

science and so quickly has electric currents for power and lighting purposes been taken up by the public, that people have scarcely had time to become acquainted with the nature of the element that they have suddenly grown so familiar with. It is needful, however, to know, from such instances as the above, that, as an experienced man puts it, "electricity is not to be fooled with; we don't know enough about it yet." And it is comparatively easy to take precautions against electrical fires when people have learned that a necessity for such care exists.

PROTECTION INDEED.

It appears that the doses of protection now being administered to the American people under the Dingley tariff, enacted the other day, are stiff indeed. An officer of the United States Government, who has had to do with the framing of all tariffs in that country since 1875, has been engaged in making a comparison of the present tariff law with the Wilson Act, authorized by Congress not long before. The comparison is made in rates expressed in ad-valorem terms between the present law and the Wilson law. The statement places the average duty rate under the new law at 54.66 per cent. ad valorem, as against an average of 40.10 under the Wilson law, the averages being figured upon the basis of values in 1896.

Increases in percentage of duty under the Dingley over the Wilson tariff are stated as under :

	Wilson bill.	Dingley bill.
Chemicals, raised from	28.63 p.c. to	30.67 p.c.
Wools and woolens	47.62 "	86.54 "
Silks	49.96 "	53.41 "
Earthen and glassware	35.00 "	52.47 "
Metals	38.11 "	49.24 "
Sugars	40.91 "	74.16 "
Tobacco	109.06 "	121.90 "
Agricultural products	22.44 "	38.42 "
Spirits	61.54 "	68.30 "
Cotton manufactures.....	42.75 "	52.33 "

Calculations are then made as to what amount of extra revenue will be raised by the new duties. But these calculations are based upon the supposition that the volume and value of goods imported will be the same in 1897-98 as it was in 1896-97. It by no means follows, however, that an equal volume will be imported; the experience has been that excessively high tariffs tend on the one hand to increase smuggling, and on the other to lessen the purchases of the foreign goods so taxed. According to the Government officials, some of the increases expected in revenue are as follows: Chemicals, from \$5,619,239 to \$8,423,084; earthenware and glassware, from \$8,006,839 to \$12,303,148; metals, from \$13,196,416 to \$17,487,482; wools, from \$605,749 to \$2,439,536; sugars, from \$29,910,703 to \$54,207,642; agricultural products, from \$7,727,614 to \$14,587,601. Thus the increase hoped for in these six items is \$44,390,000, or about 40½ per cent.

A PLEA FOR WATERWORKS AND SEWERAGE.

For several recent issues, and possibly for a longer time, the Summerside, Prince Edward Island *Journal* has been educating the residents of that pretty town to the advantages of waterworks and a system of sewerage. What it says on the subject may be taken to heart by some scores of other places in Canada. The argument is that the health, the domestic convenience, and the comfort of the people would be promoted by the introduction of water works and sewerage, whether un-

dertaken by the town or awarded to a company for a term of years. It would result in a decrease in the rates of fire insurance; the enhanced value of all property in the town, the keeping of the streets clean, and sprinkled in the dusty season, at a much less cost than now; the attraction of new residents to the town, and the keeping at home of people who are now thinking of leaving; the improved hygienic conditions and the better health of the people; the added attractiveness and cleanliness of the town; the additional work it would give our own people during the process of construction. These and many others, are indisputable arguments, which might all be elaborated at length, in favor of the speedy introduction of a copious supply of pure water, which would make the town sweet and healthy, and worth living in."

THE BRITISH ASSOCIATION LECTURES.

It was stated by the chairman of the meeting at Massey Hall, on Friday night last, that the electrical experiments in the reduction of metals, so successfully carried out by the lecturer of that evening, had never before been attempted in any country on the same scale. This means, we assume, that the melting of the precious metals by means of an electric current of high intensity has hitherto been done in private or college laboratories. We know that aluminum has for several years been produced for commercial purposes (notably in Switzerland and in Cleveland, Ohio), by means of the electric furnace, and on a large scale. But this process of reduction is not yet generally employed for gold and silver.

It is no small compliment to Canada, therefore, and indeed it is no ordinary event, that such examples of recent progress in metallurgical processes should be demonstrated in a Canadian city and before an assemblage of savants of the first rank. Nothing more striking has found place in the programme of the British Association at its Toronto meeting than this lecture of Mr. Roberts-Austen upon the metals of Canada, and the chemical and electrical experiments which accompanied it. So complete and successful were they, so perfect the arrangements of the skilled men who assisted the lecturer, that even the princes among physicists were surprised at the rapidity and precision of the results achieved before their eyes, while the less-instructed public were dazzled by the mysterious beauty of the spectacle.

One scarcely knows which to admire the most: the glowing appreciation shown by the lecturer of the metallic wealth of Canada, his mastery of the subject in theory and practice, or the tact with which he compelled interest in his lecture by means of the maps and the ingenious experiments by which it was accompanied. Canada owes much to Mr. Roberts-Austen for his services on this occasion, for his utterances—now glowing with encouragement, now laden with warning—were of value in drawing the interest of strangers to our metal fields not less than inculcating prudence among Canadian investors.

THE BANKERS OF THE UNITED STATES IN CONVENTION.

The annual convention of the American Bankers' Association was held at Detroit, August 17th and the two following days. The proceedings were of considerable interest, but lack of space prevents more than an outline of the papers read at the convention and the discussions which followed. The president, Mr. Robert J. Lowery, was optimistic in regard to the industrial outlook in the United States, but wisely deprecated any attempts on the part of leaders in commerce to bring about a sudden transformation from depression to extreme commercial activity. "No one will deny," said Mr. Lowery, "that our country, for the last several years, has been passing through the deep waters of depression.