In the laboratories, numerous studies have been directed towards the amelioration of various conditions in housing. Mention may be made of studies on efficiency in lighting, research on sound-deadening in walls and floors, investigations on the relative values of different types of insulating materials, and measurements on vapour barriers used to prevent condensation of moisture in outside walls. Work has been done on ventilation, and reports have been issued on heat losses through windows and moisture on windows. Tests are being made continuously on oil burners to ensure their safe operation. One of the earliest studies made by the Council was on the subject of fuel-saving possibilities in house heating.

Among the newer projects in this long series is the current investigation on problems involved in 'panel' or radiant heating. The purpose of this study is to find satisfactory answers to many questions raised by heating engineers regarding this new plan of heating whereby the source of heat is in or under the floor or in the ceiling instead of being supplied by conventional-type radiators. Two experimental houses have been built on the Montreal Road site for this study.

Another important advance in the matter of low-cost housing has been made in the development of a modular system for the construction of prefabricated houses. By means of prefabricated wall panels and flat-roof panels incorporating structural strength, insulation, vapour barrier, finished surfaces, and a connection system, the construction of houses almost entirely in the factory under mass production methods will be feasible. The various standard wall panels, all with identical over-all dimensions, permit the adoption of practically any floor plan to suit the requirements of the site and the builder. Further work on the details of panel fabrication is in progress.

With the establishment of the proposed Building Research Division, all of this work will be brought sharply into focus and new projects will be initiated as required to provide complete coverage of Canada's most pressing problem, the provision of adequate and efficient housing for its people.

In all of its activities the National Research Council seeks to provide an effective medium for leadership and co-operation in the training of competent research workers and in the application of scientific knowledge in the universities and industries throughout the Dominion.

Section 3.—The Educational Functions of the National Film Board and the Canadian Broadcasting Corporation

The National Film Board.*—This Board serves the Canadian people by means of visual interpretations of their country's life and culture; its social problems; its national resources and industries; and its achievements in art, science, research and medicine. It serves Canada abroad by picturing Canada to the peoples of other lands, and it brings to Canadians many aspects of international affairs that are of public interest.

Since its creation in 1939, through the passing of the National Film Act, the Board has included in its activities the production and distribution of 35mm (theatre size) and 16mm (non-theatre size) films, as well as photographs, filmstrips, small informational and large photographic displays. At the request of Government Departments, the Board also designs posters and publications. Its films (16mm and 35mm, sound and silent, black-and-white and colour, English, French and other

^{*} Prepared under the direction of Ross McLean, Film Commissioner, National Film Board, Ottawa.