

cular items in the government proposition, but it would be found difficult for any one to obtain \$2,200,000 of additional revenue without exciting opposition.

GAS vs. ELECTRICITY.

Although it seems to be almost a certainty that the electric light will, at some period more or less remote, supersede gas for the illumination of large open spaces, public buildings, and for out-door illuminations generally, indeed wherever light on a large scale is required, it is another question as to its taking the place of gas for domestic and general purposes. The method of illumination by electricity is surrounded by many practical difficulties. The liability of the machinery to derangement at any moment, the defective character of the candles, the incessant variations of the illuminating power, want of diffusibility and means of storage, the constant care and attention the lights require, and the enormous cost of producing the light, all make its use for domestic purposes a great problem. On the other hand, there is in the public mind a strong prejudice against gas companies, whose dealings with their customers too often reflect the haughtiness of the monopoly they enjoy; had they been more popular, there would not have been such a shout of joy at the proposal to introduce the electric light. The gas meter reckoning in the darkness of the cellar enormous quantities of cubic feet of gas which nearly every householder, at least once a month, pronounces to be positive falsehood, and whose figures must be accepted under penalty of seeing the supply cut off, is the cause of much recrimination. The instrument is the property of the Company, is adjusted by the Company, its registering is law, and any complaint against its working is visited upon the complainer with trouble and expense. Against lack of pressure, compelling one to grope about in his house, in the sort of light which Milton described as enough "to make darkness visible;" against too much pressure, causing escape of unburnt gas, flickering, jumping, or whistling; against noxious smells in the combustion of unpurified gas, there is no redress. No wonder that the public should have welcomed the idea of a new illuminating power, that does not bring with it risk of explosion, nor bad smell; that does not heat or vitiate the air of the rooms, but gives a vastly superior light.

The necessity for improving all gas apparatus, and for cheapening its production, has been felt by the gas com-

panies. Many have already intimated their intention to become their own gas-fitters, and propose to supply stoves for heating, &c. Between petroleum oil and electric light competition, it is to be hoped that gas companies will have a sharp eye to all new inventions, and not ignore the fact that the appliances for the consumption of gas are capable of great improvement. Reduction in price is already taking place. The Hartford, Conn., Gas Company has reduced the price of gas to \$2 per 1,000 cubic feet, and the Lowell Gas Company has gone still lower, and announce a reduction to \$1.80 after April 1st. In this city, after the 1st of May, gas is to be reduced to \$2 per 1,000 feet, and yet, compared with Europe, this reduction is not enough. The price of gas in London, England, is 3s. 6d. In the country, the average is 6s. 6d., and in the large cities about 5 shillings. In Paris, far from coal fields, the price per 1,000 cubic feet is \$1.38, and, as it will be shown, the city itself derives a large income on the price paid to the gas company.

It is not generally known that the residual products in gas making, consisting of coke, breeze, tar and ammoniacal liquor, realize to the companies a return equal to a third of the amount received from the sale of gas. The following table will give a clear idea of the value of residuals produced by the various London Companies during 1876, as compared with the cost of coal consumed.

Net proceeds of residuals per cent. on price of coals:

Gas Light Co.....	48.1	p. c.
Imperial Co.....	51.4	"
Independent.....	61.0	"
Commercial.....	54.7	"
Ratcliff.....	77.0	"
London.....	60.5	"
Phoenix.....	48.5	"
S. Metropolitan.....	68.5	"
Surrey Cons.....	60.5	"

Paris, 1877, coal purchased...frs. 20,485,737
Sale of residuals.....frs. 17,138,772

These telling figures show that, were the consumption of gas to experience a material decrease, the various products now sold at low prices as residuals, being necessities to many staple manufacturers, would still be required, and the companies could ask and obtain much higher prices for what would then become the products of a distinct and special form of industry.

The scare that prompted many stockholders in various gas companies to sacrifice their property was certainly unreasonable. The severe tests to which electric light has been submitted in Paris and in

London have demonstrated that, under the most economical processes, electric light costs two and three-fifths times that of gas of equal illuminating intensity. The reduction in the price of gas, the many improvements taking place in gas apparatus, and in the manipulation and sale of the by-products of gas making, as ammoniacal salts, liquid hydrocarbons, &c., warrant the belief that confidence may be maintained in the solidity of gas stock investments.

The statement of the Parisian Gas Company may be of some interest to stockholders in kindred companies, and also to cities that may regret having been too ready in granting charters. The expenses of the Paris company for the year 1877 amount to 40,076,567 francs, including 4,505,783 francs paid for city and State taxes. The receipts amount to 69,103,784 francs, composed of 48,205,805 francs for sale of gas, 191,197,228 cubic meters (1 metre being equal to 35.31 cubic feet), and, as already said, 17,138,772 francs for residuals. The profits for the year 1877 are 29,100,000 francs. According to the charter a dividend of 5 per cent. on the shares, amounting to 12,400,000 francs is first put aside, and the balance, 16,700,000 francs, is divided equally between the stockholders and the city. The city of Paris is in consequence, after having received taxes and dues, the receiver of \$1,670,000 as her share in the profits of the sale of gas. No wonder the shares of the company of a par value of 500 francs are held to-day at 1450 francs, in spite of Edison's immediate prospective success.

NATIONAL CURRENCY.

We have prefixed to these remarks the designation given to a proposed inconvertible paper currency, which we deeply regret to find some of the supporters of Sir John Macdonald's Administration are making efforts to establish. It appears that the Hon. Isaac Buchanan, who has for many years employed his influence in favor of such a currency, has addressed a letter to Mr. Robertson, M.P. for Hamilton, recommending what he rather absurdly designates as "the principle of the postage stamp," but which principle is as different from what Mr. Buchanan recommends as it is possible to conceive. The principle of the postage stamp is that, for convenience sake, instead of paying the postage tax in money, stamps are sold for money, and, when used, immediately cancelled. If that principle were adopted in the case of revenue duties, notes would be paid for at a sub-treasury in paper convertible into gold, then handed