

dates. In 1849, after the Union, a consolidating Act was passed applying to both Upper and Lower Canada, and the B.N.A. Act assigned the granting of patents exclusively to the Parliament of Canada. The Dominion Patent Act of 1869 repealed the provincial Acts and has formed the basis of all succeeding legislation.

Letters patent are now issued subject to the provisions of c. 150, R.S.C., 1927 (as amended by c. 4, 1928, c. 34, 1930, c. 21, 1932, and c. 32, 1935), and application for protection relating to patents should be addressed to the Commissioner of Patents, Ottawa, Canada.

The growth of Canadian inventions* is shown by the fact that the number of applications and total fees increased each year without a break from the beginning of the present century until the fiscal year ended Mar. 31, 1913, when 8,681 applications were received and the total fees amounted to \$218,125. In the fiscal year ended Mar. 31, 1938, there were 10,950 applications, with fees amounting to \$367,127, as shown in Table 21. Of the patents for 1938, 5,354 or 70 p.c. were issued to United States inventors, 647 to Canadians and 668 to residents of Great Britain and Ireland, while Germany with 432, France with 152, Holland with 121, and Sweden with 62 followed in the number of inventors to whom patents were issued. Applications for patents were distributed over the whole field of invention, but progress was specially noteworthy in the chemical and electrical arts. In the chemical field the development of new artificial resins continued with polyvinyl acetal resins receiving particular attention. The treatment of hydrocarbon oils for the production of motor fuels, aromatics and unsaturated hydrocarbons was very active. The production of artificial hormones as well as improvements in the processes of extracting them from natural substances increased and much attention has been given to the production of concentrates of vitamins and protamine insulin. There were advances in the development of plastic materials and coating compositions from synthetic resins and cellulosic materials.

In the electrical art, television continues to be given the greatest amount of attention. In cathode ray tubes the most noteworthy inventions have been the development of electron multipliers for larger amplification, for greater amounts of power, and for the intensification of optical images.

*'Invention' means any new and useful art, process, machine, manufacture, or composition of matter or any new and useful improvement in any art, process, machine, manufacture, or composition of matter.

20.—Numbers of Canadian Patentees, by Province of Residence, fiscal years 1927-38.

Province.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.
Prince Edward Island...	5	3	1	3	3	2	Nil	1	2	2	2	2
Nova Scotia.....	19	24	16	17	14	18	14	16	9	17	2	7
New Brunswick.....	21	12	17	16	18	6	14	8	7	5	12	6
Quebec.....	320	298	293	282	265	272	257	236	227	207	201	176
Ontario.....	499	537	538	500	491	504	462	475	429	365	316	321
Manitoba.....	89	71	61	72	74	47	71	42	34	49	53	39
Saskatchewan.....	68	100	93	81	68	55	37	52	45	30	28	21
Alberta.....	82	88	98	71	76	63	35	48	43	52	32	25
British Columbia.....	129	152	148	126	101	117	113	104	89	65	56	51
Yukon and N.W.T.....	Nil	Nil	Nil	1	1	Nil	Nil	Nil	Nil	Nil	1	Nil
Canada	1,232	1,285	1,265	1,169	1,169	1,084	1,063	982	885	792	703	647