

tion ought to be moved to a better land is reasonable, and should be acted upon; from the gulf shore of Labrador, the Canadian government, in a like emergency, aided removal. This is the second year of the failure of the salmon fishery, and continued residence on the coast means intolerable suffering to some and death to others.

CANADIAN POSTAL SERVICE.

The postal service of the Dominion, in these later and more active days, presents features of diversity which may well attract interest. In the cities or towns, and in the more thickly settled districts of the Dominion, where activity is constant and where commerce exacts rapid transmission, from one to six deliveries of mail per day are made, and in the cities these are made by postal carrier. But there are vast distances to traverse in the northern and western portions of Canada, where settlement is sparse and where no railway runs. To these the mails are necessarily less frequent, but even in them the means of communication are vastly improved of late years. It is significant to learn, for example, that between November 1885 and 1st July 1886, there were established postal routes over 771 miles of new railway line opened between these dates, *i.e.*, 322 miles on the C.P.R., 111½ on the N. & N.W., and the remainder on nine other railways. In one year, the fiscal year 1886, the following increases over the previous year are observable:

	1887.	1886.
Number of post offices...	7,295	7,084
Miles of post route.....	52,886	49,743
Miles annual mail travel	23,809,750	22,173,455

This increase in mail travel arises, the Postmaster General's report tells us, not alone from an increase in the number of post routes and offices, but from the increased frequency of mail service on routes where the increase of population or commerce has rendered it necessary.

Such an event as the opening of a railway from ocean to ocean, over stretches of many hundreds of miles in the west previously served by stage or horse-back messenger or Indian runner, must throw a deal of work upon the postal department. This is what took place when the Canadian Pacific Railway was opened, last year, from Montreal to Vancouver. A daily mail service had to be organized over that immense distance, mail cars and mail clerks and connections had to be provided. The first through train left Montreal on Monday, 28th June, and arrived at Port Moody, the Pacific terminus of the road, on the 4th July. By this first train the mails for British Columbia commenced to pass over the Canada Pacific Railway, daily postal car service over the whole line of 2,892 miles went into successful operation from that date. Taken in conjunction with the existing railway connexion between Halifax and Montreal, the Canada Pacific Railway now affords a continuous daily line of mail service by postal car passing over Canadian territory from the Atlantic to the Pacific, a total distance of 3,740 miles.

It is interesting to note that the railway mail clerks travelling in charge of these

postal cars receive and distribute correspondence every day over the whole line from Halifax to the Pacific Coast, and, says the Postmaster General, "correspondence passes between the postal cars on the several sections into which the railways forming the line are divided for working purposes without suffering detention at any intermediate point."

For thirty years the department has been handling parcels between Ontario and Quebec. In 1859 the number of these was about 6,000. By 1868, the number of parcels transmitted within the Dominion by mail was 24,800, and in 1886 it had risen to 640,000, yielding a revenue of \$64,000. To-day, too, as we have already noticed, a parcel post is in operation between this country and the United Kingdom, delivering closed parcels up to 3 pounds in weight. It is proposed to extend this postal system to certain British colonies and foreign countries.

The year's postal revenue was \$2,469,379, and of this sum it is estimated that all but \$170,000 was derived from letters and post cards. The expenditure amounted to \$3,380,420; of which sum \$1,594,026 was for mail service, \$1,476,303 for postmasters, carriers and clerks, the remainder, of \$311,000 being paid for all other items.

So near perfection of safety has the system of registration and inspection been brought, that out of 3,400,000 letters registered only 160 miscarried; of these, 58 were burned in railway accidents, 10 in post-office conflagrations, 12 lost while crossing on ice, the remainder (58) burglarized, stolen or embezzled. But in 50 cases the thefts were traced and the amounts made good, so that the actual cases of loss to sender or receiver were astonishingly few.

Dead letters, we are glad to see, are becoming less numerous. The total last year was 753,000. Many thousands of these were of foreign origin. Of the 17,856 registered letters handled by the dead letter office, 16,840 were returned to the writers or to the country whence they came.

Nearly 54,000,000 3-cent. stamps, 30,279,000 1-cent. stamps, and some 6,000,000 letter stamps of other denominations were issued to postmasters during the year. Also 15,078,000 1-cent. post-cards and 440,000 stamped envelopes. The value of the issue during the year, to 30th June, 1886, was distributed as under:—

Prince Edward Island.....	\$ 28,516 00
Nova Scotia	188,154 20
New Brunswick.....	135,117 70
Quebec	517,235 00
Ontario	1,374,356 80
Manitoba and North-West Territories	136,847 05
British Columbia	39,978 50

Total..... \$2,420,205 25
NOTE.—The total stamp issue of the previous year was \$2,337,852.15, showing a comparative increase in issue for the present year of \$82,353.10.

The number of clerks and letter carriers in city post offices is 698, of railway mail clerks 304—against 190 in the year 1880—of inspectors and assistants 25, and their clerks 65. Seventy-one million letters and fifteen million post cards were carried by the Canadian post in 1886; 3,400,000 of

these were registered letters, and the money transmitted by money order was \$10,281,089. Over nine millions of newspapers were delivered by the department last year, an increase of 782,000 over 1885.

FUELS OF THE FUTURE.

After a course of experimenting, long unsuccessful, the advocates of liquid fuel in the shape of crude petroleum, are able to boast of something very like success in its adaptation to steam boilers in industrial establishments. We now learn from the *Iron Trade Review* that crude petroleum has replaced coal in various industrial establishments in New York, Chicago, Detroit, Philadelphia, Pittsburgh, Baltimore, Parkersburg, W. Va., Negaunee and Niles, Mich.; Ottawa Ill., Anderson, Ind., Beaver Falls, Pa., and at many points in Ohio, notably Cincinnati, Sandusky, Canton and Lima. It is also in use in various Cleveland establishments, among the latest to introduce it being the Britton Iron & Steel Co., an old and favorably known concern. At the Britton works, says our contemporary, oil is now used both under boilers and in heating furnaces, and with results highly satisfactory to Mr. Britton. The method of its use is thus described: The oil, delivered in tank cars, is pumped into a standpipe located by the side of the tracks, measuring three feet in diameter, and every inch of oil in the standpipe represents 4.4 gallons. The fuel is fed to the boilers and furnaces in ordinary gas pipe and at the point of entrance into the combustion chamber is re-enforced by a steam blast. Just what the results are and how they compare with coal as fuel Mr. Britton desires to withhold until he can satisfy himself that the change from coal to oil may be safely made and without the shadow of a doubt of ultimate success. The Cleveland Rolling Mill Co. is also firing a battery of boilers with oil and will soon be ready to make public the results of tests, thus far encouraging.

Difficulties have hitherto been found in the regulation of the supply of oil to the furnace, as well as in the embarrassing effects of extreme heat at certain points destroying the chamber. It is certain that the new method needs very careful watching to get the best results. But among fuels of the day and the hereafter, natural gas makes decided claims to a place. Its use has doubled in extent within a year or two. Although, in the records of the U. S. Geological Survey, no record is kept of the yield of natural gas in cubic feet, it is estimated that the amount of coal displaced in that country by gas in 1886 was 6,353,000 tons, valued at \$9,847,150. In 1885 the amount of coal displaced by gas was 3,161,000 tons, valued at \$4,854,200. Pennsylvania is no longer the only state to yield this marvellous product and cheap fuel.

According to the *Coal Trade Journal*, the development of coal and natural gas in far-off localities is giving an impulse to numberless little industries hitherto dependent on distant fuel. Natural gas is found in Dakota and Texas, and they are after it in Colorado. Natural gas is in Utah, and