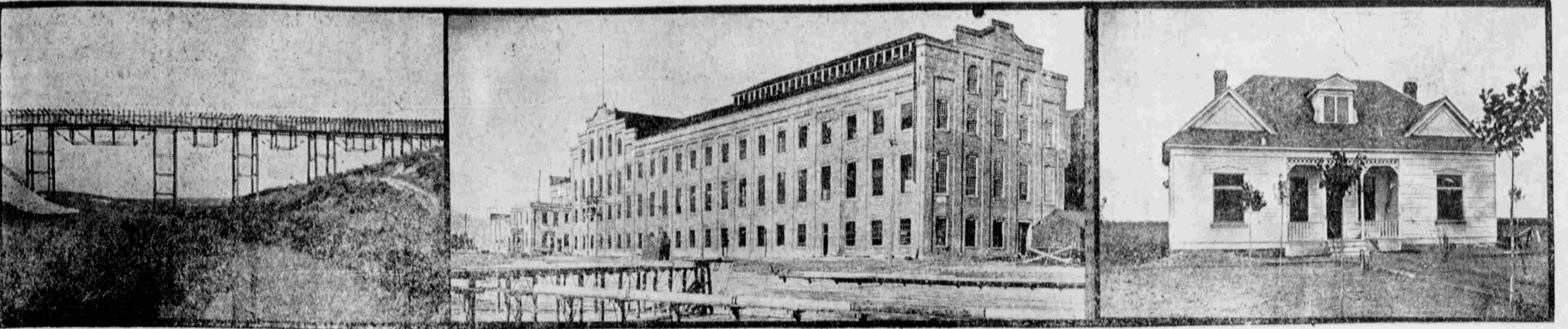




CANAL FLUME CROSSING THE MALAD RIVER.

GARLAND FACTORY OF THE UTAH SUGAR CO.

THE CLUB HOUSE.

also two wagon roads and two railroad tracks additional. For the facilities of dumping into these bins are now six railroad tracks, and seven wagon roads.

PROCESS OF MAKING SUGAR.

The delivery of the beets to the Garland sugar factory, as previously stated, is done through the medium of railroad cars and wagons, and dumped into the storage bins. As needed, they are carried from the bins to the grinders through the system of flumes which are so constructed that one man can handle as much as 600 tons per day. The beets, on reaching the mill, are elevated and dumped into the washer, a machine that practically removes all the dirt clinging to them. From the washer, the beets are again elevated and dumped into the automatic scales, which weighs and records with exactness every pound of beets entering the factory; after this weighing process, the beets are conveyed to the automatic cutters, which slice them into small, thin strips, called "cosettes." These "cosettes" fall into the diffusion cells; the diffusion process extracts the sugar from the "cosettes" and by introducing hot water, the work is completed in such a way that at the end of the ordeal, no sugar is left in the "cosettes," which are now called beet pulp, the latter being conveyed away and stored in the silos, for stock feed.

The juice of the beet, after the diffusion process, is then carefully measured and sent to the carbonation tanks; lime is here added to the juice and carbonic acid gas introduced; which causes a reaction to take place by acting on the lime, thus forming a precipitate, which contains the most of the impurities of the juice.

The juice and precipitate is then pumped to the filtering presses; where all the serum is removed, leaving a light clear juice, which is then reheated and sent to the second carbonation tanks; the process is repeated, followed by another filtration.

Passing from this process the juice is pumped into the sulphitation tanks, where sulphuric acid gas is introduced in a measured quantity, the object of which is to lighten the juice, as well as to purify its velocity. The sulphurated juice is then filtered through a set of filters, called Daneks. The water, which has been introduced for the purpose of extracting the sugar, must now be evaporated, thus bringing the juice up to a given density; in each of these effects, the juice is boiled under vacuum; steam is applied in the first effect and the vapor coming from the boiling juice is then used to boil the juice in the second effect and so on to the fifth effect, where the vacuum being the highest, the juice boils at a very low temperature, the vapor from this effect is now used in a large condenser. The thick juice is now called syrup, which is sent to a second set of sulphitation tanks, where it undergoes the same process as it did previously to this in the first sulphitation and after filtration the syrup is now of the highest standard of purity and is ready for the vacuum pan. In this pan, 400 cubic feet of syrup is concentrated to get to what is called "grinding point," after which very small crystals, in enormous quantities, are formed. It now becomes the object to feed these crystals with fresh syrup and, as the water evaporates, the crystals continue to grow to a standard commercial size, at which time the vacuum is released and the contents of the pan, which constitutes what is known as the strike, is dumped into a large mixer, where the strike is kept in constant agitation by moving paddles. About 300 pounds of strike is introduced into the centrifugal machines, where the mass is spun, the molasses being thrown through very finely perforated screens and stored in tanks.

The crystals in the machines still contain a small quantity of syrup, which has to be washed away with pure water and the crystals now become of a pure white color. The molasses are stopped at this point; the crystals are dumped out then and conveyed to a dryer, called the granulator. When dried the sugar is weighed and put into sacks, each holding 100 pounds, and the product is ready now for shipment.

The molasses spun from the centrifugal machines is boiled and strained in a second vacuum pan; this being called the second strike, it is dumped into large crystallizing vats, where the molasses is kept in constant motion. About 64 hours is required for the strain to grow to a sufficient size. This mass is then dumped into another mixer and spun in another set of centrifugals. The sugar from these is yellow, and has to be remelted in order to refine it to a standard granulated sugar.

The molasses spun out from the second strike is of a low purity to crystallize into sugar and has to be purified in a process called "osmoses." The apparatus used in this process was the first one placed in successful operation in the United States; it being used at the Lehi factory, in 1897, and later transferred to the factory at Garland. The molasses, after being purified by this process, can then be boiled and crystallized in the vacuum pan; after crystallization in the vacuum pan, the sugar is then transformed into a yellow sugar which is then refined to a standard granulated sugar.

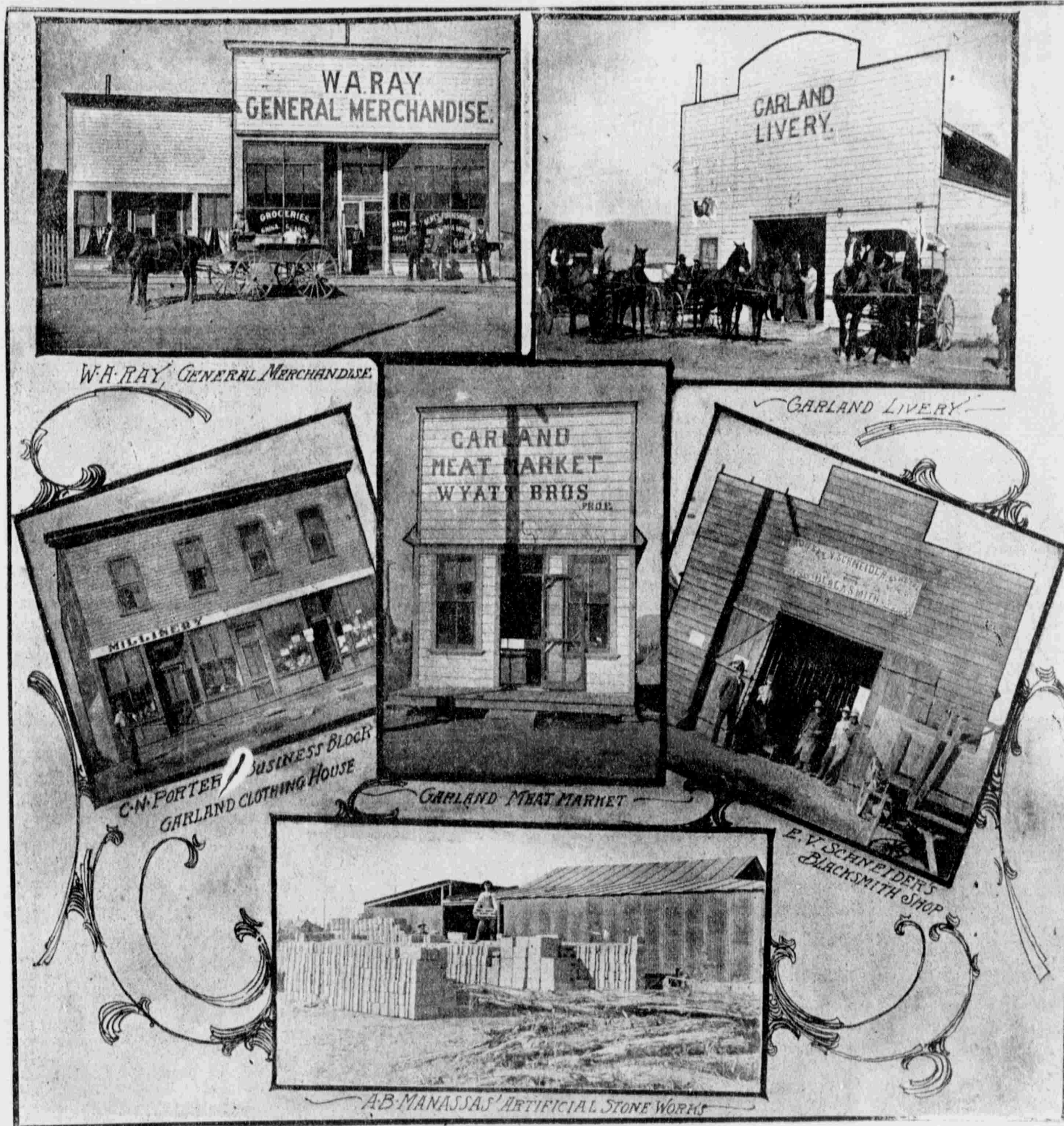
The final molasses from this spinning undergoes another operation, through the Osmoses process, or is sold for stock food.

WHERE POWER COMES FROM.

Power for the operation of the Garland factory of the Utah Sugar company comes from Bear River canyon, 12 miles away, where a power plant, with generators capable of driving 3,000 horsepower of electrical energy, was built by the Sugar company several years ago at great expense. The bulk of this power is sold to the Utah Light & Railway company and transmitted to Garland and Salt Lake. The balance is used at the factory and is supplying the citizens of Garland with light.

COMPANY'S LOCAL OFFICERS.

The local officers of the Utah Sugar company are: Mosiah Evans, resident manager; T. H. Edwards, superintendent of factory; Henry Petty, assistant superintendent of factory; Joseph E. Wadsworth, superintendent of canal; C. Wadsworth, superintendent of canal; chief engineer; W. H. Rowe, agent land department, and Charles Edwards, David Dorton, Mosiah D. Evans and Levi J. Somers, factory formen. The staff consists of C. J. Cable, chief clerk;



GROUP OF GARLAND BUSINESS INSTITUTIONS.

BIOGRAPHIES OF GARLAND'S OFFICIAL FAMILY.

MOSIAH EVANS.

Mosiah Evans was born Sept. 22, 1862, at Lehi, Utah. Attended school and worked on his father's farm until he was 16 years of age, when he commenced life as a telegraph operator, which he followed for 15 years in various capacities from operator at Leamington to train dispatcher at Salt Lake. He identified himself with The Utah Sugar company in 1892 as chief clerk at the Lehi office, which position he held until the year 1901, when he took charge of the Sugar company's interests in the Bear River valley as resident manager, which position he still holds.

He served one term as recorder and two terms as mayor of Lehi City, was a member of the lower house of the fourth Legislature of Utah and declined a unanimous nomination tendered him by his party for a like position in the fifth. He was unanimously supported by the people of Garland as its first president of the town board. It is a hobby of Mr. Evans to aid in making of Garland the best town in Boxelder county.

W. P. EATON.

was born at Newton, Massachusetts, and began his business career in the traffic department of several trunk lines out of Boston and New York. In 1897 he went to Mexico to take the position of assistant general manager of a tropical plantation in the state of Oaxaca, of which he was a director. He held this position for about three years; resigning because of ill health brought on by the malarious condition of that section of Mexico. In 1902 became the principal owner in the Western Agricultural Contracting company, of Oakland, California which handled Mexican and Japanese laborers in the beet fields, as well as fruit and walnut orchards. In 1903 with Geo. E. Herz, Mr. Eaton organized a separate company known

as Herz, Eaton & Co., to furnish Japanese laborers to the farmers of Utah and Idaho to handle their beet crops for the Utah Sugar Co., and the Idaho Sugar Co. This turned out to be a failure for the contractors because of the narrowness of the country and there being no other labor to put in place of the Japanese when they became unruly.

At present Mr. Eaton is head bookkeeper for the Utah Sugar Co., at Garland, Utah, and also clerk of the town of Garland.

CHARLES EDWARDS.

Charles Edwards, one of the members of the town board of Garland, is one of Utah's sons. He was born therefore, in Lehi on November 25, 1875, and is nearing his thirtieth year of age. At the age of 15 he left the farm and was given employment in the Utah Sugar company's factory at Lehi, since which time, with the exception of two years, he has been steadily on the employ of that corporation and now holds the position of foreman of the Garland factory, which he was filled with efficiency since 1901, when he brought his family to Garland to reside. Prior to that Mr. Edwards was employed as foreman of the Washington State Sugar company's works at Waverly, Washington. He also served the Idaho Sugar company in the same capacity during one season.

Mr. Edwards became a member of the town board at the time of the incorporation of the town of Garland.

ARTHUR L. CAPENER.

Arthur R. Capener, is one of Garland's most prominent citizens, and since taking up his residence there has held several positions of trust. He now has in his keeping the city's cash box, is also chairman of the board of education and is now serving his second term.

He takes a deep interest in education,

the early history of the Bear river canal project.

The original town was located a fraction of a mile north of the center of the business portion of the present one, which was platted in the fall of 1902. But when the town was moved, the name went with it, and it thereby

became perpetuated.

In the spring of 1903 Garland was a village of tents and the residents were engaged in work connected with the building of the sugar factory and the planting of beets. The first business house in the town was that of W. A. Ray & Son, who opened for business

about Oct. 1 of that year.

Garland became a full fledged town when it was incorporated, July 15, this year; it had a population of 415. Since then, the town has steadily grown and it now has over 600 bona fide residents.

When less than two years old Gar-

land possessed complete water and electric lighting systems.

PRINCIPAL BUSINESS HOUSES. The principal business houses of the town are:

General Merchandise Stores—W. A. Ray & Son, Grover Rose & Co., Booth's and Garland Clothing house.

Millinery—Mrs. C. N. Porter.

Banking—Bank of Garland.

Drugs—Ritter Brothers Drug company.

Liberty Stables—Fire Brothers.

Butchers—Wyatt Brothers; also dealers and shippers of livestock.

Lumber and Furniture—Hyrum Jensen.

Artificial Stone—A. B. Manassas, maker of the Miracle pressed stone for buildings.

Blacksmith—E. V. Schneider.

GARLAND'S PUBLIC SCHOOLS.

The school population of the Garland school district, which includes territory outside of the townsite, is about 100. There are five buildings, and 17 schools in the district, which covers an area four miles in width and 15 miles long. Since its organization, \$15,000 has been expended in the erection of buildings. Seventeen teachers are employed in the district. The school board is composed of A. R. Capener, Moroni Mortensen and Peter H. Hansen.

Religious meetings are held in Social hall, which was erected by the Church of Jesus Christ of Latter-day Saints.

CARLAND MEAT MARKET

WYATT BROS., Props.

Dealers in Fresh and Cured Meats, Butter, Eggs and Vegetables. Also Buyers and Shippers of Livestock and Grain.

GARLAND AND TREMONT, UTAH.

I. V. Warner

Photographer

Malad City, - Idaho

PECK HOTEL

The Best Place to Stop While in Malad.

RATES: \$2 PER DAY.

DWIGHT PECK, Proprietor.

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It Leads The World

THE MALAD VALLEY IS FAMOUS FOR ITS GOOD WHEAT.

So are the flouring mills of the Oneida Milling & Elevator Company, for the manufacture of the best grades of flour. Graham and Germade. Our output is fifty barrels of flour per day.

Try it.

Cash Paid for Wheat

This company has for sale

500 acres of the best sugar

beet lands, with good water

rights, in Idaho. Gwenford

is situated in the best part of

the Malad valley. For in-

formation concerning these

lands, address

Oneida Milling & Elevator Co.

GWENFORD, - IDAHO.