

about 270, at Ogden branch 40, at Logan about 30. The stock of merchandise carried by the Institution amounts to a little over \$1,250,000. Its sales aggregate between \$4,000,000 and \$5,000,000 per annum. The dividend paid in October last was the 21st, and was 5% for the half year. The reserve fund accumulated amounts to about \$125,000. Both buildings and merchandise are kept fully insured. The fiscal half year ends January 31, and July 31 of each year. Horace S. Eldredge is the present Superintendent, with S. W. Sears as Assistant. T. G. Webber, the Secretary of the Institution, manages the book-keeping department, and experienced salesmen and buyers watch over the interests of other departments of this mammoth mercantile concern, which has no rival in the whole region of the Rocky Mountains.

Z. C. M. I. SHOE FACTORY.

A DETAILED DESCRIPTION OF THE ESTABLISHMENT, INCLUDING AN INCIDENTAL MENTION OF OTHER DEPARTMENTS.

The subject of manufactures in Utah is of much importance to her citizens. For this reason we devote some of our space to an extended notice of the Z. C. M. I. Shoe Factory, giving details of the systematic mode of manufacturing boots and shoes. There are one hundred and fifty persons employed in this business, including men, boys and young ladies. In

THE CUTTING ROOM.

a dozen of the number are employed. In this room the first part of the manual labor is done. Care, skill and judgment are highly essential qualifications of the workmen in this department, as the materials used in cutting are expensive, and a considerable degree of ingenuity is required to cut the stock to advantage and with the least possible waste. The cost of material and labor in the uppers averages about one-half the value of the finished article. There are nearly one hundred styles of boots and shoes made in the establishment, and the large number of patterns required is surprising. Each shoe upper is made of six or more pieces, and in cutting a set of sizes of ladies' shoes there are frequently upwards of fifty patterns used. Manager Rowe is the designer of the multitude of patterns, which constitute an invaluable adjunct of the business. Nearly all the work in this department is done by hand. There are no two sides of leather, or skins, exactly alike. It is, therefore, hardly possible to use machinery in cutting uppers; a few dies, and some small machines for cutting strips, is all that is used here. We must not omit noticing, however, a remarkable ingenious machine placed in this room for measuring leather. No matter how irregular in form, nor how many holes there may be in the leather, the indicator of the machine will instantly show the precise quantity of surface in the side or skin placed on it. About half of the material required for the uppers is imported, but we are pleased to state, a large amount is now made at the Z. C. M. I. Tannery, and J. W. Summerhays & Co. of this city furnish most of the lining skins and roams that are used.

The uppers, after being cut and stamped with sizes and order numbers, are assorted in what is called "case lots," that is five dozen pairs of shoes or one dozen pairs of boots, and are passed into

THE FITTING ROOM.

A work ticket accompanies each case lot, on which is detailed a description of the goods, order No., who for, when wanted, scale of sizes and number of pairs of each size, with lines on which to write the name of each person who does any of the various designated portions of the work. We will here mention that in the making of each pair of boots or shoes, the labor of over thirty persons is represented.

In this room an Otto Silent Gas Engine, of seven horse-power, is located. This piece of mechanism was partially described in the News a few months ago. A peculiarity which every visitor notes in regard to the engine is that it is kept locked up in a glass-enclosed room, and that it has no attendant. It needs no attention except to oil, clean, start or stop it, and can be started or stopped in one minute. There is no boiler, no fire, no smoke, no dust, no noise, no danger connected with it; it feeds itself and consumes no more gas than it needs, is therefore decidedly economical, and is truly one of the wonders of the Nineteenth century. This engine runs 75 machines belonging to the shoe and clothing factories. The process of making the uppers is commenced by passing the edges of the leather, which have to be sewn, under a revolving knife, which rapidly takes off a shaving and reduces the edge to uniform thickness. The fitters paste the various parts of the uppers in proper position, and otherwise prepare the work for the sewing machine. The operators receive the uppers thus prepared and govern the lively moving sewing machine while it stitches the curved, scalloped or straight seams. A light pressure of the foot suffices to start or stop the sewing machine instantly. The exhaustive labor of feet and limbs is no longer necessary, and the engine proves a blessed boon to the young lady employees. It is exceedingly interesting to observe the astonishing rapidity of movement and beauty of work done by the machines, intricate designs in stitching being worked with the greatest precision, under the expert guidance of the operators. A

button-hole machine that automatically guides itself, making button-holes at the rate of two per minute, with a perfection of stitch unequalled by hand, is one of the most admired of the sewing machines. Several other machines in this room seem, almost, endowed with intelligence, among them being the puncher and eyeleter. This machine punches holes, regulating the distance between, inserts and fastens eyelets with great rapidity and perfect workmanship. The waxed-thread machines are large and strong, being capable of easily sewing through leather a half inch thick, and several of them carry two needles each, for stitching double seams on shoe fronts, etc.

The rooms described, connected with which are the Packing department and Office, are located in the second story, west end of Jennings' Emporium Buildings. From there we can descend by an elevator to the basement, or

SOLE LEATHER ROOM.

A fifteen horse-power steam engine, built at the Salt Lake Iron Works, operates the machines in this and the bottoming departments. Connecting with the south end of the basement is a boiler room, in which there are two twenty horse-power boilers, one furnishing steam for the engine, the other to heat the entire premises.

The hands employed in the Sole Leather Room, cut and prepare the material required for the bottoms and heels of boots and shoes. The number of pieces thus prepared averages 24 to each pair of boots or shoes, and as there is a daily production of about 400 pairs, there are, consequently, nearly 10,000 pieces of leather cut and fitted up every day in this room. The sole leather used is the best quality of California oak tan. The machinery employed includes two sole-cutting presses; a guillotine knife, for cutting strips; a splitter, to reduce the leather to uniform thickness; a heavy roller, through which the rough pieces are passed, under great pressure, making the leather firm and smooth; a moulder, which moulds the soles into the curved form of a last; a powerful heel press, and a variety of smaller machines for trimming, skiving, etc. One of these small machines is an ingenious contrivance for making nail holes. It accurately gauges the distance from the edge and between the holes, and punches them with astonishing rapidity. An important, and costly item in this department is the extensive assortment of steel dies required for cutting soles, heel lifts, etc., used in connection with the two sole-cutting presses. Attention is called to the fact that no shoddy is used, a careful inspection of each lot of stock will invariably show that nothing but genuine, and good leather enters into the goods, in that respect differing vastly from a large proportion of the boots and shoes imported into the Territory.

THE BOTTOMING ROOM.

The incessant pounding of shoemakers' hammers, whirr of machinery, lively movements of the workmen and array of racks, filled with boots and shoes in process of manufacture, combine to make a picture of industry that instinctively calls to mind a hive of busy bees. The method of fastening soles on boots and shoes, adopted in this workshop, is the same as has, for many years, extensively prevailed in England, and is now becoming popular in America, it is called the clinching screw process; unquestionably the best in the world. Solid iron lasts are used; the clinching screws are driven into the soles, with a stout, flat, file; the points of the nails turn on the last, after passing through the inner sole, and they are then firmly riveted, or clinched, by blows of a heavy hammer. After the soles and heels are securely fastened on, the boots or shoes having passed through the hands of lasters, nailers and heelers, are then given to the heel breaster, who manipulates a machine which, at one slice, cuts through the six, or more, thicknesses of sole leather comprising the heel and leaves a square breast next to the shank. The heel trimmer next receives the goods. An old fashioned shoemaker, accustomed to spend an hour or more in whittling a pair of boot heels into good shape would almost be inclined to think that the magic art had been introduced in the modern method of heel trimming as done in this establishment; the rapidity with which heels are trimmed, by machine, into the most perfect forms, has the appearance of a sleight of hand trick. Although highly interesting to a personal observer, it would be tedious to a reader to follow a detailed description of the many splendid machines used in this department. Each machine is the most perfect that can be obtained. We will simply name them in the order in which they are used. Next to the heel trimmer is the heel filer and scourer, then the edge trimmer; edge setter or burnisher; heel burnisher; sandpapering machine, or buffer, for scouring the soles; following them are the bottom finishing machines, including revolving brushes for applying colors, polishing etc.; also a machine with heated steel stamps of various designs, for stamping a trade mark on the soles; and an embossing machine for gliding the tops of boots.

From this room the goods are conveyed on the elevator up to the floor where

THE PACKING ROOM.

is located. The process of cleaning and packing boots and shoes includes more labor than is generally understood. Their attractive appearance, or the reverse, depends greatly on the manipulation of cleaners and packers,

All boots are subjected to three or four rubbing and dressing operations, on boot "trees," before they are sufficiently smooth and polished to present to the public, and ordinary leather or calf shoes are similarly treated.

There are competent foremen in each department of the factory who are specially instructed to permit no poor stock to be used or imperfect work done on the goods, and their duty is to carefully examine all goods as they pass through the various hands in each room. By this means every pair of boots and shoes is subjected to frequent inspection. Damaged or poor goods are laid aside, and only the best packed for market.

To properly conclude our observations, we will now look into

THE OFFICE.

In this quiet corner, where we see at a glance a hundred elegant samples of goods made in the establishment, is generally to be found the principal moving power of the whole concern, W. H. Rowe, Esq. He is one of those human electric machines whose business force is felt by all with whom he is associated. The successful working of this factory speaks loudly for his acquaintance with details and managing ability. In addition to supervising the Shoe Factory, Mr. Rowe is manager also of the Tannery and Clothing Factory. The employees of these manufacturing departments of Z. C. M. I. have established, by Mr. Rowe's advice, a

MUTUAL AID SOCIETY.

Which has proved highly beneficial to them. The members of this society pay a very small sum monthly into a fund from which they receive aid in case of sickness, and they hold meetings frequently for social enjoyment and mental improvement. In all matters connected with the growth of these manufacturing enterprises Mr. Rowe has had efficient aid in the services of D. M. McAllister, and other faithful employees, men, boys and girls. That these manufacturing concerns are accomplishing much good is a remark hardly necessary to make; every person can readily comprehend that the large number of people employed are not the only persons benefited, but that the whole Territory indirectly participates in the advantages. We heartily commend the laudable example of Z. C. M. I. in establishing and fostering these branches of industry, and earnestly recommend others, who can, to go and do likewise.

PALE SAPONE AND THE UTAH SOAP MANUFACTURING CO.

Mr. Charles Popper was the first gentleman to invest any considerable means in establishing works for the manufacture of soap in this city, and he was followed by many others who met with varying success. Among the very few who lived to see that success achieved was the late R. V. Morris, whose indomitable perseverance and tireless energy will be remembered with pleasure by all whose business relations brought him into contact with. Seeking no compensation, he labored only for that which a natural instinct or a high sense of honor taught him would be for the general good of the whole people.

While the articles produced by these pioneers in the soap trade were always inferior in appearance to the Eastern products, they possessed the merit of purity and were occasionally of excellent quality, and also occasionally well adapted for keeping mankind in as dirty a condition as possible.

It was reserved, however, for the consolidation known as the Utah Soap Manufacturing Company to produce toilet, bath and laundry soaps as brilliant in appearance and higher in cleansing power than any similar goods heretofore offered in this market. Yet when these goods first appeared on the streets, the failures of their predecessors were remembered and soaps of the highest grade, if made here, were received with doubt and mistrust. The majority of our merchants, however, were determined to "give Utah a chance," and stood by the enterprise in the face of every discouragement, even to the extent at one time, of buying and purchasing the Utah soap at one-half the profit derived in handling Eastern products. Still the manufacturer of any article in Utah, is likely, no matter how excellent the goods he may produce, to grow weary with hope "deferred" many times before he finds himself doing a large business, and he will probably have the mortification, again and again in his career, of seeing eastern manufacturers, whose wares are no better if equal to his, outsell him in his own territory.

But if the Usonian will produce goods pure and honest, and he can propose no higher nor safer course to himself, the time will come, and that before long, when "the one-horse factory" will make it quite interesting for competitors at a distance. As for instance, in the case of the article under consideration. A Chicago maker is receiving \$3.60 per box at his own door and but \$3.54 when the same article is delivered, at his expense, to dealers here. Of course railroads, with their insatiable desire for building up inland towns, do their share towards encouraging "the strongest party in the fight."

The besetting sin of most soap manufacturers is adulteration. There is no questioning the fact that the amount of adulteration in soaps, and also the quantity of adulterated soaps in the market, increases every year, and that a really pure, genuine, honest soap is

a difficult article to obtain. The best guaranty that patrons of the home article can have as to its purity, is the fact that it does not pay the producers to import adulterants, and no suitable adulterant can be found here, even if the manufacturers desired to use one, which they assuredly do not. There is no finer soap stock in the world than pure tallow, and that used by the works here is taken entirely from animals killed for food, while many eastern soaps are made largely from the foul grease of diseased animals—cholera hogs, dead horses, etc., bought up by "boiling houses" and by them sold to soap manufacturers—apropos of this, Dr. H. J. Deuterus, of the United States Bureau of Agriculture, recently declared that the regulations of the Chicago stock yards are such that, should an animal die in them (from disease or other causes) it is at once delivered to a soap grease rendering establishment outside of the yards; and the public can recall frequent instances where physicians of the highest eminence have decided that many loathsome skin diseases are directly traceable to the tainted grease so often used in the manufacture of soap.

In the history of soap manufacture and placing an article on the market that easily competed with imported products in that line, much credit belongs to Mr. Snell, the manager of the company. The present officers are: President, R. T. Burton; Vice-President, Philip Pugsley; Secretary and Treasurer, A. W. Carlson; Manager, Henry Snell. These with George Nebeker, director, form the managing board.

THE DESERET NATIONAL BANK.

This flourishing institution stands in the front rank of sound and profitable financial houses. It originally started under the firm name of Hooper, Eldredge & Co. commencing business in May, 1869. In 1870 it merged into the Bank of Deseret. In November, 1872, it was organized as a National Bank, and was designated a U. S. depository in 1879. Brigham Young was its first President, who was succeeded by W. H. Hooper. The present officers are: Horace S. Eldredge, President; Wm. Jennings, Vice President; L. S. Hills, Cashier, and Jas. T. Little, Assistant Cashier, who with John Sharp, Ferramor Little and Wm. H. Ritter constitute the Board of Directors. The capital originally paid in was \$200,000 Surplus and undivided profits \$200,000 U. S. 4 per cent bonds \$300,000 The deposits average over \$1,000,000 The dividends to shareholders for the first ten years under the national charter averaged 12%, and thereafter the semi-annual dividend was 8%. Its reputation is first-class and its stock is rated considerably above par.

D. & R. G. RAILWAY.

This line runs through the grandest scenery to be seen in traveling on any road on the globe, and for that reason is greatly preferred by tourists. It is excellently built and finely equipped, the facilities being extensive and complete in every department.

The system is divided into five divisions for operating the 1662 1/2-10 miles of road. The Utah division embraces the following lines:

Main Line—Grand Junction to Ogden	344.3
Pleasant Valley Branch—P.V. Junction to Coal Mine	17.6
Little Cottonwood Branch—Bingham Junction to Alta	18.2
Bingham Branch—Bingham Junction to Bingham	16.3

Total of Utah Divisions . . . 397.3

The Utah division is under the superintendency of W. H. Bancroft, with headquarters in Salt Lake City, while Col. D. C. Dodge is general manager of the entire system, with office at Denver, where all the general offices are located.

In the construction of this road, all the circumstances considered, as much enterprise, courage, and intelligence has been exhibited as in any similar undertaking in the country.

The scenery along the more interesting portion of the route of the road has been so frequently described in these columns that repetition is unnecessary.

A medical writer asserts that women are so constructed that they cannot jump. Just for the sake of argument we would like to induce the doctor to let a mouse into the same room with his wife and close the door. Science doesn't know everything yet.—Lowell Citizen.

The man who presented his wife last Christmas with a dinner kettle in which to put up his dinner on workday mornings, is puzzled to determine what gift would be most appropriate this year. He has almost decided upon a briarwood pipe for his wife to fill for him during future hours of recreation at home.—Newark Call.

A man up town made a wager with a lady that he could thread a needle quicker than she could sharpen a lead pencil. The man won—time fourteen minutes and forty seconds. It is thought the result would have been different if the woman had not run out of lead pencil inside of five minutes.

CONSUMPTION CURE.

An old physician, retired from practice, having placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellow-men. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. Noyes, 149 Power's Block, Rochester, N. Y.

W. A. Noyes

THE DINGEE & CONARD CO'S BEAUTIFUL EVER-BLOOMING ROSES

SPLENDID POT PLANTS, specially prepared for immediate bloom. Delivered safely by mail postpaid, retail postoffice. Splendid varieties, your choice, all labeled, for \$1; 12 for \$2; 19 for \$3; 26 for \$4; 33 for \$5; 75 for \$10; 100 for \$13. WE GIVE a Handsome Present of choice and valuable ROSES free with every order. Our NEW GUIDE, a complete treatise on the Rose, 36 pp., elegantly illustrated—free with all orders. THE DINGEE & CONARD CO. 200 West Grand Street, New York City.

KENNEDY'S EAST INDIA BITTERS

TRADE MARK REGISTERED. 4 FAMILY TONIC FOR DYSPEPSIA AND RHEUMATISM. BATTERS

MINERAL WATER. THE BEST REMEDY IN THE WORLD!

FOR Rheumatism, Dyspepsia, Constipation, Sedentary Diseases, Biliousness, Kidney Complaint, Lung Diseases, Impure Blood.

ILER & CO.

PROPRIETORS AND SOLE MANUFACTURERS, OMAHA, NEB. SOLD BY DRUGGISTS, GROCERS AND WINE MERCHANTS.

THE LIVER AND ITS FUNCTIONS.

It has become a well established fact that the larger portion of diseases to which the human family is subject arise in the first place from some derangement of the Liver. This organ is not only the largest, but at the same time one of the most important. The various blood, on its return to the heart, passes through this organ, and in its passage the impurities, as also the secretions which are necessary for digestion as well as for a cathartic to assist in the removal of waste material, are eliminated. From this it is easily seen that the Liver is liable to get out of order to a greater or less extent, and when this occurs it is impossible for it to properly fulfill its office of removing all objectionable matter from the blood. But allow it to pass through, carrying with it the poison of which it should have been relieved.

With impure blood the whole system becomes affected, and no organ can properly perform its function unless it is supplied with PURE BLOOD to maintain its strength. So the Liver becomes all important, and when one has the feeling of being continually fatigued, worn out, or is afflicted with Piles, Headache, Sick Stomach, Sallow Complexion, Eruptions of Skin, etc., they may be sure their Liver is out of order, and a remedy is required to assist nature in relieving itself of all accumulations, and restore it to its original strength and vigor.

For all the complaints of this kind there is no more effective and safe remedy than PRICKLY ASH BITTERS. For all the complaints of this kind there is no more effective and safe remedy than PRICKLY ASH BITTERS.

PRICKLY ASH BITTERS CURES ALL DISEASES OF THE LIVER, KIDNEYS, STOMACH AND BOWELS.

FOR SALE BY ALL DRUGGISTS. PRICE 1 DOLLAR.

PRICKLY ASH BITTERS is a medicine of rare merit, and not an intoxicating beverage, and being purely vegetable in its composition, can be used at all times with beneficial results. It is not claimed as a cure-all, but for derangements of the organs mentioned, it is a specific and as a BLOOD PURIFIER, it is above all other preparations. Ask your druggist for it, and give it a fair trial. If he has none on hand, ask that it be ordered for you.

PRICKLY ASH BITTERS CO., SOLE PROPRIETORS, ST. LOUIS AND KANSAS CITY, MO.