

The new organization will be constituted on lines suggested by Sir Frank Heath, and based largely on that followed in England in connection with the Department of Scientific and Industrial Research. The new Department will be entrusted with the better organization of present Government scientific activities; it will aim at ensuring greater co-operation between existing scientific institutions with industries whose problems await solution, and also at co-ordinating our activities with other units of the Empire in the solution of problems of common interest.

It is not to be expected that the creation of this new Department will be a short-cut to the millennium; nor, as Sir Frank Heath says, can extensive immediate results be looked for. In the first place, our supply of research workers fully competent to undertake immediately the problems awaiting solution is insufficient, and in the second place it is essential that there must be fostered a healthy spirit of co-operation amongst all concerned: as has been said, the men of science, men of business, working men, professional and scientific societies, Universities and colleges, local authorities, and Government Departments—all must be got together. “Team-work” is necessary to deal with the varied problems which arise, and which are too manifold and too complicated to be dealt with by individual firms, associations, or Government Departments.

Sir Frank Heath’s report sets out the organization for dealing with the problem, and I think we can anticipate with good reason that our hopes will be fully justified by results, and that scientific research in this country will be placed on a sound educational and financial basis.

A long-sighted policy is the precedent and first essential to success. I propose therefore that the new Department will undertake as its first duty a careful review of the research work at present being carried out in the Universities and other research laboratories. It is essential for future progress that steps be taken to promote a full and regular interchange of information between the various research institutes on the methods and results of their experimental work; it will lead to concentration and economy of effort, and also of expenditure. The corner-stone of the whole structure of the new organization is research—organized research; and I am sure Government will have the whole-hearted support of the community in hoping that this stone will be well and truly laid.

Government is concerned with the well-being of the people, and the position immediately facing us is to ensure that they should be enabled not only to exist but to prosper. Our well-being is largely dependent on the export and satisfactory disposal of our primary products. The secondary industries must not be overlooked; their operations are, however, largely confined to our internal market. Our efforts must in the main be directed to increasing the quantity and improving the quality of our primary products. This problem, however, will not be near solution until producers generally recognize scientific research as essentially part and parcel of their organization.

There is one particular matter to which special attention is drawn by Sir Frank Heath—viz., the creation of the new Agricultural Collège. The details in connection with the establishment of the Collège are practically finalized; and in connection with the establishment of the Collège the question arises as to the relation of the Collège to research. I intend to refer at present to one particular phase only—viz., that of the dairy industry. Government fully recognizes that, while very marked progress has been made in dairying on the instructional side, less has been attempted on the scientific side than in the case of other industries.

Government has had under consideration the constitution of a special branch of the Department of Agriculture dealing solely with problems affecting the dairy industry. The proposal under consideration was to establish a special laboratory and staff at Wallaceville, where the research in dairying would be carried out in conjunction with the other activities of the Department. I am, however, convinced that the proposal of Sir Frank that this special work should be attached to the Central Agricultural Collège is the correct one, and immediate steps will be taken to give full effect to his recommendation.

One other matter referred to by Sir Frank Heath is that of a scientific study of our fuel resources, both in relation to production and consumption. This matter was recently the subject of investigation by a special Committee, which dealt more particularly with the possibility of extending the uses of our coal-supply by the Railway authorities. I am convinced that further special attention will need to be directed to the use of our fuel-supply to the best advantage, the proper application of our various kinds of fuel to their appropriate purpose, and generally the adoption of the most economical and efficient means for the use of our fuel in industry. The matter has already received the attention of the Director of the Dominion Laboratory and of the Mines Department, and a highly qualified officer of the staff of the Dominion Laboratory has been detailed to make investigations while visiting the United States and England. This matter is one of such great importance, and, as I am advised our present facilities for research are sufficient immediately to attack this problem, I propose to arrange that it shall receive the immediate attention of the new Department.

In so far as our secondary industries are concerned, while I fully recognize that there are certain matters in which scientific and industrial research is required, I feel that the problem to be tackled in this Dominion is one more of investigation and adoption of improved processes and machine methods, lay-out, lighting, &c., rather than of an expensive and extensive campaign in the matter of scientific research.

The main requirements are instruction and advice on technical matters of general importance, and the dissemination to manufacturers and others of technical information from overseas.

In so far as there is a need for scientific research in the secondary industries, I consider that this can best be provided for by an extension of existing facilities. Provision will also require to be made for the testing of raw materials and products in various stages of manufacture. Encouragement and assistance will be given for the organization of research associations in various trades and industries.

Sir Frank suggests the appointment of technical field officers attached to the Department of Industries and Commerce; and I feel sure great benefit would result from the appointment of the “right man,” not merely to keep the Department advised as to difficulties experienced, but rather to keep manufacturers fully advised of the latest improved processes and, where necessary, to instruct and advise them on modern factory organization and practices.