

## CORRESPONDENCE.

To the Editor of the CANADIAN ELECTRICAL NEWS:

I am informed that there is no reason why an opposition telephone company could not operate in Canada. I hear that the Bell Telephone Company are not legally possessed of some of the patents, or that they could be used without paying them royalty, that they have not complied with some requirement of our patent laws. Can you shed any light over the hidden mysteries of this business, and oblige

A CONSTANT READER.

Montreal, 10th June, 1884.

REV. L'ABBE H. A. VERREAU, who is Principal of the Jacques Cartier Normal School of this city, one of our latest subscribers, said to us he thought the day was not far distant when every college of note would have to employ a professor in electricity.

## DOMINION NOTES.

Mr. George W. Babbitt, chief train dispatcher of the Canada Southern at St. Thomas, Ont., has invented a new and very useful attachment to signal machines in the way of an electric automatic signal register to be attached to railroad signals and utilized in registering the changes in the same. The object which will be attained is that when a signal is changed at any station on the road, the character of the alteration will be plainly shown at the dispatcher's office. This result is secured by the use of a wire circuit and the movement of a metallic lever over long and short pieces of metal insulated from each other and arranged to indicate the keyboard of any particular station. The adoption of the invention on a railroad will obviate all danger of incorrect signals being displayed at depots, as the chief train dispatcher will be enabled to observe at a glance whether the proper signal is hung out.

THE Greek ritual forbids any lights inside of the Greek Church other than candles, and when it came to lighting the cathedral of St. Petersburg by electricity, a serious difficulty presented itself. But a way was found out of it. The electric lamps were placed outside of the windows, and an extra set of windows were placed outside of the lamps. The result is that the Church is lighter by night than by day, the law has been complied with, and everybody is happy.

Among the recent inventions is an electric hand lamp the illuminating principle of which is generated by some simple chemicals that are very cheap and easily manipulated. A small sliding drawer at the bottom of the lamp holds the electric spark in solution, while by simply touching a button a magnificent light is developed or extinguished, as required. The lamp is not materially different in appearance from the ordinary kerosene lamp and, it is said, can be used in the same way, but with a complete absence of trouble, odor or danger.

## THE TELEGRAPH.

CYRUS W. FIELD foretells a great business revival this summer.

THE cable between Meat Cove, C. B., and the Magdalen Islands is broken near Cape Breton. Steamer Newfield, which is at present supplying lighthouses on the west coast of Nova Scotia, will, as soon as that work is completed, be sent to repair the work.

WE are told that out of the nine telegraph cables that now stretch from continent to continent under the Atlantic, only three are in working order, and that of these three, one works only one way. This last statement seems very singular, but is made on excellent authority. The fact is that the life of a submarine cable is limited at best, and that from eleven to fourteen years generally uses up the best of them. The idea, once prevalent, that a cable once safely laid down was good for all time, has to give way before discovered facts.

WE have often heard of the wonderful line between this country and Teheran, the capital of Persia, a distance of 3,800 miles, but we scarcely realized the fact that good signals were obtainable through so great a length of wire until recently, when we availed ourselves of an invitation from Mr. W. Andrews, the managing director of the Indo-European Telegraph Company, to make a visit of inspection. It was between 7 and 8 on Sunday evening, April 13, when we reached the office. In the basement of an unpretentious building in Old Broad-street we were shown the Morse printer in connection with the main line from London to Teheran. The courteous clerk in charge of the wire, Mr. Blagrove, informed us that we were through to Emden, and with the same ease with which one "wires" from the City to the West-end, we asked a few questions of the telegraphist in the German town. When we had finished with Emden, we spoke with the same facility to the gentleman on duty at Odessa. This did not satisfy us, and in a few seconds we were through to the Persian capital (Teheran). There were no messages about, the time was favorable, and the employes of the various countries seemed anxious to give us an opportunity of testing the capacity of this wonderful line. T. H. N. (Teheran) said "Call Kurrachee," and in less time than it takes to write these words we gained the attention of the Indian town. The signals were good and our speed must have equalled 15 words a minute. The operator at Kurrachee, when he learned that London was speaking to him, thought it would be a good opportunity to put us through to Agra, and to our astonishment the signals did not fail, and we chatted pleasantly for a few minutes with Mr. Malcom Khan, the clerk on duty. To make this triumph of telegraphy complete, Agra switched us on to another line, and we were soon talking to a native telegraphist at the Indian Government Cable Station, Calcutta. At first the gentleman "at the other end of the wire" could not believe that he was really in direct communication with the English capital, and he exclaimed in Morse language, "Are you really London?" Truly this was a great achievement. Metallic communication without a break from 18, Old Broad-street, London, to the telegraph office in Calcutta! 7,000 miles of wire! The signals were excellent, and the speed attained was not less than 12, perhaps 14, words per minute.—*Telegraphist, London.*