# Our Schools and the White Plague

SOME years ago the Department of Public Instruction for the Province of Quebec issued a pamphlet on the subject of tuberculosis. It contained the findings of the Berlin Congress on the subjects, some extracts of which we publish below.

The step is one suggestive to other educational bodies. In a former issue of CANADIAN OUT-DOOR LIFE we pointed out what was being done by the Montreal Anti-Tuberculosis League in bringing this subject before the schools of that city through the offering of prizes for essays on the question.

Ontario would seem to be rather behind the sister province in this matter. The Educational Department might with profit to the health of the Province take some practical steps to have this subject brought under the notice of the teachers, and, through them, the scholars of the Province.

The subject of the Berlin Congress was considered under four heads—

1. Dissemination of tuberculosis.
2. Its cause.
3. Its prevention.
4. Its treatment.

The disease is most readily disseminated among people, who live in crowded centres, poorly ventilated rooms, whose occupation is sedentary and who are exposed to irritating dust entering the lungs. All these causes are made more effective by reduced vitality on the part of the person exposed.

"The tubercle bacillus," says the report, "is the direct cause of all varieties of consumption in the human subject." The tubercle bacilli are parasites, which flourish in living animal tissue, but they soon lose their virulence outside the animal organism.

"From the *pus* of the diseased part comes all the infection. In the pus of the tuberculous sore, in the sputum of the diseased lung, in meat and milk, if infected, it is the tubercle bacilli, which convey the disease. Every human being infected with tuberculosis and every infected animal are centres from which the disease spreads.

In spite, however, of the number of sources of their origin and the immense production of tubercle bacilli, they are found principally in the surroundings of consumptive patients, where their production is enormous. If, however, the patient be removed the infection to a great extent ceases, *for the bacilli have but little vitality outside the living organism. Direct sunlight, putrefaction and desiccation soon destroy them.*

Hereditary tuberculosis is very rare. Experiments have shown that it occurred in about one case in sixty.

The prevention of the spreading of the disease depends almost wholly on the care that is taken by those afflicted in destroying the sputum of the diseased lungs. If this were done there would be little chance of further infection. People should be instructed in regard to the danger of carelessly spitting the excreta of the sick lungs, where it may reach the lungs of others, it should be destroyed by disinfection, or put into small paper spitoons, the whole box and its contents being burned.

The report further recommends that parents should be taught "that the disease was acquired in the young people *by breathing the germs.*" Every care should be taken to keep children free from infection, and also to see that they were well fed, live as much out-doors as possible and have such extra nourishment as may be necessary to strengthen their tissues and make them able to resist the disease.

Commenting on this subject the *Educational Record*, of Quebec, says :

"Thus far the information deals with the cause of consumption, the manner of infection and how to prevent its spreading and is of much value to the sensible teacher and her pupils. Are not many of our schools *crowded centres*, with *chalk dust-laden atmosphere*, to which is often added the filthy dust of the school-room floor, when it is swept at noon by the pupils in turn? Moreover, is not the occupation of the school-room *sedentary* for both teacher and pupils and is not the atmosphere of the room both *diluted* and *polluted?* These four conditions constitute the *favourable circumstances!* required to make a *consumptive hot-bed.* All that is further required is the importation of a few germs of the tubercle bacilli. These are frequently found in some of the homes of the pupils, and their importation to the school-room is only a matter of time.

"It is a sad truth that the provisions for ventilation of many of our public schools favour the disease, but no wide-awake, sensible teacher will sit still and perish without doing all she can to save her own health and that of her pupils.

"*First*—Let the floors be swept after school each day with a damp broom. When this is being done the windows or ventilators should be open to allow fresh air to enter and the foul, dust-laden air to go out. Next morning the blackboards should be cleaned with a damp cloth and the furniture dusted with a soft cloth moist with coal-oil. If the floors are cleaned regularly, or even every two months in winter, the best results will accrue to the school in health and cheer and wide-awake pupils.

"*Second*—The crowded condition can be somewhat overcome by combatting its effects by ventilation. To do so, where the door and windows are the only means, it is well to give the pupils some vigorous exercise, in which all must join, thus preventing the quieter pupils from remaining motionless