

New Cold Storage Plant

of the B. WILSON CO. LTD



A GROWING
VICTORIA
INDUSTRY



Housed in its splendid new quarters on Herald street, the firm of B. Wilson Company, Limited, furnishes an example of the progress which has taken place in Victoria within the past few years. Eight years ago this firm commenced business in Victoria in premises on Wharf street. In 1904 the growth of business necessitated a change to larger premises on Store street, and this year still another move was made when the fine new building on Herald street, recently completed and equipped with an up-to-date plant, the whole involving an expenditure of \$100,000, were occupied.

In no other city on the Coast is there as modern a cold storage and ice-manufacturing plant as is now possessed by this city. The growth of the firm is the natural outcome of the growth of the city and Island, and the fact that the company has invested such a large amount in putting itself in a position to handle its ever-increasing business indicates that Victoria business men are fully alive to the growing opportunities for business on this Coast.

Economy and Efficiency

Every attention has been paid to the economical and efficient operation of the various branches of the company's business. The cold storage rooms have the latest plant for keeping the temperature at the required point. From the cold storage rooms, where poultry, fish and other products can be found frozen stiff in a temperature which suggest a prairie winter, the other rooms where a less severe, but none the less well regulated temperature is required, every facility for carrying on the business has been provided. Twenty tons of ice per twenty-four hours can be manufactured, ice made from distilled water and as absolutely pure as it is possible to make it. The company's two brands of hams and bacon, the B. C. Special and Royal brands, are known throughout the province, and its Challenge brand of eggs, its creamery and dairy butter products and frozen poultry are familiar to the trade.

A trip through the company's new two-story brick building, equipped with every facility for carrying on its business, will give one an idea of what a modern plant of its kind is and what it can do. In all twenty-five employees are engaged in the various departments of the concern.

High-Grade Product

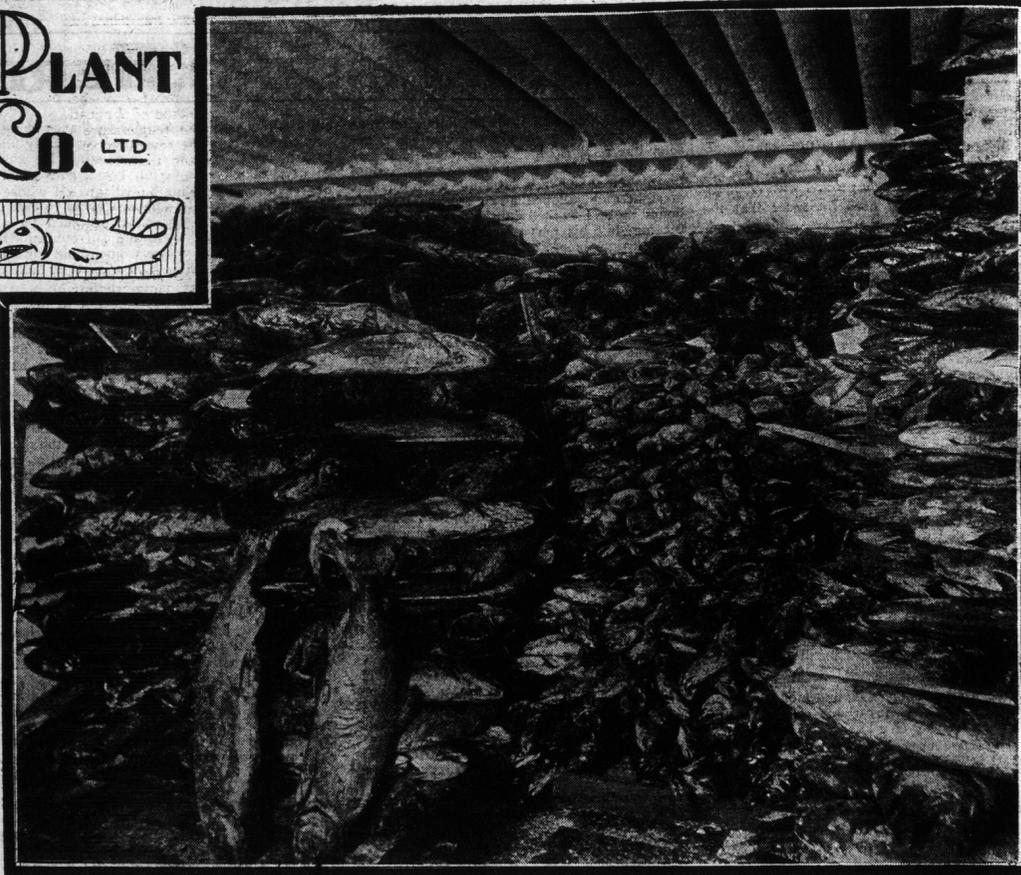
Every attention is given to the purity of the goods sent out by the firm. In the egg-handling department every egg is examined before an electric light before it is sent out; care is taken in the putting up of the butter, large quantities of which are imported from the East; the cold storage rooms are the very acme of cleanliness, and the care with which the firm's products are prepared is indicated by the fact that the sale of its hams and bacon, though in competition with the big packing house products of the other side, are daily increasing. Large shipments of mild-cured salmon are made to the German market, the fish, after being cleaned at the wharf, being stored in cold storage until shipped.

The entire plant from cellar to garret is devised with the object of ease in handling the products and convenience in shipping. Railway connection from the plant to the E. & N. has been made, the cars being brought right into the building. The mechanical equipment of the plant has been given first thought, and the firm is satisfied that it has the most up-to-date plant of any city on the Coast, with the possible exception of Los Angeles.

Mechanical Equipment

After the design and arrangement of the building was made complete to specially afford all modern conveniences required by the company's business, then came the special work of equipping the building with the refrigerating system and power to serve all auxiliary parts, all of which makes a complete plant, with a perfect control, in the hands of a single attendant.

In the selecting of the site on which the



FROZEN FISH IN COLD STORAGE TEMPERATURE ZERO

refrigerated corridor has an opening also direct to car without passing through refrigerated space, so that goods may be transferred either under the protection of refrigeration, or without it, as the nature of the goods being handled may require.

tem," which very greatly decreases the time necessary for freezing. The time ordinarily required for freezing a block of ice of equal size in other plants is forty-eight hours, while the same work is done in this one in twenty-seven hours. In addition to the reducing of the freezing time considerable economy is gained in the capacity of the machine by using this system.

The manner in which the piping is placed in the ice-making tank is a little out of the usual and regular way, in that the headers or manifolds to which all coils are connected, are specially large and of heavy steel piping, with ends and all branch connections welded in, thus eliminating joints and making the whole work of a very solid and permanent character. The coils have but one liquid supply connection to the system, which is so connected as to give perfect distribution of work to all coils, and is controlled by a single supply valve, located in the machine room.

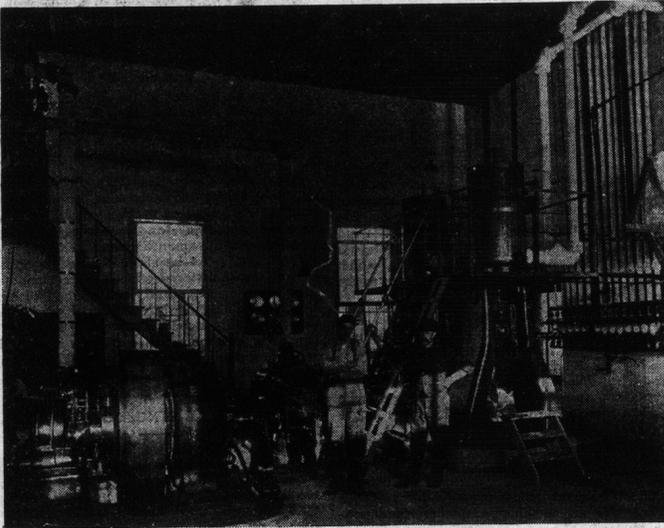
No piping or headers are exposed, all being submerged within the tank, thus utilizing the complete working surface of all pipe in connection with the freezing. The suction, or return tank to the machine, is a single pipe leading directly from the accumulator through a distilled water pre-cooling tank, thence through the refrigerated space of chill rooms on its way to the machine.

The wood-work, or covering for the tank, is so designed that not more than the space occupied by each individual freezing may be uncovered at any one time, thus exposing to the higher temperature of the room where the tank is located only the small section of the tank's surface occupied by the one can. This is a guard against a very common source

of loss of work in most ice-making tanks, in the average plant.

Ice Harvesting and Handling

Some very novel and ingenious conveniences have been worked out for the handling of the ice after being harvested. The harvesting is done in the regular way, a traveling crane and hoisting method, with shower thawing dump for releasing ice from the can in which it is frozen. The freezing tank is located on the second, or Herald street, floor level, and directly over the wagon alley, where a loading platform is provided to serve wagon deliveries and carload shipments. An ice storage room is also located on the same floor as the ice-making tank, but at a little lower level. The block of ice leaving the thawing pump passes by gravity to the storage room through an automatic door which registers or counts it as it passes in. In this room is kept the stock which is always on hand for prompt shipment and deliveries. It is refrigerated to a temperature very much below the freezing point and, consequently, ice may be kept indefinitely without the slightest deterioration. The method of removing the ice from this storage room is accomplished in a very simple, novel and practical way. The room being located immediately above the space where wagons and cars enter, make it possible to handle the ice by gravity, which is accomplished in the following manner: A small car, just large enough to hold one block of ice, is passed through an opening in the floor of the ice storage room at a point most convenient over the loading platform below. This car when not in use forms a door for closing the opening through which the ice passes when leaving the storage room, and is



Engine Room

System a Model One

The refrigerating system throughout is without exception the most complete and thoroughly modern one on the Pacific Coast at this time. There are larger ones, but none more complete in their application of the varied conditions to be met.

The system is so arranged that (although a wide range of conditions and temperatures are met) the whole can be done from a single machine with perfect ease. Three separate and distinct forms of application are combined in one system and may be handled simultaneously from the same machine, or can be operated in two separate and distinct plants, viz., ice-making, freezing and refrigerating. The advantages secured in this combined feature are very important from the standpoint of operating economically, and has proven an extraordinary valuable feature in making the temperature of each department easy to control.

Ice-Making Plant

This part of the plant is of the can system, using a 200-lb. mould placed in the freezing tank in the regular and usual way. This department of the plant complete, as well as several others, was built in local shops by plans furnished by the company's engineers. The ammonia piping is of the continuous welded coil style, each coil being seven pipes high and containing 312 lineal feet without a joint.

The tank is operated on the lately developed system known as the "flooded sys-



Office and Office Staff.

held in place by counter-balance pneumatic cylinder. When delivered to the car, it immed its own weight to within a platform level below, when it the piston counter-balance in cylinder and is dropped easily block to either car or wagon, turns to its original position



Barrelled

and registers the block of ice By the inlet and outlet counting complete check is kept upon the in storage, the amount harv amount delivered each day, a readily appreciated by all ice simple arrangement is also pre ering ice to the tops of refriger standing alongside the building the shipping of refrigerated of this being operated by gravity quiring no power whatever to no matter what disposition is

Water Distilling System

Water to be frozen is first filtered and purified in the most before it is introduced into the It is first passed through the under high pressure, thence to gine cylinder, where power is drive the machinery, thence to face condenser, where it is steam into water again, only through another evaporating lighter pressure, then chilled thoroughly before being accept freezing. The entire distilling ated by gravity, thus eliminat very uneconomical system of handling of distilled water, als ation of the water after distill tem is simple and positive in it

Results

Very striking and encoura trast between the manner in v regarded only a few years a which it is now looked at by petent to speak. It is but it was taken for granted that more or less must be annually so many offenders must come ment. A faint hope might be ed that by education or som indicated agency the number n diminished. The real belief who uttered some words app to convey encouragement w could be done to suppress or ly an evil which lay as much control as the rainfall or the is interesting to contrast wit resignation and depression th those who are now responsib ing of our penal system. "Up every criminal who is not m is potentially a good citizen, creed of the Preston Commis creed which most of their pr had been scouted as much too which, on the whole, seems sults. We are witnessing th this principle in ways never w with a degree of success wh reduce greatly ten or twenty prison population. Those wh been sceptical as to effective criminal classes would do we report of 1909 of the Borstal A can scarcely fail to admit that ful agencies for good are at

The experiment, which has cessful than its authors antic a small way at Bedford Pris gradually extended. At first to selected offenders in the m on between the ages of sixteen who had been committed for was soon discovered that litt done with criminals under sentences. This has been re system can in future be wo more effect by reason of the which came into operation on month. It empowers Court convictions for offences invol