

cooking is done by coal, charcoal, or gas.

As figures constitute the most convincing argument, the following table is taken from a paper read before the Canadian Electrical Association last year. It shows the comparative cost of cooking various articles on the electric range and gas range, electricity being taken at 2 cents per kilowatt-hour and gas at \$1.00 per thousand cubic feet.

ARTICLE	Quantity	ELECTRIC RANGE		GAS RANGE	
		Minutes	Cost (Cents)	Minutes	Cost (Cents)
Roast Beef	3 lbs.	109	2.6	70	3.9
Steamed Potatoes	14 lbs.	87	0.34	45	0.5
Onions	7 lbs.	145	0.7	65	1.2
Broiled Steak	Oven	25	0.9
Bread	Toil	77	2.5	55	2.7
Apple Pies	2	60	1.5	70	3.0
Stuffed Pies	2	58	1.9	70	3.0
Roiled Chicken	3 lbs.	96	1.3	101	1.4

In many localities, particularly in Ontario, the rate for electricity is as low as 1c. per kw. hr. and the cost given under electric range will be just one-half that shown in the table.

As a further confirmation of the low cost of electric baking, we may take the figures obtained in a test carried out in a western city where batches of three ordinary domestic loaves of bread were baked, one batch in a modern gas range and the other in an electric range. Taking the same comparative rates, that is, electricity at 2 cents per kw. hr. and gas at \$1 per thousand cubic feet, the cost with gas was 6.0c. as compared with only 2.8 cents with electricity.

In general the experience of those who have tried electric cooking has brought out the following facts:

(1) Joints of meat and steak are cooked better and lose less in weight than by other means, the electric method requiring also a shorter period of training to enable the attendant to secure good results.

(2) The certainty that, if the same time is given for the same operation, exactly the same result will be produced.

(3) The convenience and cleanliness and the avoidance of an unhealthy atmosphere in the kitchen.

(4) Where rates for electricity are reasonably low a saving is effected.—L. G. D.

If the clothes make the man, let Canadians see it that the clothes are "made in Canada."

Smoke and Fume Nuisance

May be Eliminated by Process of Electrical Precipitation of Suspended Particles

Owing to the conservation movement in the United States and to the agitation of farmers against the smelter smoke nuisance, an efficient process of electrical precipita-

tioned to a suitable source of high electric potential. To keep the current flowing between the electrodes through the gases, unidirectional direct current is used. The gases passing between the electrodes become ionized and the suspended particles removed by the forces acting between the electrodes.

The process has been used successfully for precipitating smoke, cement dust, fumes from acid plants, chlorine gas from electro-

Educating Fishermen

Modern Methods of Handling Necessary to Increase the Use of Fish

Fish is certain to become a much more important supplement to the meat diet of Canadians than it is at present. It can be produced more cheaply; it possesses splendid nourishing qualities, and, when properly cooked, is a most palatable food.

Unfortunately, much of the fish offered for sale is not of a high quality. This may, in part, be traced to the crude, careless and often wasteful methods that are used by the fishermen in taking and handling fish, and the fact that such methods are used demonstrates the need for providing technical education for fishermen.

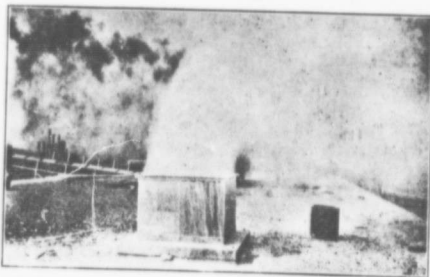
While Canada possesses one of the richest and most varied fisheries in the world, they are, in most instances, being exploited by men who have little or no technical knowledge of the natural history of fish, the proper methods of preparing fish for market, as well as of other aspects of the fisheries industry. Tradition plays a large part in the lives of many fishermen. It is extremely difficult for them to shake off the obsolete practices of their fathers and adopt those that experience in other countries has shown to be superior.

During the present winter the Canadian Fisheries Association was organized under very favourable auspices. It is gratifying to note that the new association was formed for the "development of the fishing industry on commercial, scientific and educational lines." The basic problem to be solved in building up the fishing industry and in popularizing the consumption of fish is the education of the fishermen.

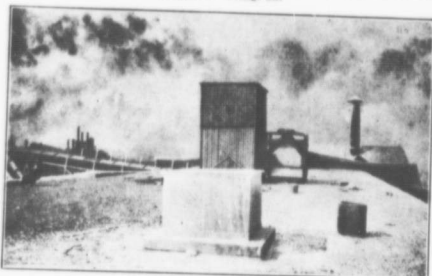
Schools for fishermen exist in practically every European maritime nation. It is in Japan, however, that fishery instruction is being carried to the greatest perfection.

Fish is a delicate food product, the handling of which requires a great deal of scientific knowledge and technical skill. This applies especially to the first stages of taking the fish and preparing them for market. Consequently, unless improvement can be brought about in the methods of the fishermen, the development of the fisheries industry will be needlessly slow and wasteful. The educational branch of the Canadian Fisheries Association has a splendid opportunity for useful work.—A. D.

At a recent meeting of the National Housing and Town Planning Council in Birmingham, the secretary, Mr. H. R. Aldridge, asserted that, since 1900, from 60,000 to 70,000 houses at a rental of less than £20 (\$97.33) per annum have been added to the existing housing accommodation of Great Britain.



Cut No. 93
Exhaust Flue from the Treater at the Hooker Electro-chemical Company's Plant at Niagara Falls, N. Y.—Voltage Off.



Cut No. 94
Exhaust Flue from the Treater at the Hooker Electro-chemical Company's Plant at Niagara Falls, N. Y.—Voltage Applied.

tion has been developed. The comparatively small cost of the installation, and the small amount of electric energy necessary for its operation, put it within the reach of almost any plant where its installation is desired or where a nuisance exists.

The process is used for removing either solid or liquid particles carried in suspension in air or other gases. This is done by submitting the gases and suspended particles to the action of a strong electric field maintained between so-called "collecting electrodes" and "discharge electrodes," the latter being insulated from the former and con-

REASONS FOR TOWN PLANNING

The need for town planning in Canada is greater to-day than ever before because of the: (1) General tendency to urban growth; (2) Growing size of large cities; (3) Separation of intimate connection between manufacturer and worker; (4) Increased rates of cost of shelter to income, due to hap-

azardous chemical plants, zinc oxide from roasting mills, tar from illuminating gas, and fumes and dust from smelters and many other industries.

It is not improbable that this process could be successfully used for collecting the "mist" from sulphite pulp plants and for overcoming the round-house smoke nuisance.

As an example of the power used, the plant shown in the illustration treats 30,000 cubic feet of gas per minute with a power consumption of from 3 to 5 kws., voltage 50,000.—W. J. D.

hazard growth; (5) Changing methods and increased use of means of transportation; (6) Need for better arterial roads; (7) Danger of congestion and unhealthy density of building.

The employer's interest in safety is rapidly transmitted to the workman to the advantage of both.