

The visitors of the season are not pure gold, nor is the influence they exert a good one. The pitiful scramble, the begging, manœuvring, expostulating, intriguing for Government House "cards"—the exultation of the one party and the indignation and disappointment of the other—are enough to make a Canadian blush who has any pride in his country. What an idea of Canada's capital the Aide-de-Camp at Rideau Hall must obtain from his first laborious and trying season in Ottawa! No doubt when he knows more of the country he thinks more highly of it; but the impression is still inevitable that the least favourable and prepossessing aspect of Canada is seen in its Capital during the parliamentary season. The Colonial Throne is not quite a seat of comfort to its occupants, and calls for constant exercises of good humour, tact and patience; but when the tenants of Government House are at liberty to go afield and breathe the purer air of the Provinces, and draw breath after their social sufferings, they find in a better acquaintance with the country a refreshing change. The unaffected genuineness of provincial life must be a contrast to the varnished vulgarity which invades the Capital in the early months of the year in quest of these bits of pasteboard, sometimes obtained by undignified solicitation or less respectable stratagem, and presumably borne away in triumph from the hard fought field as social credentials.

L. M.

THE NICARAGUAN TREATY AND SOUTH AMERICAN TRADE.

By the Nicaraguan Treaty the United States Government undertakes to connect by a canal the two oceans which lave the opposite shores of Nicaragua. By another convention, known as the Clayton-Bulwer Treaty, which has not been formally terminated, she bound herself not to build any canal across the Isthmus of Panama. A French company, with M. de Lesseps at its head, had in the meantime begun to construct a canal across the Isthmus, by the Chagres River. The work was begun without any protest from England. Mr. Blaine protested on behalf of the United States, but not on the ground that the stipulations of the Clayton-Bulwer Treaty were being made of no account by the intervention of a third party. If he had done so, and had asked England to join in the protest, the French adventurers might have been baulked. But the United States did not desire to make a treaty which tied her hands whilst the hands of all other nations, except England, were free. If Frenchmen are at liberty to carry a canal across the Isthmus, the United States is not likely to continue to deny herself a like liberty. There must be some means of terminating the Bulwer-Clayton Treaty without violating good faith or putting an undue strain upon the international relations of the contracting parties. Treaties are not eternal; they are made to meet some exigency of the time, and they expire with the causes that led to their being made. Neither England nor the United States would have bound herself by the inhibitions of the Clayton-Bulwer Treaty if France had already begun to dig the Panama Canal, and there is no reason why either of the treaty nations should allow herself less liberty than is permitted to a third power. The United States owes it to herself to seek an honourable release from the obligations of the Clayton-Bulwer Treaty, and so long as England adheres to the object of that instrument, she is bound to do what she can to enforce its inhibitions on other nations. By neglecting to do so, she has, in effect, given up the attempt to enforce the principle of the treaty. To the objection that the United States would be at liberty, under the treaty with Nicaragua, to fortify the strip of land which is to be conceded to her for the purposes of the canal, the reply is that the fortifications would be of no use: so easy would it be, by sinking a single vessel, to close the canal in time of war. In time of peace the owner of the canal would be happy to receive tolls from all comers.

That the United States could greatly add to its trade with Central and South America by means of commercial treaties is not open to question. And already treaties with some of the Central American States have been formed in addition to the treaty with Spain and another with San Domingo. The States of Central and South America, having large sums annually to pay in interest on their public debts, find it necessary to export more than they import; their export being \$352,600,000, and their imports \$293,400,000. This disparity must continue so long as their foreign indebtedness remains what it is; but if they sold more, there would be a proportionate increase in their purchasing power. The United States' share in this trade is represented by exports, \$47,000,000, and imports, \$293,400,000. For every dollar's worth of goods the United States sends to these countries, Europe sends five dollars' worth. The greater cheapness of European goods gives them the hold which they have on those markets; and if discriminating duties under the treaties changed the course of the trade, Central and South American consumers would find that they had put themselves under a restraint which, when the conditions of trade with all nations

were equal, they rejected, and that the cheap goods which they now buy would, by their own act, have been placed out of their reach. The increase in the price of the goods would make them cost nearly as much as the goods they now buy with the duty superadded. These States would find some difficulty in making up the loss of customs revenue, on which they chiefly depend. The United States would not always, or, perhaps, often, be able to monopolize the benefits of these treaties; the benefits would be shared by any other country which might obtain treaties with Central and South America, giving it all the advantages in trade and navigation to which the most favoured nation is or can be entitled. The free admission of sugar and molasses would cause the United States a loss of revenue one fourth greater than the estimated surplus of the present year; and if treaties with all the countries embraced in the plan of the Secretary Frelinghuysen, were carried into effect little or nothing of the sugar duties would be left. The revenue difficulty could be got over by reducing below its present figure (\$57,000,000) the annual contribution to the Sinking Fund; but even then there would not be much margin for reducing the tariff on articles which are highly protected, and there would be some danger that the worst features of protectionism would be fastened on the country for years to come. The *New York Times* is of opinion that the rejection of the Spanish treaty by Congress is certain. Nevertheless the policy of these treaties, amidst all these drawbacks, has much to recommend it.

C. L.

HOUSE-HEATING IN WINTER.

DURING severe and protracted winters we are liable to exclude the fresh, wholesome air from our common dwellings in endeavouring to keep out the cold and frost, and in so doing awaken a danger of which we are not perhaps sufficiently aware, and which we see with far less dread than could be desired. Neither heat nor cold in the abstract can materially affect the quality of the air we breathe, as regards its wholesomeness, though it is a fact undeniable that the temperature of the inspired air very greatly modifies the state of health. In a healthy adult, however, the temperature of the house is not very material, provided there be sufficient and suitable clothing and food, and that the air be pure. The degree of external cold—that is the degree of cold outside the body—for the delicate and very young or old, whose systems are not so vigorous as those of robust constitutions, is however of considerable moment, and therefore our houses must be kept conveniently warmed. Again, it is almost necessary that artificial heat be supplied for our cooking and for purposes of ventilation.

The points which are brought before us to discuss in respect to supplying artificial warmth in our dwellings, churches, etc., are two, viz.:—1st, What degree of warmth should be given? 2nd, Of what kind is it to consist and how is it to be supplied? For a healthy adult any temperature between 50° and 65° Fahr. will be found comfortable, provided food and clothing are suitably added. Dr. Park's gives between 48° and 60°, but this I am inclined to look on as a little below what will be found comfortable by most people. Babies and old people require an external temperature of from 65° to 75°, in addition to abundant clothes and food. The general temperature of hospital wards is 60° Fahr., but this of course greatly depends upon the form of diseases treated in the ward.

So much, then, for the degree of warmth which is found best suited to the healthiness of our habitations and for purposes of efficient ventilation. To proceed to the second point, viz., Of what kind, and how given? Different kinds of artificial heat are communicated by radiation, conduction, and convection. The latter term is applied to the conveyance from one place to another of heat by masses of air; while conduction is the passage of heat from one particle of air or matter of any kind to another—a very slow process. Radiant heat is perhaps the best kind, as the rays of heat striking the body warm it, but do not affect the air through which they pass, and add nothing to it; in which case it is obvious no deleterious or unhealthy vapours can be added to the air. Radiant heat is, however, expensive and feeble, since the effect lessens as the square of the distance from the fire—as, for instance, if at the distance of one foot from the fire the warming effect is said to be equal to one, at four feet it will be sixteen times less. A long room, therefore, can never be properly warmed by radiation. Radiant heat is undoubtedly the healthiest, and, moreover, the open fire-place which is necessary acts as a first-class ventilator. For this reason, and for the convenience and cheerfulness of the open grate, it is frequently employed and supplemented by conduction and convection, in which case the air is heated by stove-pipes, stoves, hot water or steam-pipes, etc. The air in this case is charged with heat by conduction, i.e., by the heat being conducted to the particles of air from the stove-pipes, etc., and