



In the South Chelmsford Village Improvement Association float showing the evolution of matches with Bradley Parker impersonating Ezekiel Byam.

### Mills Of The Town

Nothing more marks the enterprise of the people than the mills which were early established upon the various streams. The first corn and saw mill, which the town so liberally endowed in 1656, was followed in 1669 by a second saw mill, upon Saw Mill Meadow brook which flows into Stony Brook at what is now called Westford corner near West Chelmsford.

'At a public meeting the 3d: day in September: 1669: Thomas Hinchman, William Fletcher, and Josiah Richardson Pertitioning for a parcell of Land for there Conveniences in erecting of a saw-mill and carrying along the work thereof'. The grant was made by the town, the conditions being that the 'Inhabitants thereof shall have there boards at four shillings per hundred and not exceeding that price: for any kind of pay that the aforesd inhabitants can make: at price Currant between man and man in this town: And that any of the Inhabitants of Chelmsford giving timely notice of there want of boards to any of the owners of the Mill aforesd that then they shall be supplied for there pay before others. And further it is granted to the aforesd owners of the Mill that they shall have free Liberty to take of the Town Common What timber they see meet for the Mill to work on: And to Rattifie the aforesd grant the Town hath

chosen Samuel Foster and John Burge Senr. to see to the Recording thereof and that it is done according to former order.

Witness our hands Samuel Foster Senr  
John Burge Senr'

The banks of an old canal are still plainly seen at this point. At a general meeting of the town 'the 3 day of February, 1673 by a maior voatt was granted to farther the Iron Worke that thye shall haue for 2d a Cord leave to cutt wood according to former agreement' this was doubtless Capt. Jonas Prescotts mill at the outlet of Forge pond on the Stony Brook.

'At a general Town Meeting August 24th, 1709: it was voted that Capt. Jonas Prescott of Groton shall have the Common Meadow lying in Chelmsford as it was granted to Thomas Chamberlain of Groton for the sum of Twenty five pounds of money.' When this grant was recorded the following year, the only part of the description now intelligible is 'lying within the Town of Chelmsford near to Groton Mill on both sides of Stony Brook.'

Capt. Prescott's object in obtaining the meadow was, no doubt for the purpose of obtaining bog ore to be manufactured into iron. He and his descendants continued the business at Forge Village till 1865, almost two hundred years from the date of the first action by the Town of Chelmsford in aid of the enterprise.

The first mill on Beaver Brook at the center of the town, was erected in 1678, John Parker, son of Abraham. Continued on twelfth page

### Chelmsford Industries:

The early industries of Chelmsford were at first limited to those which could furnish the most necessary products--like corn meal and lumber. Natural resources played a determining role then in determining the location of mills where sufficient water-power was available, and in dictating many of the raw materials to be used (bog iron ore, limestone, brick clay, etc.) Home industry which at first provided for nearly every necessity of life, gradually declined as manufacturing began to be developed in the country on a large scale and as imports increased and the domestic exchange of goods grew easier with the coming of better transportation facilities.

For many years, however, self-sufficiency was essential and the town was careful to see that among its citizens were skilled workmen who by the serious pursuit of their trades could contribute to the town's welfare and progress. So, for example, a tailor, a blacksmith, a tanner, and a weaver were allowed to become inhabitants. Each citizen himself, moreover, was expected to know something of the many types of work done in the home and on the farm: raising of food, caring for animals, carpentry and repairing, preparing food, weaving, dress-mak-

Continued on fourteenth page

# INDUSTRIES



### The First Lucifer Matches Made In America

The Indians obtained fire by rubbing two sticks together until the friction caused them to ignite. The early white inhabitants used tinder boxes of metal in which punk or charred linen was ignited by a spark from steel striking on flint. Sometimes they would be obliged to borrow live coals from a neighbor's hearth.

Between the tinder-box and the friction match, several inventions came into use. An article in the 'Chelmsford Eagle,' 1883 says:

One of these was the 'instantaneous-light box,' which consisted of a small tin box containing a bottle, in which was placed some sulphuric acid, with sufficient fibrous asbestos to soak it up and prevent its spilling out of the bottle, and a supply of properly prepared matches. These consisted of small splints of wood, about two inches long, one end of which was coated with a chemical mixture prepared by mixing chlorate of potash, six parts; powdered loaf sugar, two parts; powdered gum arabic, one part; the whole colored with a little vermilion and made into a thin paste with water. The splints were first dipped into melted sulphur and afterwards into the prepared paste. They were readily inflamed by dipping the prepared ends into sulphuric acid.

There were several disadvantages in this invention, especially those arising from the use of so destructive a material as sulphuric acid, which also had another drawback, its great powder of absorbing moisture soon rendered it inert by the absorption of moisture from the atmosphere.

The Lucifer matches, which

succeeded the above, was an English invention. This match was of small strips of wood, and the inflammable mixture was a compound of chlorate of potash and sulphurate of antimony, with enough of powdered gum to render it adhesive when mixed with water and applied over the end of the match, dipped in melted brimstone. These matches were ignited by drawing them through a piece of bent sandpaper. The first Lucifer matches that were made in this country were manufactured at South Chelmsford, in 1835, by Ezekiel Byam, the founder of the house of Byam, Carlton & Co., of Boston, of which his son, E.G. Byam, was afterwards at the head.

These matches were put up in packages containing one hundred, which sold for twenty-five cents a package.

Soon after, the friction match was invented. This was patented by A.D. Phillips, of Springfield, Mass., October 1836. Mr. Byam at once saw the importance of this invention, and, with characteristic enterprise, he purchased, first, the right to manufacture, and soon after the whole patent, and in 1837, introduced the friction match to the public. The old match shop' as it was called, stood on the old road leading from South Chelmsford to the Centre, a few rods from the house of Mr. Eli E. Parker, on the opposite side. It was a small building, set into the bank, with one story above the basement.

The matches were put up at the Willard Byam house, which stood just beyond the shop on the site of the residence of Mr. E.P. Bean.

After manufacturing here about a year, Mr. Byam moved to Boston, then returned to Chelmsford. Continued on fourteenth page



Russell Lumber Mill located on Russell Pond off Mill Road.



This is one of the houses of the Chelmsford Glass Works, a company established in 1802. There was at least one string of three units, a story and a half in height, each dwelling having a central chimney and two windows on either side of the door. It is highly likely that the housing was built shortly after the factory was started, for it was located in a very sparsely inhabited district. If that was the case, this would be the earliest American industrial housing development.

# H. E. Fletcher Co.

## H. E. Fletcher Company

Few of us realize that right here in this area Massachusetts has a 'Grand Canyon' of its own, in the tremendously large quarry of the H. E. Fletcher Co.

The H. E. Fletcher Co. was founded in 1881 by Herbert E. Fletcher on the present site in West Chelmsford. Since then the company has had an outstanding record in controlled quality production with, and directly resulting from, a history of happy labor relations.

The quarry has progressed tremendously since the early days when 'Dad' Fletcher got his crew together and fashioned their first derrick by tying a boom onto a pine tree which was still growing in the ground and used a team of oxen to haul the stone away from the edge of the quarry. Today, they have a number of stiffleg derricks, supplemented by numerous crawler cranes, in the quarry. The team of oxen has as its counterpart today a diesel locomotive which operates over the company's extensive plant railroad. Another indication of the progress of the H. E. Fletcher Co. is reflected in its current application of a jet-piercing process using a flame drill to free the stone from the ledge.

The firm's main office is off Groton Rd., near the Chelmsford and Westford line. It also has an office in New York City and another in Washington, D. C. In addition, it has sales agents in other large cities.

The policy of the company has been to reduce the waste by utilizing all available stone for one purpose or another. The products sold by the company are granite curbing for highways, bridge facing, building stone, monument bases, grave markers, house veneer, paving blocks, rip rap, crushed stone, poultry grits, super-granite soil amender, stone

for dams and water supply, flagstone, industrial surface plates, paper rolls, mill stones, jetty stone, slope paving, and sea-wall stone. The main product of the company is the granite curbing and this constitutes better than 60% of their gross sales.

Some of the major projects in which Chelmsford Granite has a major place are: Lowell Post Office, Boston Post Office Littauer Building of Harvard University, State Capitol Buildings in Harrisburg, Pa., National Gallery of Art in Washington, D. C., the steps of the Supreme Court Building in Washington, D. C., the steps in the Dept. of Interior Building in Washington, D. C. Mystic River Bridge in Boston, Merrimack River Bridge in Amesbury, the Wilmington, Delaware Memorial Bridge, the 14th St. Bridge over the Potomac River in Washington, D. C., the Philadelphia, Pa.-Camden, N. J. Bridge, The Delaware Water Gap Bridge in Pa.

Curbing of Chelmsford Granite is along the sides of the road on Route 3 and Route 128 in Mass., and on the New Jersey Turnpike, the Maine Turnpike, the New Hampshire Turnpike and the Mass. Turnpike now under construction, as well as in many other locations.

The operation of the H. E. Fletcher Co. is a team effort. Members of the management group and the men on the production line are working together to accomplish a common goal - to give a better product to more customers at the lowest possible price. They know that from the fulfillment of this common purpose there will naturally flow the indirect, extremely important, results of greater security and better income for the employees and the owners.

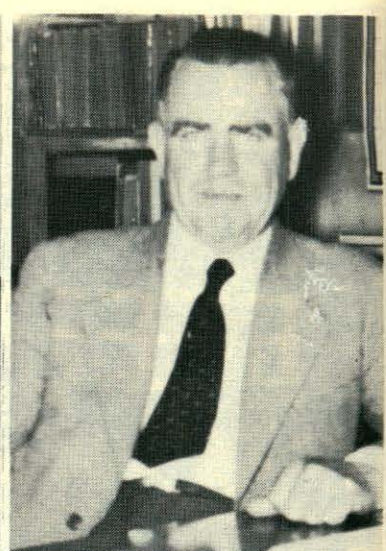
In 1953, the H. E. Fletcher Co. introduced a profit-sharing plan for its approximately 480 employees. This plan has been received with great enthusiasm



Harold H. Fletcher, president of H. E. Fletcher Company.



Herbert E. Fletcher, founder of H. E. Fletcher Company, now retired at the age of 93.



Ralph A. Fletcher, treasurer of H. E. Fletcher Company.

by the employees and already has meant substantial 'extra bonus' for them. The employees have their own social and athletic association and a beautiful and well-equipped clubhouse located in Nabnasset. They have their own insurance compensation program, a blood bank, softball and bowling leagues. They are kept posted on social and company activities by their own company paper.

The H. E. Fletcher Co. has in the past 75 years developed from a rocky knoll in the wilderness into one of the world's largest and best-equipped dimension granite quarries. Vision, boldness and advanced thinking have spearheaded this progress. Today, the attitude and outlook of the people at Fletcher's reflects a healthy confidence that the road ahead will be one of continued progress, with greater benefits for the customers, the employees and the owners.

### Byfield Manufacturing Company Being Built 1887

A business enterprise has just been inaugurated in this village which marks an epoch in its history. At intervals during the last 50 years there have been spasmodic efforts to introduce some kind of manufacturing which not only would give employment to some of our own people who were not inclined to till the soil, but attract others to the town. The manufacture of straw goods was at one time agitated, and again that of shoes was warmly advocated, but neither ever materialized.

Now, however, initial steps have been taken, with ample guarantee of fulfillment, to introduce the manufacture of machines for producing various classes of knit goods. The projector of the enterprise is the Byfield Manufacturing Company, now located on Market street in Lowell, and whose general manager is Mr. John Byfield, a well-known citizen of this town. Sufficient land for the purpose has been obtained of Deacon David Perham. It is admirably located in the southerly side of the Littleton road, a few rods west of the railroad station and two stories high, and constructed of brick. It is intended to begin work upon the foundation at once, and to have the machinery in running order by Jan. 1.

Mr. Byfield now employs 22 men, and with additional room could double his force to advantage, as the present season he has been compelled to de-

cline many orders for machines on account of inadequate facilities to complete them when wanted.

It is proper to state that Mr. Byfield's decision to locate here was largely influenced by the general and substantial encouragement pledged by our citizens, a mark of confidence which he highly appreciates. The railroad company will at once construct a spur track, which will deposit the building material where wanted and also greatly facilitate the shipment of the manufactured products.

The character and standing of the skilled mechanics employed in this establishment should speedily dispel the not unreasonable dislike which in a quiet agricultural community may be felt by some to the introduction of manufacturing, with which is often associated the advent of a class who constitute a numerical addition but no substantial benefit to the town. In the present instance there are satisfactory assurances that the prospective accession to our population is of a most worthy character.

The Byfield machine shop is making excellent progress, the weather having been favorable for building operations. The brick work of the first story is completed and the carpenters are laying the floor timbers for the second. The window frames are made by E. R. Marshall at his shop on South Street.

1887. C. W. Sylvander, shoemaker, one of the best workmen who ever adorned the bench in this village, has returned after a short residence in Lowell and opened a shop over S. W. Parkhurst's store.

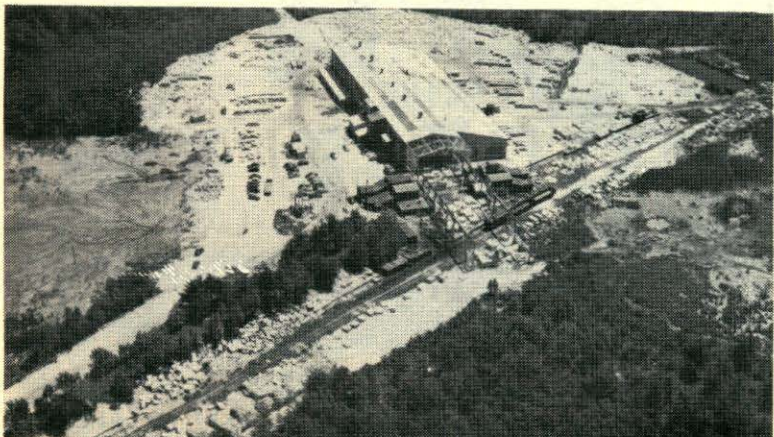
### Tour Of The File Factory, 1876

We had the pleasure of visiting the File Manufacturing and Machine Knife Works of the Hiscox File Manufacturing in operation here since last June at the old Scythe Factory (in West Chelmsford). We were shown over the establishment by the gentlemanly foreman, Mr. Samuel Naylor. He first took us into a large room which had mother earth for a floor, where the bars of steel were taken in a white heat from the fiery furnaces, and under the thumping trip-hammers, or more skilful though less powerful, hand hammers, were transformed into the various forms of knives and files. In the next room stands a row of file cutting machines upon a firm foundation of stone. Here the steel is passed through an ingenious machine where a chisel descends with precision, cutting the incisions which make the steel a file. We next visited the grinding-room where huge grindstones turned by power smooth the surface of the steel and grind the knives and sword blades, then to the hardening room, where the steel is tempered, also, the repairing, the finishing and shipping rooms. This industry gives employment to from sixty to seventy men. The products are shipped to all parts of the country.

John Wozencroft has recently opened a blacksmith in the village. John's skill in his craft is well known, and, with a trio of blacksmiths and a wheelwright, it would seem that in this community there can be no excuse for loose shoes or rattling spokes. (Nov. 1885)



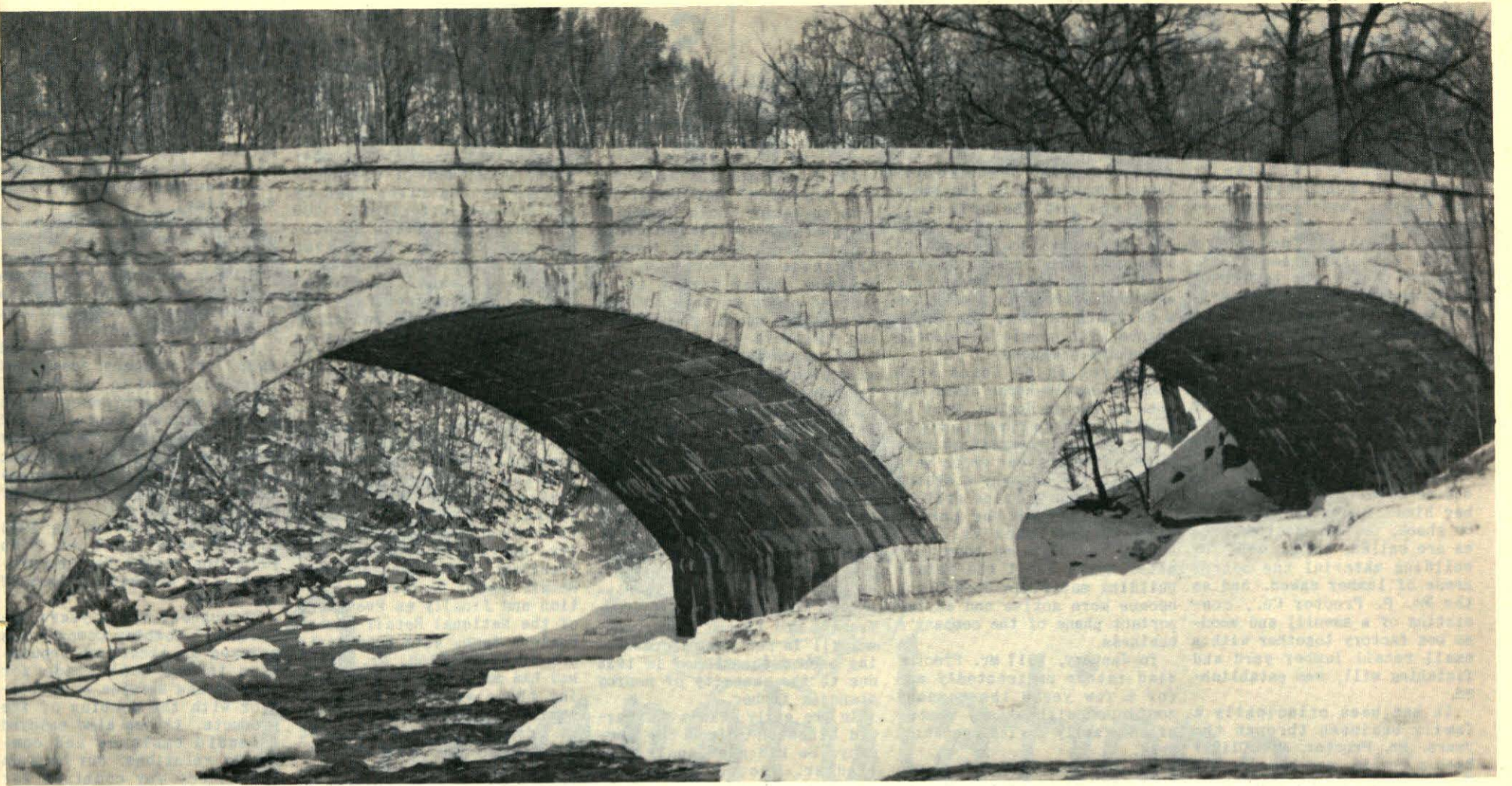
Chelmsford granite in the process of being quarried.



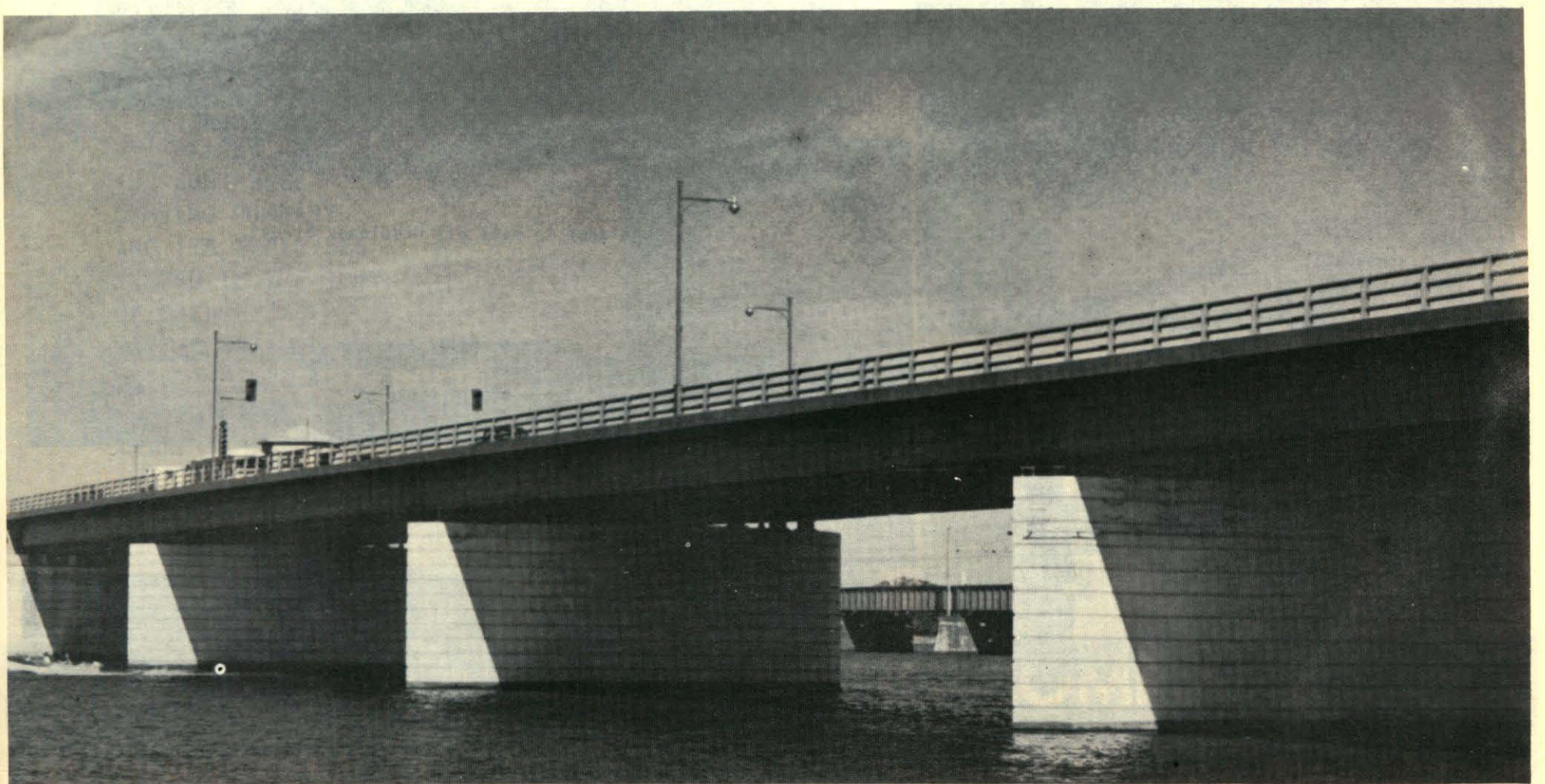
Aerial photo of mill where stone is sawed and processed into a finished product.



Aerial photo of the quarry.



H·E·FLETCHER CO.  
CHELMSFORD GRANITE  
1880 1955



# Wm. P. Proctor Co.

# Southwell Combing Co.

The Wm. P. Proctor Co. was incorporated on April 26, 1905 and began its business life in No. Chelmsford at its present site which Mr. William P. Proctor of Dunstable, Mass. the founder, had recently purchased.

The property included a house, which with additions, has now become the office of the company, and approximately ten acres of land.

Previous to coming to No. Chelmsford, Mr. Proctor had operated in the lumber business as a buyer of standing timber which he sawed on the lots with portable mills and sold as rough boards and dimension. His move to No. Chelmsford was prompted by the desire to manufacture the lumber himself into wooden boxes or shooks, as the unnailed boxes are called, and to sell for building material the better grade of lumber sawed. And so the Wm. P. Proctor Co., consisting of a sawmill and wooden box factory together with a small retail lumber yard and finishing mill, was established.

It has been principally a family business through the years. Mr. Proctor, Mr. Oliver Reed a cousin, and Miss Lettie W. Goodhue, another cousin, formed the corporation at its beginning. Through the years Miss Goodhue was a bookkeeper for the company and after Mr. Proctor's death in 1917 she, also, became treasurer. She retired in 1937 and moved to Hancock, N.H., her old home, to live with a brother and maintain a home there until her death in January 1954 at the age of 94.

In the early days of the company the wooden boxes and cases which they manufactured were sold to many Lowell firms now no longer in existence. Textile and shoe concerns, piano companies in Boston and Leominster, comb and brush factories, and hardware and

tool companies in Connecticut were some of the customers for the Proctor Company's products. During those years before World War I the retail lumber department of the business was not the principal activity of the company, but it did supply local customers in Lowell and nearby towns with such building materials as they desired. In those days a delivery service was maintained with single and double horse-drawn wagons.

Deliveries of boxes were made by double-horse drawn wagons as far as Boston. Most of the longer deliveries and those in large quantities were made by freight car which were put onto the company's siding by the Boston & Maine switching engine from the Lowell yard in Middlesex Village. During the building boom just after World War I the retail building materials department became more active and an important phase of the company's business.

In January, 1917 Mr. Proctor died rather unexpectedly and for a few years the company continued without any member of the family as its operating head.

In 1923 Mr. Norman P. Mason came into the business. He had become a member of the family through the marriage in 1920 to Mr. Proctor's older daughter, Helen. He spent a year or so familiarizing himself with the company's affairs and in January, 1926 became president of the Company and operating manager.

At this time Mr. Mason was able to obtain the services of Mr. Arthur Batchelder, an engineer by training, who had been connected with large construction projects in Puerto Rico, Florida, and Connecticut. Mr. Batchelder came to take over the management of wooden box department which included the buying of lumber on the stump and processing it

into the rough lumber used to make the boxes. He is now the general manager of the box shop and kiln department, which he founded and built for the drying of hardwood. In this operation rough lumber is shipped to North Chelmsford by rail or truck from the forests of Canada and Northern New England. After drying it is shipped on to be manufactured into wooden heels, gun stocks, and furniture.

The next two decades saw an expansion of the retail lumber business. In 1932 a yard was purchased in Nashua, N.H. and two years later a working agreement was developed with a coal and lumber business in South Acton. In 1936 a Display Center was opened on Central St. in Lowell. It was discontinued during the war. The F.D. Cook Lumber Co. in Milford, N.H. was added. Then in 1952 a sawmill was purchased in Plymouth, N.H. to provide Eastern framing and finish lumber, the sawmill in No. Chelmsford having been discontinued in 1938 due to the scarcity of nearby standing timber.

In the early 1930's Mr. Harold Kingston joined the company. He had previously married Mr. Proctor's younger daughter, Ruth.

On the retirement of Miss Lettie Goodhue, Mr. Kingston was named President and Mr. Mason became Treasurer.

The flood of March 1936, when the river, swollen by heavy rains and melting snow from the White Mountains, did so much damage throughout the Merrimack Valley, was our greatest disaster. The yard at North Chelmsford was entirely covered by more than six feet of water. Lumber piled in the open yard was threatening to

float down the river, but booms strung across the lower end of the yard prevented this from happening. Other lumber piled under one of the sheds raised as the river came up and threatened to float a 200 ft. building off its foundation. Fortunately, the river reached its crest before this happened. However, damage to the box making machinery and building materials inventory was great and much cleaning up was necessary due to the silt which covered everything as the river receded.

On April 13th, 1954 Mr. Mason accepted the appointment by President Eisenhower as Commissioner of the Federal Housing Administration in Washington, D.C. Through the years he had been active throughout the lumber industry, serving as Treasurer and President of the Massachusetts Retail Lumber Dealers Association and finally as President of the National Retail Lumber Dealers Assn. with headquarters in Washington. Mr. Mason had had many appointments during these years to serve on committees in the industry and as advisor for government agencies during World War II. He was elected to three successive terms as a director of the United States Chamber of Commerce. In 1953 he served on President Eisenhower's Advisory Committee to produce a program of cooperation between the government and the construction industry. He is now serving in Washington and as a consequence has severed his connections with the Wm. P. Proctor Co.

After World War II, Mr. Mason's son, David, upon finishing his college education at

This company began operations in 1922, in the plant known as No. 1 mill, located off Vinal Square in North Chelmsford and has been in continuous operation combing wool top since that time.

In 1932, at which time No. 1 mill had been expanded to capacity, the plant known as No. 2 mill on Middlesex Street was acquired from the United States Worsted Corporation when that company ceased operations.

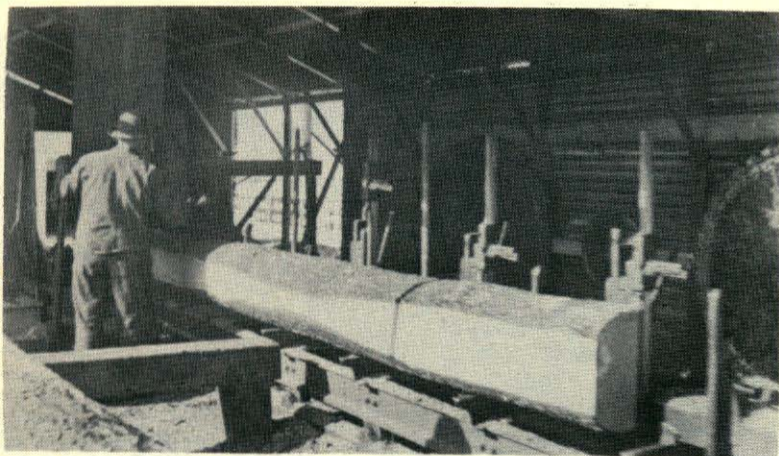
In both the years 1936 and 1938, the company sustained crippling blows in the form of floods and hurricanes which damaged plants, equipment and products. Despite these heavy losses to machinery, equipment and wool stock, the company came back bigger and better than ever before.

Further expansion in 1948 brought about mill No. 3 on Princeton Street for the processing of synthetic fibers of all kinds.

Throughout these years the Southwell Combing Company has enjoyed an excellent reputation in the wool trade for quality and service in connection with the combing of its products. It has also enjoyed splendid employee and community relations. Our hope is that these may continue for many years to come.

1886  
Every alternate Tuesday evening through the summer the ladies of the Episcopal society will dispense ice cream at the chapel to all who may call upon them provided with the indispensable dime. Acting upon the maxim, 'The proof of the pudding,' etc., the writer can vouch for the superior quality of the compound and the generous supply which the aforesaid dime will procure.

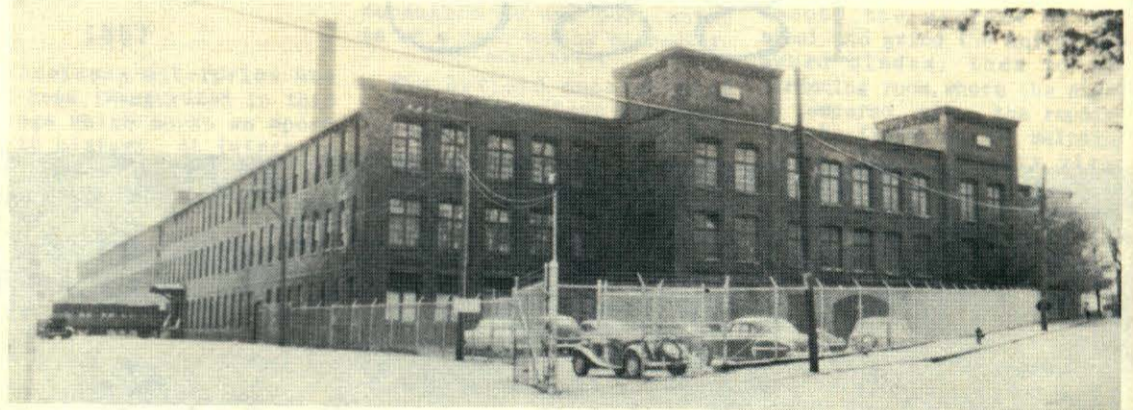
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The original saw mill used at Wm. P. Proctor Lumber Co.



During the flood in 1936 the flood caused great damage at Wm.P. Proctor Co. Shown are men towing lumber along Middlesex Street. Fence at right was under water at the high water mark of the flood.



Entrance to mill off Middlesex Street.

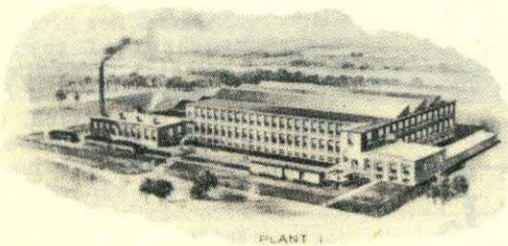


Showing Mill off Vinal Square.

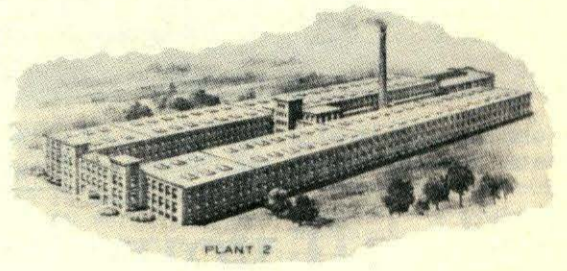
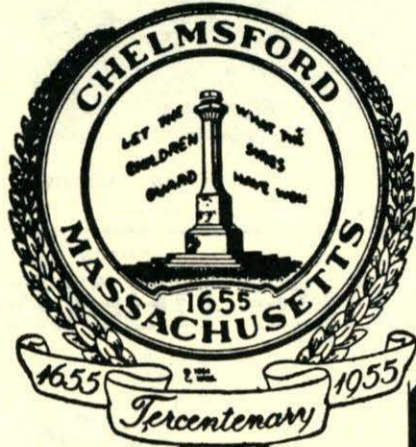


Showing Nylon Mill from Princeton Street.

# SOUTHWELL COMBING COMPANY



PLANT 1



PLANT 2

## Congratulations



PHILIP SOUTHWELL



JAMES SOUTHWELL



EUGENE F. CRANE

THE SOUTHWELL  
COMBING COMPANY  
AND ITS EMPLOYEES  
EXTEND TO THE TOWN  
OF CHELMSFORD  
MOST CORDIAL  
GREETINGS ON THIS  
TERCENTENARY  
YEAR!



HENRY F. FESSENDEN

A 300th BIRTHDAY IS A  
SIGNIFICANT ONE INDEED.  
IT MARKS IN A SPECIAL  
WAY A VANTAGE POINT  
FROM WHICH WE CAN  
BOTH LOOK BACK ON A  
LONG RECORD OF SACRIFICE  
AND ACCOMPLISHMENT  
AND VOICE A PRAYER FOR  
PEACE.

**SOUTHWELL COMBING COMPANY**

**51 MIDDLESEX STREET**

**NORTH CHELMSFORD, MASS**

# Chelmsford Ginger Ale Co.



Chelmsford Spring off High St., source of water supply for Chelmsford Spring Company which later developed into the Chelmsford Ginger Ale Company.

C. George Armstrong

The Chelmsford Ginger Ale Co., Inc., was established in 1901 by its president (Christopher) George Armstrong, born in St. Mary's, Ontario, 1864. He served in the Canadian forces during the Riel rebellion (1885) in the Canadian West and later went to Australia for a year to rebuild his health. He returned to Canada by way of the Suez Canal, thus completing a circling of the globe.

Meanwhile his sister, S. Jennie Armstrong, had married Mr. John Byfield of the Byfield Manufacturing Co. in Chelmsford and Mr. Armstrong became a salesman for its products. After his subsequent marriage to Miss Mary Hendricks Hallett of Sussex, New Brunswick, granddaughter of the Rev. John Parkhurst of Chelmsford, Mr. Armstrong opened a millinery store in Goderich, Ont. After the store was burned, he went to Sussex again and there formed a ginger ale company with his brother-in-law, S.H. White. The Sussex Ginger Ale Company is still in existence and does a large business throughout the maritime provinces.

Mr. Armstrong wished to return to New England, however, and became interested in the possibility of organizing a ginger ale company in Chelmsford where he found an abundance of pure spring water available from Robin's Hill and a building ready for his use in the old Byfield plant which was then empty. At first Chelmsford Spring Company was connected with the Sussex company, but it soon became independent. It made ginger ale, and ginger beer which was sold in stone bottles imported from

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England. This latter product had to be given up eventually, for the opaque stone bottles became illegal and the ginger beer's keeping qualities were impaired by being bottled in any other container than available.

In 1912, the original Chelmsford ginger ale plant was destroyed by fire, but it was immediately rebuilt. Other plants were later established in Boston and in Shrewsbury, and the local plant enlarged.

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# TELEPHONE SERVICE

Chelmsford has had the telephone for about a fourth of the town's 300 years.

There is no record available which shows just when the telephone first came to town. But it appears that it was before 1884, for a New England Telephone & Telegraph Company record of telephones in service in that year, shows 16 for Chelmsford. Nine of these were in North Chelmsford, six in Chelmsford Center and one in West Chelmsford.

The time could not have been before May, 1877, for it was not until then that the telephone -- invented in 1875-76 by Alexander Graham Bell -- was introduced to the world as a thing of commercial value.

So it was sometime between May, 1877, and 1884 that the telephone made its bow in

Chelmsford, telephone manager John H. Harper, Jr. points out.

At its introduction to the world the telephone did not have central office switchboards for the interconnection of lines on an 'exchange service' basis. A person simply leased telephone instruments and built his own line, usually for communication between two points. It is possible that some people in Chelmsford may have had telephones on this early 'private line' basis.

The earliest time that anyone in Chelmsford could have had a telephone on an exchange service basis was with the establishment of the central office in Lowell on April 19, 1878. This was the first central office in Massachusetts and one of the world's first -- the very first in the world having been established in New Haven, Conn., in January, 1878.

Today there are about 4000 telephones in Chelmsford. They represent about 11 per cent of the nearly 37,000 telephones in the Lowell exchange. This exchange together with the Wilmington, Billerica, Tyngsboro and Westford exchanges constitute a local service area in which the number of telephones exceeds 45,000. This is well over twice the number of telephones in the area before the war.

The telephones in Chelmsford today serve all the businesses in town and more than three-fourths of the homes. With dial operation and with the larger local calling area established in recent times, the town's telephone service has the modern features that make for speed and accuracy of service and for its greater usefulness and value. Nor is service today confined to fixed locations as it once was, for another innovation since the war was the establishment of Mobile Telephone Service to permit vehicles on the highways to be connected to the general telephone system by means of radio facilities.

As they were everywhere in the earliest years, Chelmsford's first telephones were of the magneto (handcrank) style. These were replaced in 1900 by the type requiring only the lifting of the receiver to signal the operator. And this type, in turn, was replaced by today's dial operated telephones in 1939. In 1949, dial operation was applied to Long Distance service, and operators in Lowell now dial calls to all parts of the country. In a few more years, Chelmsford telephone users themselves will be able to dial the calls they make to distant points -- ultimately to all parts of the United States and Canada. The introduction of the style of numbering Chelmsford telephones with a central office name and five figures not long ago was one of the early steps in the direction of universal dialing of calls by telephone users.

The development of switching devices to interconnect telephone lines and the development of the many devices and techniques required to transmit the human voice over long distances were the means of making telephone service what it is today -- fast, dependable and worldwide in scope.

It is perhaps of special interest to the people of Chelmsford and Lowell (which

city was originally a part of Chelmsford) that Charles J. Glidden, founder of the Lowell exchange, was the builder of the first inter-city telephone line of any important length. It was in July, 1879, that the line he planned between Lowell and Boston (about 26 miles) was completed. In time, many similar inter-city steps were taken in New England and all over the United States.

The subsequent progress in extending the range of Long Distance may be seen in the following steps westward from Boston: To Providence, 1881; New York, 1884; Chicago, 1892; Denver, 1911; San Francisco, 1915.

Thus in a little over 35 years from its first long-distance step, Lowell to Boston, the telephone spanned the continent. In a few more years after 1915, during which the gaps in cross-country routes were filled in, it blanketed the country with universal service.

In the late 1920's the telephone sent its first radio 'line' across the ocean and by 1935 it was able to demonstrate a worldwide reach. Today, by means of radio channels across all the oceans, 16% of the world's telephones are within reach of any telephone in Chelmsford or in any city or town of the United States. Today, also, the telephone reaches not alone to stationary points, but to ships at sea, to vehicles on the highways, to railroad trains, and to airplanes in the skies.

So one may think of Chelmsford's telephones in this year of the town's 300th anniversary as part of a worldwide system of communication as well as a part of the local system which began only 77 years ago.

1887. The very general use of the telephone by business men in the cities and suburban towns has prompted the managers of the New England company to establish at convenient points pay stations, as they are called, for the use of the public upon payment of the prescribed fee. This step was more necessary since individual subscribers are now prohibited from permitting the free use of their instruments by others, as was once the too general practice. A pay station is to be established in this village April 1 at S.W. Parkhurst's store. While it will be a great convenience to the community, its permanence will largely depend upon the support it receives from the public.

Telephones were placed on Saturday in the residences of G. T. Parkhurst, Ole Linstad, and C. W. Byam at the Centre and D. P. Byam at the South village connecting them with the Chelmsford farmers' exchange of the New England Telephone company. (News item, Nov. 26, 1904.)

(March, 1913)

The recent installation of a telephone at the home of Miss Cecelia A. Richardson in North Street [now #3] makes, with but few exceptions, a telephone in every home from Central Square, a distance of two miles. In proportion to its size, Chelmsford is said to subscribe more generally to telephone service than any other of Lowell's suburbs.



Service truck by the New England Telephone and Telegraph Company denoting service by them through the progress of the telephone system.



## THE TELEPHONE COMPANY SALUTES CHELMSFORD ON ITS 300th ANNIVERSARY!



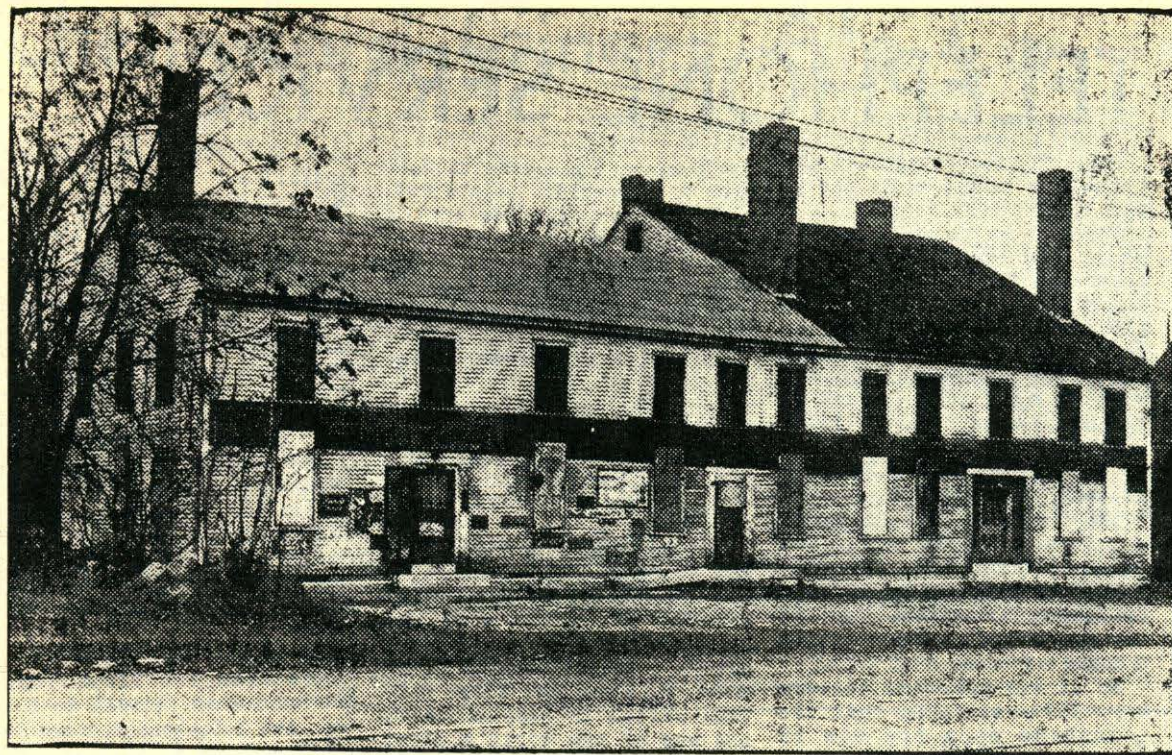
**H**ere is only one basic reason why any town or city grows in size and prosperity through the years -- that's because it's a good place to live. Because it's friendly, progressive and has an active civic pride.

The Telephone Company is proud to have been a part of this community for over half a century and to have contributed to its growth and development. And we have tried to help in other ways than by giving good telephone service. Our telephone people who live here share in community enterprises -- contribute their efforts in behalf of civic progress.

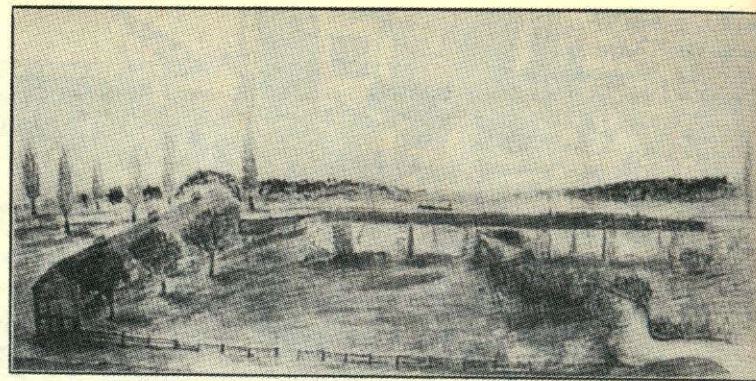
As a company, we pledge that we will continue to provide the best possible telephone service at the lowest possible cost.

As individuals, our people will continue to take an active part in the civic affairs of this thriving community of good neighbors.

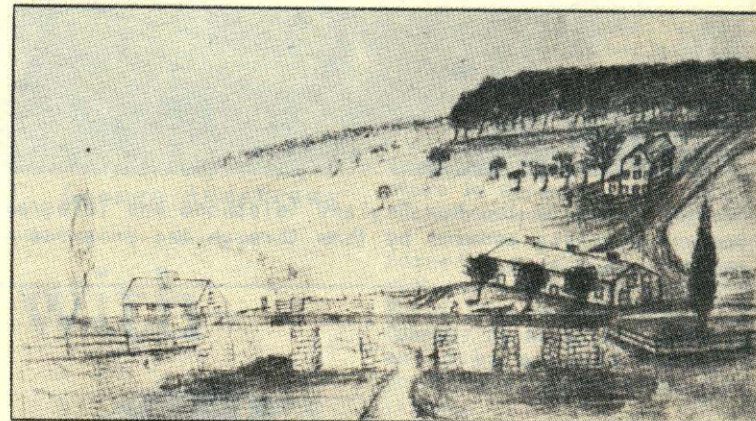
The  
NEW ENGLAND **Telephone** & TELEGRAPH  
Company



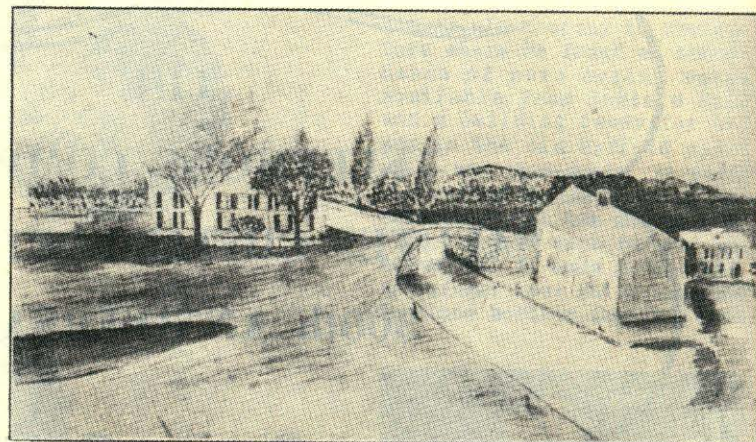
Ancient inn at Lowell where Lafayette once spent the night and tow boat captains and dispatch riders gathered.



MIDDLESEX VILLAGE. AQUEDUCT, LOOKING WEST.



MIDDLESEX VILLAGE. AQUEDUCT, LOOKING EAST.



BALDWIN MANSION. STORE HOUSE. BRIDGE OVER CANAL, MIDDLESEX VILLAGE.

### The Middlesex Tavern

The Middlesex Tavern stood for more than 155 years near the northern end of the Middlesex Canal opposite the end of Baldwin street. In March, 1930, it was condemned as unsafe by the City of Lowell and ordered town down.

It was not known just when this tavern was built, but certainly it was of Revolutionary days or even earlier. Lafayette spent a night here and so did John Hancock. It was not uncommon to see handsome coaches bearing armorial seals drive up to the tavern door in colonial days and discharge their wealthy and distinguished owners and guests.

This tavern, known as 'Clark's Tavern' in its early days, was probably built by Col. Jonas Clark, son of Chelmsford's second minister, The Rev. Thomas Clark, early in the 18th century. It was located on the direct route to Boston, via Golden Cove and Chelmsford, and for the convenience of people across the Merrimack, Col. Clark also operated 'Clark's Ferry'.

Col. Clark's sister, Elizabeth, had married the Rev. John Hancock of Cambridge, and became the grandmother of Gov. John Hancock, who signed the Declaration of Independence, and it is supposed that the Hancocks were frequent guests at the tavern, as were all the fashionable folk who travelled in those days.

The tavern was then a square building, substantially built, . . . a roomy, spacious house,

with large square rooms and great open fireplaces. Its table had a fame, and its swinging sign waved a greeting to every advancing guest. The stables must have been in the rear, for there was an expansive stable yard there, and great must have been the stir when the coaches with their four and six horses drove up, the passengers alighted, and were greeted by the substantial courteous host, who must have been a man of rare accomplishments and steadfast principles, for he was honored by his fellow townsmen and by the people of the Commonwealth. \* \* \*

Col. Clark's son, Timothy, succeeded him as tavernkeeper, and about 1815, when the Canal was in its prime, Jessie Smith was the proprietor. He was followed about 5 years later by Simeon Spaulding.

During 50 years preceding before it was torn down, the old tavern housed a variety store, wagon repair shops, clubs, and for a time, the worship of a religious society was carried on there.

1887. The boiler explosion last week in E.R. Marshall's shop was not caused, as some at first supposed, by the long service of the boiler, but by what the Secretary of the Navy would call 'structural weakness,' resulting from a defective principle of construction. The workmanship was first-class, and Mr. Marshall is too skillful and conscientious a workman to run any risks of blowing up himself or his customers by knowingly using defective machinery.

### The Middlesex Canal

The Hon. James Sullivan, lawyer, judge and twice Governor of the state, was the originator of the plan for a water route to Charlestown by which eventually New Hampshire, Vermont, and possibly Canada might some day be linked to Boston. The Proprietors of the Middlesex Canal were incorporated in 1793 and plans made for a canal from Charlestown to Middlesex Village (27 1/4 miles) which would then connect with the Merrimack and permit water traffic to Concord, N.H. The resources of northern New Hampshire would thus be made available for use in the Boston region and new markets for manufactured goods from Boston would likewise be opened.

It is virtually impossible for us today to appreciate the importance of the Middlesex Canal as an engineering marvel, a means of transportation and an economic influence. Its route was first surveyed by Samuel Thompson of Woburn in 1793, with instruments which were not precise enough for accurate determination of elevations, and Samuel Weston, an English engineer then in this country, made a second survey in 1794. Along its 27-mile length, the Canal was 30 feet deep. It contained 20 locks 11 feet wide and 75 feet long with an average lift of 7 feet, and it is estimated that they were operated 6000 times a year. Some of the locks were built of stone; others were wooden with outside walls of stone, and earth packed between the inner and outer walls. There were 7 aqueducts over rivers and streams, and 50 bridges spanned the canal. Day laborers received about \$8 monthly wages for its construction, and carpenters averaged from \$10 to \$15 per month. Water for the canal was supplied by the Concord river. It has been estimated that the water lost by evaporation from the canal, plus filling and allowing for leakages, was 10,960 gallons daily. Today the loss of so much water would in itself be enough to prohibit continuance (of the beginning) of such a project. In addition to the boatmen, who received \$13 per month in 1830, there were ordinarily some 16 men, three clerks and an agent--at a total cost of

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### Middlesex Village

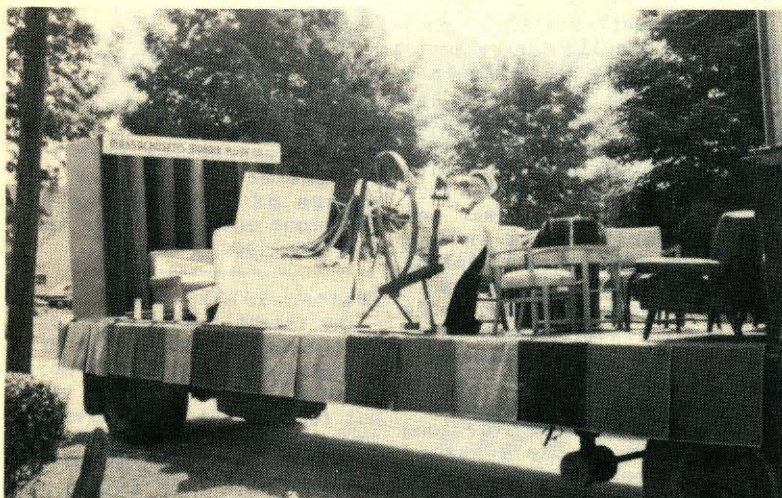
The following account of life in Middlesex Village and on the Middlesex Canal, now published for the first time, was written in the 1840's by Mrs. Paul Hill (Belinda Page Hadley), daughter of S.P. Hadley and sister of Judge Samuel P. Hadley who did so much to preserve the history of the village. S.P. Hadley, Mrs. Hill's father, succeeded Cyrus Baldwin as superintendent of the locks at the Lowell end of the Middlesex Canal and also as collector of the tolls in the toll house now exhibited in the Center near the Town Hall. Mrs. Hill was known as 'the belle of Middlesex Village' at the time of her debut. She married Paul Hill, descendant of one of Billerica's first settlers, in 1845; he was the engineer in charge of construction of the famous Hoosac Tunnel, and Miss Mabel Hill, now of Billerica, one of their children, has made this material available to us. It was originally written at her request about 60 years ago.

Middlesex Village sixty years ago was an active busy place. The glass works were located on the right side of Baldwin Street, not far from Westford Street. Not a vestige of the buildings remain now. The appearance of the large wooden building was dismal as it was perfectly black with smoke. The works brought in a great many foreigners, mostly, German, to be employed, who

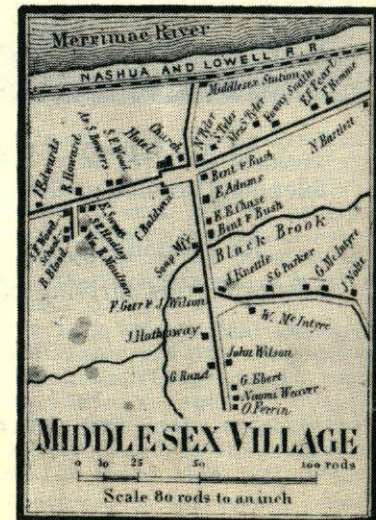
occupied tenement houses built by the Glass company for that purpose. Two of the houses still remain. Mr. Wm. Parker, the agent, was a man of culture and an excellent manager of the works. It was a great curiosity to strangers to visit the place when the men were at work. As you entered, you saw large fires in alcoves with men naked to the waist, swinging long rods to and fro in pendulum order. One would think they were demons in the infernal regions, the scene was so weird. They kept on swinging the rods until a cylinder was formed 2 or 3 feet in length. These were then taken off to be flattened and cut for window glass. I think there were no fancy articles made at this place.

In 1838 or '39, the works

Continued on fourteenth page

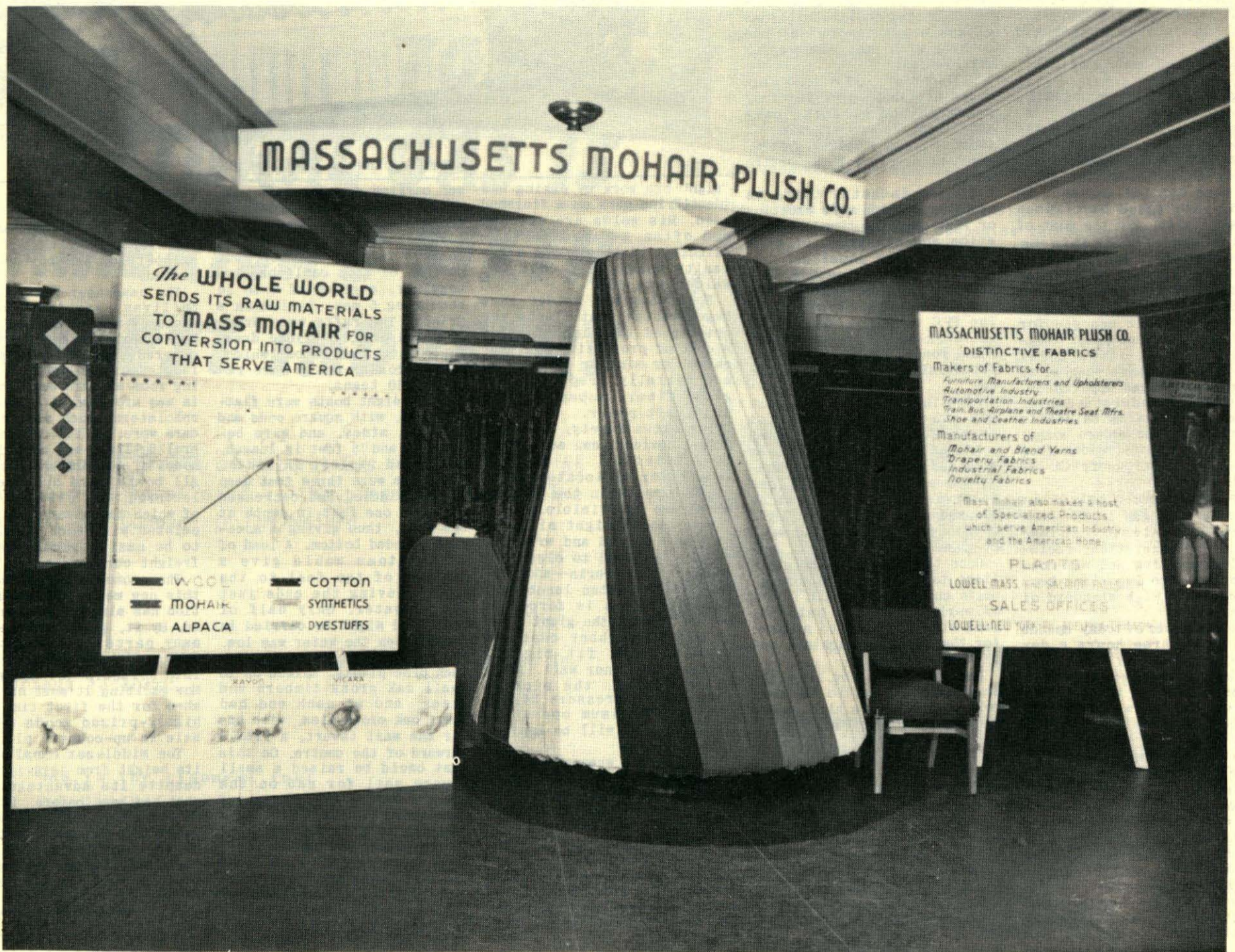


Development of Textiles from spinning wheel to the most modern fabrics displayed by Massachusetts Mohair Plush Co.





# CONGRATULATIONS



## MASSACHUSETTS MOHAIR PLUSH CO. INC.

A fully integrated manufacturer of mohair, wool and synthetic blended yarns. A leader in the fields of upholstery pile fabric, automotive fabric and industrial fabrics.

MILLS AT LOWELL, MASS. AND SALMON FALLS, N. H.

# Lowell Gas Co.

GAS ARRIVED IN CHELMSFORD SIXTY ONE YEARS AGO.

In the year 1894, when Gas oven burners were still an amazing phenomenon, the Lowell Gas Company laid its first main in Chelmsford. The Company had one customer in 1895, when operations began under the management of the then president, Sewell G. Mack, one of the original founders of the utility. In 1920 the number of Chelmsford gas users had risen to sixty-nine, in 1940 to 1260 - and today the Lowell Gas Company serves a large segment of all the homes in the community.

Interestingly enough, the price of a 1000 cubic BTU foot of gas in the late 1800's was \$2.75. At that time the average wage was \$60 a month. In 1955, when wages have risen automatically, and the cost of living has climbed into the stratosphere, the price of a 1000 cubic foot BTU of gas is \$1.20 - a reduction of \$1.55.

As more people use gas for more purposes, the price keeps falling. Most of us think first of a gas range when we're asked to name gas appliances, and this is understandable, since the gleaming automatic gas range is the modern housewife's symbol of freedom from long hours of drudgery in the kitchen.

Gas cookery and the six other major uses of gas in the home -- water, heating, clothes drying, refrigeration, incineration, heating and air-conditioning--are important keys to America's high standard of living.

The homemaker of today spends less than three hours a day preparing meals in an all-gas kitchen, but the housewife of yesteryear had to toil nine hours a day in a hot, smoky scullery to cook her family's food fare.

The whole country's way of living was revolutionized by the introduction of gas burners in the early 1800's. Family ties were strengthened because gas cookery gave the housewife more time for her husband and children and more leisure hours for herself.

The crude gas burner that fascinated the country nearly a century ago consisted of an iron ring filled with sand and placed on a wire screen. The gas was fed through the screen and ignited on top of the sand.

This simply-constructed sand-box burner proved to be the fore-runner of today's peak-performing gas range. Constant research on the gas burner has brought about tremendous strides in the development of the modern range.

One of the newest innovations is a newly-designed burner which has a built-in pilot no larger than a hypodermic needle with a flame the size of a hat pin bead.

Modern gas ranges are equipped with miniature-type oven and broiler pilots which feature an extremely low consumption of gas. This is a new design which gives off very little heat, making it possible to have a cool range completely matchless, as all burners light automatically by merely turning the knob.

These, and many other developments, make the gas range clean, cool and convenient, as well as automatic and economical. All burners are designed to make the best use of

the thousand different heats available with gas. The flame automatically tailors itself to any size cooking utensil.

One of the most fascinating aspects of the Natural Gas business concerns the method of transmitting this magic fuel.

Pipeline builders, the modern trail blazers of progress, are constantly opening up new trade routes to link millions of gas users throughout the country with vast reserves of miracle fuel.

Millions of dollars and man-hours of labor, plus years of research and planning have gone into the construction of today's giant pipeline system, which criss-crosses the entire nation.

In all industry there is probably nothing more exciting or fast-stepping than the creation and construction of a long-distance pipeline.

First, permission for construction must be obtained from the Federal Power Commission. The FPC requires everything in black and white--the proposed route, gas supply, market potential and financial sources.

Pipeline engineers must work day and night to blueprint every step of the proposed construction. Capital must be obtained, permits and rights-of-way must be secured, gas reserves and prices must be figured and every inch of the proposed pipeline route must be checked.

Once the FPC gives the green light to the project, workmen begin cutting the trail. Crews of workmen clear a path--50 feet wide or more--to prepare for the ditching machines and the pipe-layers.

Laying a pipeline, requires many crews of men, so the payroll cost alone is high. Added to this is the expense of thousands of dollars worth of heavy equipment, boosting the construction cost to as much as \$150,000 a mile for large diameter pipelines.

Preliminary planning must determine what diameter size is to be used. This depends largely on the market demand for gas and economy of operation.

Moving ahead with the project is a ditching machine that scoops out the dirt and empties it to the side of the excavation. Following this is the side-boom tractor--a derrick like machine that swings the pipe sections into place beside the ditch.

Streams and rivers, and hilly terrain, present serious obstacles in pipeline construction. Often pipe is weighted down to the bottom of a stream. In other cases, a trench must be blasted out of the stream bed for the pipe.

Rivers that are too turbulent to be crossed underwater are spanned with giant suspension bridges. Mountains and hills are scaled by pipe which is bent to the contour of the land. Highways and railroads are tunnelled under hundreds of times during the pipeline construction.

Mass-produced steel pipe that can withstand pressure of up to 1,000 pounds or more can be laid at the rate of a mile a day. Welding of the lines is one of the important keys to long-line construction.

Sealing lengths of pipe together has become a fine art. Each welder is required to



Float by Lowell Gas Company.

'sign' his work by making his identifying mark on a finished weld. His welds are checked and often X-rayed for the slightest pinhole. Only a few faulty welds will cost the welder his job.

Following the welder is a huge machine that cleans the outside of the pipe, applies a coat of protective coal-tar enamel or similar compounds, and spirally wraps it with glass fiber, asbestos felt and kraft paper.

For extra safety, an electrical device known as a 'holiday detector' is used to search for or locate breaks or thin spots in the coating which are not visible.

When about eight miles of pipe are welded and wrapped, a 'pig' is used to clean out the dirt and debris--and perhaps, a forgotten lunch box. The pig, which is forced or pulled through the giant tube, is made of rubber cups and brushes that fit tightly against the inner wall. After the cleaning, the pipe is tested with pressure higher than the maximum operating pressure that will be applied in service.

Placing the wrapped pipe in the excavation is a painstaking task. Workmen must take every precaution against damaging the line as it is laid, sliding it gently into place.

Bulldozers put the finishing touches to a line, pushing the excavation dirt over the pipe. The bulldozer follows the line right to the city gate--the point of delivery to a distribution company, who in turn supplies gas to homes and factories.

The miracle of pipeline transmission brings a gas well to the backyard of every customer, producing the magic blue flame at the flick of the wrist.

Bringing natural gas to Chelmsford as well as to every other point in the United States with mains installed, is a complex affair and the nation's gas companies work round-the-clock to serve millions of homes, factories, institutions and business establishments.

## Middlesex Canal

Continued from eighth page about \$8000 yearly.

Freight boats from Boston to Concord, N.H., and return took a week or 10 days for the trip. The usual time for freight boats between Boston and Lowell was 18 hours up and 12 hours down. Passenger boats made the trip in 12 hours up and 8 hours down, at 50¢ per person. A great deal of lumber

was carried down by raft, especially to the shipyards in the Mystic river. These rafts were not allowed to be larger than 75 feet by 9½ feet, but several of them could be tied together, a group of 7 to 10 requiring 5 men, including a driver. The rafts were drawn by yoked oxen, one yoke drawing 100 tons of lumber which, on the roads, would have required 80 teams.

The freight boats were flat-bottomed, with square ends and parallel sides, and were between 40 and 75 feet in length, and 9 and 9½ feet in width. The sides were three feet deep at the middle, but decreased to about one foot in depth at the ends, thus giving a somewhat rounded bottom. A load of twenty tons would give a draught of two feet to the boat, leaving the ends just out of water. Only half of this load might be carried in summer when the water was low. The boats were built of two-inch pine planks, spiked on to small oak cross-timbers and knees, and at each end had heavy oak cross-ties, with one for the mast thwart, a little forward of the centre. On this mast could be raised a small square sail for use on the rivers. During the passage of the canal the towline was fastened to a shorter mast put in its place. The rudder was a long steering oar, with blade ten feet long, eighteen inches wide, pivoted on the centre of the cross-tie, and trailing behind the boat in the water. Three large scull-oars, sixteen feet long, and three setting poles for use up the rapids of the Merrimac completed the outfit. In the canal proper the boats were towed by horses, frequently without a driver, in which case the man

at the rudder kept a small pile of stones of green apples ready for the encouragement of the horse. On the river a skipper and two bow-men were needed.

The passenger boat, General Sullivan, was built on the style of the Erie canal boats, but somewhat lighter, 'with a covered cabin over the whole length, except for the standing room at each end. The cabin was provided with seats and upholstered much as the horse cars were. In its day the General Sullivan was considered a model of comfort and elegance. All boats were numbered and lettered; and private boats, of which there were many, were painted with such designs as to be easily recognized, as freight cars are today.'

The economic influence of this new means of transportation has already been suggested. By it, goods imported from many parts of the world to Boston could be carried far up into northern New Hampshire. How exciting it must have been when for the first time these highly-prized goods went on sale in up-country places!

The Middlesex Canal was at its height from 1818-1836, but despite its advantages over what had been before, its useful days were numbered for the railroads cut canal receipts by two-thirds. By 1852 the boats had ceased running and the railroad era was in full swing.

A. N. Kidder began Monday to run an order team to Lowell daily, leaving at 9:30 A. M. All kinds of errands may be entrusted to his charge and his prices will be reasonable. He will have an order box at S. W. Parkhurst's store. (1893)



Blacksmith Shop beside Beaver Brook at Central Square in the Center section where the Chelmsford Wine Shop is now located.

**JUST 61 YEARS AGO  
THE LOWELL GAS COMPANY  
BEGAN SERVING  
THE TOWN OF CHELMSFORD**

**TODAY  
NATURAL GAS IS  
AMERICA'S SIXTH  
LARGEST INDUSTRY**

The amazing growth of Natural Gas in the country as a whole is paralleled by the progress made by The Lowell Gas Company in Chelmsford.

The phenomenal rise in gas usage is due to these important factors:

- Gas is the cleanest fuel
- Gas is the most dependable fuel
- Gas is the most economical fuel when true costs are considered
- Modern gas appliances are faster, more efficient and last longer than all other types

The Lowell Gas Company, in its never-ending efforts to serve the most people in the best possible manner, is constantly expanding its mains in the flourishing town of Chelmsford.



The Lowell Gas Company's Service School is so highly regarded that many gas companies throughout New England send their men here for advanced training.



Lowell Gas Company street department crewmen lay a section of main in Chelmsford. This town is among the fastest-growing in the Commonwealth.



A view of our display floor at 81 East Merrimack St. showing a few of the modern, automatic gas ranges - the only ranges that give smokeless broiling with the oven door closed.



A huge fleet of modern, radio-equipped trucks guarantee quick, efficient installation and service 24 hours a day

# Lowell Electric Light Corp.

## Electric Service A Better-Business, Better-Living Asset In Chelmsford

Chelmsford, incorporated 1655, has been known as a 'good place to live' ever since Abraham Parker hewed his log home and lighted his hearth fire two years previously.

Abraham and those who followed, were quick to see the promise offered by the wooded acres and lush green fields bordering the neighboring brooks, streams and the beautiful blue Merrimack. They knew that if wholesome, comfortable living was to be found anywhere that here was the place.

### CHELMSFORD GROWS... ALL WAYS

Having reached the Utopia of their dreams, these pioneer settlers planned, built, toiled, prospered and passed on. They left to their descendants their own examples together with the means, to live in ever-growing security and comfort.

And as the country grew to be a nation, so did Chelmsford folks grow in the recognition and acceptance of their new duties and responsibilities. Second to none in loyalty and patriotism, Chelmsford citizens have fought in all our wars from the Revolution to Korea. And in pursuits of peace they have been no less active, dis-

playing in public and business life a native ability that has brought credit to their beloved town.

**'GOOD LIVING'**  
**A CHELMSFORD TRADITION**  
The same tradition of 'good living' moved the people of Chelmsford to take advantage of electric service at the earliest time feasible. And so, a contract was entered into with The Lowell Electric Light Corporation whereby electric street lights appeared in the town during the first decade of the century. These proved so useful and popular that within six years the total had grown to 347. Today, nearly 800 electric street lights illuminate the well-kept roads and highways of the community.

**ELECTRIC HOUSELIGHTING COMES TO TOWN**  
Electricity for home use appeared directly after the advent of the street lamp although a number of Chelmsford homes near the Lowell line had enjoyed electric service for some years. From a handful of customers at the end of the horse and buggy era, electrically-served homes now total nearly 4,000.

Electric power also has proven a great asset to Chelmsford industrial and commercial enterprises, there being some 258 establishments of that

type offering work to many hundreds of people. What electricity means in terms of increased employment, speed and ease of manufacture, betterment of labor conditions, everyone concerned can testify.

**CHELMSFORD HOMEMAKERS LIKE HAPPY ELECTRIC LIVING**  
That Chelmsford homemakers are taking full advantage of modern electric living may be seen from the number of electric labor savers in use in the town. Refrigerators, washers, clothes-dryers, ranges, water heaters, are to be found in abundance as well as a surprisingly large number of automatic air conditioners. It would seem that 'good living' means 'electric living' in Chelmsford.

To the Town Officials, business men and citizens of Chelmsford, The Lowell Electric Light Corporation extends congratulations and best wishes on the occasion of the Tercentenary Celebration. Also their sincere thanks for nearly a generation and a half of neighborly cooperation and kindly business relations. That electric service may continue to help their Chelmsford friends to 'better and better living' is the hope of the friendly folks who operate The Lowell Electric Light Corporation, part of New England Electric System, New England's largest.

## Street Lighting and the V.I.A.

The Village Improvement Association at the Center was one of the first to be organized in Massachusetts (1875). Jan. 1, 1876

A meeting of the citizens of this place called for the purpose of considering measures of public interest was held in the Town Hall, on Monday evening, November 15th.

Organized by choice of J. A. Bartlett as Chairman, and H. S. Perham, Secretary.

Mr. E. K. Parkhurst addressed the meeting, and referred to some measures, the adoption of which he thought might serve to promote the public interests. The establishment of street lights was spoken of as one needed improvement. The occasional issue of a paper it was thought might serve to keep alive the interest in building which had been manifested during the past year.

Dr. J. C. Bartlett spoke in favor of forming an association for the purpose of setting shade trees and otherwise improving our streets and public squares.

Nov. 22d. Our citizens again met agreeable to adjournment. . . a constitution was presented and adopted and organization was completed by obtaining the signatures of those present and then electing the following officers: President, Dr. J. C. Bartlett; Vice President, E. K. Parkhurst; Secretary, E. H. Warren; Treasurer, Geo. A. Parkhurst; Executive Committee, N. F. Libby, David Buzzell, Rev. B. F. Cooley, Mrs. David Buzzell, and Mrs. N. P. Dadmun.

Within two weeks of this first meeting 'Mr. James P. Emerson reported three lamps provided for his roadway; Mr. E. K. Parkhurst reported for South Row, provision made for five; Mr. D. A. Buzzell, three for Westford road; for Billerica and Lowell roads, reported two each. Mr. S. W. Parkhurst, for road leading to South village, three; Mr. N. L. Libby for Center reported two as provided and three others needed.'

The V. I. A. members donated these first lamps for the streets and they also lighted and cared for them until the number grew considerably and a lamplighter was then hired to maintain them. In ten years, the number of lamps increased from the original 23 to 43, which were maintained for 20 years by the Association at a total cost of some \$6000. Finally the town took over their maintenance as the burden grew too heavy for private initiative. In 1907, the Association introduced gas street lights to the Centre when a surplus of money for a Fourth of July celebration made the expenditure possible. A few years later, these were replaced by electric lights.

## Street Lighting

1892

Street lighting will be resumed by Mr. Lamphere this week, but will be continued only until the next moon, as the funds for this branch of the V. I. A. work are exhausted. Indeed, to continue lighting until the close of the association year, Oct. 16, compels the directors to draw on a fund originally intended for another purpose. As the lamps have been maintained substantially by subscription for the past two years their con-

tinuance depends upon the voluntary support of those who are, or ought to be, interested in their maintenance. The contributions of the past year have not been so liberal and so general as the soliciting agent, Mr. Marshall, anticipated. It would be a misfortune in more senses than one should the community permit this feature of village enterprise, so long maintained, to be discontinued. Some who have been accustomed to municipal control of such matters should remember that different conditions exist here. It is the individual to whom an appeal must be made, not the town as a corporation, as an assessment for such an expense could not be enforced.

## Mills of the Town

Continued from first page

built a saw-mill on Beaver Brook, of which some remains are yet to be seen. In an ancient deed from Abraham Parker, Senr., to his eldest son John, occurs this language: 'Also whereas the said John Parker of his own estate hath been at one third pt of ye charge in building of a saw milne now standing upon his father Abrahams land.' also 'both ye upper and lower Dam with all the profits and comodities of ye same according to his proportion of interest in ye said mill, Dec. 29, 1679', and from another deed, from the same to son Moses, it is plain that the mill was on Beaver Brook.

The first Gristmill at North Chelmsford was undertaken by Daniel Waldo, who, doubtless, had learned the mill business of Samuel Adams, whose daughter Susanna he had married. In 1695 he made an agreement with the town 'about building a corn mill on Stony brook below the Highway to Dunstable.'

The agreement stipulated that said Waldo was to maintain a good mill and miller. 'The sd mill to be kept for the Towns use except the fourth day of each week which is for Dunstable: and to grind the Towns Corn well and there Mault for half Toal except a small quantity a bushel or the like,' and the people were to be served in turn, and he is not to 'damnifie' the highway or any man's meadow by flowing. In consideration for which 'we grant to the sd Waldo the stream of sd brook: and also twenty five acres of land on each side of sd brook provided the sd highway be not Damnified'.

The Dunstable highway here mentioned is the street passing through the village of North Chelmsford, known now as Middlesex road. The bridge originally crossed the stream lower down than the present one. In 1822 these mills with twenty acres of land around were sold to Kirk Boott as agent for the Merrimack Manufacturing Company for fifteen-thousand dollars.

West, July 12, 1889

By invitation of Mr. Edward Moore of Brookside, a party of 16 from West Chelmsford and Brookside had a pleasant ride on the Merrimack River, last Saturday afternoon, in Mr. George C. Moore's steamer, starting from the landing at North Chelmsford between 1 and 2 o'clock and going within sight of Nashua. They took in Harmony grove on their way up the river, and Tyng's island on their return.



Picture of Fore Fathers Cemetery years ago showing the kerosene lamp which was placed in the town by the Village Improvement Association and also in the background of the cemetery may be seen the old railroad house where the Chelmsford Ginger Ale plant now stands.



The present Colonial building in Central Square as it looked over 50 years ago when Ralph Adams' father operated a store and a bakery was also located on the ground floor while the I.O.O.F. hall was on the second floor.



# chelmsford folks are celebrating

3 CENTURIES OF COMMUNITY PROGRESS

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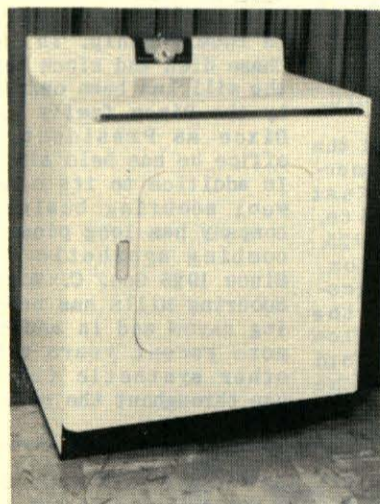
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● DRYER MAY BE PLUGGED IN AND USED ON REGULAR SEPARATE 115-VOLT CIRCUIT, OR IS EASILY ADAPTABLE FOR USE WITH 230-VOLTS FOR EXTRA FAST DRYING.

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1954 MODEL DA-320  
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JUST A FEW LEFT AT ONLY \$126

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JOINING WITH OTHER FRIENDS AND ADMIRERS, YOUR ELECTRIC LIGHT COMPANY EXTENDS CONGRATULATIONS AND BEST WISHES TO ALL WHO LIVE, WORK AND DO BUSINESS IN THE PROGRESSIVE TOWN OF CHELMSFORD. MAY THE YEARS AHEAD BE AS KIND AS THOSE IN THE PAST, BRINGING PEACE, PROSPERITY AND A FULL MEASURE OF TRUE HAPPINESS.



**The Lowell Electric Light Corporation**

Part of New England Electric System

## Wm. P. Proctor Co.

Continued from fourth page  
Brown University, came to work in the company. When his father left to take the position in Washington, David Mason stepped into the vacated position.

The Wm. P. Proctor Co. has grown with Chelmsford these last 50 years. It will have total sales of over one million dollars in 1955. Its pay checks will total just under \$300,000.00 which keeps a lot of families going. The box shop will manufacture over 5 million feet of native white pine into boxes and box shooks. The kiln department will dry over one million feet of hardwood and the sawmill at Plymouth will produce approximately 1½ million feet of lumber for the retail department.

The Wm. P. Proctor Co. is proud of its company family of approximately 100 employees, many of whom take an active interest in civic affairs. In Chelmsford they have served on the Finance Committee, the Board of Appeals, and the Local Draft Board and as Building Inspector. They also, have taken an active part in the Chelmsford Lions Club and the Lowell Exchange Club.

The Wm. P. Proctor Co. is confidently looking forward to many more anniversaries, proud of its small part in helping to make Chelmsford the attractive suburban town that it is.

## Ginger Ale Co.

Continued from sixth page

In 1928 the business was sold to Canada Dry Ginger Ale, Inc., which still operates it and which still includes Chelmsford ginger ale as one of its products.

Mr. Armstrong continued to take part in the business as a director of the Canada Dry company until his death in 1936. During the last years of his life, Mr. Armstrong broadened his interests to include ownership of a large farm, Armont, in West Campton, N.H. There he found relaxation and great satisfaction in his fine herds of cattle and Angora goats, the beautiful woodlands with their sugar maple trees, the vegetable garden and splendid orchard. He constructed by the roadside a stopping-place for motorists where they might see what has been called the finest view to be found of the foothills of the White Mountains. His daughter, Miss Beatrice Armstrong, is now the resident owner of this property.

Mrs. Armstrong died in Chelmsford in 1936, and very shortly after, Mr. Armstrong was stricken by a heart seizure. Mr. and Mrs. Armstrong had three children, all of whom are now living: Mrs. H.C. Cumberley of San Diego, California; and the Misses Winifred and Beatrice Armstrong of West Campton.

Mr. Armstrong will be remembered not only as a keen business man but as a good citizen and a benefactor of the town and of the Unitarian church, which he attended. He was also the donor of the cement sidewalk (first of its kind in town) along Billerica Street from Central Square past All Saints' Church. His gift was made to the town in appreciation of the long friendship he enjoyed with the Reverend Wilson Waters.

## Middlesex Village

Continued from eighth page  
were given up on Middlesex Village and removed to some other place. Mr. Parker moved to Suncook, N.H., where he largely engaged in agricultural pursuits. Quite a number of the foreign population moved away, but some remained whose descendants are among our most respected citizens.

The hat factory of Messrs Bent and Bush was situated on Black Brook, on Baldwin Street. They employed a number of men at this place in the process of making the bodies of the hats. They had another building at the corner of Middlesex and Baldwin Street where the hats were finished. This required a number of men to finish and women to do the trimming. Mr. Bent and Mr. Bush were both enterprising men, public spirited and wide awake for the interest of the village. They were always interested in the church which was the Unitarian through all its changes. Quite a feud arose in the church about 1830. A certain portion of the society seceded from the old church and became very orthodox. They worshipped at the old three story house on the right hand side of Middlesex Street, just beyond the canal. This building contained a good sized hall and the people were very well accommodated. Such bitterness existed between the two sects, it is sad to think of, and I am glad we see so little of it now. I think the orthodox were more bitter than the other party for they would not speak to their old friends and even kept curtains down if their houses adjoined.

Perhaps I have told you this anecdote of my experience when very young at this time. One of the oldest men had died who

Continued on sixteenth page

## Lucifer Matches

Continued from first page

Chelmsford about the year 1845, and continued till the spring of 1848, when the business, having outgrown his accommodations, was transferred permanently to Boston.

The place in South Chelmsford where the matches were made was called Brimstone Corner. These verses went with the matches all over the country.

For quickness and sureness the public will find,

These matches will leave all others behind:

Without further remarks we

# George C. Moore Wool Scouring Co.

invite you to try 'em,

Remember all good that are signed by E. BYAM:

Ezekiel Byam was born in Chelmsford, October 24, 1796. He married Charlotte Bateman in February, 1818. He died at the home of his daughter, Mrs. O.B. Dudley, in Bunker Hill Street, Charlestown, August 9, 1863, and was buried in Forefathers' Cemetery, Chelmsford.

## Chelmsford Industries

Continued from first page

ing, tanning, candle-dipping, and so on, in addition to care of children and the sick. At one period it was common, on large farms, to see many small buildings devoted to some special activity which was later carried on elsewhere, away from home, on a larger scale, and by paid specialized workers. Smokehouses, icehouses, forges, and cider mills and shoeshops were some of these. Cloth was spun at home, dyed there and made up into clothing. Fulling mills, for dressing homespun cloth, appeared about 1700; at about the same time, bog iron ore began to be used in mills run by water-power.

Printing first came to town as far as we know when, during the Revolution, Nathaniel Coverley, a Boston printer, was forced to flee from that city and settled in the southerly part of town. A tannery dealing mostly in calfskins which were bought wholesale at 25¢ each, operated from 1831 to 1837 near the stream still flowing between Bartlett Street and Boston Road, near the Riney house. Where the house at 15 First Street now stands, in the Homestead, the making of glass was attempted, some specimens of which are still preserved. Lime and limestone were important Chelmsford products in the early 19th century, and limekilns were built to burn the lime while cooperage flourished to furnish the casks and barrels for the finished product. As carriages became popular, a 'carriage manufactory' was opened on North Road, specializing in work which a blacksmith was earlier expected to do. Similarly, a 'sled manufactory' was operated in South Chelmsford, in the old shop of one of the local blacksmiths, where heavy sleds for carrying cordwood were built, and wagons repaired. Ploughs were made in the barn at 62 Boston Road, and further down the street was the shop (now the Legion Hall) of Eben R. Marshall, who, a skilled woodworker, followed the trade of his father. The cider and vinegar mill still in use on Westford Street was established in 1835 and successfully weathered a 19th century temperance movement which frowned on the making of cider and

urged that vinegar be the only apple by-product produced.

Ice houses were familiar landmarks in town until a few years ago when the manufacture of artificial ice reduced the demand for the natural product, and served not only Chelmsford residents but those of Lowell as well.

About 1820, when farming had not become mechanized, scythes were commonplace farm tools, and a factory for making them operated in the West village for some 25 years. Later it turned out swords and sabres during the Civil War and then, files and machine knives.

Stores and taverns were important parts of the town's social and business life and were located in many of the old buildings still in existence.

## Printing in Chelmsford

In 1775, Nathaniel Coverley, during the troubled conditions of affairs in Boston, moved from that place to Chelmsford, and set up his printing press in the south part of the Town. Sundry pamphlets and small works were executed at his press dated Chelmsford, New England.

The Chelmsford Courier, published from a shall one-story building opposite the meeting house in Middlesex Village, by William Baldwin, editor, was as far as was known, the earliest newspaper, which appeared June 25, 1824. The office having been burned, the name, was changed the following year to the Chelmsford Phoenix, with Rev. Bernard Whitman, the Unitarian minister at Middlesex, editor, and William Baldwin, proprietor, in September, 1825, E.M. Reinhart became the publisher, and the next year, J. S.C. Knowlton purchased it and changed the name to the Merrimack Journal. It was supposed that the new Town would be called Merrimack, but when it was named Lowell, the paper became the Lowell Journal.

The Ladies' Literary Friend appeared in East Chelmsford, March 23, 1825.

There was a paper called the Globe, published at the General Printing Office, East Chelmsford, by J.H. White, which appeared June 23, 1825, but was printed in Boston, or, possibly, in East Chelmsford. In September of the above year, the Phoenix office was removed to East Chelmsford and occupied the place of the Globe Printing Office.

The Monthly Quarto appeared at North Chelmsford in 1876, published by Merrill and Sargent. One number only was issued. Rev. L.J. Merrill was pastor of the Second Congregational Society. Mr. Sargent was book-keeper for Silver and Gay, machinists, for forty years.

The Chelmsford Eagle had been published occasionally by the Village Improvement Association: 1876, 1877, and 1883.

1892. Mrs. Jeanette Bailey has opened a dry and fancy goods store, with general notions, in the railroad house, so called, on Littleton street. She hopes for a share of the local patronage.

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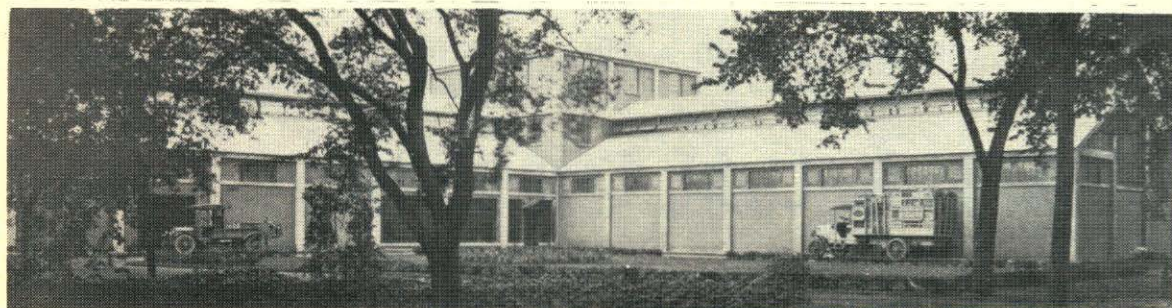
1892. Wm. H. Hills, a registered pharmacist has reopened the family drug store formerly carried on by Arthur F. Brown.

The George C. Moore Mills have been an important factor in the life of the North village since Mr. Moore established his wool-combing business there in the 1870's. He purchased (1872) the old foundry on the north side of the passage-way leading from the Lowell road to the old turnpike, put in necessary machinery and began production which continues to the present. In 1875, a brick mill was erected but burned at completion; it was rebuilt at once. In 1885, another brick building was erected and three years later, other additions were made. In 1890, a three-story brick building was added to the plant. This plant, with a capacity in 1915 for cleaning 15 tons of wool daily, was a remarkable example of the results of Mr. Moore's business foresight and ability, built upon the property where Daniel Waldo's grist mill-first in North Chelmsford--was built soon after 1695. Mr. Moore also purchased, in 1898, the North Chelmsford Machine Co. (established 1832); in 1905, it was incorporated as the North Chelmsford Machine and Supply Co., makers of textile machinery and supplies.

For the past 63 years the Geo. C. Moore Wool Scouring Mills has been under the direction or ownership of Mr. Edgar Dixon. The present mill was built in 1903 and Mr. Dixon was Manager having come to work for Mr. Moore in 1892. In 1903 Mr. Moore sold the older premises on Princeton and Middlesex Streets (now occupied by Southwell Combing Company) to Silesia Mills of the United States Worsted Company. The new mill burned down in 1909 but was promptly rebuilt. Mr. George C. Moore died in 1923 and his heirs sold the mill to Edgar Dixon and Walter I. Chase. In 1930 the company bought at auction the large storehouse on Middlesex Street from the United States Worsted Company, then in receivership. In 1942 Mr. Chase died and since that time the mill has been owned solely by the Dixon family with Mr. Dixon as President, which office he has held since 1923. In addition to its commission wool scouring business the company has long pioneered in combing synthetic fibres. Since 1926 Geo. C. Moore Wool Scouring Mills has been combing rayon and in addition in more recent years numerous other synthetic fibers for use throughout the worsted industry.

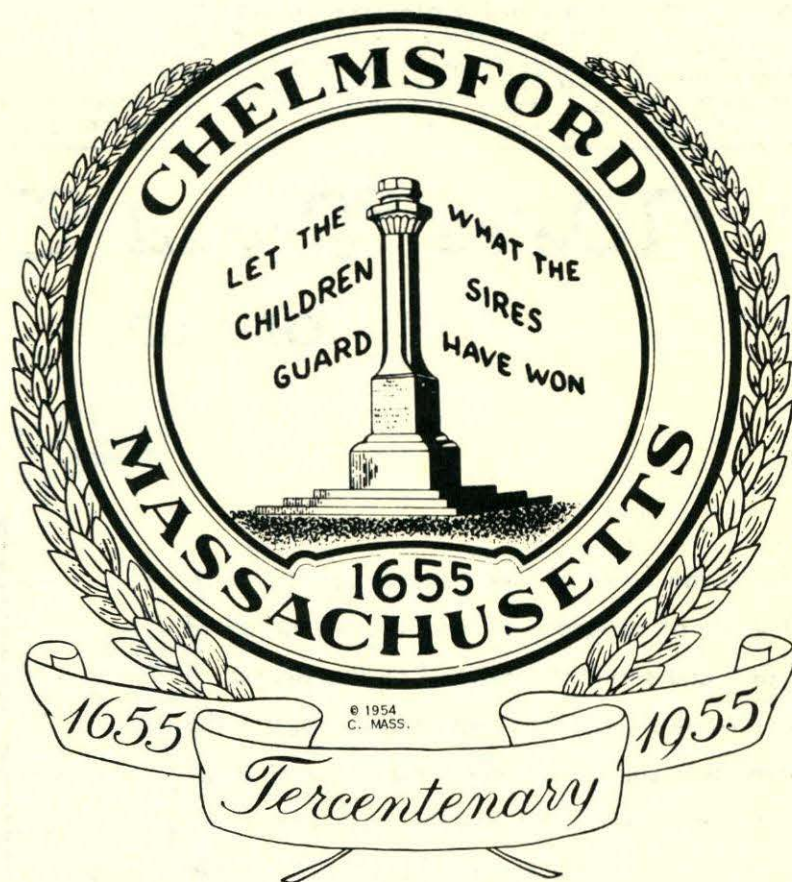
## SAW AND GRIST MILL SOLD

Deacon David Perham has sold his saw and grist mill property to Messrs. Edwin E. and Lewis M. Dutton, well known residents of the town who will take possession April 1st. Deacon Perham retires after a long and active business career of nearly half a century, which certainly entitles him to that relaxation the need of which is pretty sure to be felt at three score years and ten. The Messrs. Dutton are men of the highest business integrity and possess the entire confidence of our community. With ample means and excellent railroad facilities, there seems to be no reason why the new form should not only retain the present custom of the mill but largely extend it. 1884



After the original Chelmsford Ginger Ale plant was destroyed by fire in 1912 this new plant was built immediately after.

**CONGRATULATIONS  
TO THE  
TOWN OF CHELMSFORD**



**George C. Moore  
Wool Scouring Co.**

**NORTH CHELMSFORD**

## Middlesex Village

Continued from fourteenth page was not a professor of religion in any church but a good citizen in every respect. The day he died a woman of the strict faith called into our home to speak of the sad news. After talking a few moments of the suddenness of his death she said to my mother, 'I suppose Mr. G. is in Hell now.' I was perfectly shocked for I supposed he was burning up in fire and brimstone as was taught in those days. The old church was sustained, however, as more of the moneyed men attended there. It was not given up for quite a number of years. The building was finally sold to the Roman Catholics at No. Chelmsford. Lowell had grown so rapidly the business decreased and there were only a few to keep it up. A number of trades were represented in the village. A shoemaker, tailor, cooper, two grocery stores and a nice livery stable. Mr. Jesse Smith kept store for a number of years at the farther end of the Middlesex House and Mr. Samuel Burbank in a building not standing at the present time, on the other side of the canal from the hotel. Over this store was the tailor's shop. A man by the name of Carr kept it at one time and could always be seen at the window sitting crosslegged on his bench. There was a weekly paper printed at one time. I cannot say positively but think it was the Chelmsford Chronical. There has been very little change in the private buildings of those days. They still remain the same with the exception of the 'Baldwin house'. This was removed to another location of give place to a new one erected by the Pratt who bought the estate. The place was formerly owned and occupied by Mr. Cyrus Baldwin, Collector at the head of the canal, and a brother of the original engineers and planners of the Canal--Mr. Loammi and George Baldwin of Medford. The house was a picturesque looking place as it was situated near the canal with a pretty porch on the side opening into a long drawing room. The garden at the back of the house was laid out in nice taste with walks and flowering shrubs. The grand old trees still remain and it seemed in those days like some old 'Manor house' with its lovely surroundings. Near this spot a bridge crossed the canal on Main Street, now Middlesex Street. The bridge was high enough to allow boats heavily loaded with freight to pass under. It, of course, made quite a rise on both sides of the canal. Just beyond the bridge on the north side stood a large store house and still beyond a large stable for the accommodation of the horses employed by the company. A short distance from the bridge the locks commenced and boats were lowered through to the Merrimack River. After Mr. Baldwin resigned, Mr. Samuel P. Hadley was chosen Collector and remained in the business thirty-five years or until the business on the canal was closed. An immense quantity of freight passed through every day and the place was made lively by the jolly boatmen. How well I remember the Packet boat as it was moored near the bridge in the canal! It was painted a bright green and could be seen at quite a distance. There were windows on both sides.

The morning the boat was to start on its trip to Boston a stagecoach arrived with passengers from the neighboring towns. At precisely eight o'clock a horn was sounded and all got on board. No hurrying for fear of being left behind, but a quiet step into the boat from the wharf. Old and young, with babies and lunch baskets were soon seated in nicely cushioned seats with a good long day before them for a ride. Capt. Silas Tyler who commanded the boat for many years was a kind gentlemanly man and always endeavored to make his passengers comfortable and happy. The boat was drawn by two horses attached to a tow line and a boy rode the forward horse as it was a tandem one. It just comes to me that the curtains were of red merino and on rings. I, as a small child enjoyed sliding them back and forth while standing on the seat. Well to go back to the starting. Very soon the old ladies would take out their knitting work, the gentlemen reading the papers and the young mothers with their children formed almost a happy family without any of the conventionalities of the present time. Soon after leav-

ing the village the canal passed a long distance through woods and small shrubs growing near the path. The wild flowers were abundant and berries were plenty in the season of them. The first stopping place was North Billerica, near the chemical works. A portion of the old canal can be seen at that place with water still in it. On the way to Wilmington we passed over an aqueduct; the remains are still standing. They are very picturesque and look like the ruins of some old fortress. After a few more miles' ride we reached the locks at Woburn. We were allowed to leave the packet here and go to the Horn Pond house while the packet was passing through the locks. It was a dismal place to be shut into for even a short time, as they were very deep. The ladies and children preferred to go to the house where refreshments could be had, and the children entertained with swings and other games. It was a fine old place and a pleasant change for an hour on the boat. Soon all are on board again and we pass into a more open country and larger villages--Medford, Cambridge, and then arrive at



THE VERY END---Antique hearse with pretty Barbara Burkinshaw, Janet Bell and Gail Churchill brought the parade to a close.

Charlestown, the end of the route, at 3 o'clock. What would people think of such a long time now if that was the only one, and the old stage coach to go to Boston? I think it would seem like going to a Pick-nic than anything else. After the cars commenced running from Lowell to Boston the stages still remained for a time. An old Irish woman who wished to go to the city was told she could go in one hour by the cars but it would take three to go by the stage. 'Faith,' said she, 'I'll go by the stage and get my money's worth.' The boat always returned to Middlesex the following day, arriving the same time as at Charlestown.

## We're Proud Too

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## 127 Years

JUST as the Town of Chelmsford is proud of its 300 years of progress, so too, are we proud of the financial services rendered to the people of Greater-Lowell, by the banks that made up the present day Union National Bank . . . and which has served so faithfully for the past 127 years. YES, there's a deep rooted foundation to the Union Bank — a foundation built on great resources . . . capable, conscientious personnel . . . and long experience.

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