The total stand of timber of merchantable size is estimated to be 302,458,000,000 cu. ft., of which 189,051,000,000 cu. ft. is accessible. These cubic volumes are volumes of wood that can actually be used. Expressed in commercial terms, the accessible timber is made up of 242,072,000,000 bd. ft. of logs in trees large enough to produce sawlogs and 1,686,834,000 cords of smaller material suitable for pulpwood, fuelwood, posts, mining timbers, etc.

**Resources of the Province of Newfoundland.**—The entrance of Newfoundland into Confederation on Mar. 31, 1949, resulted in an appreciable increase in Canada's forested area. It is estimated that 16,000 sq. miles of the Island of Newfoundland are covered with forests. Approximately 76 p.c. is privately owned or held under long-term leases. For Labrador, an area of about 112,000 sq. miles, no estimate of the forest areas is as yet available. Some of the forests of this part of the Province have been leased, but the greater part are still controlled by the Province.

The forests have become an important source of income to Newfoundland in the past fifty years. In 1948 pulp production totalled 467,691 tons and the newsprint output amounted to 382,248 tons, of which 98 p.c. was exported. Lumbering is carried on in 1,400 sawmills, many of which are small and seasonal in operation. In 1947 their production totalled 68,000,000 bd. ft.

The Province of Newfoundland, like the other provinces, administers its own resources. The Federal Forestry Branch, on the invitation of the Newfoundland Provincial Government, has delegated officers to advise on matters pertaining to the protection and development of the forests. This involves an up-to-date inventory of the forest resources, the protection of the forests from fire, and the organization of a program of economic and silvicultural research aiming towards an adequate and continuous supply of forest products.

## Section 4.—Forest Depletion and Increment

The purpose of this Section is to present a general account of forest depletion and increment. Details of the scientific control of those influences that account for wastage, viz., forest fires and insect pests, are dealt with in the Section on Forest Administration at p. 453.

**Depletion.**—The average annual rate of depletion of reserves of merchantable timber during the ten years 1939-48, by cause, is given in Table 2. Of the total depletion, 78·7 p.c. was utilized and 21·3 p.c. was destroyed by fire, insects, and disease. The utilization of 2,687,973,000 cu. ft. comprised 39 p.c. as logs and bolts, 30 p.c. as pulpwood, 27 p.c. as fuelwood, and the remaining 4 p.c. as miscellaneous products. Approximately 7 p.c. of the wood utilized was exported in unmanufactured form.

The more efficient utilization of timber that has been cut is one factor related to forest depletion. There is little doubt that in the past too high a percentage of the sawn logs has been discarded. Changes of great significance are taking place in the uses of wood that permit of the utilization of sizes and qualities unmerchantable as sawn lumber. The development of the manufacture of rayon, cellophane and numerous other products in the cellulose industry is rapidly extending the use of wood. Plastic-wood products, fibre board and laminated wood will undoubtedly