

to by trained men. On their report, approved by the Commissioner, certain works are authorized and the applicant told to go ahead with construction. The works being reported as finished, another inspection takes place to make sure that the plans have been properly carried out, and, when everything is found to be right, the license to use the stream is issued to the applicant.

In such a business, of course, everything depends upon a thorough knowledge of the facts. It can easily be understood that the investigation of the flow of the streams of the great western country is a very big part of the work of the irrigation staff. And, as streamflow depends upon rainfall and other conditions of the elements and varies not only from month to month but from season to season of the wide cycle within which these phenomena seem to revolve, of course there are no end of problems to be investigated. The difficulties are not made less by the extremes of heat and cold which are known in the West. Pressing back into the hidden recesses of the wonderful workshop in which nature carries on her vast and leisurely operations, the officers of the irrigation service find that the forests growing on the slopes of the hills are the great sponge-like reservoirs which best regulate the streams with whose flow they have to deal. And here the irrigation officers and the forestry officers, as it were, meet and link up the great services to the country which they are so devotedly performing. It is easy to see why forestry and irrigation have been combined in one department—they are essentially one.

But, while all this direct work of conservation is going on in the field, that is not by any means all the work. There must be a central office and a directing head. That office is the one referred to at the opening of this article and the man in charge of the whole immense busi-

ness is Mr. R. H. Campbell, Director of Forestry.

The work in the central office is multifarious in its nature and not less interesting than that in the field. Records must be kept, and, as these are largely of the nature of plans with first-hand notes by observers of actual conditions in the field, the work of filing is unusually heavy. The correspondence of the Branch is very voluminous. The working out of plans and the preparation of directions for all the parties that are constantly in motion over the half-continent dealt with is a big contract. For in this service there is anxious care that every dollar shall be made to tell in the permanent development of the country. Aside from all this routine there is most important work for the Branch to do with an eye to the future. For all authorities agree that the world is coming face to face with a wood famine. This manifests itself in a hundred ways—in the increase of timber prices in the almost feverish search for substitutes for wood in the various industries, in the use of kinds of wood hitherto completely disregarded, in the careful saving of wood materials hitherto mere waste in industrial operations. All this means problems of invention, of combination, of adaptation. And these, in turn, involve the need of knowledge. And knowledge it seems the government's special business to supply in this as in agricultural, mining, commercial and many other matters. The collection of facts as to the resources of the forest, the extent of use in many different lines, the possibilities involved in scientific experiments now being made in Canada and elsewhere and other similar matters command the attention of officers of the Branch. Only those who have considered the possibilities of the future in the use of wood can understand how varied, how interesting, how far-reaching are the investigations to be made. But anyone can see that there is