

Sir GEORGE FOSTER: No, it is not a government work. We are simply buying copies.

Bureau of Industrial and Scientific Research—Salaries and expenses, including printing and stationery, and the collection and distribution of information, \$43,600.

Sir WILFRID LAURIER: "Salaries and expenses, including printing and stationery," is a very elastic term.

Sir GEORGE FOSTER: It has to be elastic. My hon. friend understands the organization of the advisory council. It consists of eleven members, who, with one exception, are all giving their services gratis. The administrative commissioner, Professor MacCallum, receives a salary of \$10,000. This item of \$43,600 is for the travelling expenses of the council, and expenses incurred in gathering information and making their investigations. As regards studentships, we are following the plan which has been adopted by the advisory council in Great Britain and elsewhere. The idea is to get hold of those students who are just about ready to leave the university, and who have proved themselves during a collegiate or scientific course of any kind to be particularly adapted for investigation along a certain line. The studentship is \$600 for the first year, and \$750 for the second year if a second year is added.

Mr. MURPHY: Is that to maintain them at the university?

Sir GEORGE FOSTER: I will explain it. In order to get a studentship these young men must continue their investigations along a line which must be approved by the advisory council. Full inquiry is made into the student's antecedents, the work he has done, and his ability in the particular line of inquiry in which he is engaged.

If that is a line of inquiry which commends itself to the advisory council as likely to prove useful and advantageous in connection with the industries of the country, they may approve of such an one for a studentship. The university gives him the run of the university during the year of his studentship; that is, he has the advantage of the laboratory and whatever is necessary in his investigation. That is the contribution on the part of the university toward that year's work, and the studentship of \$600 is granted to induce him to carry on his investigation for the year. If, at the end of that year, after thorough examination and supervision by the advisory council, it is found that he has made much pro-

[Mr. Murphy.]

gress in that line of his work that it promises to yield beneficial results for practical purposes in the industry to which it is allied, a second year scholarship may be given under the same conditions and carried out in much the same way, except that it is not necessary for this second year's work to be carried on all the while in the university; the student may be transferred to a large industrial concern where he can carry on his investigations in connection with the actual work of the industry itself. In the United States and Great Britain it is considered to be an essential part of the work of the student that a certain amount of time should be devoted to this work in the atmosphere and amidst the practical surroundings of the industry to which his investigation is allied. A student or a fellow has to promise that he will devote his work and his ability to our own country. It is a rather pitiful comment that nine-tenths of possibly the brightest scientific students who have been developed in our country have gone to other countries to carry out the practical results of their work, many of them to the United States. There are students who have thus gone out from our colleges who to-day, in the United States, are drawing salaries of anywhere from \$5,000 to \$20,000. That is the talent we need to keep in our own country, so far as possible; it is the kind of talent which is now, more than ever before, absolutely necessary to the development of our industries on the lines of competition, with the saving and resulting effects that come from the application of close scientific knowledge to the industry itself. As an example of the kind of investigation contemplated, one of these aids is to be bestowed on an investigation now going on in the University of Saskatchewan as to the possibility of utilizing straw for the purpose of making gas. As a by product of the making of gas out of straw there is quite a large percentage of valuable oil. These investigations have been going on under one of the professors in the Saskatchewan University, and one of our aids will be given to assist in bringing that, if possible, to an ultimate and successful conclusion, so that the vast quantities of straw now mostly wasted in the West (although part of it is eaten by young cattle) may be utilized in heating and lighting and producing motive power for the people on the prairies.

Mr. PUGSLEY: When was the bureau established?