A South African Institute of Hygiene and Tropical Medicine

H. SUTHERLAND GEAR.

In Gower Street, London, there is a striking building to which the attention of the passer-by is mainly attracted by two unusual features. On the frieze of the facade a series of names is carved, and on the metal work of each balcony are gilded emblems representing what at first sight appears to be a curious selection from the animal kingdom-lice, flies, rats, mosquitoes, The building is the London School of etc. Hygiene and Tropical Medicine, and the names are those of men whose lives were devoted to the advancement of public health and tropical medicine, while the insects and animals are those intimately concerned in the transmission of certain human scourges.

These three factors—the School of Hygiene, the illustrious names and the vectors of disease are symbolical of much which deserves consideration by those desirous of improving hygiene in this country. The London School owes its existence largely to the Trustees of the Rockefeller Foundation, who, to quote a report, '' had reached the conclusion that, if the gospel of hygiene, a gospel of hope and comfort, a gospel of vital importance to mankind, was to be adequately served, a great teaching centre was a necessity."

Many of the names on the frieze need no introduction to medical men, or even to the general public. Such names as Pasteur, Koch and Lister are justly venerated, while others, although equally important in their spheres, are unfortunately less well known. These pioneers of preventive medicine, Frank, Shattuck, Chadwick, Farr, Simon, Gorgas, Leishman and Biggs, are the men to whom the world largely owes its happier outlook on living. It would be an interesting speculation to picture the health and sanitary conditions of the present day in the absence of modern bacteriology, parasitology and clinical medicine. The work of the hygienists named above would be strong argument that even in the absence of much of our modern clinical and laboratory knowledge our morbidity and mortality rates would still have dropped considerably. Too often it is not appreciated that the increased expectation of life, the removal of environmental dangers, and the enhancement

of living conditions-are blessings that have been the gifts to mankind of the pioneers in the fields of preventive and state medicine, *i.e.*, of such men as Frank, Simon and their followers.

The third factor—vectors of disease—suggests yet another aspect where hygiene has made considerable contribution to the welfare of the human race. It has been the efforts of the sanitarian and the health officer which have brought the malarial carrying mosquito, the typhuscarrying louse, etc., within the bounds of control.

In the above brief reference to the London School, the pioneers of public health, and the animal vectors of disease, understanding of the importance of hygiene and the teaching of hygiene emerge. Though the Rockefeller Foundation looked to this particular school "to become a centre of world-wide influence, both in the way of training public health students and research workers, and of furthering research into public health problems," it has indicated its belief in the need for national and local schools of hygiene by assisting materially in their establishment in such countries as Italy. India. Czechoslovakia and Poland. The influence wielded by these centres has been considerable, and even the hard materialist and the uninitiated layman have been able to grasp the decrease in sickness, and the increase in health to be attributed to their activities.

Argument in support of the proposal made recently for a school of hygiene in South Africa is hardly necessary when the truth of the above stat ments is admitted. A school of hygiene as a Witwatersrand Jubilee Memorial was the particularly happy suggestion recently made by Dr. Daubenton, and must inevitably have the support of the medical profession and the community as a whole. The functions of such an institute or school have been enumerated by Dr. Daubenton but may usefully be reconsidered in regard to certain special aspects.

The 1936 Annual Report of the Union Department of Public Health puts forward some of the strongest arguments in support of the present idea. It draws attention firstly to the urgent need for public health and medical research and investigation in South Africa, and Sir Edward Thornton completes this section by saying:---

"It is recommended that an expert Committee should be set up to consider the more pressing problems and to advise generally how medical research and laboratory facilities could best be co-ordinated throughout the Union with a view to the more efficient application of these services to problems of public health."

Recent developments, such as the increased number of urban health officials, the expansion of the district surgeoncy system, the institution of the district nursing service, and the increasing calls made on typhus, malaria and plague field staffs, emphasise the importance of providing an increasing number of personnel trained in the special branches of hygiene and preventive medicine, while the prominence given to the political position of the non-European groups in our national society has stimulated a belated interest in their health and allied problems. The social and health conditions of this community are of major concern in the economy of the South African nation, and the magnitude of the questions of housing, nutrition, incidence of such diseases as tuberculosis, venereal disease, malaria, typhus, etc., and the importance of describing the vital phenomena of births, deaths and population trends is such as to appal the public health and social administrator. Expert help in investigation, in framing suitable policies of economy, of nutrition, of health, and in providing medical and sanitary care is bound to become increasingly necessary. Almost of equal importance is the study being given to rural health and medical conditions generally, and which has found expression for instance in the recent report on national health insurance.

Industrial hygiene in South Africa as practised especially by the gold mines has attracted world wide interest and is a demonstration of a highly efficient form of community health effort. Nevertheless, the gold mining and other South African industries are constantly perplexed by fresh hygienic and medical problems, and are continuously calling for further specialisation of their medical and sanitary staffs.

As a final indication of the growing interest in hygienic matters in the Union may be instanced the ever increasing number of enquiries, especially since the establishment of many new medical officers of health, for information and advice on innumerable health matters. Such institutions as the Union Health Department, the South African Institute of Medical Research and the Medical Schools are called upon to provide data not only to local health officials and organisations, but to overseas organisations, such as the Health Bureau of the League of Nations and other national bodies. There is a constant stream of information and intelligence concerning health matters, which requires systematising and collecting, and there exists a demand for some such instrument as a health intelligence bureau or office additional to the existing routine machinery.

The need for research in public health, for more medical officers of health, health and sanitary inspectors, district nurses and health visitors, for medical and health care of the non-European and rural communities, for industrial medicine, and for the collection and provision of hygienic intelligence, advice and propaganda cannot but be considered of fundamental importance to the State, and all in all these needs seem to be most adequately met by the establishment of a school or institute of hygiene and preventive medicine.

Dr. Daubenton has outlined how such a school would provide health propaganda, would give post graduate health instruction, would train nurses and school teachers in hygiene and would disseminate health knowledge especially in rural areas. These are the primary objectives in the programme of a school of hygiene, but such an institution may have a wider significance and one which seems peculiarly desirable in South Africa.

Public health is evolving and its direction is ever changing. Last century the emphasis was on the environment, and sanitation occupied the field; to-day the emphasis is being placed on the individual, and social medicine is the term describing the new method. It is social medicine as well as sanitation which has to be applied in this country. The type of application necessary has still largely to be determined, and it is in this that the school of hygiene would render great assistance to the health authorities. In its field stations and experimental areas it will investigate the economics, social and health problems of our rural and urban, European and non-European communities. Therefore, in addition to its important function of teaching, there must be the function of epidemiological and health research, research complementary to that clinical and laboratory investigation so ably being conducted by our present research institutions.

Yet another duty the school should undertake is that of establishing a central health bureau, which, well armed with library and exchange facilities, would be in a position to disperse authoritative advice and information, so essential to the development of sound state medicine and international health co-operation. The school should be the great co-ordinating mechanism, bringing together all organisations and individuals, official and voluntary, concerned in the improvement of hygiene and tropical medicine.

Can it be denied that a school of hygiene would be a worthy and fitting component of the health and medical organisation of the State? In it the people would see a great institution, teaching and demonstrating the benefits of a healthy life, and guiding the State to yet greater visions of happi-ness and well-being. The medical profession will be accepting a splendid responsibility in urging that the ideal of a school of hygiene should be adopted. South Africa herself owes a great debt to those pioneers honoured in the London School of Hygiene, and is herself faced by many perils broadcast by the rats, lice, fleas and flies depicted on the facade of the School, and in founding her own school of hygiene and preventive medicine she would be not only paying homage to some of those great benefactors, but would be forging a mighty instrument in the fight against disease and defect.



