officers would of course be required. And in this connection it may be observed that better accommodation will surely soon have to be provided for the department of the chief analyst, and so but little extra would be needed for a Hygienic branch.

The total cost of an such organization would not exceed, and probably not reach, $50,000 a year. The extention of the mortuary statistics, as at present collected, to one hundred places instead of less than thirty, as at present, would not exceed $20,000. One hundred monthly reports, relating to epidemics, twelve times a year, at $2 a report (a fair remuneration) would cost $2,400. The cost of three inspections a year by each of the eight inspectors would not exceed $5,000; with a per diem allowance and costs of travel to each inspector. The expenses of the Advisory Council, one meeting a year, and executive thereof, say four meetings, need not exceed $5,000, if even $3,000. A large number of monthly bulletins could be published for $2,000. And salaries and all office expenses would not exceed $10,000, if more than even $7,000. So that an appropriation $50,000 would give several thousands for any investigations as to causes of disease, which might be deemed advisable. And in what better way or to what better cause could Canada set apart $50,000 a year of her revenue? We believe that 150 centres of information could be "worked" for the $50,000 a year.

LATEST FACTS RELATING TO THE CAUSES, SOURCES AND PREVENTION OF TYPHOID FEVER.

EXTRACTS FROM A PAPER IN THE N. Y. MEDICAL JOURNAL, JAN. 19TH, 1889, BY AUGUSTUS CAILLE, M.D., VISITING PHYSICIAN TO THE GERMAN HOSPITAL AND CHILDREN'S DISPENSARY, RECENTLY READ BEFORE THE MEDICO-CHIRURGICAL SOCIETY, NEW YORK.

WE may state that the evidence as to the parasitic origin of typhoid fever is conclusive.

Next in importance to the recognition of a poison, its source is of practical value, for if we know from what direction danger threatens we have a rational defence in prophylaxis.

If we at any time admit the existence of a specific parasite we must also admit its continual propagation, and it is not at all probable that the typhoid-fever poison originates spontaneously in putrescible matter, but that it finds therein a suitable vehicle for its growth and multiplication. In other words, drinking water contaminated by drainage from a cess-pool will not cause typhoid fever unless the specific germ is contained therein.

Experience has taught us that the disease under consideration is not directly contagious, and we know, on the other hand, that the specific poison is contained in the dejections of the sick; therefore we may state, without fear of contradiction, that the *carriers of the contagion are chiefly air, water, food and clothing.* It is hardly necessary to cite instances of infection by means of contaminated air (sewer-gas), the latter being simply a vehicle for the typhoid-fever germ.

Murchison has reported how a number of children were taken sick from breathing the air of a school-room contaminated by means of an open cess-pool. Nearly all the children were attacked, and those sitting nearest the closet were taken sick first. A positive proof of infection by means of sewer-gas has lately been reported. Some time ago several convicts were stricken with typhoid fever in one of the wards of the Michigan State Prison at Jackson. The Board of Health was called upon to investigate the matter under the supervision of Professor Vaughan, director of the Michigan Laboratory of Hygiene. The milk and the water supply were found pure. A defective sewer was found which had not been in use, but which communicated with a newly constructed sewer under the hospital ward. The air of the old soil-pipe was analyzed and the typhoid-fever germ found, and distinguished by the potato cultivation.

When air or sewer-gas is the medium of infection, absorption of the poison need not necessarily take place through the lungs. In all likelihood the germs are