The White Star Line has established in addition to its regular New York-Liverpool services regular services between Boston and Liverpool (calling at Queenstown), and Boston, Azores and Mediterranean ports. The services will be operated by the large, modern, twin-screw steamers Republic, 15,400 tons; Cretic, 13,500 tons; Cymric, 13,100 tons; Canopic, 13,000 tons; Romanic, 11,400 tons, sailing regularly throughout the year to and from Boston and Liverpool (calling at Queenstown), and to and from Boston, the Azores and Mediterranean ports, and will be inaugurated at once and operated continuously. Return tickets by the White Star Line are available for their full value towards passage by any of the White Star services. Facilities will be offered for booking across the European Continent between the various ports of call in the Mediterranean and Liverpool, which will thus enable passengers to book the round trip from Boston, via the Mediterranean, returning from Liverpool to New York or Boston or vice versa.

## Among the Express Companies.

The Western Ex. Co. has closed its offices at Stuben and Sturgeon River, Mich.

The Dominion Ex. Co. has reopened its wagon route between Beamsville and St. Catherines, Ont., for the winter.

The Dominion Ex. Co. has closed its stage route between St. Basil, Que., and St. David, Me., the office at the latter point being closed.

The Dominion Ex. Co. announces the following changes in names: Annaville, formerly Ste. Anne de la Perade; Bruchesi, formerly Ste. Anne de Plains; Masson, formerly Buckingham, Que.; Biscot, formerly Biscotasing; Eureka, formerly Eureka Lake; Nemegos, formerly Nemegosenda, Ont.

The Alaska Pacific Express Co. is operating a stage line between Whitehorse and Dawson, Yukon, from two to six times a week, according to the condition of the trail and the volume of the business. It is also operating a weekly dog train service between Dawson and Eagle, Alaska and Forty Mile, Yukon; a semi-weekly service from Log Cabin to Atlin, Discovery and Pine City, B.C., and a semimonthly service from Valdez to Fairbanks, Chenoa, Fort Gibbon, Tanana and Weare, Alaska.

## Telegraph and Cable Matters.

The Canadian Northern Telegraph Co. has laid a cable to connect its commercial office at the corner of Main st. and Portage avenue, with its railway telegraph office, Water st., Winnipeg.

A conference of the partners in the all-British trans-Pacific cable will shortly be held in London, Eng., at which a proposal will be made to lay a cable between Canada and Great Britain.

The Dominion Government proposes to establish a Marconi wireless station at Sable Island, N.S., and has under consideration a proposition to establish a similar station at Cape Race, Newfoundland.

R. G. Reid, of the Reid Newfoundland Co., has filed a claim for \$3,000,000 against the Newfoundland Government for losses sustained through the Government taking back from him in 1901 the control of the telegraph system of the colony.

W. M. Gibson, formerly connected with the G.N.W. Telegraph Co. and with the C.P. Telegraph department in Montreal, won the Carnegie medal for being the best all-round telegrapher, at the recent tournament of the American Telegraphers' Association.

The C. P. Telegraph department has created a new position, that of electrical engineer, to which W. J. Camp, heretofore Super-

intendent of the Eastern division, has been appointed. He will have charge of all electrical equipment on the system; office Montreal.

I. McMichael was presented with a diamond stud at a farewell dinner given him by the staff of the Western Union Telegraph Co., on leaving Minneapolis, Minn., to assume the duties of his new position as General Manager of the Great Northwestern Telegraph Co., Toronto.

The Canadian Northern Telegraph Co. has completed stringing a line for commercial purposes on its Duluth extension from Stanley Junction to Gunflint Narrows, Ont., and proposes to string a copper wire for commercial business between Port Arthur, Ont., and Winnipeg, Man.

The Australian Senate has declined to ratify the agreement made between the ex-Premier, Sir E. Barton, and the Eastern Extension Cable Co., which gave an unfair advantage to that company in competition with the stateowned all-British trans-Pacific cable, in which Canada has a very large interest.

The Chief Signal Officer of the United States, in his annual report, states that 1,470 miles of military telegraph and cable lines have been laid during the year in Alaska, and adds that preparations are being made for the installation of wireless telegraph stations at St. Michael and Nome, 108 miles apart.

N. C. Marshall, of Vancouver, B.C., has been appointed Western manager of the Marconi Wireless Telegraph Co. It is proposed to instal stations at various points in the west to connect Vancouver, Victoria, Nanaimo, Comox, and other places, thence to Skagway, Alaska, and Dawson, in the Yukon Territory.

The company controlling the Marconi system of wireless telegraph in Great Britain has begun suit against the DeForest Wireless Telegraph Co. for alleged infringement of patents. The DeForest Co., which has its Canadian headquarters in Toronto, has recently had in operation stations at Holyhead, Wales, and Howth Head, Ireland, 65 miles apart.

The Dominion Government telegraph repair steamer Tyrian recently completed a three months' trip laying cables and repairing land lines in Nova Scotia, and along the northern shores of the Gulf of St. Lawrence to Chateau bay, opposite Belle isle. At Chateau bay new masts for the Marconi wireless telegraph system of communication between the mainland and Belle isle were erected.

The C.P. Telegraph eastern division, hitherto exténding from the Atlantic coast to Fort William, Ont., was on Nov. 1 divided, one of the new divisions, the Atlantic, extending from the coast to Megantic, Que.; and the other, the Eastern, from Megantic to Fort William. J. F. Richardson, heretofore Superintendent of Construction and Inspector, has been appointed Superintendent Eastern division; office at Montreal. P. W. Snider, heretofore local manager at St. John, N.B., has been appointed Superintendent Atlantic division, office St. John. W. P. Robinson, hitherto chief operator at St. John, has been appointed local manager at St. John, succeeding P. W. Snider.

The "magnetic storm" which was observed in Canada Oct. 30-31, appears to have been not only general from east to west in Canada, but in England, and generally all over the northern hemisphere. The lines at Winnipeg were considerably disorganized, that district being apparently right in the storm centre. So much was the system disorganized there that the C.P.R. telegraph department had to send messages by train to Fort William, Ont., where they could be dispatched. At Fort William the C.P.R. telegraphers were able to establish a circuit to Montreal, 998 miles, and send messages without batteries. The Montreal offices of the

company escaped the disturbances. At Kingston, Ont., the G.N.W. telegraph operators worked a commercial line to Toronto. J. F. Richardson, Superintendent Eastern division C.P.R. telegraph department, referring to the recent disturbances says that messages were sent over the wires from Montreal to Fort William without artificial current, the electricity coming from the earth. The telegraph wires are connected to the earth at each end, forming what is termed a "shunt." A sufficient portion of the current passing through the earth east and west, travelled over the wires and furnished the power by which sig-nals were transmitted. This current, sometimes positive and sometimes negative, measured over 50 milliamperes, but is too intermittent to be of practical use, and its maximum is reached only every 10½ years. "I have," says Mr. Richardson, "experienced three of these cycles, and the disturbance we felt Oct. 31 was the heaviest and most widely felt. At the same time that the northern part of Canada was effected, the cables and European lines reported similar electrical phenomenon. I have reason to believe that the aurora borealis is the outward sign of this internal disturbance, and discharges from the earth around the magnetic north. There are dark spots on the sun, said to be eruptions, that appear at the same time, but I am unable to say what the connection is between these three phenomena—sun spots, aurora borealis, and earth currents."

## Western Union Telegraph Co.

Comparative statement for years ended June 30, 1902, and 1903:

Revenue Expenses and taxes	1903, . \$29,167,686 80 20,953,215 07	1902. \$28,073,095 20,780,766
Net revenue	\$ 8,214,471 73	\$ 7,292,329 992,580
Balance	\$ 7.136,771 73 4.868,050 00	\$ 6,299,749 4,868,031
Surplus Previous surplus	\$ 2,268,721 73	\$ 1,431,718 9,319,285
Total surplus	•	

Total surplus \$13,019,724 55 \$10,751,003

The capital stock is \$97,370,000. The funded debt is \$24,504,000. The Co. now has 1,089,212 miles of wire and 23,567 offices. During the past year 69,790,866 messages were sent. The average tolls for the messages transmitted were 31.4 cents and the average cost 25.6 cents. \$3,351,644.94 were expended for construction during the year, 402 miles of poles and 59,228 miles of wire being added.

## General Telephone Matters.

The number of telephones in use in London, Ont., is now over 1,700.

The franchise of the Bell Telephone Co. in London, Ont., expires Dec. 4.

The Bell Telephone Co. has bought out the local telephone company heretofore doing business at Carman, Man.

The Dominion Government has laid a land cable between the two ends of Belle Isle, and fitted the same for telephonic use.

We are advised that the Bell Telephone Co. has not decided, as press reports state, to erect a new exchange building in Winnipeg in 1904.

The Canadian Machine Telephone Co., which hitherto has had its headquarters at Ottawa, has moved its offices and plant to Toronto.

The Canadian Machine Telephone Co. has made overtures to the Kingston, Ont., city council with a view of installing its telephone service there.

The Bell Telephone Co. is improving its lines between Chesley, Walkerton and Owen