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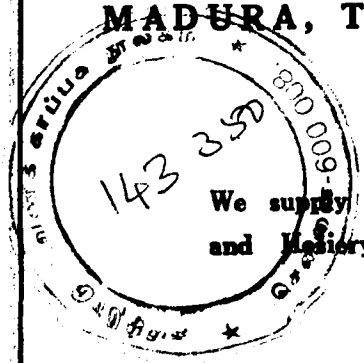
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PEOPLE'S HEALTH

A Pioneer in the Field of Public Health

Vol. II

JULY, 1948

No. 10

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'It's possible,' says our Public Health Department!



VOL. II No. 10

JULY, 1948

ISSUED MONTHLY

EDITORIAL . . .

"The Health of a people is really the foundation upon which all their happiness and all their powers as a state depend"—Disraeli.

Ensure a strong Ministry of Health for India

We have already brought to the notice of our readers the foregoing famous quotation of Disraeli. Again, we quote it; for the simple reason that its unassailable truth has not, as yet, been fully appreciated and acted upon by those who steer the ship of Independent India. Our top-ranking statesmen and politicians have been but rendering lip service to national health. They have not as yet laid, true and well, the foundation on which a well-planned superstructure could be reared in due course to ensure the nation's health.

STATE'S RESPONSIBILITY

We have in these columns repeatedly urged that the State should accept the full responsibility for the health of the people. We do not know whether our constitution-makers have

given any thought to the imperative necessity of having a strong Ministry of Health at the Centre with *statutory powers* to direct the activities of the Provinces and the acceding States in the promotion of people's health on sound lines.

The Union list contains a number of subjects concerning health on which the Indian Parliament may legislate. The concurrent list contains certain subjects, while certain others are left exclusively for the Provinces. Subjects relating to national health are closely inter-connected. They cannot be compartamentalised. Section 227 of the proposed Constitution Act gives powers to Parliament to legislate in respect of any matter provided the Council of State by a resolution carried by two-thirds of the members attending and voting on a subject.

THIS WON'T DO

The Local Self-Government of Cantonment areas is in the Union list. They form so many islands scattered throughout the country. Diseases do not respect territorial boundaries nor linguistic or other similar barriers. These cannot prevent the invasion of epidemics from one area to another. Under the old foreign rule, it was convenient for the administration to transfer its responsibility for the health of the people and their education to the shoulders of impecunious local authorities. It suited them to consider that these subjects were *matters of mere local concern*. They doled out grants as and when they pleased, like throwing crumbs at hungry dogs! No uniform principles or policies were adopted in the past. And what is the net result? The health of the people has progressively deteriorated to the present deplorable low level.

With the dawn of independence, it is essential that a Central Ministry of Health should lay down policies and see that they are implemented in practice in the interest of the nation as a whole. There is an unfortunate tendency on the part of Provincial Ministers of Health to act independent of the Central Government and even independent of the neighbouring territories. Indeed, instances are not wanting that in certain Provinces actions have been taken independent of com-

monsense too! The spirit of provincialism in matters pertaining to people's health is baneful. This state of affairs, if allowed to continue, would result in nothing short of a catastrophe.

HEALTH IS NOT MERELY NATIONAL BUT INTERNATIONAL

A stage is come in the affairs of the world when the health of the people has come to be considered a world affair. It transcends national boundaries. That is the reason why a World Health Organisation has been brought into existence. India is a member of that organisation. If there is not to be a strong Central Ministry of Health responsible for India's health, we fail to see why she should be a member of W.H.O. at all.

CENTRAL DIRECTION ESSENTIAL

Judged from the events of recent past, we strongly urge that the training of technical personnel required to man the various health services, research and similar activities should be entirely in the hands of the Ministry of Health, Government of India. In short, it should be the clearing house of all public health activities in the various Provinces and acceding States. It should assess the results which have accrued therefrom and recommend modifications of procedure and practice for general adoption throughout the whole country. At the moment, every health department has its own favourite method of combating health

problems. Every Province has its own standard of designs of public health engineering works. Some may be good, some may be bad and some may be indifferent. The Central Government should assess the relative merits of the varied principal public health activities to promote the health of the people and place correct knowledge at the disposal of the Provinces. Needless to add that the Centre should have only the very best specialists in the respective fields of work to advise them suitably. The Central Minister of Health should have a bureau of specialists charged with the responsibility for tendering technical advice.

WHY THESE WATER TIGHT COMPARTMENTS?

The Ministry of Health, Government of India, is now in charge of all activities, which go to promote the health of the nation. They are in charge of Housing and Town Planning, Local Self-Government administration, Medicine—Preventive and Curative—Public Health Engineering and other similar activities. In the Provinces, on the other hand, one Minister is in charge of Housing, another of Town Planning, a third of Local Administration or Local Self-Government as it is called in some Provinces; a fourth, Medicine—Curative and Preventive—and a fifth, in charge of Public Health Engineering works. The net result is, the right-

hand does not know what the left-hand does! This deplorable lack of coordination results in inefficiency and wastage of funds. In consequence, people do not derive the benefits of a properly coordinated public health administration.

We would, therefore, strongly urge that statutorily the Provincial Ministers of Health should hold charge of all the portfolios which the Minister of Health, Government of India, holds. Only then, it would be possible to render fully coordinated services to the people.

At the moment, we understand that frantic attempts are being made to take away the portfolios of water-supply and drainage from the Minister of Health, Madras. Housing is already in charge of a Minister who has nothing to do with Town Planning. The division of portfolios in the Provinces has not been effected with an eye to business. Power politics determine the distribution of portfolios!

We therefore appeal to our Constitution-makers to keep these aspects of the question while finalising India's Constitution.

A Call to Action

SEWAGE DISPOSAL OR SEWAGE UTILISATION?

Seeing that the City of Madras has to depend upon outside assistance for the supply of vegetables for human

consumption and of green fodder for cattle, Mr. A. V. Raman wrote a personal letter to the Minister for Food, Madras, on the 30th May 1947 suggesting the utilisation of the sewage of the city for farming instead of shooting it into the Bay of Bengal. He also suggested that a committee may be constituted for formulating concrete proposals after making local inspection of the sites available for the purpose.

MADRAS PREMIER DEPLORES

Reginald Reynolds, in his famous book *Cleanliness and Godliness*, has put forward a powerful plea for the utilisation of the so-called waste from the community for its own benefit by putting it back on land. He strongly condemns the practice of throwing away precious manure in the name of health.

The other day, the Madras Premier, in a public speech, deeply deplored and, rightly too, that valuable sewage of the city was being shot into the sea without utilising it for the benefit of the citizens of Madras. At present, 27 million gallons of sewage per day, is being discharged into the sea. It is estimated that this is equivalent to 5.4 tons of combined nitrogen!

APPLY SCIENTIFIC KNOWLEDGE

The reasons why the old sewage farm was closed down long ago, need not be discussed in detail here. But it should be noted that the condition of the sewage during certain months

of the year, is highly septic by the time it reaches the outfall, emitting large quantities of offensive gas. This was primarily responsible for abandoning the old sewage farm. Its maintenance had also been neglected in certain vital respects.

If modern scientific knowledge is applied, such an unsuitable condition of sewage for farming, can be corrected and the sewage can be profitably applied on to the land without causing any nuisance to the neighbourhood.

No doubt, our 'experts' would take note of the results of the researches carried out elsewhere that the sewage intended for application on land should not be subjected to any other preliminary treatment than effective screening. Humus formation on soil is as important as application of fertilisers. Sludge encourages the formation of humus and it should not be separated from the sewage. If the soil should 'live' in a healthy state, the supply of humus to it should be maintained.

COMMITTEE'S CONSERVATIVE RECOMMENDATIONS

Agreeably to the suggestion of Mr. Raman, the Government were pleased to appoint a committee to go into the question. The committee was fully representative of all interests. Local inspections were made and the subject was discussed from several standpoints. Eventually, the committee came to certain conclusions which err rather

on the conservative side. In the first instance, the committee has recommended that an experimental farm may be started with a view to watching the results for three years. The estimated capital cost of the proposal is Rs. 3.80 lakhs or, say, Rs. 4 lakhs and a recurring expenditure of Rs. 1.30 lakhs. The anticipated receipt by the sale of fodder is estimated at Rs. 65,000 during a three-year period of experiment.

The committee has not apparently contemplated raising vegetables and other more profitable crops immediately. There is a certain element of risk of transmission of disease by vegetables grown on sewage farms which are likely to be eaten raw. American health authorities do not favour the idea of vegetables being grown. In German sewage farms, however, potatoes, turnips and grains are grown. Dairy cattle are pastured in sewage irrigated fields without any adverse results. Here, in India, farming should be the most natural method of sewage utilisation and it should be possible to grow profitable crops also.

MAKE IT A SUCCESS

The circuitous procedure for which our administrative circumlocution offices have won a notoriety even under popular Ministers, should be short-circuited and the Corporation of Madras authorised to go forward immediately to implement the recom-

mendations of the committee. The entire cost of the project should be borne by the Government as the experiment is in the nature of a research, the results of which would be available to the rest of the Province, as well. Pending a decision on the financial aspects, the Corporation authorities may be authorised to go forward with the scheme without any loss of time. The required land should be immediately placed at the disposal of the Corporation, acquiring it under the emergency powers of the Land Acquisition Act.

Further, all the available technical talent in Agriculture, Public Health—Medical and Engineering—should be canalized to ensure the success of the experimental measure. The Commissioner of the Corporation should be given the authority to approach any Government expert to render technical assistance to him, as and when necessary. To make a project successful, it requires effort and talent and, above all, interest. It is easy to 'report' detailing a long list of obstacles to progress. Let our experts shoulder their responsibilities, apply their modern expert knowledge, and make the experiment a success. Here is a chance for them to act.

A Leaf from Goebbels!

A few years back the Madras Ministry gave birth to an official propaganda

magazine called, *Madras Information*. Criticisms were then directed against the publication of the magazine by many quarters for varied and valid reasons; but the popular Ministry had its own way.

GOVERNMENT AND PUBLICITY WORK

Under this caption the magazine justifies its birth and its adolescent activities. It states that the criticisms do not take into account all the relevant considerations. It contends:

"that publicity has many high-ways and by-ways. It can be done on many fronts and from numerous angles. The methods vary with the subject and it is not the monopoly of any one organisation or agency. The field for publicity is vast and there is room for any number of organizations".

If any one had asked the notorious Goebbels as to why he adopted his own peculiar and telling method of propaganda in the World War II, he would have given reasons perhaps more convincing than the *Madras Information*, has now advanced! The magazine develops them further in these terms:

"No doubt the newspaper press occupies a unique position in the field of publicity, but it is not necessarily in a position always to interpret Govern-

mental policies or publicize Governmental activities as effectively as the Government themselves, as the authors of these policies or activities, can do. It is a common place that an author is in a better position to explain his writings than a third party, and Government are in a better position than any other organization to explain their principles and policies and publicize their activities in the most effective manner. Moreover, newspapers are not unattached entities. They generally support a particular political party or school of thought. In England, for example, their great political parties, e.g., the Conservative, the Liberal, or the Labour Party control a considerable section of the press while, in India, there are many papers supporting the nationalist school of thought, while others are controlled by communal organizations. These interpret men and events from their respective angles and the interpretations often differ widely. ..."

We refrain from commenting on the ingenious arguments developed by *Madras Information* excepting to draw attention to the fact that political parties

as such in England run their own publicity papers, but the Ministry as such do not think of running a propaganda paper at State expense. This fundamental fact has been overlooked.

We are not certainly interested in the general policy behind the publication of this propaganda magazine. But we are deeply interested in the publicity given in so far as the public health activities of the Government are concerned. We do not know whether the Ministry of Health hold themselves responsible for the accuracy of the information published in this magazine.

TRUTH COMES TO LIGHT

In the same issue of the magazine (Vol. II, No. 12) photographs of "A typical slum in Madras City", "The old slum has disappeared and new houses have been built", and "A model new house in an old slum area", have been published under prominent head-line "Slums and Plague spots Government have planned to wipe them out".

Any citizen of Madras who takes a walk along the Marina in the evenings would not have failed to recognise the photographs referred to, as the new quarters built in the Fishermen's colony opposite the Lady Willingdon Training School. So far as our information goes, the Government had nothing to do with their design, lay out or construction. If the Government claim credit for the design, they would stand

condemned for creating a fresh slum in a new form. The new hutments were there long before the present Ministry came into office.

Thus the magazine seriously intend to convey that the Madras Ministry had been responsible for the construction of new huts and give an impression to the public as though the Ministry have any plans to wipe the slums out of existence.

Far from claiming any credit for this new slum, the Madras Government have called upon the Corporation to pull down the new tenements, as the lay-out, design and construction not only mar the natural beauty of the marina but are also sub-standard in every respect. Indeed, 'Madras Information' has very faithfully represented the Ministry's activities!

We do not wish to multiply instances of misrepresentation of *Madras Information*. It is following a policy of *suppressio vere suggestio falsi*. Surely this is not a faithful reflection of the activities of the Ministry.

HARD TO FIGHT

And the parson made it his text that week, and he said likewise,
That a lie which is half a truth is
ever the blackest of lies,
That a lie which is all a lie may be
met and fought with outright,
But a lie which is part a truth is
harder matter to fight.

TENNYSON.

AN APPEAL

We would appeal to the Ministry of Information that the publicity of untruths and half-truths, far from enlisting the cooperation and winning the appreciation of the people, would bring down the Ministry's prestige in the public eye. People would rightly think that the Ministry had taken a leaf from Goebbels. It is high time that the Ministry of Information stop the publication of this magazine and regain their credit. Incidentally, public money could well be saved.

Male Nurses

When Dr. T. S. S. Rajan, the Minister of Health under the first Congress Ministry, introduced the innovation of employing male nurses in the General Hospital, Madras, there was a hue and cry. It was urged that women alone were suited to render nursing services. Experience all these years has, however, shown that the male nurses have acquitted themselves very well indeed.

AMERICAN EXPERIENCE

The American Nurses Association, in a recent news release, calls attention to the vocational possibilities of nursing for men high school graduates. It points out that wartime experiences of the army and navy corpsmen amply proved that nursing is not a career for women alone. Further, men are especially well-fitted for work in heavy

industry, and in hospitals with large divisions caring for orthopedic conditions. Although the number of men admitted to nursing schools increased from 45 in 1945 to 334 in 1947, there is still room for many more men students. Be it noted here that in America, of all Western countries, the women are zealous to protect their interests and assert their rights!

The Madras Ministry have a programme of training literally an army of nurses although those who returned from the war are still waiting for employment. We hope, in their scheme of things, men also will have an opportunity to get themselves trained as nurses. Indeed, throughout the Indian Dominion, men should be given equal facilities to get themselves trained as nurses.

STATE SERVICES AND SEX

The Government of India have recently announced that women will be eligible for any public service in India, including Indian Administrative and Indian Police Services. They have thus removed the discrimination in the matter of employment in public services based merely on sex. Is it not, therefore, reasonable that men should not be excluded from nursing service on considerations of sex?

A Double Waste

The Madras Public Health Act, 1939, has put an obligation on Government

to constitute for the Province a Public Health Board. The Chairman of the Board is the Minister of Health and its Secretary, the Director of Public Health. The other members are the Minister for Local Administration, the Surgeon-General, the Sanitary Engineer to Government, the Inspector of Municipal Councils and Local Boards, three members of the Legislative Assembly and an unattached non-official.

NATURE OF BUSINESS DONE

The functions of the Board are strictly limited to advising Government on such matters as the Government may from time to time refer to it. The members have thus no statutory right to bring forward on their own initiative any subject for the consideration of the Board.

We have no precise information as to how often this Board meets and what useful business it transacts. From the meagre information furnished to us, we observe that the Government have chosen to refer to the Board subjects such as how best cashewnuts can be roasted, whether fixed masonry dust-bins can be considered suitable, whether the squatting plates provided in public and private sanitary conveniences are satisfactory. Similar 'important' matters are referred to the Board! What a waste of talent, time, thought and energy! In short, the Board has been reduced to a farce!

THE LATEST

At its meeting held on 8th June 1948, the Board agreed to the proposal of the Director of Public Health to appoint a senior Health Inspector in every district as *Sanitary Superintendent* to assist the District Health Officer in sanitation. The reasons which were urged in favour of the proposal are:—

(1) The Government had *already* permitted the District Health Officers to carry on latrine construction work in Panchayats and other rural areas.

(2) The District Board Engineering staff have neither the time nor are they interested in these small works.

(3) Engineering subordinates are very scarce.

DUTIES OF SANITARY SUPERINTENDENTS

The Sanitary Superintendents are expected to assist the District Health Officers in sanitation, such as site inspection, supervision, latrine inspection, check-measurement, carrying out all minor sanitary works, etc.

AN ANALYSIS OF THE POSITION

The Government *suo motto* could not have permitted the District Health Officers to undertake the execution of works in rural areas. They should have accepted the recommendations made by the Head of the Department. At the time he made it, how did he expect them to shoulder the responsibility for which they are so eminently

ill-suited by their training and experience? Does it not amount to the Head of the Department putting insidiously the thin end of the wedge and driving it home at a later stage?

On what authority is it stated that the District Board Engineering staff have neither the time nor are they interested in these small works? Is it not in the nature of an *obiter dictum*? We should take this representation with a grain of salt, at any rate till some unassailable evidence is tendered to support this assertion! The only Engineer-member of the Board had maintained a discreet silence. Why? Is it because he did not comprehend the problem before him? Granting for a moment, that the District Board Engineering staff have neither the time nor interest in these small works, what prevents the Government from issuing an order definitely assigning these works to them and insisting upon their carrying out orders?

If Engineering subordinates are very scarce, how is the difficulty expected to be got over by entrusting the execution of works to Health Inspectors who like the Health Officers, are by no means trained to carry out this class of work? Their training is so limited that they cannot be expected to read a plan, much less to measure and check-measure works. They cannot differentiate qualities in materials and constructions. Such is the limited

training given to them in Engineering subjects! They are innocent of leveling. If drains are constructed to wrong levels, they would come forward at a later stage with proposals to appoint an additional gang of drain cleaners to push the sewage up-hill!

THE TRUTH OF THE MATTER

If the matter is probed into further, the truth will come to light. The object behind the proposal is not really in the interest of works in rural areas but to give promotion to senior Health Inspectors in order to give a *quietus* to their agitation for promotion as Assistant Health Officers. We readily concede that this class of field subordinates have quite a number of grievances. We have a feeling that the Head of the Department is largely responsible for putting a wet blanket on the enthusiasm of this class of willing workers. It requires administrative talent to redress such grievances and make the field staff contented and happy. Unfortunately, there appears to be a deplorable lack of such talent in our administration.

HARD TO BELIEVE

How can the dearth of Engineering subordinates be made good by the appointment of a *single person in each district* to be in charge of execution of works? The Director had been hammering *ad nauseam* that the jurisdiction of District Health Officers is too wide

and unwieldy. They are said to be in charge of 2 millions of people scattered over 500 villages and spread over 5,000 square miles. How can a single *Sanitary Superintendent* in each district, be expected to be in charge of such a large jurisdiction to inspect sites, supervise execution and check-measure works?

TO SUM UP

It looks as though the Ministry is advised to employ the village barber to practise surgery in rural areas on the ground that qualified surgeons are scarce and even the limited ones available, are not interested in minor operations! The Director of Public Health apparently hopes that by giving a special training for three months to the Senior Health Inspectors, he would equip them to take charge of execution of works! He may just as well attempt washing a black dog with soap and water to convert it into a white dog as in the story of *Tenaliraman*, the famous court-jester.

Will the Government scotch the resolution of the Public Health Board in this behalf and avert a double waste?

Our Housing Problems

HOW MISMANAGED!

In their zeal and sympathy for the people who are homeless or who are compelled to live in squalid slums, persons in authority who really mean well, allow their heads to be carried

away by their hearts! They do not seem to realize that they actually aggravate the evils which they are anxious to remedy. An amateur, however well meaning and zealous he may be, may do more harm than good in his efforts to remedy the insanitary living conditions of our people.

DELHI EXAMPLE

Mr. Mohanlal Saxena, our Minister for Rehabilitation, is one with an excellent record of honest and loyal work. He is unassuming. He means well. He has recently canalised all his enthusiasm and energy in mobilising the evacuees to build their own homes in New Delhi. Photographs illustrating how the evacuees themselves carry building materials on their heads have been published. From the photographs of the incomplete structures which appeared in the Press, one has to rub one's eyes whether the new habitations would after all prove useful in the end. We have no information whether the Minister had the benefit of getting competent technical advice in working out the lay-out, community facilities and the designs of the dwellings themselves. There is nothing to indicate that the New Delhi City Improvement Trust was consulted in the matter. After all, it is this Trust which is responsible for the proper development of New Delhi. We are afraid that the energy, time, labour and materials spent on the construction of

dwelling without any preconceived plan, may produce in the end a worse slum than what one sees in Old Delhi.

MADRAS IN BACKWATERS!

The other day, in the Madras Legislative Assembly, a volley of questions was shot at the new Minister for Housing. Dr. S. Gurubotham, who was recently *nominated* to the Madras Legislative Council and appointed as Minister for *Firka* Development, is God's good man from all accounts. We have no doubt that he means well; but, from the replies he furnished to the questions put to him the other day, he has given an impression that he has not applied his mind to the subject. A specific question was put to him as to what he had done for the low-income groups; he said that he had asked the *department* to bring up proposals for fresh schemes to cover the low-income groups and to furnish schemes for building houses costing between Rs. 500 and 1,500. Apparently Dr. Gurubotham is 'a strong office-note-man'. If he had given any thought to the subject, he should have formulated the policy he proposes to adopt for providing homes for the low-income groups and sought the departmental assistance in its implementation.

STANDARD DESIGN FOR A DWELLING

We do not know whether he is aware that the Madras Government constituted an expert committee to work out a design for a dwelling,

satisfying the absolute minimum standards of sanitation, comfort and convenience. He should realize that it is absolute wastage of public funds to rear buildings which are below the standard; for, such buildings would be slums in a new form by the time they are occupied. We would strongly commend to the Minister to call for the designs prepared by the expert committee and decide whether or not the Government should accept them as the absolute minimum standard.

WANTED A NATIONAL BUILDING CODE

We have been urging in these columns that we should evolve a national building code prescribing the absolute minimum standards to ensure health and sanitation. Steps should be taken to bring all the existing sub-standard buildings to the standards so set up. No new building should be permitted to be constructed which does not comply with the prescribed standards. Unless some such firm stand is taken in the housing policy of the State, good money will be thrown after bad jobs. The popular ministry owe a duty in this matter. They should remember that they are after all dealing with people's money.

WHY PLAN BEHIND BARRED DOORS?

We have also been pointing out that in our country, we have developed peculiar official departmental mentality

which believe in planning behind barred doors. The people, for whose benefit projects are sponsored, are not given any opportunity to have any say in the matter. In the matter of housing, the people, for whose benefit, houses are expected to be built, should have some say. They have a right to point out how their living conditions should be satisfied. Copying the West, our experts are talking of two-room tenements and three-room tenements, parlour houses, and so on and so forth. What would satisfy the living conditions of our people is the courtyard-design of buildings for which South India has been famous for centuries past? Let's apply every test according to modern hygienic requirements. One would find that they satisfy all of them. The *pial* forms the drawing room, as it were; the *koodum* and the *Thazhvaram* opening into a central court-yard, are put to multi-purpose use. They are fully utilized in day to day life and more so on festive occasions. One does not feel cramped in such a dwelling. It is not however our purpose here to sing the praise of the courtyard design of dwellings; but what we do wish to emphasize is that before any change is made in them, a strong case should be made out.

"SLUM MENTALITY"

Those who are responsible for the design and construction of single-room tenements for our Police force, our

public cleansing staff and our workers in factories have exhibited altogether a slum mentality and it is high time that we shake it off, if we do really mean to raise the standard of living of our people. The first step towards raising the living standard is to provide a home satisfying the minimum requirement of health and sanitation. Hon. Rajkumari Amrit Kaur, in her message to the conference of the Chairmen of Improvement Trusts in India, referring to single-room tenements, says "they are an abomination—they exist in far too large a number in our big cities—both from the point of view of physical as well as moral health."

Several agencies are engaged in providing homes for the people: the railway authorities, the factories, the local authorities, private individuals, all are engaged in building homes for the people. They all have their own standards. The Madras Corporation had built a few years back a number of single-room tenements for the fishermen in the *marina*. The Government have now called upon the Corporation to pull them down on the ground that they are unsuitable in the lay-out, design and other details. What a waste of money! When money is scarce in our country, it is the duty of the State to see that every pie is spent properly on a well-thought-out approved scheme. The Minister in charge of Housing has a responsibility in the matter.

(Continued on page 499)



LAWS OF HEALTH

by

MAHATMA GANDHI

Shri Brijlal Nehru, himself a faddist like me, has written to the Press belauding the statement of the Minister of Health that "a very great deal of our ill-health is due to our own fault" and saying that there is to his knowledge no governmental agency responsible for removing this fault. He adds: "The attention of our Health Ministers has so far been confined to the establishment of hospitals, sanatoria, clinics, dispensaries, etc., i.e., devices for the treatment of disease; no institutions have been founded for the prevention of disease by bringing home to the people the need of correct living and the methods of doing so.

He then goes on to suggest that "a separate branch be established to attend to the promotion of health as distinguished from treatment of disease. This agency may be given the assistance of an advisory body of both experts

and laymen so that the experts may devise their schemes with the full knowledge of the requirements of the people and the limitations under which they have to live and work." Why does this fellow faddist want a separate branch for this very necessary purpose? This was the fashion under the old regime which went on piling expenditure on expenditure and deluded itself and the gullible public that the greater the expense the greater the utility. I would have the Minister of Health require the doctors under her and the other staff understand that their first care must be the attainment and preservation of the health of the public whom they are paid to serve.

As a preliminary step, the writer "would have the production of a book on health laws and correct living in the conditions prevailing in India. To carry weight with the public, the book

must be brought out under the authority of the Health Ministry of the Government of India . . . The duty of writing such a book may be entrusted to the Indian Medical Association, who should be required to produce it within a stated time. A transfer of emphasis from disease to health in the teaching given in our medical colleges would in itself be most desirable."

Indeed, the teaching of the laws of Health should be obligatory in all schools and colleges. If the treatise recommended by Shri Brijlal Nehru is brought out, I hope the authors would be instructed to avoid the introduction of disease under the guise of preserving health such as the craze for various inoculations.

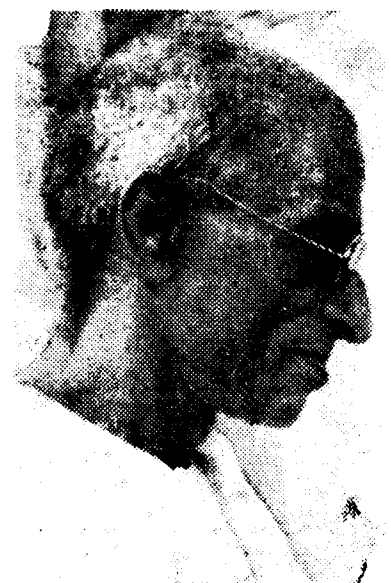
(From HARIJAN, dated December 28, 1947.)

(Continued from page 497)

THE HOUSING COMMITTEE'S REPORT AN EYE-WASH!

The Madras Provincial Housing Committee submitted their report on the 20th December, 1947. The Minister for Housing told the Madras Legislative Assembly the other day that the recommendations of the committee were still under the *consideration* of Government. From the expedition with which the Government attempt to *consider* the recommendations of committees appointed by them, one despairs whether any thing would ever be implemented at all. We ask why the report of the housing committee was not exposed for sale to the public and why the public were not given an opportunity to study the report and offer their criticism, if any. The State is bound to take the people with them in implementing the recommendations of the committee. Even now, it is not too late for the Government to make the report available to the public *at cost price*.

We have had the experience of the report of the Water-Supply and Drainage Committee, Madras. The Government do not seem to have considered the report at all. We wonder how many Ministers of the State can claim to have even read the report dealing with so fundamental a subject as the provision of drinking water to the people. It looks as if the popular ministries appoint committees to go into this or that question just to throw dust in the eyes of the people. Seeing that the Government do not mean business at all and that appointment of committees is just a cloak, the public should tell them that no non-official should hereafter care to serve in any of the committees constituted by the Ministry; at any rate, until such time as they prove by their action that they do honestly mean to render service to the people in whose name and for whose benefit they administer the country.



ENVIRONMENTAL HYGIENE COMMITTEE

A Message

by
His Excellency
Shri. C. RAJAGOPALACHARI
The Governor-General of India

"It was with great pleasure that I heard of the appointment of an Environmental Hygiene Committee by our Health Minister, Rajkumari Amrit Kaur. I avail myself of this opportunity to convey to the Committee how interested I am in its work. I hope the labours of the Committee will be crowned with success and a programme will be evolved for speedy development in this field."

ENVIRONMENTAL HYGIENE COMMITTEE : TERMS OF REFERENCE

- | | |
|---|--|
| <p>(i) Investigation of the whole field of Environmental Hygiene with special reference to</p> <ul style="list-style-type: none"> (a) town and village planning ; (b) housing, urban and rural ; (c) water supply ; (d) general sanitation, including conservancy and drainage ; (e) prevention of river and beach pollution ; | <ul style="list-style-type: none"> (f) control of insect vectors of diseases ; and (g) regulation of certain trades, industries and occupations dangerous to health and offensive to the community. <p>(ii) The framing of a programme of development for the consideration of Government based on an examination of the recommendations of the Health</p> |
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(Continued on page 501)

ANOTHER NOTABLE MESSAGE

by
A. B. SHETTY
Minister of Health, Madras

The announcement of the constitution of a Committee to go into the question of environmental hygiene has been welcomed in many quarters. There is always a great demand from cities and towns and also larger villages for the installation of water-supply and drainage schemes. In view of this, this Government appointed in June last year a Committee on Water-Supply and Drainage, and the Committee has given a report to Government making recommendations of far-reaching importance. Sri A. V. Raman has taken a leading part in the deliberations of this Committee and also in drawing up the report. I am glad to note that you have selected him as a member of your Committee also and I am sure his wide knowledge and experience of the pro-

blems connected with environmental hygiene will be of great help to your Committee. As the provision of water-supply and drainage is of fundamental importance for improving the living conditions of the people, they ought to be given the first priority in any health development programme.

I trust the Central Government will give the right lead in this matter to the Provincial Governments and also render them all necessary help in the matter of funds, technical personnel and materials of construction so that they may go forward with a large programme of water-supply and drainage works.

Wishing success to the Committee in its work.

(Continued from page 500).

ENVIRONMENTAL HYGIENE COMMITTEE

Survey and of Development Committee regarding Environmental Hygiene and of the Five-year plans of Provinces.

In framing the programme, the Committee should take into consideration the following factors :—

(a) the programme will require to be placed on a basis of adequate and comprehensive planning while at the same time taking into account the financial capacity of Governments to implement the programme. The Committee should, therefore, suggest, wherever possible, ways and means by which the funds necessary

for implementing their proposals can be found.

(b) the need for promoting the training of an adequate number of technical personnel of various categories required for a modern programme of environmental improvement and for promoting the production of the necessary equipment. The Committee should make specific recommendations in this regard.

(c) in view of the varying resources of the Provinces, the measures required to assist the less favoured Provinces so that the programme can be implemented on as uniform a basis as possible.

TWO NOTEWORTHY MESSAGES

by

RAJKUMARI AMRIT KAUR

Minister of Health, Government of India



Environmental Hygiene Committee

A clean and healthy environment is an essential pre-requisite to the development of community-life on sound lines. As has been pointed out by the Bhole Committee "in the campaign for improved health, drugs, vaccines and sera can in no way replace such essentials as a hygienic home, good food, fresh air and a safe water supply." In our country the standards of sanitation, housing and other amenities for healthful living are so low that, side by side with the provision of medical relief and preventive care, a progressive improvement of environmental hygiene is an essential step towards the realisation of an effective advance in public health. It was therefore with great pleasure that I decided to appoint this Committee in order that the many problems associated with environmental hygiene might be discussed by an expert body and proper recommendations made to the Government in this country to enable them to formulate a planned programme of development in this field. Unfortunately, other important duties have made it necessary for me to leave India just prior to the date of inauguration of this Committee and I am therefore sending this message through

the Chairman, Dr. Das Gupta, in order to assure him and his colleagues on the Committee how keenly interested I am in its work and in the proposals which it will put forward.

COMPREHENSIVE TERMS OF REFERENCE

The terms of reference of the Committee indicate the large field which has to be covered. This included town and village planning, housing, water supply, general sanitation including drainage, prevention of beach and river pollution control of carriers of disease such as rats, flies, fleas and mosquitoes and regulation of certain trades which may prove offensive to the public and dangerous to their health. I realise that no Committee, however well chosen its members may be, can be expected to deal satisfactorily with all these problems. Even so, taking into consideration the need for keeping the Committee as small as possible, an attempt has been made to bring together distinguished workers in this field with a considerable background of theoretical knowledge and practical experience. It is open to the Committee to coopt for limited

periods as and when required, such members as have special knowledge and experience in particular subjects. The need for the Committee to secure firsthand knowledge regarding the matters under investigation is recognised and the Committee will have freedom to tour about the country, inspect places and collect such information as it may desire to secure.

LONG-TERM—SHORT-TERM PROPOSALS

I do not propose to anticipate the findings of the Committee or its recommendations. It seems obvious to me, however, that financial and other considerations are bound to dictate formulation by the Committee of short-term and long-term proposals. It will be of advantage if a graded programme of development can be worked out in order to enable the Government to proceed, without delay, with the execution of important and obviously urgent works. I am sure that, as persons of considerable practical and administrative experience, the members of the Committee are as alive as I am to the fact that the proposals they put forward will involve expenditure of large sums of money. Programmes which are extravagant in their demands on the public purse will, I much fear, tend to be shelved. On the other hand, planning on a halting and ineffective basis will defeat the purpose in view, namely, the achievement of demonstrable results beneficial to the community. It is essential, therefore, that the short-term proposals should be capable of producing within a short period of time demonstrable results. Otherwise the set-back to the realisation of our objective, which is a rapid advance in the improvement of environmental hygiene, is bound to be of a serious nature. The long-term programme should provide the Committee with the opportunity to set forth its recommendations on as broad a basis as sound development would require.

ENLIST PUBLIC COOPERATION

I would like to stress that no measure designed to promote the welfare of the people can succeed unless their active and intelligent cooperation is secured. Clean and hygienic homes, sanitary surroundings, unpolluted water supplies and wholesome food, all require that, apart from organised public effort to improve housing, sanitation and water and food supplies, a simultaneous advance should be made in the standards that the people set for themselves in these matters. The method of approach to the solution of our problems should therefore be such as to take note of certain essential factors of the situation. One is that the rural population is poor, that at least in the immediate future the measures which are proposed should not be costly and that, in the execution of the schemes, local resources in labour and material should be utilised to the full. Those who cannot provide money or material for the establishment of essential services for village life should be encouraged to contribute in labour towards the execution of the necessary works. I would even suggest a compulsory mobilisation of village man-power, on payment, for essential community needs, the period of such mobilisation being, of course, limited to a week or two each year in order to cause no hardship to the people. Even apart from the contribution which individuals will thus make towards the improvement of village life, such cooperative effort will undoubtedly produce other beneficial results by the development of a spirit of comradeship in the advancement of common causes and by helping to create a feeling of pride and satisfaction in the progressive realisation of higher standards of life for all. Given the right type of workers, I personally have no doubt that the necessary cooperation will be forthcoming without any compulsion. Another point to be taken note of is that, in educating the people to a better life, our attempt should be to utilise to the full all that is best in

the traditional life of the community. And here we must note that ignorance of the primary laws of health, hygiene and sanitation has got to be fought with all the resources at our disposal. In this sphere the proper education of women is of particular importance and I would like to recommend to the members of the Committee to make full use of the knowledge and experience of women social workers when touring.

TRAINING TECHNICAL PERSONNEL

The training of personnel in sufficiently large numbers to meet the requirements for the development programme is an equally important question and I have no doubt that this subject will receive full consideration at the hands of the Committee.

I have briefly referred to certain matters coming within the purview of the Committee's deliberations only to show how complex and varied are the problems with which it has to deal. I must now leave it to enter upon its tasks with a message of warm good wishes for a speedy and successful conclusion of its labours.

Message to Conference of Chairmen of Improvement Trusts

I am extremely sorry that I cannot be present at the Conference of the Improvement Trusts of India that is being called in Delhi this month (July) under your Chairmanship. But, as you know, I am obliged to proceed to Europe to attend the first Conference of the World Health Organisation.

NEED FOR IMPROVEMENT TRUSTS

To any one who has had the opportunity of doing social service over a long period of years in both cities and villages and, therefore, seen the hovels and insanitary conditions in which the

vast majority of our population lives, it is not necessary to emphasise either the importance or the necessity of bodies such as 'Improvement Trusts'. That our cities and our villages should be cleared of slum areas and hovels and our people given decent dwelling houses at the earliest possible opportunity, is vital to the nation's well-being. While I do not for one moment question the legitimacy of the economists' cry for more production and better distribution in order to raise the dreadfully low standards of life in our country, I do feel most strongly that we can never hope for more production until and unless the health of the nation, which is at just as low an ebb as their economic position, is brought up to standard. Many of the diseases which ravage our land are due to causes which are preventable. And the main causes of epidemics and some diseases, for example, tuberculosis, which is playing havoc with us today are bad housing and lack of sanitation. I am filled with envy every time I visit the Western hemisphere and see what an enormous amount of attention is being paid to the clearance of slum areas and how it is always sought, when building new tenements, to provide such facilities as will lessen the burden of the housewife.

FASCINATING TASK

Improvement Trusts have, in my opinion, a tremendous responsibility for, on the successful outcome of their endeavours, depend the happiness and well-being of millions. But theirs is also a fascinating task. To plan, to experiment, to bring into the lives of people who have had to bear nothing but the heat and burden of the day in the most dreary and squalid environment, something of the beauty and restful joy of a decent home, the cleanliness of hygienic surroundings, the health giving air accruing from parks and garden plots, must surely be their own reward.

HANDICAPS TO PROGRESS

I am aware of the fact that every housing project is being held up today for lack of building material as also difficulties in the matter of transport. But all difficulties are made to be surmounted and I am sure that it will be possible in the light of recent experiment, both here and in other countries, to put up buildings with materials other than the stereotyped cement and steel or, at any rate, to reduce their need to the minimum, so that our improvement programmes may not be held up.

I also feel that we may not always think in terms of every permanent structures. Less permanent buildings erected more speedily to meet immediate requirements might very well serve us better. Ideas change no less than needs. The building that was considered perfect a generation ago may today be out of date in the eyes of a modern architect.

DISPEL IGNORANCE

Pari passu with the erection of decent dwelling houses is the need for teaching our ignorant public how to live in them. Social workers, in particular women, should be employed by every

Improvement Trust to teach the house wife how to make the best use of her new home. I am glad that Delhi has employed two women for this work.

ONE ROOM TENEMENT—AN ABOMINATION

I would also like to stress the utmost importance of doing away at once with one room tenements. They are an abomination—they exist in far too large a number in our big cities—both from the point of view of physical as well as moral health. Personally I would like every worker's family quarters to consist of not less than 3 living rooms, a verandah, a kitchen, a bath room and a small courtyard.

I have spoken as a layman but as one who is immensely anxious that the work of our Improvement Trusts may go forward with leaps and bounds.

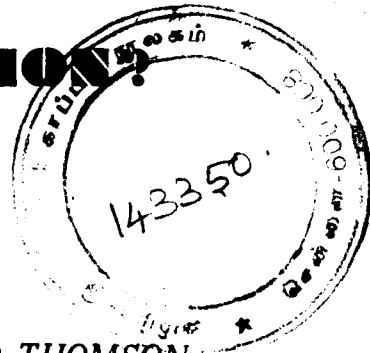
I welcome you all to Delhi and wish your deliberations every success. I am sure the exchange of ideas and a recounting of your varied experiences will be of immense value to you and enable you to return to your labours refreshed and inspired.

FOUNDATION OF ALL SOCIAL PROGRESS

It is not too much to say that an adequate solution of the housing question is the foundation of all social progress. Health and housing are indissolubly connected. If this country is to be the country which we desire to see it become, a great offensive must be undertaken against disease and crime, and the first point at which the attack must be delivered is the unhealthy, ugly, over-crowded house in the mean street, which we all of us know too well. If a healthy race is to be reared, it can be reared only in healthy homes; if infant mortality is to be reduced and tuberculosis to be stamped out, the first essential is the improving of housing conditions; if drink and crime are to be successfully combated, decent, sanitary houses must be provided. If 'unrest' is to be converted into contentment, the provision of good houses may prove one of the most potent agents in that conversion.

(By His Late Majesty King George V.)

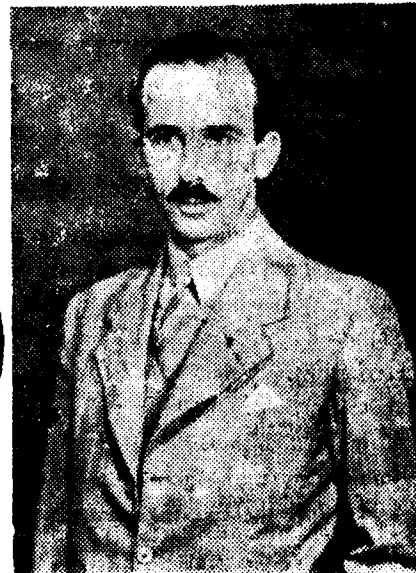
WHAT IS WRONG WITH INDIAN EDUCATION?



by

Lieut-Col. J. FORD THOMSON

Adviser to Government of Madras, in Child Psychology.



When one scans the newspapers these days, there is rarely an issue without an editorial, a reported speech, or a letter to the editor, concerning Indian education and how it should be improved. The great attention which is being paid to this subject is a measure of its importance, and it can be said, with reason, that the future of India ultimately depends upon the education which will be given to her youth. One feels, however, that the arguments and disputes at present in full swing are directed towards resolving questions at the periphery of the problem, and that the real defects of education in this great country are not recognised. Of what moment is the selection of this or that language as a medium of instruction, if the instruction itself has stupendous and glaring faults? If grossly faulty instruction is given, its ill-effects cannot be mitigated by changing the language employed in giving it; nor is a course of citizenship a substitute for adequate and systematic character training.

TWO MAJOR FAULTS

To the writer there appear to be two major and obvious faults in Indian education to-day; the emphasis on memory in teaching, and the

lack of any systematic character training in schools.

The first of these is that the whole emphasis of teaching is placed firmly and squarely upon the utilisation of memory; practice in reasoning and thinking being apparently regarded as of minor moment. It is a shocking thing to see an intelligent youth who has worked hard throughout his education, memorising facts and passages from books; a lad who has passed high in his S.S.L.C. examination, gained distinction throughout his career at college, and finally acquired an honours degree; but who, one finds, is almost incapable of critical and constructive thought. How has this happened?

EXAMINATION SYSTEM

The basic reason is, almost certainly, the examination system, which imposes a strict syllabus upon the schoolmaster, and demands that a student be capable of reproducing the work set, if he is to pass his examination. Ability is measured in these examinations by the amount accurately remembered, rather than by the student's facility in solving fresh problems, or the degree to which he can utilise his critical faculties. The necessity of cramming the

requisite amount of factual knowledge into the students' heads to enable them to answer examination questions, renders it difficult for a teacher to take time to encourage his students to think, criticise, and solve new problems for themselves.

DEVELOP ORIGINALITY

It is an undoubted fact that if a child's mind be not orientated towards solving problems as they arise, he will never, despite considerable native ability, achieve that originality of mind, the presence of which is so essential, if the intellectual life of a country is to grow, expand, and come to full fruition. The Union of India has a population of some three hundred millions, and among these myriads of people there are many individuals who are endowed with first class intellectual potentiality, but who, through faulty education and faulty goals in life, will never contribute anything of significance, either to the Indian nation, or to humanity as a whole; they have never been taught to use and develop the intellectual gifts with which heredity has endowed them, and their talents lie buried in the ground. One cannot help thinking that the relatively few individuals who, having gone through the mill of the Indian educative process, are producing original thought to the benefit of their country and humanity, have achieved what they have done, not because of their education, but in spite of it.

BOOKWORMS!

I have asked intelligent looking boys in the higher forms for their own opinions about some question they have studied, only to be treated to word-for-word recitations of passages from their text-books. If these lads be interrupted, and asked question in the middle of their recitations, they have to go back to the beginning, in order to pick up, once more, the threads of memory! I have asked university students.

questions on surgery, to answer which required thought, and have been treated again to word-for-word recitations from their text-books. The tragedy of it is that these lads were proceeding with their education, obtaining high marks in examinations, happy in the thought that they were becoming highly educated individuals. How wrong they were! They were succeeding only in becoming walking gramophones, capable of being useful clerks, from whom one could obtain information on an as required basis. Such individuals are worth little more than a book-case containing a few dozen text-books.

THE CRUX OF THE QUESTION

The crux of the question lies in the undoubted fact that a person containing in his memory a certain number of facts and ideas which he can use freely and rapidly to solve ideas, is worth infinitely more than an individual with ten times the number of facts and ideas in his memory, which he is incapable of utilising to solve the problems presented to him from day to day. That this is so, surely needs no argument. Yet, the stocking of memory would appear to be the basic aim of formal education in India to-day. That this is a legacy from the past, no one can dispute. But the fact that the Indian educational system was designed to turn out good subordinates who were not required to think much, but had excellent memories which could be used by others, is no reason why it should be perpetuated, now that India is in a position to take her rightful place as one of the greatest nations in the world both numerically and culturally. This pernicious basis of education must be rooted out, the examination system must be reviewed, the factual requirements cut down, and the ability to think stressed. Teachers must get into the habit of constantly forcing their students, from their earliest years, to solve problems, with the minimum assistance. The examination papers must gradually swing over

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from determining memory capacity, to the evaluation of thinking capacity.

PRIMARY PURPOSE OF EDUCATION

This process, of course, has to be gradual. But the principle that one of the primary purposes of formal education is to teach the student to utilise knowledge, should be established immediately; for virtue lies in correct utilisation of knowledge, rather than in its simple acquisition.

CHARACTER TRAINING SCANDALOUSLY NEGLECTED

The second great defect in Indian education is not confined to India, but obtains, in greater or less degree, in every educational system, in every country in the world. Systematic character training of children is simply not being done. Prominent personages deliver speech after speech stating that character training must be done, but none give much indication of *how* it is to be done. It is extraordinary that, until recently, educationists have paid very little attention to this branch of the child's education. Yet, it is manifestly far more important to the State, and the individual, than formal education: for a man of great knowledge and ability, but with a bad character, is obviously a menace to any Society, since he will utilise his knowledge and ability to further his evil ends; whereas a good man with little knowledge and ability is an ornament to any society.

WHY?

This neglect of character training is really scandalous when one considers the question. A child has an extraordinarily full curriculum at school, and when one asks a headmaster for an hour a day for systematic character training, he can never find the time, and talks about syllabi and curricula. Imagine! We cannot find the time for character training! A more fantastic situation has never occurred in the whole of human history. It is because children have not had their characters trained, that society is in its

present unsatisfactory state, with its black markets, nepotism and corruption, back-biting and unfair competition, lust for power and money, and all the other vices which one can find without having to search too far. Yet time cannot be found for character training! Time cannot be found! But if this time is not found, and quickly, I make bold to forecast that human civilization, as we know it, will not last very long, for man has now wrested such power from the universe that, if mass character training to fit humanity to use it is not rapidly undertaken, humanity will become disorganised and regress into the dark savagery of the past; doubtless to rise again, perhaps with a happier outcome. But this need not happen, provided the dangers inherent in not training children to have sound characters are recognised immediately, and acted upon. It is unfortunately not possible for me to describe a system of character training, such as I advocate, in an article of this size, but I would assure my readers that systematic character training is possible and can be done. It cannot, however, be accomplished without educationists giving up one hour of formal education a day for every child. This means that character training must be done at the expense of formal education. If this be not recognised, and time be not given, then character training in schools is an impossibility.

CHANGE CRAMMING MEMORY

When one recognises the importance of the two central defects described, one is able to view the other questions which are being disputed to-day, in correct perspective, and then one finds that they are very minor in character. Let us first change the basis of education from cramming memory, to teaching students to think and use the knowledge they have acquired; let us institute systematic character training in all schools; then only will it be intellectually permissible to discuss such matters as the medium of instruction.

PUBLIC HEALTH EDUCATION

Contributed by

One of our Collaborators

The importance of health education cannot be over-emphasized. It is axiomatic that effective campaigns in the field of public health cannot be organized without previous intelligence. The people should be told first the various aspects governing their health: how to maintain it and how to promote it and above all how to prevent disability and disease.

Many people still believe that health is a negative quality. One is supposed to be healthy, if there is no apparent illness. People should be told that more freedom from disease does not necessarily denote health; health is something more than that. A man must not only be free from any bodily or mental ailment, but also be able to develop and utilize all the inherent qualities in him to the fullest extent.

The real reason why the various activities of public health departments do not bring in commensurate results is that people are not sufficiently educated to appreciate their values. There is no use of launching upon schemes of development without convincing the people of their usefulness. Thus, to put first things first an organized and intensive campaign must be carried out to teach people the laws of health. It is gratifying to note that the Ministry of Health, Government of India, are arranging to bring out an authoritative book on the laws of health. It is to be hoped that the several sections in it would be drafted by real specialists in the respective fields.

A SAD COMMENTARY

It is no use having a good cause; it should be presented in the best way possible. It should be presented in a manner which will carry conviction to common sense at every step. Even a bad cause was successfully publicised by the

notorious Joseph Goebbels during World War II. A propagandist should have a flair for the subject. It is not for every one to be a successful propagandist; it requires training. The propaganda should not only be instructive but attractive also. It is not enough if people are taught the laws of health; attempts should be made to rouse in them keen and abiding interest on health problems. This can be done only by taking advantage of every conceivable resource at our command.

Mere literary education has not been found to ensure a correct understanding and appreciation of community health activities. It is my sad experience that the so-called 'educated people' are the worst sinners in resisting health measures and in violating codes of decency and public conduct. For instance, the people who hold double degree in Arts and Law do not hesitate to use the road margins for answering calls of nature. I have often come across graduates in law, arts and science objecting to vaccinations and inoculations. Some of them are, of course, very scrupulous regarding their personal cleanliness; but they are totally insensible to community sanitation. They are only too ready with excuses and objections! Thus, in health education, one has to educate the educated first. Sanitary conscience is woefully lacking in our *intelligentia*. This is indeed a sad commentary on our present day education in schools and colleges.

HOW TO ORGANIZE HEALTH EDUCATION?

Now, what are the various agencies that we have to tap for a fruitful campaign of health education? I would unhesitatingly put the schools in the forefront. It is deplorable indeed,

that hygiene and sanitation do not figure among the subjects that are taught in our schools. In some cases the syllabus may include them; but those who teach them are as ignorant as the taught. First, the teachers should be taught all about the principles of environmental hygiene, particularly of school hygiene. Where is a more fertile soil than the young minds to sow the seeds of the knowledge of health? This is a matter that has so far received very scant attention from the authorities. Teaching of hygiene, to school children should be made compulsory. Cleanliness, as every body would admit, is next only to Godliness. I maintain that this subject should be given precedence over the innumerable subjects which our unfortunate children are made to overburden their tender minds. It is encouraging to note that sufficient notice of the grievous omission has been taken in the general scheme of educational reorganization by the Central Government but how far the idea is going to be implemented has to be seen. The Bhore Committee stressed the importance of the subject. But what have the authorities done with it? For instance, the Madras Ministry of Education rest content by drawing the attention of the managements of our schools to the remarks of the Bhore Committee on the subject!

WANTED STANDARD TEXT-BOOKS ON HYGIENE IN REGIONAL LANGUAGES

For one thing, we have, if at all, no sufficient and suitable text-books on the subject in the regional languages. Most of the English books even if translated, would not suit the condition prevailing in our country. So the Government have to encourage writing of such books in vernacular by competent specialists in the field. This is absolutely essential if the subject is to be taught in our schools. The second thing, as I have stated already, is that the teachers

should first be given adequate training before they are permitted to impart health education to the children. For this, the subject of hygiene should be given a prominent place in the curricula of training institutions. Specialists should be requisitioned to conduct regular classes to the teachers on hygiene and sanitation. Thus, the provision of suitable text-books in regional languages and the training of teachers are the two primary pre-requisites for starting teaching of hygiene in schools.

UTILIZE THE PRESS

The Press may be utilized to educate the public in matters of health. We have popular Press both in English and in regional languages. If their co-operation is enlisted for publishing educative articles, the public are bound to be benefited by them. In Cochin, Travancore and British Malabar, this source has great potentialities.

CHECK THIS TENDENCY

There is an unfortunate tendency among departmental officials to start publication of magazines under official aegis in the erroneous belief that they would serve the purpose better than the public Press. This tendency should be nipped in the bud. The public in our country view with suspicion and disfavour any official propaganda. The circulation of official magazines, as a rule, is limited to official channels only. Even departmental officials consider that it is after all only an official propaganda. A better and more profitable method is to enlist the co-operation of existing newspapers and magazines and to take columns in them on contract, if necessary, and make those columns regular features of health publicity. The source of the material published need not be given at all. What we, health propagandists want is publicity of correct knowledge and information. High class newspapers and magazines have in

their employ competent hands to vet the articles sent to them for publication. It is to their interests as well to see that their standards are not lowered by the publication of inferior material. Moreover, when an article appears in the public Press, it not merely focusses attention but also encourages criticism of the material published. Departmental officials, instead of welcoming criticism, fight shy of them! Such people do not understand psychology. When once people take into their head to criticise an article, it means that they take interest in the subject. We should welcome such criticism.

PUBLIC LECTURES

Full advantage should be taken of the opportunities afforded for public lectures on matters pertaining to the health of the people. It should, again, be noted that the speaker should get up as a surprise to the audience. He should never give them to understand that a propagandist appears before them by design; then they will turn a deaf ear. Making a theme from what has been uttered by other speakers, the propagandist should re-orient facts and figures to bring home to the minds of the audience a few important points.

The way in which propaganda is now being done by the sanitary or health inspectors or for the matter of that, even health officers, is disgustingly tedious and uninteresting. The reason is they are mostly stereotyped. Once a person has heard a lecture by a public health official on, say, small-pox, he would dread to hear the man again, as there is nothing but a monotonous repetition. It requires a certain amount of pre-meditation and thought to bring home facts to the minds of the people in different ways and on different occasions. It should be made a rule that the officers in the health department, should be given training in the art of preparation for public lectures and for delivering them. It is not that every health or sanitary inspector or

health officer or even a Director of Public Health, could develop this art without training. This is really one of the weakest links in the organisation of the health department.

FAIRS AND FESTIVALS

India is a land of fairs and festivals and every encouragement should be given to the people to visit them. Provisions of section 144 of Criminal Procedure Code should not be invoked for preventing people from attending them. Such occasions serve possibly, as the best opportunity for doing effective work in educating the public on health matters. Here again, the art of talking to the village folks should be developed. Pedantic, literary vernacular speeches fall usually on deaf ears. The speech should be in colloquial language, narrated in an interesting and homely style. Parables and stories go a great way in impressing upon the minds of our village folks the truth which we wish to convey to them.

CINEMA SHOWS

We are lagging behind western countries in producing films for educating public opinion. The material available is deplorably out of date, even if some are made available now. Efforts should be made to draft talks and plot which would have a telling effect on the people. The administrations should arrange for having such films taken. By law, the government should have the right of calling upon those who run cinema shows to give at least 15 minutes for exhibiting educative films on public health, free of cost. Unless this is done, there is no chance of educating the people. It is often said that owing to lack of education, our people are ignorant. We will have to take a lesson from the experience of Russia, where the people were perhaps more ignorant and more unclean in their habits than the people of this ancient land. Within a short period, a magic, as it were, has been wrought in that country. Cinema

shows for educative purposes did this trick. Why not we also follow that good example?

POSTERS

Posters on health matters exhibited at present attract no body. They seem mere caricatures. The drawing of posters is a special art. It should be put in a telling way. For instance, the cartoons which appear under the auspices of the National Tuberculosis Association, New York, leave an indelible impression in the minds of the people. They are effectively and attractively drawn. It should not be left to any individual to work out the details of posters. A committee should be set up to discuss and to finalize the form.

PAMPHLETS

Pamphlets should be brief and informative. The head lines should be striking. They should be written in an interesting manner free from technical jargons. The pamphlets should be distributed house to house and the people should be made to interest themselves in reading them. They should be asked to communicate for further information to the department concerned. If necessary, a responsible official should make it a point to visit a few houses and explain the purpose of the pamphlet and how people could be benefited by perusing them. For instance, take mosquito control. The pamphlet should tell why mosquitoes are undesirable; this is particularly important in malarial tracts; how to avoid breeding mosquitoes; whom to call for relief when mosquitoes annoy you; what, in general, the anti-mosquito agency is doing to eliminate the pest, etc. Some of the pamphlets published by Metropolitan Insurance Company, of America, are most interesting and no where do we find that they are advertising insurance business. Recently Prithvi Insurance Company of Madras have started the publication of such pamphlets both in English and in vernacular.

I wish other insurance Companies also are encouraged to issue informative pamphlets. The department need not have the exclusive right of issuing informative pamphlets.

ESSAY COMPETITIONS

We should encourage any public spirited person or association to offer prizes for the best essay on any specified subject. An enthusiastic health official who knows his job best, can always tap such avenues for the purpose. The competition encourages people to think out and write them down. The successful essay should be printed in the vernacular of the place and circulated free. The co-operation of the Press should be sought for publication of the prize-essay; award of the prize should be made as public as possible and the function performed in as grand a scale as is practicable. This would help others to emulate example of the prize-winner.

EXHIBITIONS

The exhibitions as at present arranged are, to say the least of it, ineffective. In certain parts of the country, the women-folk arrange in a gallery all sorts of toys, broken ones not excluded, during a particular season of the year. The exhibitions conducted by the departments are remarkably like them. Better not hold any such exhibitions at all. If exhibitions have to be arranged, they ought to be planned well beforehand; what exhibit would attract public attention should be understood.

Exhibition of flush-out latrines indifferently manufactured by any local enthusiastic but ignorant official; charts unintelligently prepared which far from capturing imagination of the public, repel attention, defeat the aims in view. Take, for instance, mosquito control. How many educated people understand how mosquito-eggs look like larvæ or pupæ. How nice would it be to exhibit these in jars with appropriate models of where they breed and how to control them! If larvacidal

fish are utilized to check mosquito breeding, how fitting it would be to exhibit *Gambusia* next to the jar of larvæ. If drainage is the principal work involved, as an anti-malarial measure in an area, a model of marshy land, listed with various types of drainage, would help to capture the imagination of people. Anything that moves, attracts public attention. The psychology of the common man should be understood in arranging exhibitions. The same old models arranged in the same old fashion can give but a psychological satisfaction to the organizers but would not evoke public admiration.

TELEPHONES

In large cities, telephones could be used as an excellent tool for rousing interest in individuals. The listing should be intelligently inserted so that the people may readily get at the correct number. Every encouragement should be made for the people to call by telephone and make any complaint or request for assistance. This method of propaganda has not, as yet, been understood in our country. It is worth considering how far telephone could be useful in receiving reports from the residents in an area. A health official may call on a particular prominent man, make enquiries whether he has any suggestions to offer to improve the services rendered by the department. All such enquiries would immediately have the effect of winning the co-operation of the people.

VALUE OF MUSEUM:

Every health department should have a well arranged museum at the head-quarters. The various units like sanitary division or circle should have a portable set of posters, models, magic lantern and other requisites for propaganda. One or more cinema vans with films on health subjects is an absolute necessity. Pamphlets and leaflets dealing with all aspects of public health are necessary requisites. A large number

of attractive and striking posters and charts should be available. It should however be borne prominently in mind that the provision of services is the best propaganda. Tons of propaganda in favour of using safe water, cannot produce an ounce of it for consumption!

CLUB CHATS

How useful it is to have a quiet chat with a few limited friends in a quiet corner of a club. In such talks, the health official should encourage interrogations by others. He should talk as little as possible. He should convey correct information in reply to doubts or questions raised. This method of quiet propaganda may not be spectacular. It may not give an advertisement to the official but the results would be far-reaching.

ENCOURAGE COMPLAINTS AND CRITICISM

A public health official should not be sensitive to criticism. Complaints may be made in carping language, perhaps without any foundation. He should not flare up on receipt of such complaints. Every effort should be made on the other hand to impress upon the complainant and that his co-operation in making the complaint is welcome and is quite appreciated. One should thank him for it. In due course, the very complainant would become a friend of the department if handled tactfully. After all, human nature is good. We should bank upon it. It would be a question of time before an aggressive critic becomes an amiable friend. Every health worker, from the top down to humble field worker, should have a cool head screwed on to his shoulder. Otherwise, public co-operation would be impossible. Any public health official who exhibits temper or shuns complaints from people or shows a tendency to be vindictive should be immediately got rid of or confined to desk work; otherwise

good public relations on which so much depends for public co-operation would be impossible. I lay special emphasis on this aspect of the question; as experience shows, vindictiveness on the part of a health official is sure to dig the grave of the usefulness of the department.

CONCLUSION

I have set out in the foregoing paragraphs some ideas which struck me prominently. The question is how to implement them in practice. This can be easily done, provided the public health official does not consider himself as the

sole custodian of knowledge on propaganda. The co-operation of other professionals is indispensable; so also the co-operation of the people at large. We should form a small committee in every local area, discuss the points freely and come to decisions. The official should always be in the back-ground and make the non-officials believe that they are responsible for the decisions. After all, a permanent servant is paid for the services he is expected to render to the people. The only reward which a non-official gets is his popularity among the people for the work he does. This should be encouraged.

HEALTH EDUCATION IN PROGRESSIVE COUNTRIES

A great deal of attention is paid to the subject of health education in the West. In England, there is a central Committee for Health Education *which works in collaboration with the Ministry of Health*. In Australia, there is a regular and carefully drawn up course of instruction in health and hygiene prepared in association with the Health Department for all pupil teachers in the training colleges. In America, there is a new development whereby an attempt is made to train a type of individual called "Health Educator"—a person whose background is that of a teacher and to whom additional training in public health is given. Great importance is attached in Russia to health education and a large amount of money is spent annually on research and on the preparation and execution of schemes calculated to improve and preserve the health of the community.

(Bhore Committee's Report—Vol. II, Page 86)

CONFERENCE OF THE CHAIRMEN OF IMPROVEMENT TRUSTS

Arm-chair Reflections

by

A PLANNING EXPERT

The Conference of Chairmen of Improvement Trusts in the Indian Union, at Delhi, which opened on 28th June 1948 was an innovation. As a matter of fact, it was the first Conference of its kind and one wondered what it would achieve.

Surprisingly enough, the delegates from all provinces attended it in large numbers. The conference was presided over by Sir Arthur Dean, Chairman of the Delhi Improvement Trust. It was held under the aegis of the Ministry of Health.

Sir Arthur Dean is due to leave the shores of India for good, within the next three weeks. Despite that fact, he performed his task as Chairman with enthusiasm and public spirit, and above all with a thorough grasp of the intricate technical and administrative issues involved.

A THOUGHT-PROVOKING MESSAGE

The conference opened with a thought-provoking message from the Hon'ble Rajkumari Amrit Kaur, Minister for Health. She struck a correct note by suggesting that at the present moment, India needed not only the provision of decent dwellings for the common man but also instructing the ignorant public as to how to live in them. She emphasized that social workers, in particular, women, should be employed by every Improvement Trust to teach the housewife how to make the best use of her new home.

DEBATE AT THE CONFERENCE

The weather was hot. But, Mr. A. V. Raman, from Madras, who initiated the discussion, made

the atmosphere somewhat hotter by his spirited thoughtful talk. One representative from each province was then called upon to speak. As is usual, with such conferences, some speakers adhered to the points raised in the notes and others rambled from China to Peru. Some were vigorous, while others bleated. At the end of the preliminary general discussions, the delegates were left with a sense of bewilderment and when the conference was divided into committees, one read a sense of relief in the faces of all the delegates. The Chairman is a great economist in time for, despite his lack of his personal knowledge of the various delegates, he not only nominated the Convener of each committee but also those who were to serve thereon. Those who have not been included in Committees were allowed the freedom to attach themselves to any committee of their choice. One wondered how these committees would work; but on the whole the results produced were remarkable in more ways than one.

A SENSE OF URGENCY RULED

Everyone was inspired with a sense of urgency as the Chairman applied the law of the guillotine and gave a mandate that the reports of the various committees should be in his hands by noon the next day. Perhaps, it was that sense of urgency which inspired the members of various committees to come to decisions and draft their resolutions, and perhaps, again, it was that sense of urgency which, in a number of committees, generated plenty of heat and not a little of light.

The drafter of resolutions indicated either the personality of the convenor or the strongest member in the committee.

The second morning was given to much activity either of debate or of drafting of resolutions which were not completed till after mid-day.

THE PLENARY SESSION

After lunch, the conference met in a plenary session and proceeded to receive the reports of the committees one by one as they became ready and promptly went on to discuss the draft resolutions submitted by the committees. Every member was reading the report at the same time and discussion took the form of thinking aloud. The discussions perhaps were therefore rambling in their nature, but they were keenly contested. As a matter of fact, contest proved to be the saving factor and was probably responsible for the satisfactory results which the conference achieved. The discussion was often hot to the point of boiling; but the anti-climax was reached when, after all these discussions, quite a number of members voted for resolutions which they vehemently opposed! It is generally believed that it is the privilege of the woman to change her mind; but a number of our delegates exercised that privilege! They are all lovable fellows and one liked them for their foibles.

SHOULD IMPROVEMENT TRUSTS SUPERCEDE LOCAL AUTHORITIES?

The next day, on the 30th, it was anticipated that the conference would come to a close by lunch time but as the gradual tempo of the debate rose, one wondered if the conference would get through its business by the evening. The Chairman performed his functions remarkably well, applied closure to the debate firmly and summed up the discussion crystallizing the point at issue most effectively. Were it not for that fact the conference could never have got through its business. In the afternoon,

the report of one committee led to lively debate on which a group of members from one province was represented who almost defended their report with knightly fervour and threw gauntlets at others who opposed their view-point. And what is the view-point? The essence of the view-point, which they were defending with such great zeal, was that Improvement Trusts should swallow the municipalities! In the event, this proved too distasteful a morsel of food to the stomach and practically all the members (with the exception of the group already referred to) rose like a man and stoutly opposed it. Again, Mr. A. V. Raman, Madras, made a short, but powerful appeal which made the delegates set up and think. This they did. Eventually, a meek but humorous amendment moved by one of the members seemed to arouse the pugnacity of the group of knights who were defending the report of the Committee. Oil was poured on troubled waters by one member drafting a resolution and giving it to another to move it. That resolution seemed to deflate the balloon and restored the equanimity of the conference which, thereafter, broke up with great good humour.

A POWERFUL TRUNK WITHOUT A HEAD!

The trunk of the Environmental Hygiene Committee attended the conference and took active part in its deliberations, but its head (Chairman) was missing. As one member jocularly put it that the doctor head felt himself out of tune with the engineer trunk of the Committee, other members commented upon the queer anthropology of the Environmental Hygiene Committee, but the members of the Committee were most discreet and would not answer! They took the Committee in good humour. As a matter of fact, this provided a measure of amusement which was so necessary in the midst of the hard work which those

who had gathered for the conference, had to put in.

VISIT TO A NEW HOUSING ESTATE

On the 30th evening the Committee received hospitality from Dr. Ghosh of the Hind Azad Trust which is attempting to design and construct suitable houses for refugees and to rehabilitate them by way of cottage industries. After this hospitality the Committee was taken round some works which are being executed by the Delhi Improvement Trust, Sir Arthur Dean taking the members round and explaining the salient features of the schemes.

In the evening, Sir Arthur Dean and others were 'at home' to the members of the conference at the Delhi Gymkhana amidst rather happy surroundings.

ENGINEER PROVES AN EFFICIENT ADMINISTRATOR

The conference was not only the first of its kind, but was remarkably businesslike and has,

in its resolutions, focussed attention on some of the most urgent and outstanding problems of the country. One wonders how soon they will be given consideration. The credit for the success of the 'Indian Civic Congress' should go to Sir Arthur Dean for the most businesslike manner in which he set about the business before him. He was peremptory on some occasions. His eye sometimes refused to take notice of a member itching to speak. Sir Arthur Dean belied the general impression that engineers are not good administrators and one felt that India might do better by entrusting itself more in the hands of engineers than is commonly done. Here, probably I am treading upon the corns of vested interests in the upper ranks of our administrative services. But the businesslike atmosphere of the conference and the predominance of engineers therein would have surprised many of our administrators. You can write long learned minutes.

IMPORTANCE OF ENVIRONMENTAL SANITATION

Town Planning is an *equipoise* attained between health, convenience and beauty and it is no mean task to achieve it. That we have so far failed even to function effectively, even in a few areas set apart for town planning, indicates the force of our argument in favour of very wide and extensive powers for the Improvement Trusts and the Development Board of Kanpur. We can imagine what a tremendous task we have to tackle in this country if we do as we must take up numerous other areas which are crying for development in all the parts of our country. We have to realize that the important problem of improving man's physical environments is an essential part of the campaign for promoting health and where are the conditions worse than in this unfortunate land of ours, even if we do not quote the facts and figures of infantile and other mortalities and sickness? We can easily estimate what we can add to the poor man's meagre income by saving his doctor's bill if we provide him with healthy and sanitary surroundings.

(Report of Papers and Functions Sub-Committee—Conference of Chairmen of Improvement Trusts.)

MEDICAL PROBLEMS OF THE FUTURE

by

A. B. SHETTY

Minister of Health, Madras



In the midst of the death and destruction caused by the two world wars in this century the humane art of medicine and surgery has made tremendous progress. New drugs of wonderful potency have been discovered and new techniques developed due to the stimulus of war conditions. In recent years the outlook of doctors has been changing and broadening to a great extent. The emphasis has shifted from curative work to the preventive aspects of medicine. Doctors no longer rest content with merely stemming the ravages of disease or mending the maimed. Rehabilitation of disabled persons has become an essential part of preventive medicine. In future, medicine will become constructive, having for its objective the promotion of positive health rather than the lesser goal of curing disease.

CONCEPT OF SOCIAL MEDICINE

The concept of 'social medicine' also is an integral part of the broader phase of preventive medicine. Doctors have learned to look beyond the bedside of the patient to his home and social background, his work and recreation in order to build better health for him. The influence of mental conditions on bodily illness has become

the subject of scientific investigation and the importance of psychological medicine is getting greater recognition. Nations have begun to understand that health occupies a key position in any scheme of social security. In this post-war era Governments in practically all countries are showing greater concern for making adequate medical care and health services available to all their citizens. In the words of Wendell Wilkie it is all 'one world' now. There is need for inter-national co-operation in matters of health and this has found recognition in the constitution of the World Health Organisation representing the Governments of the world and in the World Medical Association representing the Medical Associations of different countries.

STATE RESPONSIBILITY

The idea of free education for all the people seemed a revolutionary concept two or three generations ago. Now it has become an accepted duty of the State everywhere. In a similar manner the idea of a Health Service free-for-all is taking shape and finding acceptance in several countries at present. In Britain the National Health Services Act providing a free comprehensive medical service for the whole population

will come into operation from the 5th of this month (July). This new health service is a part of the British Government's larger plan of post-war security to their people.

In India the Bhole Committee appointed by the Central Government during war-time have surveyed the existing health conditions and shown how low the level of health is in this country judged by the enormous amount of sickness and the high rates of mortality prevalent here. The Committee has made recommendations of far-reaching importance for the development of our existing health and medical services with a view to meet the needs of the entire population, particularly those living in the hitherto neglected rural areas. The improvement of the quality and of the distribution of medical care among the underprivileged people of rural areas is one of the urgent problems calling for solution.

ENVIRONMENTAL HEALTH

Advanced countries in the west have made remarkable progress in the improvement of public health. In Britain the great developments made in the environmental health services, the measures taken for the control of communicable disease and the establishment of personal health services have resulted in the virtual elimination of the great epidemic diseases, in the marked decline of death rates particularly among children and young persons and in a noteworthy increase in the expectation of life at birth. The reform of public health has brought about similar results in America where longevity has gone up from 47 years in 1900 to over 63 years in 1940. The effects of implementing the recent advances in curative and preventive medicine and in nutrition are revealed by a comparison of the mortality from disease in the armed forces. The health record not only of the British Armed forces but also of their civil population was maintained at a high level in World War No. 2. on

account of the measures taken to prevent infective diseases and maintain proper nutrition standards. The figures furnished by the Medical corps of the U.S.A. Army show a reduction of more than 95% in the death rate in 1943 as compared with the record of the first World war.

PRIMARY CONDITIONS FOR HEALTHFUL LIVING

In India the measures taken so far for rendering medical aid and providing health services have been of little avail. Our efforts today are mostly directed towards curing and patching up after the damage to health has already been done. *No real or substantial improvement in Public Health can be achieved unless the primary conditions essential for healthful living are ensured in the first place. Good housing, adequate nutrition, safe drinking water and proper sanitation are the pre-requisites of a healthy life.* Enough of the right kind of food at prices within the means of the people will do more to eliminate disease and improve health and physique than any other single measure. Malnutrition has always been a major health problem in India. Food shortage has made malnutrition and under-nutrition the most serious danger to health at the present time. Efforts to improve nutrition must take precedence over other items of the health programme in this country. Good feeding must be accompanied by good housing, since housing programme will have to be undertaken for providing hygienic dwellings in healthy surroundings, particularly for the low-income groups. *The provision of a safe and adequate water-supply, being a basic requirement, should receive the highest possible priority in any planning for health development.* Drainage and general sanitation also should receive due attention. The committee on Environmental Hygiene constituted last month by the Central Government has come not a day too soon. It

is hoped that its labours will be fruitful of good results in a much neglected field of public health work.

WANTED WELL-TRAINED PERSONNEL

A sufficiently large army of well-trained medical and health personnel and an adequate number of well-equipped hospitals are required to fight the war against disease. The number of doctors, Health Officers and essential ancillary personnel, such as nurses, Health Visitors, Pharmacists, technicians, etc. will have to be increased considerably, if we are to provide a comprehensive curative and preventive service for the whole community. The Bhoré Committee wants the existing number of doctors to be raised four times in 25 years. Soviet Russia was able to raise the number of doctors from 25,000 to 141,000 in the course of 24 years by increasing the number of medical institutions and making them work double shift. According to the Bhoré Committee's proposals, five new Medical Colleges were to be established in Madras Province within 10 years. Unless we can have cheaper type designs for our buildings, it will not be possible to think of starting new colleges for many more years to come. The medical course is too long and too costly. Soviet Russia adopted a shorter course of training and thus met the need for increasing the number of medical personnel to the maximum extent in the minimum time. Several distinguished medical men who came before the Bhoré Committee seem to have expressed the opinion that by suitable modifications in the present curriculum and effective medical training could be given in 3½ years. The majority of the committee have not favoured this proposal. It is a point for consideration whether for some time at least we can be content with producing less elaborately trained general practitioners to meet the need for medical aid in villages. The major-

ity of ordinary ailments can be cured by timely medical advice and simple treatment. It is only a small percentage of serious cases of illness or injuries that require modern methods of diagnosis and specialised treatment in well-equipped hospitals. Such cases must be sent to towns and cities where scientific diagnosis and skilled medical and surgical aid can be made available. The Post-war schemes of the Madras Government provide for the opening of Primary Health Centres for combined medical relief and health work in villages. Cases requiring expert medical or surgical aid are proposed to be sent to Taluk or District Headquarters hospitals. These Headquarters hospitals are to be improved and enlarged providing laboratories and X-ray equipments for diagnostic work and special departments for the treatment of Tuberculosis, Leprosy, Venereal, Eye, E.N.T., Dental cases etc. The measures now being taken for controlling important communicable diseases (such as malaria, tuberculosis, cholera, plague, leprosy, filariasis, guinea worm and venereal diseases) have to be extended and made more effective. The expansion of personal health services have to be undertaken along with the campaign for elimination of preventable diseases. The Employees' State Insurance Act passed by the Dominion Legislature in April 1948 is the first practical step proposed in this country towards the goal of providing a complete health service. About 2½ million workers will come under it and these workers will get free medical treatment, cash benefit during sickness and compensation in case of death through employment injury. The benefits of this scheme will gradually be extended to the families of the insured persons and others in course of time.

REGARDING HOSPITAL

We want not only more doctors but also better trained doctors. The Central Government have just appointed a Committee to visit important

medical institutions and explore methods of up-grading particular departments in them for the purpose of developing post-graduate training and research facilities. Medicine is now in a phase of rapid advance. A sufficient number of our medical men with post-graduates' qualifications should be sent from time to time to foreign countries so that we may keep pace with modern developments. The standard of medical practice in the mofussil stations also must be kept high by providing refresher courses at Madras and other centres to enable practitioners to keep abreast of new discoveries and new techniques in medicine and surgery. The maintenance of health and the prevention of disease are far more important to the welfare of the community than curative work, but the medical man's attention is mainly directed at present to the diagnosis and treatment of disease. Proposals have recently been made to revise the medical curriculum laying more stress on the preventive aspect of medicine in the study of every subject. There is need for a change in the attitude of the general public also towards health and disease.

PREVENTION *versus* CURE

At present they are more concerned with cure than with prevention. Schools have an important part to play in teaching the young, the principles of health and the right methods of living so that a correct attitude to health may be developed in the citizens of tomorrow.

Advertisements regarding health foods and patent medicines tempt people to buy and use them. Free samples for the medical profession lead doctors to favour the use of proprietary medicines and health foods. Regulation of this traffic and protection of the public against adulterated foods and patent medicines supported by bogus testimonials will be a public health great service of value. It is the business of the medical and health staff to create in the public a new attitude to health. People seem to have a pathetic faith in the medicine bottle and craze for injections. Some doctors make indiscriminate use of drugs and overdose their patients with medicines of doubtful efficacy even in cases for which no specific treatment is available. Medicine has still many worlds to conquer. Some diseases can neither be cured nor prevented even with the best of modern medical aid, while there are many other ailments from which the patients recover with or without medicine. There is still another class of diseases where correct diagnosis and the proper and timely use of the potent and specific remedies we have to-day are all-important.

CONCLUSION

Let people understand that fresh air, pure water, nourishing food and the conditions under which they live, work and have their recreation are the primary things needed for their health and well-being.

(Country—A.I.R., Madras).

UNIFORM PLUMBING CODE

Private Sewage Disposal Systems

The adoption of uniform standards not only ensures efficiency of work but also results in economy. In our country, we have not, as yet, evolved standards in plumbing as in many other public health engineering works. We do not even seem to know the economy which would result in a single pipe system of plumbing as opposed to one set of pipes carrying the waste from wash-hand basins, baths and the like, while the other from water closets, slop-sinks and similar fittings. The subject is one which merits the consideration of the profession.

We reproduce hereunder extracts from 'Uniform Plumbing Code' as adopted by the Western Plumbing Officials' Association, by special permission from the 'Sanitarian', a journal of sanitary technology, (Vol. 10, No. 5). The standards laid down hereunder are recommended for all sanitarians as a guide for private sewage disposal systems.

Ed., P. H.

PRIVATE SEWAGE DISPOSAL SYSTEMS—GENERAL

(a) Where permitted by Section 602 the house sewer or private sewer shall be connected to a private sewage disposal system complying with the provisions of this chapter until such time as a public sewer is available. The type of system shall be determined on the basis of location, soil porosity, and ground water level and shall be designed to receive all sanitary sewage from the property. No surface drainage shall be permitted to enter any part of the system. The system, except as otherwise provided, shall consist of a septic tank with effluent discharging into a sub-surface disposal field, into one or more seepage pits, or into a combination of sub-surface disposal field and seepage pits.

(b) Where conditions are such that neither of the above systems can be expected to function satisfactorily; for agricultural and industrial plumbing systems where appreciable amounts of industrial or indigestible waste are produced; or when grease traps are required by Sections No. 1008 or 1009; the method of sewage disposal shall be approved by, and constructed in accordance with requirements of the Department of Health.

(c) Nothing contained in this chapter shall be construed to prevent the Department of Health from requiring compliance with higher requirements than those contained herein where such higher requirements are essential to maintain a sanitary condition.

DRAWINGS AND SPECIFICATIONS

The Plumbing Inspector may require plans and specifications before a permit is issued for a private sewage disposal system. When plans and specifications are required they shall contain the following information:

(a) Plot plan drawn to scale completely dimensioned, showing direction and approximate slope of surface, location of all present or proposed structures on the plot, number of bedrooms or plumbing fixtures in each structure and location of the sewage disposal system with relation to lot lines and structures.

(b) Details of construction necessary to assure compliance with the requirements of this chapter.

(c) Full description of the complete installation including quality, kind and grade of all materials, equipment, construction, workmanship and methods of assembly and installation.

LOCATION

Location of private sewage disposal systems or parts thereof shall be not less than the stated minimum distances indicated in Table No. XIV—1.

CAPACITY OF SYSTEM

(a) The liquid capacity of all septic tanks shall conform to Table No. XIV—2 as determined by the number of bedrooms in dwelling properties and the number of plumbing fixture units installed in other properties.

Table No. XIV—2
CAPACITY OF SEPTIC TANKS

Dwelling Number of Bedrooms	Other Properties! Max. Fixture Units Served	Liquid Capacity in Gallons	Total Volume Cu. Ft.
2	20	500	80
3	20	625	100
4	20	750	125
5	25	900	150
6	30	1,100	180
7	35	1,300	210
8	40	1,500	240
12	60	2,000	320

Heavy tight clay, hardpan, rock or other impervious formations are unsuitable.

Note :—Tank capacity shall be 140 gal. per bedroom in excess of number listed. Total volume in cubic feet includes air space above liquid. Where single compartment tanks are used the volume and capacity shall be 25 per cent greater than indicated in this table.

The inlet compartment of multi-compartment tanks shall be not less than 350 gallons capacity, the length of single compartment tanks or the inlet compartment of multi-compartment tanks shall be not less than 3 feet in width or 5 feet in length. Liquid depth shall be not less than 30 inches nor more than 6 feet. The total depth shall be not less than 9 inches greater than liquid depth. The cover of the septic tank shall be at least 2 inches above the back-vent openings.

(b) The minimum seepage area of disposal fields shall conform to Table No. XIV—3 as determined for the type of soil prevailing on the site to the depth of 3 feet below bottom of proposed

Table No. XIV—1

LOCATION OF SEWAGE DISPOSAL SYSTEM

MINIMUM Septic Tank	DISTANCE IN CLEAR Disposal Field	REQUIRED Seepage Pit	FROM
10 feet	10 feet	10 feet	Buildings or Structures
5 feet	5 feet	5 feet	Property line adjoining private property
10 feet	50 feet	100 feet	Water supply wells**
10 feet	50 feet	100 feet	Streams**
10 feet	10 feet	10 feet	Large trees
5 feet	5 feet	12 feet	Seepage pits
5 feet	4 feet*	5 feet	Disposal field

Note :— *Two times width of trench for trenches wider than two feet. (See also Sec. 1405—(3).

**Where special hazards are involved the distance required shall be increased as may be directed by the Health or other authority having jurisdiction.

disposal trenches. Test hole shall be drilled or dug and samples preserved for reference when required by the Plumbing Inspector. Where disposal fields are installed a minimum of 150 square feet of effective absorption area shall be provided for each system.

Table No. XIV—3

CAPACITY OF DISPOSAL FIELD

Character of Soil	Effective Absorption Area in Sq. Ft. (Area in bottom of disposal trench)			
	Dwellings Per Bedroom	Other Properties Per Unit Served Private Use	Per Fixture Public Use *	
Coarse sand or gravel ..	60	7	10	
Fine sand ..	80	10	13	
Sandy loam or sandy clay ..	120	15	20	
Clay with considerable sand or gravel ..	180	20	30	
Clay with small amount of sand or gravel ..	240	30	40	

Tight clay, hardpan, rock or other impervious formation unsuitable.

Note :—*Required area for day schools may be 50 per cent of tabular requirement.

(c) Effective absorption area of a seepage pit shall be calculated as the side wall area below the inlet exclusive

of any hardpan, rock, clay, or other impervious formations and shall be as required by Table No. XIV—4.

Table No. XIV—4

CAPACITY OF SEWAGE PITS

Character of Soil	Effective Absorption Area in Sq. Ft. (Area inside wall of seepage pits)			
	Dwellings Per Bedroom	Other Properties Per Unit Served Private Use	Per Fixture Public Use *	
Coarse sand or gravel ..	30	3	5	
Fine sand ..	45	5	8	
Sandy loam or sandy clay ..	75	8	13	
Clay with considerable sand or gravel ..	120	13	20	
Clay with small amount of sand or gravel ..	240	27	40	

Tight clay, hardpan, rock or other impervious formation unsuitable.

Note :—*Required area for day schools may be 50 per cent of tabular requirement.

A minimum of 4 feet of porous formation for each installation shall be provided in one or more pits. The volume of seepage pits measured below the inlet shall be not less than that of the septic tank discharging thereinto. No pit excavation shall extend into the

water table nor to a depth where sewage may contaminate underground water stratum that is usable for domestic purposes.

CONSTRUCTION

(a) Septic tanks shall be constructed of sound, durable material not subject to excessive corrosion or decay and shall be water-tight. Access to each compartment shall be provided by a manhole or removable cover 20 inches in minimum dimension, one of which shall be located over the inlet. The outlet pipe or baffle shall extend at least 4 inches above and 4 inches below water surface. The inlet pipe or baffle shall extend at least 4 inches above and 16 inches below water surface.

Inlet and outlet pipe fittings or baffles, and compartment partitions shall have a free vent area equal to the cross sectional area of the house sewer or private sewer discharging thereinto to provide free ventilation 4 inches minimum above the water surface from the disposal field or seepage pit through the septic tank, house sewer and stack to the outer air. The invert of the inlet pipe shall be at a level not less than 2 inches above the invert of the outlet pipe.

Partitions or baffles between compartments shall extend at least 4 inches above the liquid level and shall have at least a 4 inch slot or fitting equal to the capacity of the inlet to the tank, midway in the depth of the liquid.

Automatic syphon and dosing tanks shall be installed for septic tanks larger than 1000-gallon capacity when required by the Plumbing Inspector. Dosing tanks shall not be installed when the loss of head will require tile lines in disposal fields to be covered with more than 3 feet of earth.

(b) A distribution box of sufficient size to receive lateral lines may be constructed at the head of each disposal field, and for branch lines to two or more seepage pits, with top water-tight and flush with finish grade. The invert of all outlets shall be level and the invert of the inlet shall be at the least one inch above the outlets.

(c) Disposal fields shall be constructed in natural earth as follows :

Minimum number of lines per field ..	1
Maximum length of each line (unless otherwise approved) ..	100 ft.
Minimum bottom width of trench ..	18 inches
Minimum spacing of drain lines centre to centre ..	6 feet
Maximum depth of cover tile lines ..	36 inches
Preferred depth of cover of tile lines ..	18 inches
Maximum grade of tile lines ..	6 inches per 100 ft.
Preferred grade of tile lines ..	2 to 4 inches per 100 ft.

Minimum filter material
under tile 6 inches
Minimum filter material over
tile 2 inches

All laterals from distribution box with grade exceeding 6 inches per 100 feet shall be bell and spigot cast iron, vitrified clay, or other pipe acceptable to the Plumbing Inspector, with water-tight joints.

Disposal field shall be constructed of clay field tile not less than 4 inches in diameter laid with half-inch open joints. Other types of drain lines may be used when acceptable to the Plumbing Inspector. All bends used in the disposal field shall have one tight joint to each end of the bend.

Grade boards shall be staked at proper grade in the centre of the trench to support drain tile. Before lines are laid crushed stone, gravel, slag, clean cinders or similar material having adequate voids and acceptable to the Plumbing Inspector varying from $\frac{3}{4}$ to $2\frac{1}{2}$ inches in size shall be placed in the trench to the level of the grade board. After drain lines have been placed they shall be completely encased with filter material as hereinbefore provided before inspection. After approval by the Plumbing Inspector, building paper, straw or similar material shall be placed over the filter bed to prevent closure of voids with earth backfill.

When seepage pits are used in combination with disposal fields, the filter

material in the trenches shall terminate at least 5 feet from the pit excavation and the line extending from such point to the seepage pit shall be bell and spigot pipe with tight joints.

(d) Every seepage pit shall have an excavated diameter of at least 4 feet, lined with hard burned whole brick, stone or similar material at least 4 inches nominal thickness except that perforated concrete block $1\frac{1}{2}$ square feet face area or larger may be 3 inches minimum thickness. The lining shall be laid in cement mortar above the inlet and dry with, not to exceed 2 inches, open vertical joints below the inlet.

When necessary to backfill for any reason the annular space between lining and earth wall shall be filled with crushed rock or gravel. Where a depth of more than 20 feet is required by wall formations a smaller diameter pit may be bored below such depth to provide required seepage and filled to within 20 feet of the surface with coarse rock in lieu of lining.

The arched dome may be constructed in one of three ways:

- (1) Brick laid in cement mortar.
 - (2) Brick laid dry with a covering of at least 2 inches of cement. Said covering to extend at least 6 inches out beyond side walls of seepage hole.
 - (3) Reinforced concrete.
- Top or arch must be at least 2 feet below surface of ground.

FROM EVERY WHERE



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.)

DESIGN FOR A SEPTIC CLOSET

Hepburn, E. A. *Health Bull.* Melbourne. 1946, Jan. June, Nos. 85 and 86, 2315-19.

The provision of closet accommodation in unsewered areas is always a matter for correlation to local conditions. Where an adequate supply of water is available, the best provision is a water-carriage system of drainage discharging into a sewage purification and disposal plant of which the septic tank in some form is a principal unit. Where, owing to lack of water supply and similar reasons, water carriage is not practicable, some form of earth latrine, or—for the habitation—some form of "Pan" or container closet is generally adopted. All the ordinary forms of container closet are open to objections, chief among these being offensive odours and the necessity for frequent emptying.

From time to time efforts have been made—notably in America—to adapt the septic tank principle to the individual closet, the central idea being to liquefy the contents so that they may over-flow and be disposed of automatically by soil absorption. Schemes of this type were

constructed by the Public Works Department at certain picnic grounds, the down pipe from the roof of the closet superstructure being led into the septic tank to provide the necessary water-calculations having shown that rain water from this small area should not be sufficient to cause flushing out of the solid contents. Although not completely satisfactory, these schemes appeared to work well; inspection after a period of heavy use showed that the tanks carried little scum and were not more than one-third full of sludge after five years, operation.

On the basis of this experience and of information collected from various other sources, the "septic closet" here described and illustrated was designed. It consists of a standard latrine riser (in galvanized iron) and seat, fitted immediately over the inlet section of a septic tank of usual design, approximately 5 feet by 2 feet 6 inches and having an effective depth of 3 feet. (These dimensions appear to be on the liberal side for a single closet fitment.)

The amount of effluent is small, being equal only to the volume of faeces plus the few gallons

of water (probably one to ten gallons per person per week) which must be added to keep the contents sufficiently fluid for the tank to operate. If only the minimum necessary amount of water is added the effluent corresponds to a strong septic tank effluent; it is disposed of by overflow into an open-jointed agricultural drain laid in a trench 12 to 18 inches in depth and of similar width, filled with screened coarse material and covered with earth in the usual way for such drains. A vent shaft is provided to serve both the closet fitment and the tank.

An installation of this kind is subject to the regulations relating to septic tanks, e.g., its position in relation to the premises served, any possible sources of water-supply, etc. Maintenance also is similar; sludge must be removed as required. A "septic closet" may not be placed in or in direct communication with a dwelling. The author claims, however, that if it is properly maintained it should be free from the objections usually associated with the "pan closet", and that removal of the contents will be required "only once in several years instead of once a week".

To prevent trouble from flies, mosquitoes, etc., sufficient kerosene or waste-motor-oil thinned with kerosene, should be poured in to form a film over the surface of the liquid in the first chamber.

HENRY H. CLAY.

(*Bulletin of Hygiene*—Vol. 22, No. 11.)

SUN AND BODY HEAT

The sun's rays also add much ordinary heat to the body when they strike the skin or clothes. In the Tropics, where the body is usually having difficulty in losing its own heat to the environment, the sunshine aggravates the discomfort. Indeed, for San Juan, P. R., it has been computed that the full sunlight of midday generally decreases the cooling power of the environment by about one-fourth to one-half. Under such conditions the difference between the shade

and the sunshine is often the difference between comfort and discomfort. Type of clothing may make a similar difference. A black surface absorbs nearly all the incident solar rays, while a white surface reflects a large part of them. Light-coloured clothes are therefore preferable.

Speaking of black, one wonders why the Negro would not feel the sun more than a white man. The Negro's skin does absorb more solar heat, to be sure, but it has more sweat glands; hence the Negro sweats very copiously and because of his blackness starts to sweat sooner, for skin temperature controls the sweat reaction. Wearing clothes, however, puts the Negro and white more on a par. The Negro skin is tough and withstands infection better than the white skin, which becomes soggy with continual sweating, making skin ailments hard to cure. The origin and significance of the pigmentation of the races is a mystery. It is observed, however, that the darker races are considerably better suited to the Tropics; even Italians, Portuguese and Spaniards have an advantage over blonds from higher latitudes. One must be cautious about such reasoning, however, for the Maya-Aztec-Inca group of Indians of Central and South America do not thrive in the hot, moist lowlands much better than the whites.

Frequent exposure to high intensities of both the heat and ultra-violet rays of the sun may induce cataract of the eye.

(Extract from "Climate and Man" Year Book of Agriculture—U. S. Dept. of Agriculture.

THE HUMAN PROBLEM OF URBAN DISPERSAL

The problem of making new communities so attractive to the mass of men that they will seek them out and make them their own is not quite so simple as the earliest utopians thought. The slow experience is getting Letchworth Garden City started, the lack of anything that could be called a mad rush when Welwyn Garden City

was founded, have proved that there are other factors we must take account of and overcome, if we are to build, not one or two garden cities, but a whole civilisation in which such cities will be normal ones. Our problem is something more than a problem of planning or building on new lines, planning so as to find a place and a right relationship for all of a city's multifarious activities; our problem, essentially, is to get people started on a new way of life, a way of life that is attractive to them, comprehensible to them, and capable of enlisting their active support, rather than their passive toleration.

LEWIS MUMFORD.

(*"The American City"* October 46.)

PUBLIC HEALTH ADMINISTRATION

The House Rats.—James Silver. Circular No. 423, U. S. Dept. of Agriculture. January 1937, pp. 1—18.

The rat is the most destructive animal economically and a menace to the public health. The house rats of the United States may be classified as the brown rat (*rattus norvegicus*) and the black rat (*R. rattus*). Both these species are known by several other names. The origin of house rats is the Orient. They were introduced into America about the time of the revolution.

A description of the two types of rats mentioned is given as are the breeding and other habits. An estimate of the number is given as one rat for every two people in cities and two rats for every person on farms in the United States.

The economic losses due to rats is estimated to be 63 million dollars on farms, 68 million to small towns and 58 million to city residents or \$ 189,000,000 per year total loss for the United States.

The relation of rats to public health and the transmission of diseases is outlined and the diseases transmitted by them enumerated.

The repression of rats is touched on and reference made to several other Government pamphlets.

James J. DILLON.

(From "Public Health Engineering Abstracts" Vol. XVIII—April 2, 1938—page 2.)

NEW CHOLERA DRUG

Dr. Harry Seneca, a research associate at the laboratories of Columbia University's College of Physicians and Surgeons, New York, working in conjunction with Dr. Edward Henderson of the Schering Corporation of New Jersey, has developed a new drug claimed to be "of definite value in treating cholera." It is called phthalyl-sulfacetimide and was said to have been effective in Egypt during the Cholera epidemic when, last December, Dr. Seneca flew to Cairo a thousand cases of the compound.

Five hundred patients were given the drug, but, because of lack of trained personnel, records were kept for only 43 patients, of whom one died. The doctors say they found the drug useful against bacillary dysentery, colitis, ulcerative colitis and other diseases. An executive officer of the Columbia Department of Urology says it has marked penetration qualities into the wall of the intestine, is practically not absorbed throughout the general system and has "a marked anti-biotic effect upon the cholera bacillus."

Announcing the discovery, the Dean of the college says that the drug shows "certain unusual metabolic features that may prove valuable in treatment of intestinal infections" and that "It may be effective also in fighting such diseases as salmonellosis and contagious diseases of fowl."

Preliminary studies at the college in nine clinical cases of acute enteritis with diarrhoea, abdominal distress, weakness and anorexia, showed an absence of toxic effects when three grams of the drug were given three times daily for 13 doses.

(*Statesman*, May, 28, 1946.

THE NEW TEACHER

The new scheme of education needs a new kind of teacher to work it. The scheme however perfect is bound to fail unless it is placed in the hands of the right kind of teachers. The quality of the present day teaching and the position of the teaching profession are both very low indeed. Basic education calls for an improvement in standard of teaching. It emphasises craft work and its correlation with other objects of study. The system to succeed wants teachers with imagination, initiative and enthusiasm for their profession.

It is essential that the profession should be made really attractive to capable persons and placed on a level of equality with other professions. The salaries offered must be consistent with the status of the teachers and their service should entitle them to pensions or other suitable recognition.

The Speakers' Digest, Government of India, Vol 1—No. 14.

FEE CHARGED FOR REFUSE COLLECTION

STEUBENVILLE, OHIO, now meets the cost of garbage and refuse collection by making a monthly charge to those house-holds and business establishments directly served, according to a recent announcement.

The plan was recommended by the Steubenville Finance Committee and was adopted unanimously by the City Council. The fee will be paid to the City Treasurer.

(From The American City, January, 1946.)

MUST WE BUILD FUTURE SLUMS NOW?

Louis Justement. *Amer. City*, 61, 124.

Most of next year's housing will be poorly planned and built and will become the slums of tomorrow. Housing is so urgently needed that nothing much can be done about the situation now. The American Institute of Architects believes that we should prepare for the day when

decisions are not based upon expediency and we can "make effective use of our technical and material resources". The co-operation of several other national organizations has been invited "to develop a program that will truly reflect the desires of all co-operating professions." Economic planning is now in disrepute and there is a desire to abandon all controls. Many controls are due to lack of planning. Planning is necessary to preserve maximum freedom. "The committee now being organized can be most useful in suggesting a procedure for urban redevelopment which is based on a careful evaluation of the requirements of business as well as those of the public welfare".—

R. F. POSTON.

(P. H. Eng. Absts, Vol. XXVII, No. 6.)

HALIFAX LEARNS ABOUT WATER WASTE

Amer. City, 62, 86-87 (May 1947)

A description of a study of water waste in the system at Halifax, Nova Scotia. Underground leakage of approximately 42 percent of the daily supply was found and corrected. It is estimated that the correction of the defects disclosed by the study will result in an annual saving of \$47,000, or more than five times the cost of the survey.

F. M. VEATCH.

(P. H. Eng. Absts, Vol. XXVII No. 7.)

CHEESE AS THE CAUSE OF EPIDEMICS

F. W. Fabian. *Jour. Milk Tech.*, 9, 129-43 (May-June 1946)

This article contains a history of cheese poisonings, and there is discussed at some length the most important types of bacteria which may be developed in cheese. Conclusions are that "Pasteurization is the only safe procedure to recommend or required", and that pasteurization combined with proper culture and a 90 day holding period at 60 F. would produce a safe as well as a mature cheese.

J. MILES GILBERT.

(P. H. Eng. Absts., Vol. XXVII No. 2.)

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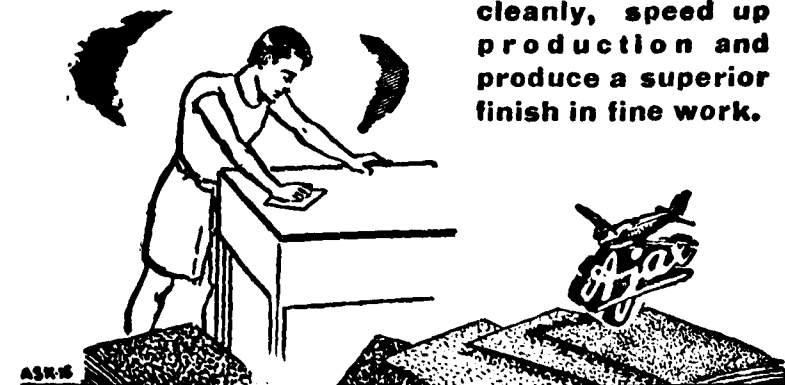
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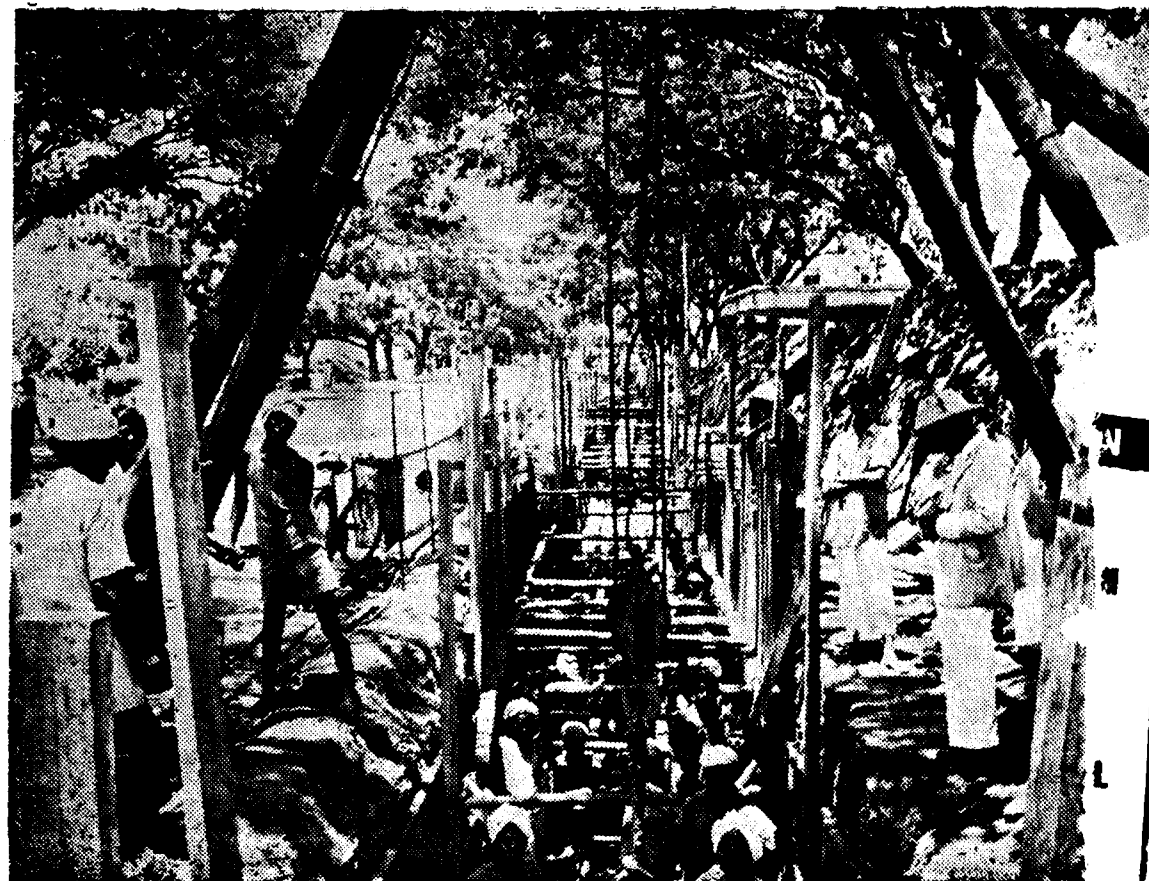


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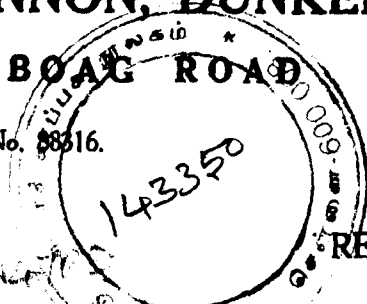
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