

infinitesimal foot-power of a sewing machine. In the heating and welding of materials, as a part of the process of manufacture, electricity, by its control, speed and concentration or distribution, enjoys a peculiar field, distinct from either coal or gas.

Electric railways have not reached beyond the industrial, urban, interurban and terminal use. The electrification of trunk lines, which awaits the supply of economic electric power at frequent intervals along the route and the overcoming of the many necessary minor changes in trunk line operation, besides the enormous capital outlay required, comprise a combination of requirements not considered economically attractive as yet.

Electrometallurgy and electrochemistry have been responsible for the handling of materials not workable by any other means, have made available new materials and have greatly cheapened the production of many important materials of wide use. Aluminum, calcium carbide, chromium, cyanamid, silicon, etc., are products only from electrical processes. Alkalies, hypochlorite, phosphorous, magnesium, sodium, nitrates, etc., are produced electrically at the lowest cost.

Telephony and telegraphy; radio-telephony and radio-telegraphy; radiography and therapeutics, electricity, while possibly providing the greatest conveniences and aids afforded to mankind by electricity, are not of such power-consuming magnitude as to require further mention.

The source of electric power for commercial purposes is motive power produced by steam, oil, gas or water. In Canada, it is notable that, without exception, all cities are now supplied by or are within the economic distribution zone of hydro-electric sources, and, further, commercial conditions are such that power from these sources is available to the customer at very attractive rates and it is apparent that the future of power-consuming industries has its foundation in the bountiful and wide-spread water power resources of the country.

The Dominion of Canada has an area of 3,745,574 square miles, stretching from the Atlantic to the Pacific and from the northern boundary of the United States to the Arctic Ocean.

The Northwest Territories, the vast northern portion of