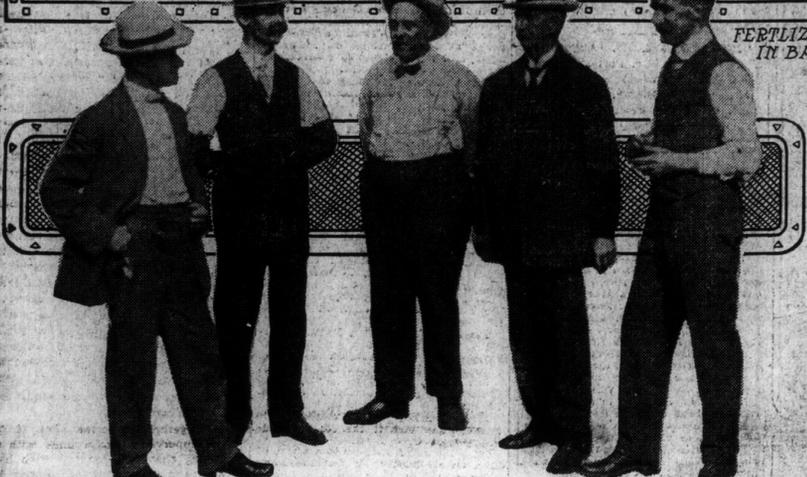


"FOR THE PEOPLE, BY THE PEOPLE"



MEN BEHIND THE PROJECT - FROM LEFT TO RIGHT - ALD. WHETTER, J. LAWRENSON, CHIEF ENGINEER - J. F. LAWSON, SUPT. OF CONSTRUCTION - ALD. DUNN - D. W. WRIGHT, SUPT. OF PLANT

FERTILIZING MACHINE IN BASEMENT



HOG KILLING ROOM AND SCRAPING HOGS

First Civic Abattoir in Canada is Placed in Operation—Toronto's Newest Public Ownership Project Will Help the Small Butcher and Reduce the Price of Meat and Improve Its Quality—Later on The City Will Probably Sell Meat Direct to the Citizens.

WHEN a few days ago the first bullock, especially groomed for the occasion, tore up the runway of the new civic abattoir and into the pen, from which led the various slaughtering stalls, little did he realize that when the edge descended upon his cranium he was being paid the highest honor that could be paid to one of his kin in Toronto. It was surely an honor, for he was the first bullock to be slaughtered in a civic abattoir in Canada.

Toronto's new civic abattoir is at last open for business. Although the official opening of the new venture will not be until Aug. 4, animals are now being slaughtered, and in a few days most of the eighteen or twenty small abattoirs in Toronto will have been closed down, and their business centered in the fine new building on Tecumseh street. When approaching the new abattoir it bears more the appearance of a church or an educational institution than a butchering establishment. It is of yellow brick with red tile roof, and the front elevation is decorated with two turrets, one at each side of the building. A wide lawn with a fine cement sidewalk adorns the street front, while the offices, splendidly equipped, are in the immediate front.

The cattle and other animals, however, will not use the front entrance. In the rear of the buildings on the railway lines, are the stock yards, roomy, and capable of holding nearly five thousand animals. From the stockyards is a runway which leads up to the second floor of the abattoir, on which all the killing is done. Along one side of the

killing floor is a passage thru which the animals are driven. Down the centre is a wide aisle which separates the killing stalls from cooling rooms on the same floor. The killing room is over thirty feet high, and is lighted by skylights over the entire roof.

Carefully Inspected.

Nine separate stalls, which will be assigned to the various butchers, are completely equipped for killing cattle and sheep, each stall has a box into which cattle are run before they are stunned, and which automatically dumps them onto the bleeding floor. Overhead tracks run everywhere, and at the entrance to each stall is a scale, upon which every carcass is weighed before being removed to the cooling chambers. Before the meat passes into the coolers it is run before a government inspector, who looks for any sign of disease, and also inspects the entrails, to insure that no infected meat is passed out for public consumption.

At the end of the row of slaughtering stalls is the hog slaughtering machine. The hogs are driven into a small pen and are carried on a revolving wheel onto a track and past the sticker. The dead hogs then slowly pass thru a bleeding passage and are dropped into the tank of water kept at 120 degrees. When the bristles are softened the hog is automatically lifted on a carrier into the scraper, which, by means of a series of paddles, removes the bristles. The animal is then ready for the butcher, and an inspector, who prepares it for the pickling vat, or cooler.

Each slaughtering stall has a corresponding cooling room, and before

the meat is placed inside it will have distinguished labels fastened to it. From the coolers the meat will be taken down on overhead tracks to the shipping platform on the west side of the building. Later in the year the freezing and cold storage system will be opened and will allow meat to be frozen solid for export and for long keeping. These rooms on the ground floor of the main building will have a capacity for over 10,000 carcasses as well as for large quantities of butter, eggs and other produce. The apartments are of varying temperature, from below zero for storing the meat to just a little below freezing, where it can be kept indefinitely.

These storerooms will enable but-

chers to kill at a constant pace and store any of their surplus meat resulting from an over supply in the market. When the abattoir is running to capacity it will be able to handle over 2000 animals a day. This will include every process, including that of disposing of the by-products. Each firm using the abattoir will supply its own men to kill, but the entire work will be under the supervision of the government inspectors, and the checking up of the meat, and the allotment of times and space in the storage rooms, and the killing floor, will be in the hands of the manager in the employ of the city.

In the rear of the main building, and connected with it by a bridge, is the refinery, power plant and

refrigerating plant. Steam will not be used in the building except for heating purposes, the refrigerating pump will be run by electric motor, while all the machinery will be run in the same manner.

Adjoining the power plant the refinery will take care of all the by-products of the slaughtering. Seven huge boilers, rendering pans and cooking vats are in this building, the material starting at the top of the four floors and working its way to the shipping and store-room in the basement.

Scheme Will Develop.

The new abattoir will be run on a co-operative plan, altho by a vote of the people last New Year's Day, it

was decided that the city should engage in the dead meat business. The abattoir will kill a certain number of animals on its own initiative, for sale to butchers who do not desire to do their own slaughtering. Later on the city will likely go right in for the selling of meat to its citizens.

The proverbial saying, that nothing but the squeal of a hog wasted will still hold good at the Toronto abattoir. Not only will the hair of the hogs be used, but the blood will be treated in huge machines, illustrated, and made into fertilizer, while the bones and entrails will be used for the same purpose.

The city, however, has made cer-

some of the by-products themselves in order to help pay for the upkeep of the building. All the blood will go to the city as will also all the refuse, while definite prices will be paid the butchers for hides, fat, tallow, and other side products that can be made use of. All condemned carcasses and butchered head cattle will be bought by the city.

Prices Charged

If it is desired by patrons the city supplies the butchers and charges accordingly. The price paid by the dealer for the right to kill his animals includes the use of the cooler for twenty-four hours.

The following are the rates that have been decided upon and it is expected that they will enable the butcher to save considerably over the cost of killing in individual establishments.

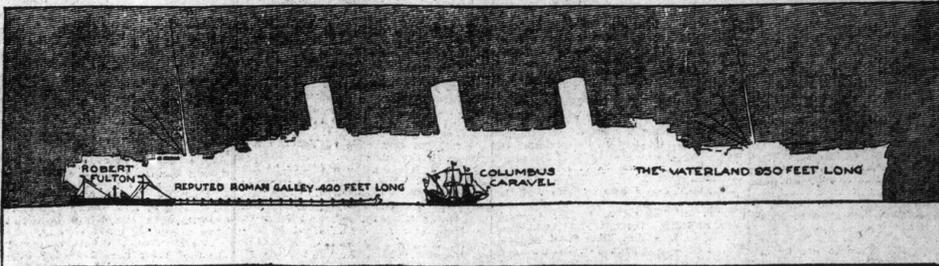
When butchers are provided by the city, and use of the premises inclusive:

Cattle, per head	75 cents
Calves, per head	20 cents
Hogs, per head	25 cents
Sheep and lambs, per head	15 cents
For use of premises only, users provide their own butchers:	
Cattle, per head	40 cents
Calves, per head	12 1/2 cents
Hogs, per head	15 cents
Sheep and lambs, per head	10 cents

The city will also be prepared to take in shipments of live stock from any drover, or farmer, kill them and sell the dressed carcasses, make returns to the consignor for hides, fat and by-products, less charges for killing, and immediately upon the sale of the product will forward the price realized, charging a sale commission of one-half per cent. of total value for beef and one per cent for other meats.

Not only will the citizens of Toronto get the benefit of the new venture but in this way the small farmer will be encouraged to send his product to Toronto and will receive a vastly better price than thru the medium of stock dealers. From the beginning to the end the abattoir will be run for the benefit of everybody concerned. It will assist the grower, the dealer and the consumer and the rules have been so constructed that the small man will have every chance to place his meat in his store just as cheaply and under just as splendid sanitary conditions as the large dealer. The meat killed under the best conditions will naturally reflect this in its quality.

New Facts About the Sea and Big Ships



The First Steamboat, and Ancient Rowing and Sailing Craft, Compared with the Biggest Modern Boat, the Waterland—The Newest Ocean Giant Is 950 Feet Long, 100 Feet in Beam, and the Height from Keel to Top of Mast Is 287 Feet.

FROM A point near the water, steamer, the ocean appears to be perfectly flat. If one climbed to the top of a high mast or rose by airship to a considerable height, the surface of the water would seem to be convex, forming a great bowl ending only at the horizon. Both these impressions are, of course, optical illusions, since the ocean follows the general line of the earth is spherical.

In crossing any large body of water the vessel must therefore climb up hill half the distance and descend on the other side. The elevation of the surface of the sea varies considerably in mid-ocean. In the Pacific it is from two to three feet, while in the Atlantic from nine to twelve feet.

In making a long voyage, as in crossing the Atlantic, the height of

this hill is surprisingly great. Taking the width of the Atlantic as approximately 8000 miles, the "mountain" which must be climbed by transatlantic ships measures nearly 150 miles in height. In other words, an ocean liner is obliged to "climb" a distance of 150 miles, or a gradient of about 20 per cent., and descend at the same angle on the other half of the trip.

Actual Height of Sea Waves.

It is only in the imagination of the poets that waves rise "mountains high." The exact altitude and length of waves have been measured with scientific accuracy and the record waves are carefully recorded. Waves in shallow water are, as a rule, higher than those in open or deep water. The height of a wave is commonly about one-fiftieth its length.

The longest wave on record was 2500 feet, measuring from crest to crest, and its period being about 22 seconds. Waves of extreme length are seldom very high. A wave 2500 feet in length, rising in deep water, will have a height of about 50 feet.

When a wave enters shallow water its crest becomes considerably higher, and one of a height of 40 feet will frequently rise to 50 feet. If it meets resistance, it may be thrown up twice this height.

In severe storms at sea waves rarely reach a height of fifty feet. The average in such time has a period of about ten seconds, which would indicate a length of about 500 feet. Waves with a period of ten seconds have a length of from 150 to 300 feet and a height of 23 feet, and form a very high sea.

It is generally agreed that Noah's Ark measured about 450 feet in length, 75 feet in breadth and 45 feet in depth. It is interesting to note that the proportions of these dimensions are practically the same as those of the great modern ocean liners.

The Greeks and Romans constructed several large vessels measuring upward of 500 feet. These were built for the emperor and rulers and were little more than enormous scoops without any means of propulsion. Upon these were erected elaborate cabin accommodations, and even gardens were planted. A Roman bath was installed on one of these boats.

A vessel 420 feet in length was built by Ptolemy, which was propelled by 500 rowers arranged in five banks, using oars fifty-seven feet in length. The boat is recorded to have developed considerable speed.