

miles from Fort Selkirk to Dawson were completed Sep. 28.

Frank Richards, Surveyor for the telegraph construction party, was drowned in Five Finger Rapids, Aug. 2.

The present rate for a 10-words message from Bennett to Five Fingers, 319 miles, is 75c.

A. B. Clegg has been appointed Manager of the office at Dawson, & W. Brownlow has been appointed to the Selwyn River office.

It was recently reported in Victoria, B.C., that the Government intends constructing a line from Tagish to Atlin, about 115 miles. A telephone system is already in operation in the Atlin district.

The cheques accompanying tenders put in on Aug. 24 for the supply of telegraph wire for the proposed line between Quesnelle, B.C., & a connection with the line from Bennett to Dawson having been returned to the tenderers it was reported that the Government had abandoned the idea of constructing this line, for the present at least. The Government press announces that the report is unfounded, that the policy of the Government has undergone no change, & that a contract for the supply of wire has been let to the same contractors as supplied that necessary for the Bennett-Dawson line.

Arrangements have been made by the C.P.R. Co.'s telegraph by which messages received by it at Vancouver for transmission to the Yukon, will be forwarded by steamer every other day from Vancouver, & every intermediate day from Victoria & Nanaimo, making practically a daily service with the north. At Skagway the messages will be handed to the White Pass & Yukon Ry., & sent over its wires to the starting point of the Government line at Bennett. It is expected that messages can be got to Dawson within 4 days after leaving Vancouver. Coming down the same arrangement will be in effect. The steamers will bring messages from Skagway, and at the first port of call, whether Comox, Nanaimo, Victoria or Vancouver, the messages will be delivered to the telegraph office for transmission to the points to which they are addressed.

The Pacific Cable Scheme.

All the Australian colonies interested in the proposed Pacific cable from Vancouver, B.C., to Sydney have been discussing the subject of late. The Victoria Assembly has passed a motion declaring it expedient that that colony co-operate with the United Kingdom, Canada, New South Wales, Queensland & New Zealand in the construction & working of a cable across the Pacific Ocean from B.C. to Australia, touching upon British territory only. Victoria is thus committed to the Pacific cable, & if the Eastern Extension Co. wants the Cape route it must carry it out itself. In New South Wales nothing will be done in the direction of bringing the Pacific cable question before Parliament until a definite agreement has been arrived at on the subject. The latest phase of the matter is the representation on the board which is to arrange all the preliminary business & prepare the tariff. The original proposal was that a board of eight should be appointed, comprising three delegates from Great Britain, two from Australia, one from New Zealand & two from Canada. The Australian colonies, & especially New South Wales & Victoria, considered that the representation for Australia was too small, & the suggestion has been made that the three

Australian colonies & New Zealand shall each have a member on the board, thus making four for Australia. This it was recognized would necessitate an increase in the representation of Great Britain & Canada. The matter is now under the consideration of the home authorities.

Subways for Electric Wires.

City Engineer Galt, of Ottawa, having been instructed by the city council to report upon the feasibility of having all electric wiring underground, has done so as follows:

Underground wiring is quite practicable from a civil, mechanical & electrical standpoint notwithstanding all the objections, difficulties & obstacles to be encountered. The most important feature to be considered from the standard of municipal requirements is the system of underground work. The ideal method, unquestionably, would be separate open subways on each side underneath the sidewalks or along the street roadway close to the gutter or curbing, large enough in size for the accommodation of water & gas mains, electric wiring, etc., including facilities for examining, making all repairs & house connections. This seems to be the only suitable plan of subway construction, & will give separate underground space on each side of the street for pipes & wire service to the street line. Of course, this would require duplicate water & gas mains, etc., but there could be no objection outside of the extra cost, because in the central portion of the city this is most desirable & highly advantageous, subway or no subway. My conclusions are as follows:

In cities overhead wiring is objectionable from every standpoint.

Underground systems are practicable for all kinds of service, notwithstanding the serious objections urged, including interference on account of electrical induction.

A single subway in the middle of the street, although practicable, is entirely unsuitable, because connections to house properties would require constant cutting up & repairing of streets.

It is more than apparent, without further explanation or illustration, that under municipal ownership the extent & interference in the tearing up of streets will be reduced to a minimum.

In the end the results will be highly satisfactory & economical to all concerned, while at the same time the dangerous, annoying & objectionable overhead system will be abolished.

I submit a preliminary sketch showing a brick lined underground subway 4 ft. wide by 4½ ft. high, located inside the roadway close to the curbing. The total cost of the actual construction of this double subway on the ordinary macadam roadways would be \$12 per lineal foot & on permanently paved roadways \$16 per foot, to which would have to be added all the other large incidental expenses connected with the conversion of the present system into the new. If subways were placed directly underneath the concrete sidewalks the cost of construction would be increased to 25%, & would still have to cross over road-

ways at all street intersections; & in addition be a serious hindrance to pedestrian traffic during period of construction.

General Telephone Matters.

A telephone line has been established between Atlin, B.C., & Discovery, a distance of 6 miles.

The poles for the extension of the N.B. Telephone Co.'s line from Moncton to Buc-touche have all been placed.

The Town Council of Neepawa, Man., has awarded contracts for the installation of an electric light & telephone service.

The Bell Telephone Co. will shortly have all its wires on Main St., Winnipeg, under ground & next season will extend the conduit system to other central streets.

Salt Spring Island, Strait of Georgia, B.C., has a telephone service with about 35 miles of wire & 12 'phones. The postmaster keeps the central & maintains the lines, etc.

The Winnipeg City Council has extended its contract with the Bell Telephone Co. for the operation of the fire alarm system for another year, at the old figure, \$3,000.

The Hudson's Bay Co. has decided to establish telephone communication between Fort Smith & Smith Landing, on Great Slave River, N.W.T., a distance of 16 miles.

The Bell Telephone Co. gives notice that a direct heavy copper wire having been built from Toronto to Buffalo, improved communication can now be had with places in the U.S.

The New Westminster & British Columbia Telephone Co. has now over 800 subscribers on its Vancouver list & will shortly have to install a switchboard of larger capacity than the present one.

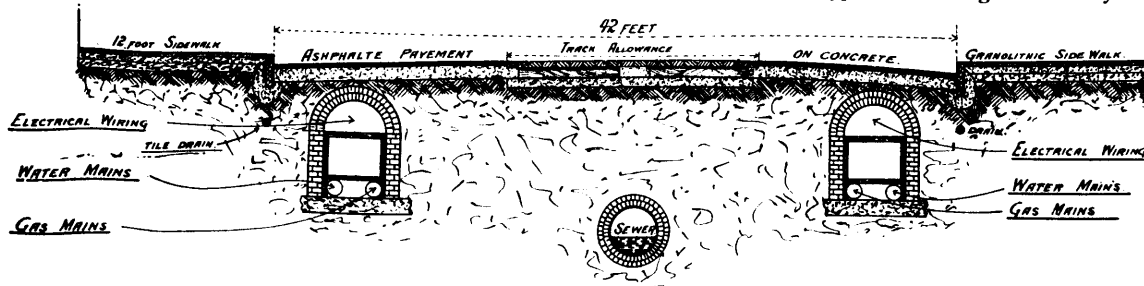
The Vernon & Nelson Telephone Co. intends to string another wire to accommodate its rapidly increasing business. It makes connection with the C.P.R. Co.'s telegraph at Cascade, B.C.

Telephone communication has been established between Mine Centre, Algoma, & all the mines of the Vermillion group, including the Golden Star, Decca, Manhattan, Olive, Lucky Coon, Aria, Alice A, & many others.

The premises of the Telephone Exchange & Public Works Warehouse, at Kingston, Jamaica, were recently destroyed by a fire caused by some mishap to the West India Electric Co.'s trolley wire. The loss is estimated at £6,000.

Rat Portage, Ont., municipal council has made a contract with the Citizens' Telephone & Electric Co. for street lighting. The Co. gives free lighting for the town hall, free telephone service for the same & for the police station & pump house, as well as a fire alarm service without cost to the town.

The Bell Telephone Co.'s plant in Ottawa is to be greatly improved, in fact almost entirely renewed, at an expenditure of about \$150,000. The present switchboard, which cost \$35,000 when installed, is to be replaced by one which will be 50% quicker. All the wiring is to be renewed, copper wire being used solely. A



SKETCH OF SUBWAYS FOR ELECTRIC WIRES.