indeed, a triumph to the party, who gets his demolition order quashed! This is in effect a triumph for evil forces in the line of sanitation. If Government is incapable of implementing its own rules, where is the benefit of planning for sanitation?

Let Government ask Municipalities for information about delinquents and mete out suitable penalty in the shape of demolition of unauthorised structures. Just a few cases dealt with that way, ought to be enough deterrent for malpractices and town planning is bound to succeed. Unless this is done, all talk of planning—tall talk—may as well be given up.

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.)

VENTILATION IN THE SPREAD OF CHICKEN POX AND MEASLES WITHIN SCHOOL ROOMS.

—WELLS, MILDRED. W.

J. Amer. Ned. Ass. V. 129, *No.* 3.

It is a function of "sanitary" ventilation to reduce the concentration of infecting organisms in the air to a level low enough to prevent the spread of the disease that they cause. This level probably depends partly on the concentration of susceptible people in the environment; the fact that, in schools, chicken-pox and measles show explosive and spreading outbreaks only in the lower grades, with the greatest number of susceptibles might mean that ventilation of present standards dilutes the organisms to the extent that spread of the disease occurs only when there is a relatively high proportion of susceptibles. It is difficult to increase ventilation above a certain point, and the tests reported in this paper were undertaken to see whether radiant disinfection of the air by ultra-violet lamps could be used instead. The tests were carried out in two private schools in Philadelphia, and in two groups of public schools in a nearby suburban area.

The class-room and other gathering places of the children in the younger gardens in three of the schools were irradiated by the methods described by Wells, Wells, and Wilder (This *Bulletin*, 1942 v. 17, 303). Children were regarded as susceptible if they had no previous history of the disease in question; in view of evidence for the existence of subclinical attacks of mumps, the method was not regarded as very satisfactory for this disease.

For analysis, the classes were divided into five groups according to the proportion of susceptible children that they contained, and the results are presented in tables showing, for each susceptibility group and each school, the number of exposures to cases of measles,

chickenpox and mumps that failed to result in any secondary cases (" negative exposures "). The total number of exposures in each group was small, but the proportion of negative exposures in unirradiated classrooms decreased regularly with increase in the proportion of susceptibles. Thus there were no secondary cases from 13 exposures to chickenpox in classes with less than 20 per cent susceptibles, while of 11 exposures in classes with more than 60 per cent susceptibles, eight were followed by secondary cases.

With measles, the proportion of exposures, in a given susceptibility group, that resulted in secondary cases, was greater than with chickenpox. The irradiated classes showed, for all susceptibility groups and for all three diseases, a higher proportion of negative exposures than the unirradiated classes. Taking measles as an example, in the irradiated schools the proportion of all the exposures that were negative was 11/17 in classes with less than 60 per cent susceptibles, and 15/18 in those with 60 per cent or more. The corresponding proportions in the same susceptibility groups and age grades in the unirradiated schools were 4/15 and 2/5. Among the uncontrollable factors that are responsible for some of the failures with irradiation are a high relative humidity, and the occurrence of direct droplet infection.

R. E. O. WILLIAMS.

(*From Bulletin of Hygiene Vol.* 21, *No.* 1).

CHLORINE RESIDUAL WILL INACTIVATE POLIO VIRUS.

FREE CHLORINE residuals within the range of normal water dosage will inactivate the polio virus, and the effectiveness of the residual does not depend on the type of chlorine-bearing compound so long as the equivalent oxidation potential of free chlorine exists. This statement was made by G. M. Ridenour and R. S. Ingols of the University of Michigan School of Public Health, on the basis of research aided by a grant from the National Foundation for Infantile Paralysis and described in an article in the June issue of the AMERICAN JOURNAL OF PUBLIC HEALTH.

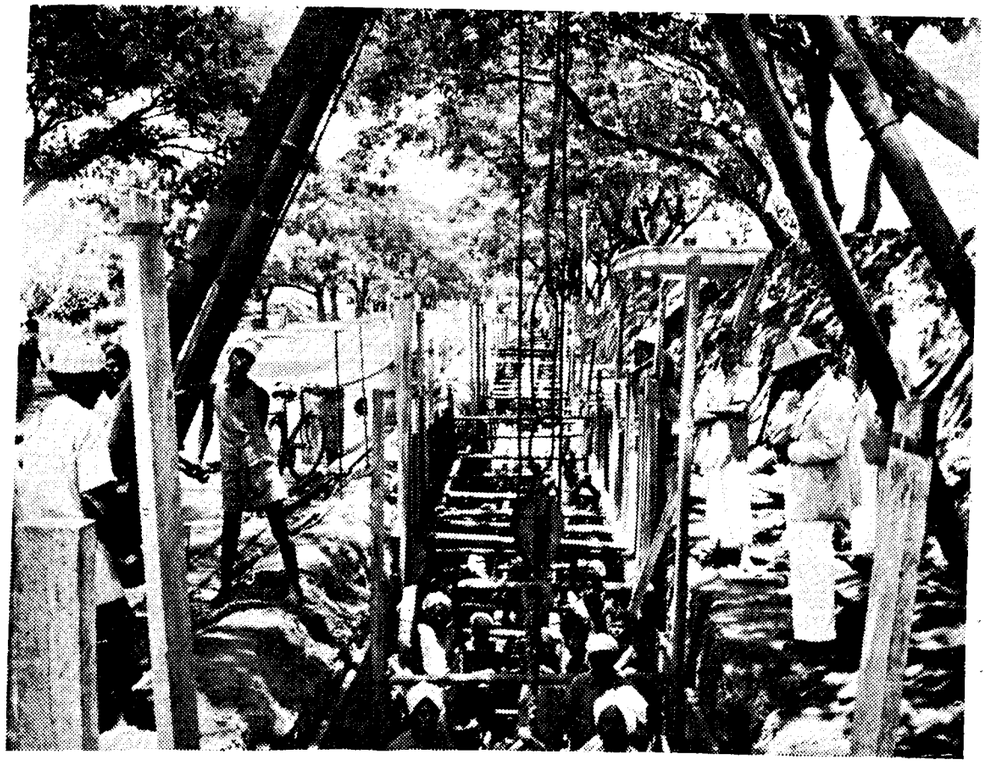
Previous investigation had indicated that the amount of chlorine and time of contact required for disinfection against the polio virus were beyond practical limits. Thus, if poliomyelites were a water-borne disease, chlorination would not be practical. The authors point out, however, that these investigations were based on the orthotolidine test, which measures not only uncombined chlorine, but also varies other chloro compounds with a lesser disinfectane capacity. The authors substituted for this the recently developed orthotolidine-arsenite (OTA) test, which measures only free chlorine or its equivalent oxidation potential.

In conducting their research, the authors used water treated with chlorine or with chlorint dioxide. They found that the results were about the same for chlorine, chlorine dioxide, or a mixture of the two, provided sufficient free chlorine residual was supplied. "The results from these studies show that chlorine, now in universal use for disinfection of water, can be used in amounts which will result in inactivation of polimyelites virus and yet produce a satisfactory and palatable water."

In view of the marked difference in results obtained through the use of the new OTA test, the authors suggest that methods now in operation for chlorination of community waters in general be re-examined to determine their efficiency in providing free chlorine."

They also point out that "the OTA test for residual chlorine now supplies a method of detecting the effective chlorine available for inactivation of the virus in treated water."

(*From the American City*).



தமிழ்நாடு ஆவணக்காப்பக நூலகம்,
எழும்பூர், சென்னை-600 008.

தவணைத்தாள்.

சே எண் : ப. எண் :

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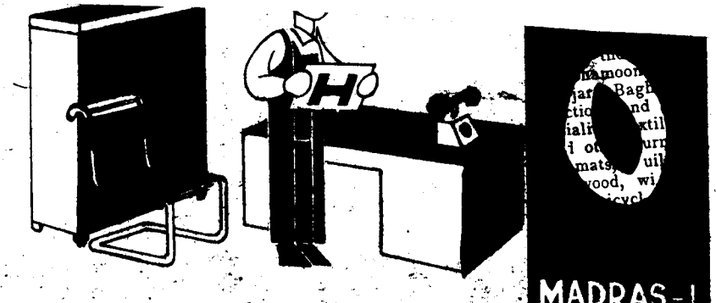

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