

**HISTORY OF THE CEMENT BRICK INDUSTRY IN DURHAM, by Frederick Palen.**

About the middle of June, 1904, the first Cement Brick to be made in Durham, Ontario, were made on the homestead of Mr. John Williams, an employee of the National Portland Cement Co. Mr. John Williams and Mr. Frederick Palen, both of whom are employees of the National Portland Cement Co., Limited, saw great opportunities for the use of cement in manufacturing wares of all kinds and they agreed to form a partnership and go into the manufacture of cement brick and several other articles such as window and door sills. They were desirous of knowing if cement wares could be made at a profit, so they hired two men, purchased a quantity of lumber, and made wooden molds for brick and blocks, etc.

It was hard and up hill work to get the brick and other things made satisfactorily, but they, after much perseverance, acquired a knowledge which enabled them to manufacture a first class article in the brick especially, and equal to any and better than a good many clay brick.

This plant was kept in operation four months and turned out a large number of brick and other articles manufactured out of cement. Many sales were made to farmers who wanted to build chimneys, and in some cases, walls, out of the cement brick. All those who purchased cement brick have since expressed their satisfaction and agreed that cement brick are the best.

The cost of manufacture was however, very high, and it was deemed prudent to close down the plant as soon as the weather got chilly, they having accomplished their object in getting the figures to show what the cost of manufacture would be. It was demonstrated that the business would not pay unless a power plant was put in to press out the brick. Of course, a little money could be made by working by hand.

The only ingredients in a cement brick are water, sand and cement. There are few articles on the market which do not contain more. In manufacturing clay brick, it is necessary to purchase, in the course of a year, a large quantity of wood for burning the brick, but in manufacturing cement brick this is unnecessary, because the cement is already calcined in the kilns at a heat of 3000 degrees. Fah. This is one of the items that can be saved in manufacturing cement brick, and which is indispensable with clay brick.

In regards to the comparative qualities of the clay and cement brick, a few words will not be amiss. Cement brick increase in strength and hardness with age and are improved by the elements, while clay brick will decay and crumble.

The normal composition of a cement brick is within the following limits: Silica, 20 to 25%; Alumina, 5 to 9%; Oxide of Iron, 2 to 5%; Lime, 57 to 65%; Magnesia, 1 to 4%; Sulphuric acid, 0.25 to 2, according to the nature of the particular raw materials used. The manufacturer must determine the proper composition within the limits mentioned above and must maintain a uniformity of the product by means of repeated analytical tests.

Portland Cement brick attain in the space of a few years a very great hardness. Although in the erection of buildings, cement mortar is required principally to resist pressure, it is the universal opinion that cement brick and cement mortar will combined make a greater power of resistance to compression than any other kind of brick and mortar.

Portland cement is a compound consisting of chemically combined Lime, Silica, Alumina, Oxide of Iron, Sulphuric acid and one or two other properties. Produced by a calcination of a most perfect and intimate mixture of Calcareous and Argillaceous material. The composition of raw material must be such as to furnish these elements in the proper proportion, together with a proper amount of certain fluxing material. The mixture must be chemically correct, infinitely fine, soft and free from all deleterious substance. As a rule, only the finest marls and clays are suitable. Scientifically exact composition, a perfect mixture of ultra particles, semi-fusion at a brilliant white heat and perfect oxidation in burning, together with the final reductions of the clinker formed to a fine dust, are the essentials of Portland Cement manufacture.

Portland Cement is the best material yet manufactured for the making of artificial stone. Properly mixed with good sand and gravel, it makes the hardest and most durable stone; surpassing in smoothness and wear, freedom from cleavage by frost, and brittleness and breakage by blows, and especially in durability, any natural paving or building stone, or brick. It is superior to clay, as it is practically indestructible. In old Roman work, cement has resisted the wear of man for over a thousand years, although the Roman cement was vastly inferior to the present Portland cement. Under many circumstances it is absolutely necessary as where very strong walls are needed. The adaptability to be molded into every form is one of its valuable attributes. Canadians have within recent years made great strides in the use of Portland Cement, and the art of its manufacture. New processes adapted to the treatment of our material and labor saving devices, have enabled us to more than compete in both quality and price with the foreign product, and we are now believed to be on the eve of a most

**FAMOUS PEOPLE BY FANNIE M. LOTHROP**



**HELEN KELLER**

**The World's Most Remarkable College Graduate**

The story of Helen Keller's life is the biography of two wonderful women—the blind, deaf and dumb girl, who for over twenty years has fought against awful odds; and the kind, ingenious and patient teacher who has led her charge into the sunlight of knowledge and of kinship with humanity.

In 1886, when Miss Annie Sullivan was called to Tuscomb, Ala., to assume the care of Helen, the child had been living for nearly five years in the mental darkness that followed her treble affliction resulting from convulsions. The task of education seemed well-nigh hopeless, for the one sense through which the child's mind was to be awakened to consciousness was her sense of touch. But in June, 1904, eighteen years later, Miss Keller graduated from Radcliffe with distinction, and received her degree of B. A.

This fairy tale of education, this romance of the conquest of obstacles, is a superb triumph of concentration. At her entrance examination in June, 1900, as if Nature had not sufficiently handicapped her efforts, she had to submit to two additional trials. The questions were given her in the American Braille system of writing for the blind, with which Miss Keller was only slightly familiar, having learned the English Braille—the two systems being as different as two distinct systems of shorthand. This delay in puzzling out the translation of the questions was further aggravated by the fact that her little Swiss watch with raised figures had unfortunately been left at home, so she had no means of gauging the time, yet her typewriter clicked out the answers and she "passed" with flying colors in every study.

During her college course, in many studies Miss Sullivan repeated the lesson which Helen's fragile fingers feathered their way over her mentor's face, translated the muscular motions of speech into ideas. She studied English, Latin, French, Greek, German, political economy, logic, higher mathematics, chemistry and all the other myriad phases of college wisdom, through her wonderful fingers.

She uses the typewriter in five languages, has learned to speak with clear articulation, can swim, row, play cards, chess and basketball; dance, and perform a hundred other seemingly impossible things. Her memory is marvelous, her temperament sunny and happy; her mind is wonderfully broad, subtle and thorough, and her book, "The Story of My Life," besides being great as a biography, is the most important work of the century on psychology as a revelation of the human mind, its methods and possibilities.

phenominal expansion of all the industries in which the goods manufactured out of Portland cement are the factors, especially in such articles as brick, hollow building blocks, door sills, window sills, tile etc. In this connection I would therefore call attention to some of the uses to which Portland cement is adapted, and the method of application.

The uses of Portland cement are numerous, all may be called artificial stone, except perhaps mortar and plaster, or "stucco" (walks), brick, curbs and steps, floors, cellar, stable, wash, spring or milk houses, tannery, slaughter houses, chemical works, brewery and malt houses, walls of buildings, caps and sills, piers and abutments for bridges, arches, sewers, conduits, bridges, culverts, etc., foundations for buildings, engines, monuments and heavy structures generally, street pavements, water, harbor and dam work, wells, reservoirs, silos, steep tubs, tannery and egg vats, stoves, waterproof concreting of wet and damp cellars, cement wares as laundry tubs, burial cases, mangers, troughs and objects.

**Pale Faced Nervous Women**  
Always Grow Strong and Have a Rosy Complexion by using **Ferrozone.**

Ferrozone is by long odds the best tonic for pale-faced girls and exhausted women. It forms the right kind of blood and tissue for rebuilding the system. It replaces tiredness by energy and vim, and adds nerve force and staying power. Miss Dorothy E. Ledue, of Chester, gives the following convincing evidence of Ferrozone's power.

"My work compels me to rise early in the morning and work ten hours daily as a saleslady. Last spring I was run down, lost my color, and fell off in weight. I seemed to lack ambition and the life was out of me. A friend recommended Ferrozone, and I took one tablet after meals, with wonderful results. Ferrozone brought back my complexion and has given me new strength and abundance of energy and spirits. I would advise all young ladies to use Ferrozone."

Mrs. H. G. Wilder, of Dexter says: "My daughter was not very well last summer, and lost her strength completely when the hot weather came. I gave her Ferrozone and am glad to say it did wonders. After six boxes were used my daughter was strong, she looked the picture of health. I can recommend Ferrozone to all mothers, both for themselves and daughters."

Go to your druggist to-day and get a supply of Ferrozone. Price 50c per box, or six boxes for \$2.50. By mail from the Ferrozone Company Kingston, Ont.

**SYMPTOMS THAT INVITE GERMS.**

Little Ailments That Should Be Looked After If One Wants To Keep Well.

Anyone who has any of the many symptoms caused by poor digestion should take special care to avoid conditions where disease germs are likely to be present. Extreme thinness is the most common indication of a weak stomach, but any of the following symptoms are also good evidence of stomach troubles.

- Uneasiness at stomach,
- Confusion of mind,
- Flatulency, Waterbrash,
- Spitting up of food, Nausea,
- Colic, Gripes,
- Sensation of weight or heaviness at pit of stomach.
- Coated tongue,
- Sour taste in mouth,
- Diarrhoea, Sore mouth,
- Dry skin, Constipation,
- Nervousness,
- Sediment in Urine,
- Sick Headache,
- Night Sweats,
- Congestion of the head,
- Headache,
- Vertigo or dizziness,
- Cold hands and feet,
- Dizziness,
- Pain under shoulder blade,
- Sleeplessness,
- Pain between shoulders,
- Palpitation of the heart,
- Defects of vision or hearing.

These little ailments which indicate a weak stomach and imperfect digestion and imperfect digestion, should be looked after by the use of Mi-o-na, if one wants to keep well. A tablet of this remarkable remedy, taken before each meal, will so strengthen the stomach and digestive organs that natural weight will be restored and perfect health and strength regained.

Mi-o-na is so nearly infallible in curing indigestion and the many diseases resulting from a weakened stomach, that a guarantee to refund the money is given with every box, should it not give perfect satisfaction. Ask Macfarlane & Co. to show you the Mi-o-na guarantee.

**Farm for Sale.**

LOT 12, CON. 1, S. D. R., GLENELG, consisting of 50 acres—well watered, well fenced and mostly seeded down. Comfortable house and stables, 1/2 mile from school, 1/2 mile from Bunesan P. O. and 4 miles from Durham. An excellent pasture farm, or would suit anyone wishing to engage in small farming. Apply on the premises, or by letter to

ALEX. FIRTH, Bunesan, Ont. March 6th—10pd.

**VESTS For Summer Wear.**

If you once realized how much cooler, easier, neater and altogether more comfortable our Washable Vests are than the ordinary vests, you would not let the day go by without having at least one.

Come in and let us slip on your size, just to see how you like.

All our Vest are tailored. The fabrics will wash beautifully. The patterns are the handsomest we could pick out.

\$1.75 and \$2.25. Single breasted. "Stout" or "slim" sizes."

Now is a good time to buy.

**J. L. FLARITY**  
Merchant Tailor.

**Houses for Sale.**

BRICK OR FRAME—APPLY TO J. W. CRAWFORD. Also several building lots.

**TO LET.**

THREE ROOMS ABOVE A. McLaughlan's Store, recently occupied by Dr. Gunn as office—to rent on easy terms. Apply to W. H. BEAN, Sec'y A. F. & A. M.

**For Sale or Rent.**

LOT 51, 52, 53—Sideroad 50, 1/2 miles north of Priceville. Farm in first class condition. Good buildings with running stream convenient to the barn. For further particulars apply to

DUGALD D. MCLACHLAN, Priceville P. O. Jan. 28—tf.

**For Sale.**

A DESIRABLE PIECE OF PROPERTY consisting of twenty-five acres one-half mile east of Corporation of the Town of Durham, described as South part of Lot 29, Con. 2, E. G. R., Glenelg. On the premises is a comfortable brick five roomed cottage, a good frame barn and stable, a small bearing orchard, an abundance of the best running water. All cleared, title good. Terms easy and price right. For further particulars apply to

THOS. DAVIS, Lot 2, Con. 3, N. D. R., Glenelg, April 4, 1904.—tf. DURHAM P. O.

**Town Lots for Sale.**

IN THE CENTRAL PART OF Durham. Four lots on the West side of Albert Street, for private residences. Now is the time to get these lots. For further information apply to

J. M. HUNTER, Durham. April 12, 1904.—tf.

**Park Lot For Sale.**

PARK LOT NUMBER 13 NORTH of Saddler street in the Town of Durham, in the county of Grey, containing 4 acres more or less. For terms and particulars apply to

J. P. TELFORD, Dec. 2—tf. Vendor's Solicitor, Durham.

**Houses to Rent.**

TWO GOOD HOUSES, NEW BRICK good location, garden lot with each. Rent reasonable to right tenant. Situated on Queen street. Apply to

JAMES CARSON or ED. WALSH.

**HOUSE TO RENT.**

FRONT PART OF DOUBLE House—five rooms—to rent. Terms reasonable. For further particulars apply to

JAS. CARSON, Durham, or to M. O'DONNELL, 210 61st Ave. West Duluth, Minn.

**Tenders Wanted.**

TENDERS WILL BE RECEIVED up to Saturday, May 9th, for the erection of a new brick school house in S. S. No. 2, Egremont. Plans and specifications may be seen by applying to

April 17th. JAMES MACK, Sec'y.

**Farm For Sale.**

212 ACRES NEAR WILDER'S Lake. Two barns, stone stables with cement floors, good house, well watered. Cheap. For further particulars apply to

MACKAY & DUNN, Vendor's Solicitors. March 10—tf.

**House for Sale.**

SIX-ROOMED COTTAGE, PANTRY and Cellar. Also good Woodshed, 1/2 acre ground, well and cistern. Desirable location on College street, Durham. For terms and particulars apply at residence

A. FORD, Proprietor. Feb'y 10th—3mpd.

**Farm for Sale.**

LOT NO. 30, GARAFRAXA ROAD, L Sullivan, 99 acres more or less. Rough-cast house, frame barn. For particulars apply to

MRS. QUIRK, Dornoch. March 24th, '05.

**Farm for Sale.**

BEING PARTS OF LOTS 62 AND 63, Bentinck, Con. 2, W. G. R., adjoining the Corporation of the Town of Durham. The farm consists of 42 1/2 acres—about 4 acres woodland, the balance under grass. Comfortable dwelling and good comfortable outbuildings. Small orchard. Just the kind of place for a dairy farmer or market gardener. Sold at right price and on easy terms as the proprietor intends going west and wishes to dispose of it.

H. BURNETT, Proprietor, Jan. 20, 1905.—tf. DURHAM, ONT.

**House to Rent.**

ON THE FIRST OF DECEMBER—a comfortable, conveniently situated house on Lambton street west. Spring water tap in kitchen. Rent reasonable. Apply to

N. MCINTYRE, Durham. Nov. 8th.

**NEW ADVERTISEMENT.**

**H. H. Miller**

THE HANOVER CONVEYANCER

Now offers the following:

100 ACRES, south-west of Varney, in NORMANBY. An extra good farm and well improved. Owner anxious to go west.

150 ACRES, BENTINCK, north of Allan Park. Well improved and offered very cheap.

125 ACRES, on 18th Concession of NORMANBY. Good farm with good timber. Offered cheap. Will rent if not sold.

100 ACRES, BENTINCK, near Rocky Mountain. Good farm with good timber. Will sell cheap.

DURHAM RESIDENCE, belonging to Mr. J. L. Bryawne, photographer, offered at snap price.

MONEY TO LOAN at lowest rates. INSURANCES PLACED in No. 1 Companies at low rates. DEBTS COLLECTED. BUSINESS DIFFICULTIES arranged. C. P. R. TICKETS for sale to all points.

Always Prompt—Never Negligent. **H. H. MILLER.**

**Implements**

The "Deering" Implements, manufactured by the International Harvester Co. of Hamilton, lead the world.

SEED DRILLS, CULTIVATORS, DISC HARROWS, DIAMOND SMOOTHING HARROWS, SCUFFLERS, WAGONS, WILKINSON PLOWS AND LAND ROLLERS.

**Buggies.**  
A complete line of the Palmerston Buggy Co.'s Buggies.

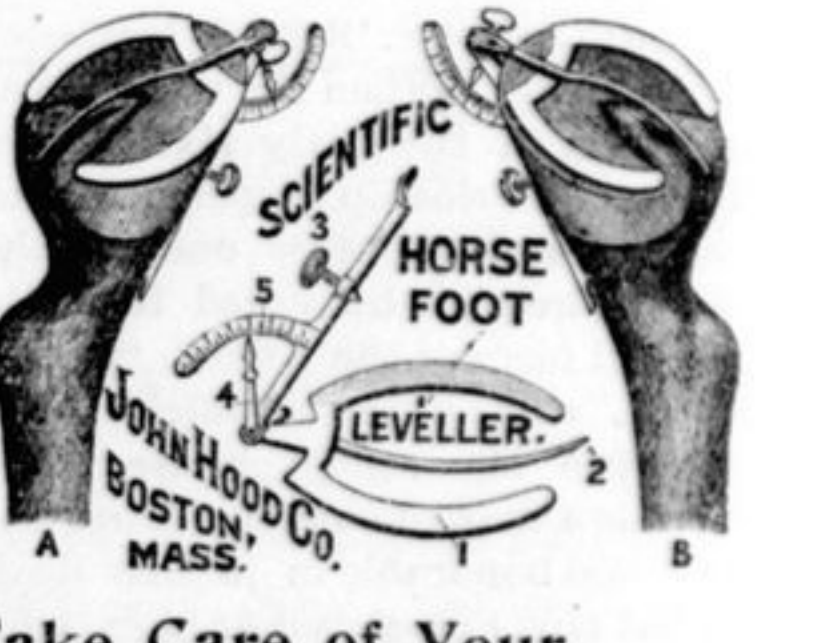
Raymond Sewing Machines, Dowsell Washers, Thomas Bros. Washers, McClary clothes, Elmira Hay Loaders, J. I. Case Threshing Machines.

**Wire Fencing.**

The Dillon Wire Fence Co. of Owen Sound offers prizes of from \$450 down to \$100 to persons putting up the greatest number of rods of their fencing. We sell the wire.

MONUMENTS.—The Doyle & Julian Marble Works, Owen Sound. Before buying elsewhere see our designs and samples. We can save you money.

**JOHN CLARK**



**Take Care of Your Horses Feet. . . .**

NO MORE GUESS WORK, in levelling and balancing your horse's foot. I have the Scientific Horse Foot Leveller which is the latest and best contrivance for that purpose and will guarantee satisfaction.

**W. GUTHRIE,**  
The Blacksmith.

**AT COST**

FOR **30 DAYS**

When we say "cost" we mean it, and during the month of March we are determined to clear out our stock of

Ready-made Suits, A large stock of Trousers, Overcoats while they last, A few Waterproof Jackets, A line of Prints, 25c Tea at 20c.

DON'T FORGET that all the above are going "at cost." Get bargains while they last.

**Fresh Groceries**

Always in stock. Apples and Potatoes at right prices.

**S. SCOTT**

DURHAM, — — ONTARIO.

If a good

freight 25 Household it and my would get good baker ahead that is no flour

Now, is Mr. Henderson's Royal Household

THE O

Not the Oldest—Not the Just the Best.

If you wish to receive the Best and Shortland Education, it is that you attend the Best—

The Mount Forest Business Col

This College is the Best— Because each student is taught by his own desk. Because all difficulties are explained as they occur, thus saving time to the students and enabling them to accomplish more than is possible elsewhere. Because each student receives a certificate in his weak subjects and in his subjects. Because each student does his dependent of all others thereby instilling confidence in himself. Because by attending the day classes, students graduate in time and at a small cost. Because its graduates are employed in the best positions in almost every part of the Dominion and American cities. Because this College enjoys the endorsement of the Business Public. Because it teaches Actual business start to finish. Because its Shortland students carry on work, some writing 1 per minute after attending 4 months. Because at the head of it is a man whose qualifications as a teacher are such and whose ambition is to see his students become good citizens, morally, socially and financially. O, on July and August.

**W. T. CLANCY,**

**DR. GEO. S. BURTON**  
Late Assistant Roy. London Ophthalmic Eng., and to Golden Sq. Throat & Specialist: Eye, Ear, Throat & Exclusively

Will be at the Midway House 1st of each month, from 12 to 4 p.m.

**DR. BROWN**  
L. R. C. P., LONDON & GRADUATE of London York and Chicago.

Diseases of Eye, Ear, Nose and Throat. Will be at Knapp House, Durham Saturday in each month. Hours—

**Sydenham Mutual Fire**  
ESTABLISHED 1829.

Insures farm buildings and dwellings and contents in town and villages. Everything in a dwelling insured by one sum. Contents of our buildings all the farm produce. Stocks and live stock from fire or the widest range of insurance at rates. If your insurance expires it will pay you to insure in the same office.

Drop a card to **J. H. McFAYDEN,** April 17th—tm. DURHAM.

The Frost Fence is guaranteed to be charge, any defects due to Write for free booklet.

**W. L. FALL**