

REPLY POST-CARDS.—The British Post Office authorities have issued a notice that on and after the 1st October double or reply inland post-cards, bearing an impressed $\frac{1}{2}$ d. stamp on each portion, will be sold to the public at all post-offices, the price of a single thin card being $2\frac{1}{2}$ cents, and that of a stout card 3 cents.

ANSWERS TO CORRESPONDENTS.

R. I. C. E.—Subscribe to the *Consulting Engineer*, published in Toronto. It is by far the ablest journal connected with the engineering profession that has ever been published in Canada.

EDISON'S LIGHT IN USE.

RESULTS IN NEW YORK CITY AND OUT OF TOWN.

The work of the Edison Electric Light Company in the down-town district has almost ceased to be an experiment; the lamps have burned steadily, night and day whenever wanted, since the 4th of September. The manufacturers of fixtures are overtaxed in supplying the demand, or the introduction of the lamps would go on faster; as it is, about one hundred lamps a day are added to the system, and enough are in operation at points further away from the central station to prove that the conductors are perfect and that no difficulty need be feared even on longer circuits. From the Pearl street station to the banking house of Drexel, Morgan & Co., at Broad and Wall streets, is about half a mile, and is the longest distance over which the current is sent in this district. The only complaints received come from persons who, having seen the arc lights in the streets, imagine that the Edison light would be something of that kind, and are disappointed at finding it of about the same power as a good gas burner. The metres are going in as fast as the inspector of the Board of Fire Underwriters passes upon the "wiring" of the buildings, and are found to work well. The upper floors of the central station in Pearl street are being fitted up as offices for the business of the district. An ingenious arrangement for detecting serious differences in the amount of light given has been introduced. When the light becomes too strong, owing to a large number of lamps being suddenly extinguished, a lamp painted red, lights up automatically, and a bell begins to ring. When the light becomes too weak a blue lamp lights up and the bell rings, and continues to ring until some more currents are turned on. By the first of next January the company hopes to have all their lights burning, and the business is settled on as firm a footing as that of the gas companies.

Outside the city the Edison Company now has 16,976 lamps run by isolated plants, several of which are in this city. The *Herald* building, which is not in the district, has a plant of its own, and for several months has run 500 lamps from its own dynamo. Among the places into which the Edison light has been recently introduced, will be shortly, is the new Fall River steamboat *Pilgrim*, which is to have 802 lamps; the American Printing and Dye Works at Fall River has 250 lamps; the Baltimore Sun, 150; the United States Fish Commission steamer *Albatross*, 130; Amory Mills, Manchester, 250; Bridgeport Organ Company, 250; Partridge's dry goods store, Chicago, 310; Best Brewery, Milwaukee, 506; Beatty's Organ Factory, Washington, N.J., 300. The most remarkable letter received by the Edison Company, in response to a request for statistics of cost, is from the Wamsutta Mills, New Bedford, Mass., whose agent, Edward Kilburn, reports that, after using three hundred Edison lamps for one year, the saving over gas at \$2 per 1,000 feet—the price formerly paid—has been \$2,250. Another report from the Merrick Thread Mills, at Holyoke, Mass., gives the cost of 120 lamps for 1,080 hours of burning at \$42, as against \$275 for gas; but this comparison is unfair, because no account is taken of the cost of the power used except the estimated coal burned. The greatest durability of lamps has been in these mills, where, with 120 lamps in use, only five have broken since last April.—*N.Y. Evening Post*, September 30.

STILLING THE WAVES WITH OIL.

In Parliament recently, the Earl of Carnarvon called attention to the effects said to be produced by pouring oil upon the sea in tempestuous weather, and inquired what measures the Board of Trade, had adopted to test the value of recent experiments, and to encourage a discovery valuable to life and property at sea.

Lord Sudeley said the idea of throwing oil on troubled waters had a certain fascination about it which would always render the experiment interesting. Unfortunately, it was a subject on which a great deal of sensational and impracticable matter had been published. There was no doubt upon a certain point. With special conditions of wind, tide, and current, oil on troubled waters was of considerable use, and undoubtedly it had been found of advantage on tidal bars, and in case of boats beaching through a surf. They must, however, divert themselves of all idea that it would altogether prevent shipwreck and loss of life on harbor bars. Oil on waves had been constantly used on the Assyrian coast, and in Pliny's time it had been used by divers to keep the waters smooth so that they might get more light. Dr. Badley, in 1857, had tried many experiments on the subject, but they were not very successful. A number of papers had also been read at many institutions, and there had been a very able review article on the subject. The Board of Trade had taken great interest in the matter, and they were most anxious

THE STOCK MARKET.

The following table shows the highest and lowest prices of stocks on the Montreal Stock Exchange on each day of the week ended 5th October, 1882, and the number of shares reported as sold during the week.

STOCKS IN MONTREAL.	Share.	Capital Paid up.	Rest.	Fri.		Sat.		Mon.		Tues.		Wed.		Thurs.		Total Trans.
				L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	
Bank of Montreal	200	\$11,999,200	\$5,500,000	210	211	210	211	211	211	211	211	210	211	210	211	531
Merchants Bank	100	5,614,570	525,000	130	131	130	131	131	131	132	132	131	132	132	133	1031
Canadian Bk of Com.	50	6,000,000	1,400,000	143	143	143	143	143	143	143	143	143	143	143	143	1085
Bank of Toronto	100	2,000,000	660,000	180	180	180	181	180	181	180	181	180	181	180	181	794
Ontario Bank	40	2,998,280	100,000	128	128	128	129	128	129	128	129	128	129	128	129	178
Banque du Peuple	50	1,600,000	240,000	130	130	130	131	130	131	130	131	130	131	130	131	495
Bank British North A.	250	4,866,666	1,216,000	140	140	140	140	140	140	140	140	140	140	140	140	495
Molson's Bank	50	2,000,000	140,000	130	130	130	131	130	131	130	131	130	131	130	131	495
Dominion Bank	50	970,250	415,000	130	130	130	131	130	131	130	131	130	131	130	131	495
Federal Bank	100	1,367,260	300,000	130	130	130	131	130	131	130	131	130	131	130	131	200
Imperial Bank of C.	100	1,175,553	400,000	130	130	130	131	130	131	130	131	130	131	130	131	200
Banque J. & C. Carier	25	500,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	200
Quebec Bank	100	2,500,000	325,000	130	130	130	131	130	131	130	131	130	131	130	131	200
Banque Nationale	50	2,000,000	150,000	130	130	130	131	130	131	130	131	130	131	130	131	200
Eastern Townships	50	1,382,787	220,000	130	130	130	131	130	131	130	131	130	131	130	131	200
Union Bank	100	1,895,510	18,000	130	130	130	131	130	131	130	131	130	131	130	131	200
Exchange Bank	100	500,000	200,000	130	130	130	131	130	131	130	131	130	131	130	131	200
Banque d'Hotelage	100	600,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	200
Montreal Tel. Co.	100	2,000,000	171,432	130	130	130	131	130	131	130	131	130	131	130	131	1510
Montreal Tel. Co.	50	711,709	21,704	130	130	130	131	130	131	130	131	130	131	130	131	1510
Rich. & Ont. Nav. Co.	100	1,565,000	151	130	130	130	131	130	131	130	131	130	131	130	131	4923
City Pass Ry. Co.	50	800,000	151	130	130	130	131	130	131	130	131	130	131	130	131	2800
City Gas Co.	40	1,800,000	151	130	130	130	131	130	131	130	131	130	131	130	131	4206
Canada Cotton Co.	100	1,800,000	151	130	130	130	131	130	131	130	131	130	131	130	131	4206
Royal Canadian In. Co.	50	1,800,000	151	130	130	130	131	130	131	130	131	130	131	130	131	4206
Dominion 5 p.c. Stock	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Ont. Investment Ass.	100	612,532	64,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Loan & Mortgage	50	481,027	64,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Mont. Building Ass.	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
St. Paul M. & M. W. Way	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Graphic Printing Co.	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Canada Shipping Co.	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Montreal Cotton Co.	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Dundas Cotton Co.	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Canada Paper Co.	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Canada Central Bonds	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206
Champlain & St. L.	100	100,000	100,000	130	130	130	131	130	131	130	131	130	131	130	131	4206

to collect all the authentic facts which could be obtained. The Board of Trade, however, did not see its way to expend money or to become investors in this matter. It seemed to them that it was their duty in this respect to carry out the same views as they had in regard to railways—namely, to encourage experiments by others. After referring to Mr. Shield's experiments at Peterhead, and to their admittedly inconclusive character, pointing to the fact insisted on by many authorities, that oil was useless in very severe gales of wind, the noble lord said that those experiments would be repeated during the coming winter, and would be carefully watched and recorded. There was no doubt oil would be of use to throw overboard during a wreck to enable boats to approach, and it might be of use when boats were being veered down to a wreck from the windward. There seemed also something in the idea of oil attached to a lifebuoy, for as it would smooth the surface, it would enable the buoy to be better seen, and it would give the drowning man if he did see it, a better chance of getting hold of the lifebuoy. In this way, therefore, it seemed very worthy of trial.—*London Standard Parliamentary Report*.

THE COST OF BRITISH LIVING.

From a report read by Professor L. one Levi before a section of the British Association for the Advancement of Science, we learn that the gross personal expenditure of the United Kingdom amounted last year to £878,000,000 of which sum £728,000,000, or about 83 per cent., was probably spent on necessities, and £150,000,000, or 17 per cent., on luxuries and waste. The investigation of the committee shows that of this gross sum the working classes expended £423,600,000, or \$2,118,000,000, and the middle and higher class £454,000,000, or \$2,270,000,000. The reports point out that the expenditure on the necessities of life has greatly increased within the past few years, and that a comparison of the quantities per head consumed of the principal imported articles shows that the people now have a much greater command over the articles of food than they previously enjoyed, and what is highly encouraging, their expenditure on these has increased in a larger proportion than the expenditure on account of alcoholic drinks and other luxuries. With regard to the relative expenditure of the classes on necessities and luxuries, the report shows that the working classes expended 80 per cent. on necessities and 20 per cent. on luxuries, while the middle and upper classes expended 86 per cent. on necessities and 14 per cent. on luxuries. These figures show that the working classes are more prodigal in their expenditure for luxuries than those above them, a fact, which, the report says, is to be regretted, because it lessens their available means for necessities. The report places the total income of the United Kingdom at £1,000,000,000, equal to \$5,000,000,000. Of this sum it is estimated that £436,000,000 represents the earnings of the laboring classes, and £564,000,000 those of the middle and higher classes. Deducting expenditure, there is left to the working classes a surplus of £13,000,000, and to the middle and higher classes one of £110,000,000. These figures are interesting in showing the general progress and thrift of the country, and it would be a good thing if some committee of economists and statisticians would undertake a like work for the United States. A comparison between the two countries would be interesting in showing the difference between a free trade country and one in which the system of protection is deemed necessary to the welfare of the laboring classes.

PEDESTRIAN, who has dropped a penny in front of "a poor, blind man;" "Why, you humbug, you're not blind." Beggar: "Not I, sir. If the card says I am, they must have given me the wrong one. I'm deaf and dumb."

INSURANCE IN WINNIPEG.—Insurance companies doing business in Winnipeg have combined to keep up the rates. The consequence is that a risk which is taken at fifty cents in Toronto is not taken under \$1.12 in the millionaire's paradise. There is some justice, it would seem, in charging a higher rate in Winnipeg than in Toronto, because the risk in the former place, owing to the large number of frame buildings and the small area covered by the fire limits, is greater. Still Winnipeg insurers are dissatisfied, and they are endeavoring to induce some of the American companies not yet doing business in Canada to go over and help them. These companies, it is alleged, will not have to make the \$50,000 deposit with the Dominion Government, as they will not establish agencies in Canada. The Canadian insurer will simply step across the line and insure there, risking the recovery of his money in case his building is consumed by fire.—*Mail*.

A ROCKY MOUNTAIN RAILWAY TUNNEL.—The Denver and South Park Division of the Union Pacific Railroad pierces the main range of the Rocky Mountains, 150 miles southwest of Denver, Colorado. The length of the tunnel is 1,700 feet, and its altitude above the sea 11,500 feet. The approaches on either side are described as marvels of engineering skill, laid through scenes unrivaled for grandeur and magnificence. Although the tunnel commences with a sharp curve at its eastern end, so nicely was the engineering done, that when workmen from either side met in the heart of the great snowy range, they found only about one inch variation in their respective horizons. This tunnel, said to be the highest in America or Europe, leads to the new silver region of Gunnison.

NEW U. S. RAILWAYS.—The amount of railroad building that is going on in the United States is something almost incredible. In the month of August last 1,274 miles were constructed, and the total for 1882 up to September is over 7,000 miles. The construction for the entire year is estimated at 10,500 miles, and the cost of railways built this year is on an average \$25,000 per mile, or \$175,000,000 for the eight months. When a nation spends a million dollars per day on building railroads there ought not to be much said about the decline of her carrying trade.

PLEASURE AND BUSINESS.—An American country editor who had the misfortune to lose his wife had the following combination epitaph engraved upon her tombstone: "To the memory of Tabitha, wife of Moses Skinner, Esq., gentlemanly editor of the *Trombone*. Terms, \$3 a year, invariably in advance. A kind mother and an exemplary wife. Office over Coleman's grocery, up two flights of stairs. Knock hard. We shall miss thee, mother, we shall miss thee. Job printing solicited."

THE CHEAPER LIGHT.—The *Sanitary Engineer* says the substitution of electric lighting by the use of two machines driven by one engine instead of gas, at the South Kensington Museum, London, has resulted in a saving in the working expenses at the rate of nearly \$3,700 a year, or more than \$112 per annum for each lamp. Up to the end of last year the 32 lamps illuminating the Lord President's Court and the Sheepshanks and Raphael Galleries had been at work for six months, or 345 hours of lighting.

THE FASTEST TRIP.—The Guion Line steamer *Alaska*, Captain Murray, which sailed from New York September 13, for Queenstown and Liverpool, was signaled passing Fastnet at two o'clock September 19. She made the trip in six days fifteen hours and nineteen minutes. This is the fastest trip ever made between America and Europe. The next fastest time was made by the *Alaska*—namely, six days twenty-two hours and ten minutes to Queenstown.