

like a barrier across the isthmus of Nova Scotia from the Bay of Fundy to the Northumberland Straits, with summits of a thousand feet or more and a general elevation above six hundred. These hills end in Pictou County, where at Mount Dalhousie open slopes, the old pastures of abandoned farms, provide excellent ski runs. All the area is honey-combed with ancient logging trails waiting to be marked and mapped; and at the head of the valleys that lie far up among the hills are farm-homes, many available for a scheme linking them together for winter visitors. Finally, the government of the province might be expected to erect one or more hostels for summer and winter visitors in the beautiful park in Cape Breton traversed by the Cabot Trail.

Besides entertaining our own folk,

with such an enterprise in hand, we may look forward to welcoming parties of youthful visitors to our shores. When Nova Scotia is impatiently awaiting the completion of the last two links of hard surfacing, to open this holiday land to the 40,000,000 residents of the Eastern States; and when the hotel-keeper, the gas station man, guides and others are ready to pounce with none too altruistic intention upon the incoming hordes, it may be good for us to turn our attention to some way of entertaining strangers that is not primarily to make money out of them. Such generous interest will save us from becoming a race of flunkeys, and will be a valuable element in the building up of international goodwill and international peace, the supreme task of all far-sighted citizens to-day.

Health Units in British Columbia

By J. S. CULL

ALTHOUGH many evils may have been attributed to the World War, at least one great service that it accomplished was that it demonstrated that a Nation's greatest resource is its population. In the hour of need when all resources were required, we were shocked to learn that a tremendous proportion of the population were disabled, unfit, and also a liability to the Nation through causes which were absolutely preventable. This disclosure of defects that were materially hampering the advance of our civilization, of our financial returns, was a revelation of something that should be corrected, and there ensued an awakening of the public conscience. We in British Columbia were particularly fortunate in having as our Provincial Health Officer a man who was not slow to take

advantage of this change in the public mind, and who rejoiced at the educational advantage that the War had afforded of driving home the fact that co-operation of the public with the health authorities would bring about the same results in the civil population in peace times as co-operative health work had been able to effect with the various armies in the field; namely, the reduction in casualties from 95% *due to sickness* in the South African War, which lasted two years, to 5%, with ten times the number of men engaged in four years, in the World War.

It is to the broad vision and foresight of the Provincial Health Department that British Columbia owes its advanced position today in Public Health practice and administration. As a result of their forceful and continued statement that education of the public was the basis on which all Public Health work and pro-

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gress must be founded, the first Public Health Nurse was appointed in 1921. The number has steadily increased until today there are over 80 Public Health Nurses employed in the Province, and we are particularly happy to be able to say that in not one instance has it been necessary to withdraw the service once it has been established in a city, town or municipality.

The Public Health Nurse provided a most important link between the School Medical Officer and the home, and the value of her work was clearly demonstrated in the results that accrued. However, it was soon realized that there was a weakness in the scheme. The nurse was not receiving the co-operation or backing that she was entitled to either from School Medical Officers or from Health Officers of the districts owing to the fact that these latter were usually part-time appointments. This was not a criticism of the Medical Officers but rather of the antiquated system. A practising physician must of necessity devote a greater part of his time to his practice in order to make a living and cannot be expected to give much time to preventive work. The next logical step was the development of a full-time health service whereby all health services in the community would be under one head whose sole interest would be the prevention of sickness and disease, and the promotion of health and happiness. This led to the formation of full-time Health Units.

The Staff of a Health Unit consists of a full-time Director, who is a physician with special training which qualifies him for Public Health work; one or more full-time trained and qualified Public Health Nurses; an office clerk; and a full or part-time Sanitary Inspector. This Staff is responsible for all the health work of the district over which they have supervision including food, milk and water control, sewage disposal, child welfare, public education, school health services, control of communicable diseases and so on, but does not carry out any curative treatment or bedside nursing.

The first Health Unit was established

in 1927 in the Municipality of Saanich which is located in the Southern portion of Vancouver Island. This is essentially a residential and farming community with a population of 15,000 and an area of 55 square miles. In this district the administration of Public Health under two separate authorities became so chaotic, the control of communicable disease so inefficient, that at times schools had to be closed on account of epidemics. Saanich was pointed out as a community where there was no health protection and as a menace to its neighbours in spreading communicable diseases. Under the influence of The Provincial Board of Health the Municipal Council and School Board agreed to unite their separate authorities under one full-time, fully trained and qualified health officer. The staff at the outset also included four Public Health Nurses.

Within a short time very tangible results began to accrue as a result of the work done by the Health Unit. The control of infection and the correction of handicapping defects resulted in raising the standard of health of the school population to such an extent that retardation began to decrease and attendance to rise. This was commented upon by the then Municipal Inspector of Schools: "While retardation had cost Saanich over \$17,000.00 in 1928, last year (1929) the cost of 'repeaters' had been cut down to \$11,000.00". In 1926-27 the average attendance of enrolled pupils was 82.9%, while in 1934-35 the average had risen to 92.9%. About 80% of the school population had been vaccinated and about 65% to 70% immunized against diphtheria, there being not a single case of diphtheria for six years, nor a case of smallpox for seven years. Mounting costs for isolation indicated a lack of control over infection and in 1926 reached the figure of \$5,500.00. A very readily appreciated indication of the efficiency of a full-time health service was shown by the immediate decline in isolation costs and in 1935 the figure had been reduced to nil, a direct monetary saving to the municipality of over \$5,000.00 apart from the saving

in life and health which is so difficult to evaluate in dollars and cents. Child welfare clinics and dental clinics are held regularly throughout the district. These are the highlights but all other phases of a generalized public health programme are adequately covered.

The Kelowna Health Unit was the second to be established and serves the City of Kelowna and the rural district surrounding the City. This location is in the Southern interior of the Province and is known as the Okanagan Valley. The staff consists of a part-time Director and two Public Health Nurses. The work is in general similar to that which has been described for Saanich. An extract taken from the Annual Report of the Provincial Board of Health for the year 1935 shows how conditions have improved: "Before the Health Unit was established many cases of typhoid fever occurred. The original number of from 30 to 40 yearly has now dropped, until in 1934-35 no cases were reported." Close supervision of all cases of communicable disease is kept by the school nurses working under the direction of the Health Officer. Immunization clinics have been held to protect the children against smallpox and diphtheria. In 1928 there were no children protected in these rural areas but in 1935, 90% of the school children were thus protected.

In 1929 the third Health Unit was established to serve the City and District of North Vancouver. Here again, as in Saanich, the Councils and School Boards of the City and surrounding Municipality agreed to merge their health services into one administration under the supervision of the Health Unit Director who was appointed Medical Officer of Health for the whole area. In addition to the Director the staff has two Public Health Nurses, an office clerk, and a part-time Sanitary Inspector. The relative freedom from communicable disease, the improvement in the health of school and pre-school children, the improved sanitation, and last but not least the whole-hearted support of the community speak well for the efficiency of this full-time health service.

In 1935, the Peace River Health Unit was established in the North Eastern section of the Province, but on an entirely different basis to the former Units. The Peace River district is essentially a frontier country, covering an area of about 5,000 square miles and with a population of about 10,000. Settlements are small and widely separated from each other. In 1934, the Department of Education instituted an experiment, unique in Canada, in which all the schools were consolidated into one school district and the entire administration of same placed under an Official Trustee. A considerable financial saving resulted and to complete the picture it was decided to establish a full-time health service. This was the first Health Unit in Canada operating under dual head of the Departments of Education and Health and is, in my opinion, without doubt the ideal system, for, after all, health and education are really inseparable—each being necessary to complete the other. A very complete health service is now available to the people of this frontier and isolated section of the Province. At present the Staff consists of a full-time Director; four full-time and three part-time nurses; there is an office clerk; and the Provincial Police co-operate with the Department as Sanitary Officers. Dental service is offered annually for all school and pre-school children; surgical attention for tonsils and adenoids; immunization against communicable disease is available for all; eye examinations and glasses are available at a low figure for children with defective eyesight; goitre prophylaxis is provided, and a host of other services too numerous to mention. Public education is carried on continually and particularly in regard to sanitation and the proper feeding of infant and pre-school children. Naturally all the people are thoroughly appreciative of such a service in a rural community.

So successful did this larger Unit of Administration prove itself in a rural community that a similar plan, together with its associated Health Unit, was started in a combined semi-urban and

rural district. This was located in the lower Fraser Valley and so was begun the Sumas-Matsqui-Abbotsford Health Unit. This follows the lines of the Peace River Unit and essentially the same services are provided and are available to the inhabitants of the community.

The dental services are made available by the employment of dentists either full-time for one or two months, or part-time throughout the school year. In view of the fact that the Health Unit staffs carry out no curative treatment, there has been nothing but co-operation between them and the practising physicians of the districts.

The International Health Division of the Rockefeller Foundation have lent financial assistance and the British Columbia Provincial Board of Health owes them a debt of gratitude for thus being enabled to develop the Public Health work of the Province and to provide health services of which these various communities may be justly proud. The Rockefeller grant is usually for a period of three years, and at the end of that time the community, together with grants from the Department of Education and the Provincial Board of Health carry on the expense of the service.

No article of this nature would be complete without a brief mention of another experiment which is proving successful and which is unique on the North Ameri-

can Continent. In 1936, the Vancouver Metropolitan Health Board was formed and under this scheme Vancouver City and all surrounding municipalities are joined into one administrative area so that their forces and resources are combined for the most effective carrying on of Public Health work. Communicable diseases pay no heed to municipal boundaries and for this one point alone it is essential that all control should be uniform and under one administration. The area concerned is divided up into a number of districts and each one is essentially a Health Unit. Each has its full-time Director, with a staff of six or more Public Health Nurses, an office clerk, and the services of a Sanitary Inspector, and each Unit is directly responsible to the Senior Medical Health Officer who has complete charge over the whole Metropolitan area. In such a plan the specialized services of a City Health Department are available to the suburban districts, and the staff may be concentrated or distributed as the Senior Officer sees fit for the solution of any particular problem.

We in British Columbia feel that the Health Unit plan of administration for Public Health work has proven itself efficient and effective and look forward to the time when it will be more generally adopted not only in British Columbia but in Canada as a whole.

Problems Of A Country Doctor

By C. G. CAMPBELL

THE problems of a country doctor are the problems of agriculture, or more specifically, the difficulties of the rural population of his district. In a section where the farmers exist precariously on marginal land, where periodic drought and flood or the slow impoverishment of the soil results in a steady decline of

the population curve the problem of securing adequate medical services is a very difficult one. The scattered residents of such areas, most of them in the older age groups, are held captive by a constant struggle with their material necessities. One sees what were formerly well populated districts now marked by abandoned school houses; the roads are neglected in favor of more travelled highways, and they are impassible for motor

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