The WHITIN Spinple

Outside the Office

DECEMBER

VOL. 2 NO 5

GEORGE MARSTON WHITIN

George Marston Whitin

Mr. George Marston Whitin passed away on the morning of December 8, a little after four o'clock. Mr. Whitin had been in failing health for a number of years; and while his death was not unexpected, yet it leaves us with a great sense of loss.

It is the intention of the editors to publish later an article covering the life of Mr. Whitin, as his career was so intimately connected with the growth and development of the Whitin Machine Works. We append below a brief article which appeared in the newspapers.

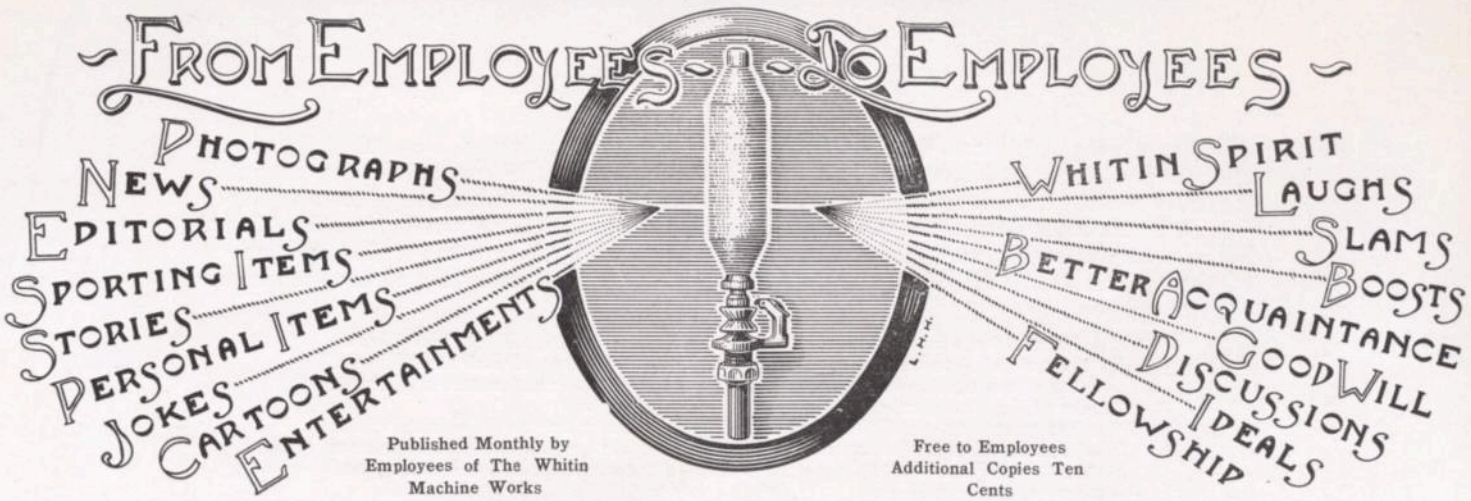
> He was born in North Uxbridge, Mass., September 11, 1856, son of Charles E. Whitin and Adaline (Swift) Whitin, and great grandson of Col. Paul Whitin.
>
> He attended the public schools of Northbridge and then entered Williston Academy, Easthampton.
>
> After leaving school he served his apprenticeship in the Whitin Machine Works and then became associated with his father and brother in the management of the Paul Whitin Mfg. Co., having mills in Northbridge and Riverdale, and later was made president.
>
> On October 1, 1879, he married Catharine W. Lasell, and in 1881 entered the employ of the Whitin Machine Works. Two years later he was made a director and clerk of the corporation, and in 1886 was elected treasurer, succeeding his father-in-law, the late Josiah Lasell. This position he filled with marked success for more than thirty years and until increasing ill-health caused him to resign.
>
> Mr. Whitin in his management of the Whitin Machine Works displayed unusual ability and business sagacity. The growth and development of not only the Whitin Machine Works, which increased threefold under his direction up to its present size, with its thirty-five hundred employees, but also the prosperity of Whitinsville, stand today as a tribute to his courage and foresight as a builder. Mr. Whitin brought to his work a great personal energy and unusual attention to detail.
>
> He had very much at heart the condition and happiness of the individual workman and is responsible for the model industrial village which has been built in Whitinsville.
>
> Mr. Whitin was also very intimately and widely connected with the cotton textile industry, and his advice was frequently sought and most highly regarded in matters of policy and direction.
>
> For recreation he turned to the woods and streams and was very fond of shooting and fishing.
>
> The Village Congregational Church numbered Mr. Whitin among its members.
>
> He was a Republican in politics and, although never holding public office, was deeply interested in national and local questions and was a strong factor in shaping public policy.
>
> For many years Mr. Whitin was president of the Whitinsville Savings Bank and a director of the National Bank.
>
> During his business career he was a director on the boards of the following mills: Quissett Mills, Kilburn Mills, Nashawena Mills, Nonquitt Spinning Co., Crown Mfg. Co., Lawton Mills, Calhoun Mills, Sharp Mfg. Co., Whitman Mills, Manomet Mills, Nyanza Mills, Arlington Mills, Brogon Mills, Williamston Mills.
>
> He was a member of the following clubs: Union Club of Boston, Home Market Club, Worcester Country Club, Algonquin Club, Tatnuck Country Club, Grafton Country Club.
>
> Mr. Whitin is survived by his widow, Mrs. Catharine L. Whitin, and by four daughters, Mrs. Lawrence M. Keeler, Mrs. Sydney R. Mason, Mrs. E. Kent Swift, and Miss Lois H. Whitin, all of Whitinsville, and also by a brother, Mr. Henry T. Whitin, of Northbridge.

The funeral was held on Friday afternoon, December 10, at two o'clock, in the Village Congregational Church. The following business associates of Mr. Whitin served as honorary pall bearers: Mr. William Whitman, Mr. Arthur Sharp, Mr. Robert Herrick, Mr. Frank J. Hale, Mr. George A. Draper, Mr. C. E. Riley, Mr. R. P. Snelling, Mr. Henry Tiffany, Mr. Lyman B. Goff, Mr. Stuart W. Cramer, Mr. Charles R. Makepeace, Mr. Charles H. Hutchison.

The actual pall bearers were those who were associated with Mr. Whitin here at the Works for a long number of years and were as follows: Mr. A. H. Whipple, Mr. B. R. Sweet, Mr. Geo. B. Hamblin, Mr. George Wilmot, Mr. W. O. Aldrich, Mr. Charles S. Snow, Mr. W. E. Burnap, Mr. Arba S. Noyes, Mr. R. K. Brown.

The shop was closed on Friday, December 10, in accordance with this notice posted on the bulletin boards:

"Out of respect for the memory of Mr. G. Marston Whitin, for more than thirty years Treasurer of the Whitin Machine Works, the shop will be closed on Friday, December 10. The Works will re-open on Saturday morning, December 11."



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Member of Industrial Editors Association of New England

THIS copy of "Spindle" will be the seventeenth number to be published. We would like to take thisopportunity to thank ourcontributors for theirloyal support, which has made the publishing of the "Spindle" possible.

It may seem to some that the "Spindle" acts like an automatic machine which, when once set going, produces article after article with no seeming effort or interruption; but the "Spindle" is not automatic, and if it were, even then it would have to be fed with material at regular intervals. Our contributors have been many, and they are increasing rather than decreasing; yet there is room even now for good material which we know you have and which we wish you would send in.

The photographs, cartoons, and illustrations which have rounded out the appearance of the "Spindle" and which have greatly increased the interest of the magazine could not be dispensed with and the magazine kept up to its present standard.

The cover of the "Spindle" has been spoken of by many publishers as not only a work of art, but one singularly appropriate for this particular type of magazine published by a cotton-machinery company. This cover is only one of 29 different illustrations or cartoons L. H. Horner has contributed.

Robert Metcalf comes in for special mention for his part in making the "Spindle" a success. He has contributed and had published 184 photographs in the "Spindle," besides contributing many others which we will be able to use in the future.

Homer Bruillette has furnished us with 60 photographs; Adelbert Ramsey, 20 cartoons; L. G. Lavallee, 7 cartoons; Robert Hargreaves, 4 cartoons; and John Minshull, 3 cartoons. Others have furnished 201 photographs or cartoons. It is the combined support of our contributors that makes "Spindle" what it is today.

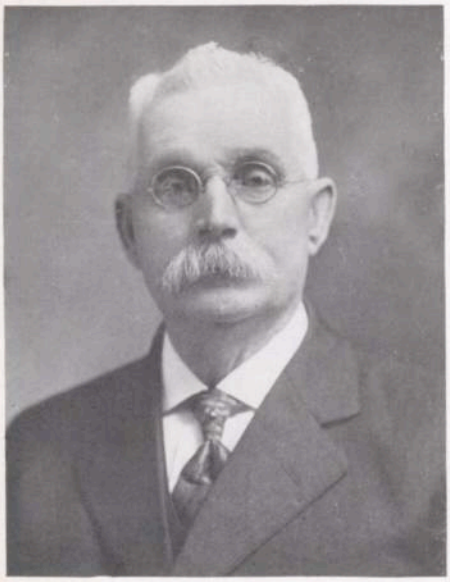
The Safety Committee and the Hospital have both been very much concerned over eye accidents and possible eye accidents in the shop. They have preached continually the necessity of wearing goggles while grinding, as a protection to one of our most important senses.

We hope that every employee of the Whitin Machine Works has not only read the "Safety First" bulletin board during the last three weeks, but has also been thinking what would have happened to the man on the flyer job, if he had not worn the goggles as pictured in the photograph above. This same photograph appeared on all our safety bulletin boards.

The piece of steel which cracked the glass on these special safety goggles had sufficient force to penetrate deep into the eye ball, even though the eyelid had been closed over the eye at the time; but glasses were worn by a man who believed in "Safety First," and the special, strong eyeglass prevented a very serious accident.

A very interesting talk was given by Henry Owen at the foremen's meeting Wednesday, December 1, on the water supply of Whitinsville. Mr. Owen explained in a graphic way the complete system as it stands and gave specific reasons why it was necessary to economize as much as possible on our supply of water.

The "Spindle" editor and photographer made a special trip to each of the seven reservoirs in town and, as the pictures will show, were impressed by the fact that our largest reservoirs, No. 5 and No. 6, have very little water in them at the present time. This is true even in spite of the fact that the last two weeks have been especially rainy. Where there should be stored 360,000,000 gallons of water, we doubt if there is 1-16 of that amount in these two reservoirs. The article by Mr. Owen will be found both instructive and interesting to all of us, as we are indeed dependent upon a good water supply.



Michael J. Cronin

Our Long Service Series

Michael J. Cronin has seen 48 years of service in the Whitin Machine Works. He came to this country from Cork, Ire., in 1872 and on June 9 of that year started to work with us as a painter.

Mr. John C. Whitin was in very close touch with the outside work in those days. The foreman of the paint job, Sylvester Morse, who, by the way, was the grandfather of our photographer, Robert Metcalf, was Mr. Cronin's first boss.

In 1872 Mr. Cronin worked on the interior of the John C. Whitin house and the next year was placed on interior work in the Gustavus Taft house. He also helped work on the glass work in the greenhouse of the J. C. Whitin estate, under the direction of Mr. P. Q. West, and in 1874 helped put the first coat of paint on the John C. Whitin barn.

Mr. Cronin informed us that a man named Mr. Stanley, from Providence, was in charge of the construction of the John C. Whitin home and was assisted by Mr. Snow, the father of the present foreman of the Carpenter Shop.

In 1880 Mr. Cronin was called on to help out in the glass work of the greenhouses in Pine Grove Cemetery, at which time he worked under John Hubbard. George Farquar was the florist of the greenhouses at that time and since has made a name for himself as a prominent florist in Boston. Another one of the outstanding paint jobs handled by Mr. Cronin was the interior finishing of Memorial Hall.

A very interesting story is told by Mr. Cronin about Henry Ward Beecher, who visited Whitinsville, and the Rev. Mr. Abbott. It seemed to be a source of interest and delight to Mr. Beecher to show his friends through the old schoolhouse, which at that time had been turned into a tenement for the Whitin Machine Works. Mr. Beecher would point out the exact locations of the desks, and he would have many pleasant stories to tell about the scholars and the school when he was in charge.

Like most of the old-timers, Mr. Cronin experienced the hard times of 1875 in Whitinsville, and also states that Mr. John C. Whitin believed in finding all the work possible for the men during this period. It was necessary for Mr. Cronin to give up painting and take up ice cutting on the pond under Mr. Sumner L. Snow.

Sylvester Morse was succeeded by George M. Brown as foreman of the paint job, who in turn was succeeded by Mr. Cronin in 1892.

In the 48 years of service in the Whitin Machine Works, Mr. Cronin has either painted in or else had charge of the painting in practically every house in town.

His home on Pine Street was the old Cyrus Taft house, which used to be situated on the west corner of Hill Street and Main Street. This house was moved 29 years ago by Mr. Cronin to where it now stands. Its large ells were taken off, and the lumber is in use in several of the buildings around town today. The house itself is over 150 years old and has the old-fashioned hinges, or butts, on its front door even now. The original nails, which are still there, are made of wrought iron. The largest hinges unfortunately are not on the house today, having been sent to Wellesley College for decorative purposes by Mrs. Whitin.

Another story of the old days that is of interest to us relates how Forest Street received its name. In the middle '60's Mr. Whitin brought many machines from the Holyoke Machine Works, and several of the employees of this concern came to Whitinsville. Houses were built in which many of them were placed, and, taking a tip from the residents of Cork Street, they named the street Holyoke Street. This rather incensed Mr. Whitin, who ordered a sign made at once and had it nailed up at the foot of the street. The sign read, "Forest Street," and since then it has been known as such.

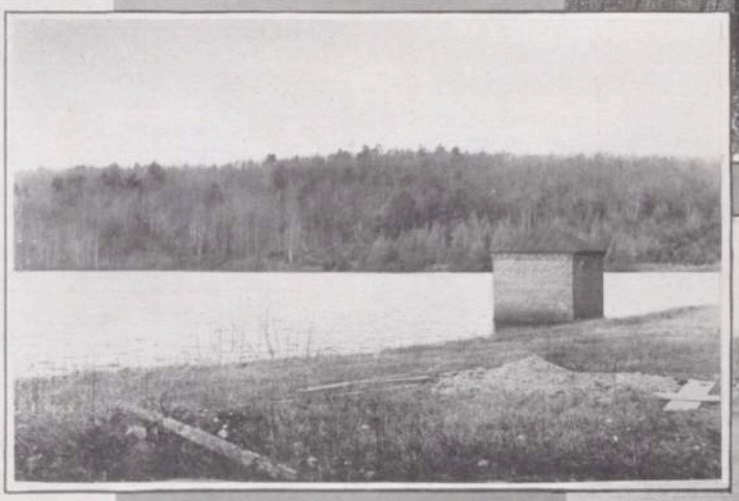
We congratulate Mr. Cronin on his service record of 48 years.

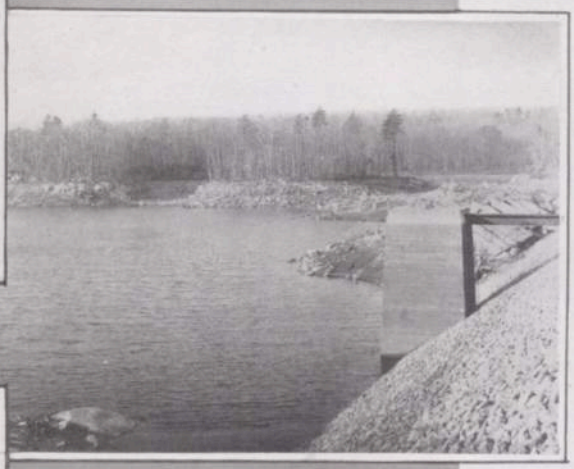
Why All This Safety Talk?

The Safety movement, to be effective, must be kept continually before us, as is the case with advertising. You cannot place one advertisement and forever keep the name of the product before the public; neither will one "Safety First" forever keep us free from accident.

The need for intelligent, co-operative safety work is greater today than ever before. When we stop to consider that 10 percent of all deaths in the United States are due to accidents; that, on the average, every 8 minutes someone meets death by an accident; that every 54 minutes someone is killed by a fall; every 63 minutes someone is killed by a railroad accident; every 73 minutes someone is fatally burned; every 90 minutes someone is drowned; and every 108 minutes someone is killed in an automobile accident, we cannot help but feel that all our past effort should have been redoubled in the interest of humanity to save suffering and avoid sacrifice.

It is not only necessary for each one of us to constantly keep before him the fact that eternal vigilance is the price of safety; but further, by always being on the alert to keep another free from danger, we shall feel that we have done all we could to carry out the thought, "Thou art thy brother's keeper."—*From the Hammermill Bond employees' publication.*





The first photograph above, reading from left to right, is a picture of the pumping station below reservoir No. 4, pumping capacity 850 gallons per minute. No. 3 reservoir is housed under the roof in No. 2 photo. This reservoir is located in the woods behind the estate of Mr. L. M. Keeler. No. 2 reservoir has practically the same appearance and is located near Taylor Springs west of the house of Josiah Lasell, 2nd. Photo No. 3 shows No. 4 reservoir on the right as you climb Breakneck Hill. Please notice the next two pictures of No. 5 and No. 6 reservoirs. The reservoirs are nearly empty in spite of two weeks of wet weather. This gives one an idea of the reserve water supply used during the dry spell this fall. The last picture shows No. 7 reservoir, the latest in modern design. This reservoir is located to the south of No. 4, on the hill

Whitinsville Water System

No. 1 Reservoir, Built 1868; Capacity, 1,000,000 gallons

The first move to furnish water to the village of Whitinsville, of any kind, was made in 1868, when Mr. J. C. Whitin conceived the idea of building a reservoir on the northeastern side of the road from the village of Whitinsville to Northbridge Center, on a piece of land adjacent to the property now owned by Mr. C. W. Lasell. He did not have in mind a system for drinking water, but planned exclusively for fire prevention for the Whitin Machine Works in the valley below.

The reservoir is made of brick, circular in form, 100 feet in diameter, 18 feet deep, and covered by a wooden roof and cupola. This roof was shingled and the reservoir ventilated through the cupola. It had a capacity of one million gallons of water at an elevation of 406 feet above the sea level, or 106 feet above the level of the present Whitin Pond.

There was no provision made for collecting drinking water from the springs in the immediate neighborhood, for the whole water supply was derived through pumps placed on the lower floor of the No. 2 Shop of the Whitin Machine Works and the water drawn from the trench connected with the pond and forced through a 12 inch pipe up into the reservoir.

This 12 inch pipe connecting the pump to the reservoir is not of the modern or bell and spigot type, but is made of a spiral cylindrical tube of sheet iron covered inside and out with one inch of cement, leaving a bore of 12 inches. To show that this construction is reliable and permanent, it is only necessary to state that this pipe has now been in service for practically 52 years and is as tight as it ever was. It has a failing, in that it is a hard pipe into which to connect other pipes, which has perhaps discouraged tampering with it.

The water from this reservoir was connected to fire hydrants throughout the shop yard. These hydrants were of that early type in use before the automatic draining hydrant of today had been invented. In other words, the water came above ground up to the nozzle outlets, so was apt to freeze in winter unless the hydrant was covered by boxes or hoods filled with shavings and sawdust—in spite of this precaution, tradition tells us that they were often found frozen in time of need.

The old residents tell us that Mr. John C. Whitin made the statement that, when the brick reservoir was finished, he had a reservoir large enough to take care of Whitinsville's needs forever.

The No. 1 reservoir gives a pressure of 50 pounds at the basement-floor level of the shops and was connected with the sprinkler system from 1883 until No. 7 reservoir was finished in 1920.

The first reservoir for drinking water was built in the year 1889 in the fields back of the residence of Mr. Josiah Lasell, 2nd, rectangular in shape, with a capacity of 225 thousand gallons and at an elevation of 386 feet above the sea level. The reservoir was connected by pipes through the lawn of Mr. G. H. Whitin down High Street and was used for furnishing water for domestic use in the tenements for the plant, all of which at that time were located in that immediate neighborhood. It is evident that it was not used for the houses on the hill, as the elevation was not sufficient. The water comes from springs located to the north and east and has a reputation of being very good drinking water.

Extra demands for water soon made it necessary to build reservoir No. 3 in 1891, which is located in the rear of the residence of Mr. L. M. Keeler and has a capacity of 301 thousand gallons at an elevation of 453 feet, or 153 feet above the Whitin Pond. This rectangular reservoir collects water from the brook and springs to the north and is sometimes helped out by pumping water from a well, 550 feet deep, in the immediate neighborhood, although the well furnishes but a small amount of the water. The elevation of this reservoir made it possible to furnish some of the houses on the higher elevations, but never with a very satisfactory head. The water is piped down Hill Street and connects into the village system at the intersection of Chestnut Street.

These two reservoirs, No. 2 and No. 3, took up all of the available spring and well water within the immediate neighborhood of the Whitin Machine Works and made it necessary that other sections be looked for to supply the larger and still increasing demands of the village.

Cook Allen Brook, a small stream coming from the hills to the south of Purgatory in the west end of the town, had always had the reputation of having clear water, and a dam was therefore erected at the foot of Breakneck Hill. This reservoir has an elevation of 394 feet, a flowage of 10 acres, a capacity of 80 million gallons, and was finished in the year 1903. It is some three miles away from the village, and the long pipes reduced the pressure so that the village service only showed about 35 pounds pressure, all on account of friction losses. To remedy this a dual system of piping was put in, starting at the Brick School House, helping out the old 8 inch pipe through the ponds by the use of 12 inch, 14 inch, and 10 inch pipes, circling the Meadow Pond through the Burden District and coming into Whitinsville through Chestnut Street and down Grove Street into the Main Street service line. While this helped, it did not cure the trouble.

Continued on page 17, column 2

Spinning Job

The spinning job is one of the older departments in the shop and produces various kinds of lathe work, drilling, and assembly work for spinning frames, quillers, twisters, woolen frames, and jack spool frames.

It certainly has as large a variety of work, including repairs, as any department in the shop.

We are unable to get any history before the early sixties; but from that time until 1876 George Bathrick was foreman, and his son Dwight was assistant foreman. After Mr. Bathrick's death his son succeeded him; but in 1878 L. L. Remington was put in charge, and in 1879 L. L. Remington and Emory Burbank ran the department together. In 1892 Mr. Burbank was transferred to fill the position as foreman of the loom job.

Elmer S. Blanchard

The department in 1892 was located in the southeast corner of the old No. 1 Shop, where Hanny's job is now, and did not take up very much floor space, as there were nine other jobs on the same side of the room—namely, George Carr's job, Hanny's job, Clark's paint bench, Blair's planer job, Cahill's doffer job, Ellis's ring job, Cleveland's spooler job, Smith's box job, and Graves's picker job.

There was only one upright drill in this room, and you can judge it was a very much used machine. One had to watch his chance, if he wanted to use the drill. Most of the drilling in those days was done on speed lathes and traverse drills.

With few exceptions the lathes on the spinning job were the old Whitin lathes, and anyone who ever operated one of those machines can tell you all about the feed and how he got his fingers caught in the gears. No matter how much a beginner was warned, he was sure to find out how it worked. Usually, he would have one less finger nail to manicure for a while.

In 1900 this job was moved into No. 1 Shop east addition, where Britton's job is now. All but the Whitin lathes were put into scrap iron and replaced by new lathes.

In 1905 the department was moved to its present location on the top floor of No. 1 Shop, and it occupies the whole of the south side of the room.

E. S. Blanchard, foreman of the spinning job, started to work in the shop August 27, 1889, on the spindle job, for Henry Woodmancy, where he worked eight months. He was then transferred to the picker job under B. R. Graves, where he worked on pickers and doublers. It was during the 15 months Mr. Blanchard worked with Mr. Graves that the last old Whitin pickers were built. He was then sent to the spooler job under Charles Cleveland, where he worked about six months, and in February, 1892, at the time Mr. Burbank went to the loom job, he was appointed assistant foreman for L. L. Remington. In 1907 Mr. Remington resigned, and Mr. Blanchard was promoted to foreman.

Eighteen of the men on the spinning job have worked in the shop 20 years or over. Of this number, eleven have been with us 30 or more years; five, 40 or more; and one, 52 years and 6 months—a record that speaks for itself.

L. L. Remington

The personnel of the job is as follows:

	In Shop		On Job	
	Yrs.	Mos.	Yrs.	Mos.
James Rankin	52	6	45	7
John Y. Rankin	47		37	
Thomas Fox	47		30	
Samuel St. Andre	41	6	41	6
Frank Bassett	40		24	6
Edward L. Brown	36		15	6
Thomas F. Gorman	35		15	
Robert Shirley	34	8	1	10
E. S. Blanchard	31		28	8
George Giguere	30	3	30	3
B. F. Devlin	30		28	
W. J. Walker	29	3	13	6
W. J. Welsh	29		24	6
Richard Hyland	28		22	9
J. G. Montgomery	22	3	22	
John Morrow	21		15	6
Adolf. Roy	20	9	20	
Wm. McClurg	20	3	16	2
John O'Neil	18	4	17	6
John Dufries	9	9	7	
Harold Kane	9	9	1	8
Octave White	9	2	9	2
Dick Philebosian	9		8	
Victor St. Andre	4	6	4	
W. J. St. Jean	4	4	4	4
John Lash	4		2	
F. L. Buma	4		1	9
Willis Favreau	3	3	3	3
Thomas O'Neil	3	3	3	3
Frank Drew	2	11	2	11
Sake Buma	2	9		9
Iga Baker	2	8	1	11
Arthur Layton	1	6	1	6
Wm. J. Godbout	1	6		8
Herman St. Andre	1	4	1	4
Alexander McKee	1	1		8
Peter Heerdt	1	2	1	2
Andrew McKaig		10		10
Romeo Thibeault		8		2
Frank Steele		7		7
William Pouliot		4		4

How To Keep Well

Issued with the Authority of 100 Hygiene Experts

Care of the Skin and Scalp

Did you ever think of your skin as a blanket? Blanket is a warm word for covering, suitable to use in the first month of winter. This covering of flesh and bone deserves the best of care, and anyone can have a good complexion if he has good digestion and takes care to be clean.

Be afraid of "skin foods."

Don't be afraid of soap.

"Skin foods" are worthless, if not harmful, as the skin is not fed through the cuticle cells. Wash your face with good, pure soap in warm water, with a cold rinse and a vigorous rubbing afterwards. Daily baths are necessary for real cleanliness, and a final spraying in cold water trains the skin to resist cold air and helps keep you from taking cold.

If your skin is chapped, use a little glycerine mixed with rose-water.

Pimples showing pus should be pricked with a needle sterilized in iodine or the flame of a match. Bathing with boric acid solution with hot cloths afterwards is good. Blackheads are lifeless "plugs" and may be removed with a Comedo extractor similar to a watch key. Yeast, one to three cakes daily, each dissolved in half a glass of water, is sometimes effective in getting rid of pimples.

If you want a good, clear skin, don't eat too many chocolates, griddle cakes or pastry.

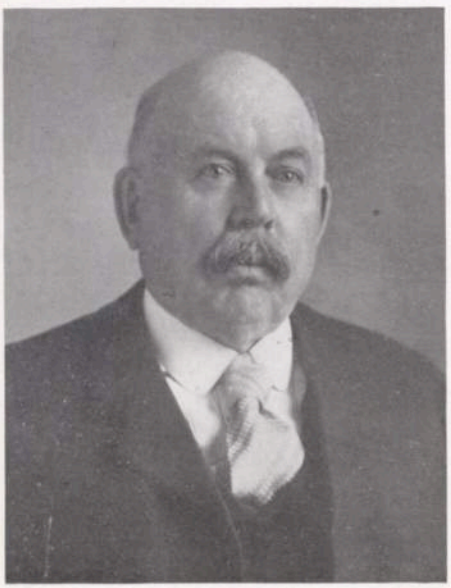
Setting-up exercises or skating are better for the skin than cold creams. The skin is chiefly useful as a heat regulator. Let your skin breathe. Air baths are useful even in winter.

The scalp is part of the skin and should be kept clean. Shampooing once a week ought to keep the hair clean. Tar or sulphur soap is good for dandruff. Be sure to rinse the hair thoroughly of soap and get it absolutely dry with hot towels or hot air.

Do not permit your hair to be singed. It is a useless measure for a dead tissue.

Not long ago a young man was turned down for a job because of the bad condition of his skin and hair. The necessity of care is just as great for men as women.

A word to women: Some old-fashioned men—employers and husbands—still prefer natural roses to rouge, and natural roses can be made to grow on any cheek if the gardener is faithful to follow sound advice!—*Life Extension Institute.*



Emory Burbank

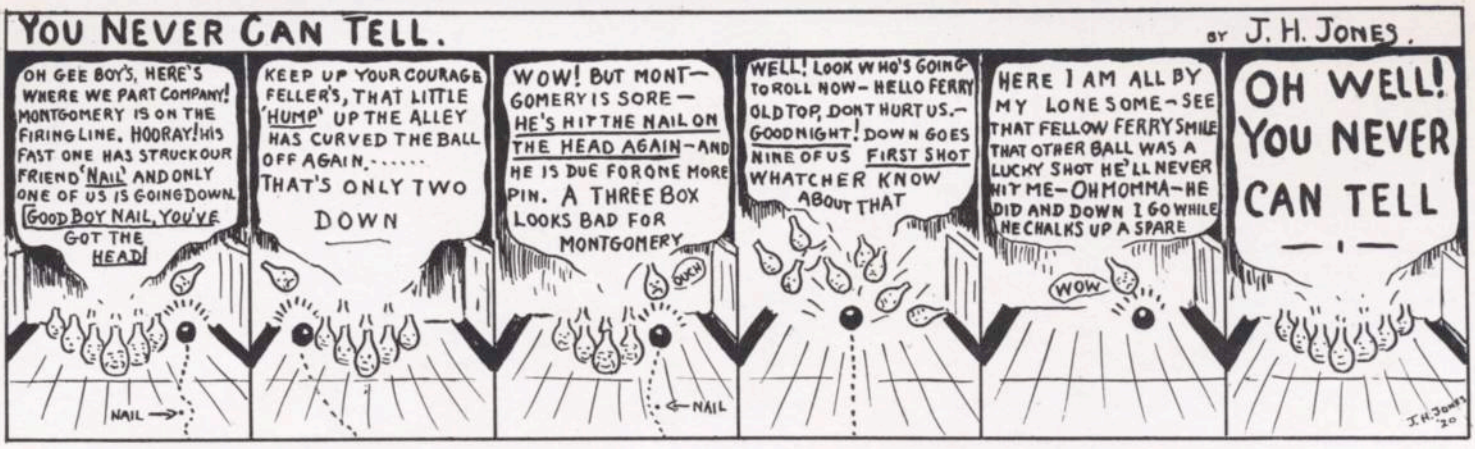
Spinning Job in 1895

Those working on Spinning Job today are 1st row: No. 1, Samuel St. Andre; No. 3, James Rankin; No. 7, Elmer Blanchard. 2nd row, No. 7, John Rankin; No. 8, Thomas Fox. 3rd row, No. 8, George Giguere. In the shop, 1st row, No. 2, Alonzo Sill, 2-22; No. 5, Herbert Rankin, 2-14; No. 8, Thomas Brooks, 1-2. 2nd row, No. 1, Thomas Garner, 1-3; No. 4, John Ball, 2-2. 3rd row, No. 3, Henry Graves, 2-14. 4th row, No. 2, John Mahoney, 6-1.

75% of the difference between last year's average and 100 has been given as a handicap this year in the Office League with the following results. No one was allowed more than 15 pins handicap.

Individual Averages (With Handicaps)

Johnston, Harold	101.2	Boutiette	97.1
Montgomery	101.1	Crawford, W.	97.1
Driscoll	100.8	Whipple	96.6
Lasell	100.5	Minshull	96.6
Alden	100.5	Crawford, H.	96.4
McGoey	100.2	Wild	95.8
Parks	99.2	Ferry	95.5
Broadhurst	99.0	Wilmot	95.5
Bullock	98.8	Lincoln	95.0
Greenwood	98.0	Noble	94.4
Nelson	98.0	Carpenter	94.2
Brennan	97.8	Ball	94.0
Johnston, Henry	97.5	Duggan	93.0
Noyes	97.5	Larkin	92.3
Scott	97.1	Foley	90.0



Shop League

TOTAL pinfall of 1,400 has yet to be reached by the Shop League. The Spindles tried hard to reach that objective and came within five pins of doing the trick on Monday evening, November 29.

On the fifteenth of November the Spinning met the Patterns, which proved disastrous to them, losing three out of four points, the first points they had dropped this season. The Patterns rolled a steady match, taking the first string by three pins, lost the second by seven pins, and captured the third by fifteen. Hourihan, a last year's Foundry bowler, joined the Patterns and upset the dope, leaving an average of 92.3 for his second match of the season, a jump of nearly thirty pins over the three strings of the match previous.

The Card job left the Foundry with a goose egg on the same evening, with averages of 90.7, 95, 94, and 90.7 for four of their men. The Foundry had three good averages for the evening in McCarthy's 91, McGuinness's 95, and B. Connor's 90.7, but an off night for Dorsey and McLeod with 78 and 86.3 lost the match.

The Pickers lost three points to the Spindles on Wednesday, November 7. The match had few outstanding features except the steady bowling of Marien, who rolled three strings of 95, 95, and 97.

The Patterns rolled the Foundry on the evening of November 22. No match was scheduled for this Monday, but a double-header on December 8 was avoided in this way. The Patterns continued their winning streak by taking three of the points. F. Brown, of the Patterns, started off with 101 and 93, but dropped to 71 on his third string. Veau, of the Foundry, cleaned up the highest string and pinfall for the evening.

On the night before Thanksgiving, the Card job rolled off a match with the Spinning job to avoid a double-header scheduled for December 29. The two teams broke even for the evening, the Spinning job winning out by five pins on the total pinfall. The Cards won the first string by three pins, the second by one pin, and lost the last string by nine pins. It was an evening of high individual strings. Flynn rolled one of 111, and Plante 107 for the Cards, while Kane knocked down 109 and Donovan 102 and 115 for the Spinning job. Donovan's average for three strings was 103. Flynn's individual string of 111 and individual average of 98.7 will not show this month in the averages for the shop, as this was his first match.

On Monday, November 29, the Spindle job blanked the Patterns, taking all four points. The total pinfall for the Spindle job was 1,395, the highest yet rolled by any team either this season or last season. Farley's average for the evening was 88.8; Turcotte's, 92; McFarland's 89.3; Donovan's, 90.3; and Marien's, 104.7. Turcotte, for the Spindles, rolled an individual string of 116, and for the same team Marien rolled 108 and 115. Thompson, for the Patterns, rolled two strings of 101 and 100.

On the same evening the Card job also took four points away from the Picker job. The good rolling of Finney and Roche was the outstanding feature of the evening.

Wednesday evening, December 1, the Foundry lost three points to the Spinning job. Bisson, of the Spinning job, rolled an average of 97.3, with strings of 104 and 115. Connors started the match for the Foundry and rolled 111, giving way to Dorsey.

The Card job split even with the Spindle job on Monday night, December 6. The second string lost the match for the Card job, when it dropped 66 pins to the Spindles. Finney rolled a string of 109 for the Card job and Donovan 106 for the Spindles. The high average for the evening was 97.3, rolled by Marien, of the Spindle job.

On No. 3 and No. 4 alleys the same evening the Spinning job won four points from the Picker job, winning the match by 102 pins. The Spinning job had three individual strings over 100, Donovan getting 105, Kane 106, and Bisson 110.

The Pattern job took three points away from the Foundry on Wednesday night, December 8. The Patterns won the first string by 53 pins, lost the second by 39, and won the third by 16. McLeod, of the Foundry, rolled 107 for his second string, and Hourihan started the evening with 102. The three-string averages for the evening were not high, Hourihan standing the highest with 90.1.

INDIVIDUAL AVERAGES
WEEK ENDING DECEMBER 10

Marien	98.1	Hourihan	86.7
Donavan, F.	95.0	Brown, F.	85.9
Bisson	94.0	McGuinness	85.3
Plante	93.0	Veau	85.0
Willard	90.9	Grady	85.0
McCarthy	90.4	McGowan	84.5
Roche	90.1	Farley	84.0
Brown, J.	89.8	Peltier	83.4
Melia	89.8	Stevens	83.3
Donavan, L.	89.7	Lemoine	83.3
Kane	89.5	Anderson	83.0
Connors, B.	88.9	Saragian	81.2
Connors, P.	88.6	Mulligan	81.2
Turcotte	88.3	McLeod	80.9
Thompson	88.2	O'Brien	80.7
McFarland	87.2	O'Neil	80.0
Wood	87.1	Dorsey	79.6
Finney	87.0	Walsh	78.8

LEAGUE STANDING

DECEMBER 10

	WON	LOST	P. C.
Spindles	16	4	.800
Cards	11	7	.708
Spinning	14	6	.700
Patterns	9	11	.450
Foundry	3	13	.188
Pickers	1	15	.063

HIGH INDIVIDUAL STRINGS

Roche	125	Donovan	115
Plante	119	Connors, B.	111
Turcotte	116	Finney	109
Bisson	115	Kane	109
Marien	115	McCarthy	107

HIGH THREE INDIVIDUAL STRINGS

DECEMBER 10

Marien	314	Donovan	309
Plante	311	Roche	304

Office League

From November 16 to December 9, in six matches, the Office League has been marked by exceptionally good bowling. Thirty-one strings, each totaling 100 or over, have been rolled. Those who appear in the 100 column are Bullock (3 times), Driscoll (4), Lasell (4), Alden (1), Harold Johnston (2), Noble (1), Broadhurst (5), Henry Johnston (1), Montgomery (4), Ferry (1), Larkin (1), Helland (1), Minshull (1), Boutiette (1), W. Crawford (1).

Tuesday night, November 16, No. 2 Office met the Main Office and dropped six points out of seven. The third string stood 528 to 527 in favor of the Main Office. E. S. Alden, Jr., in his second string chalked up 116 pins. G. B. Hamblin and George Wilmot finished the last string 98 to 96 in favor of Wilmot, and a total of three pins to Wilmot's credit.

On Thursday of the same evening the Drafting Room defeated the Repair Department by seven pins, taking four out of the seven points. The Repairs took the first three strings, the first by 3 pins, the second by 24, and the third by 6, and lost the last two by 37 and 3.

No. 2 Office bowled its best match in two seasons against the Drafting Room, November 30, and under ordinary conditions would have cleaned up, but 2,674 for a total pinfall was too much for the No. 2 Office by 11 pins; 2,663, or a team average of 88.8, is good bowling, and to lose five points on that exhibition is hard luck.

The Drafting Room took away the second and fifth strings by four pins each. Ferry came back strong after a bad start this season and registered a 93.4 average for the evening.

The Main Office won five points from the Repair Department on Wednesday night, December 2. The evening was featured by the good bowling of Joseph Lasell and George Broadhurst. Alden went into a slump after his remarkable pace of the season. Lasell rolled his best match, scoring 94, 116, 108, 81, and 99 for an average of 99.6. The fourth string was the stumbling block for Broadhurst as well as Lasell. His totals were 104, 101, 109, 84, and 92, and an average of 98.

Tuesday night, December 7, Montgomery came back into his normal stride after a match of poor bowling. As we reported last month, anything below 100 is poor bowling for Montgomery. His average for the evening was 101.4. The strings were 90, 99, 98, 108, and 112.

The Drafting Room, however, went into a slump in spite of Montgomery's good bowling, and the Main Office took five of the seven points. We are surprised to see Foley, of the Main Office, hitting them poorly so far this year, but expect a comeback later.

No. 2 Office, not rolling as well as they did against the Drafting Room when they lost five points, cleaned up five points from the Repair Department on Wednesday night, December 9. William Crawford, of the Repairs, showed a flash of real form, but slipped in the last two strings after registering 102. Driscoll, Bullock, and Broadhurst rolled their usual good average. Driscoll was a bit off in his second, third, and fourth strings, but the 103 and 99 of the first and fifth saved his standing.

The season should prove interesting, with but two points between the leaders, and the other two teams in the running ready to upset the standing at any time.

LEAGUE STANDING

	WON	LOST
Main Office	23	12
Drafting Room	21	14
Repair Department	16	19
No. 2 Office	10	25

INDIVIDUAL AVERAGES

Montgomery	99.7	Scott	85.6
Broadhurst	94.5	McGoey	85.6
Driscoll	92.8	Lincoln	84.8
Johnston, Harold	92.8	Crawford, H.	84.8
Lasell	90.3	Nelson	84.4
Johnston, Henry	90.2	Boutiette	84.1
Bullock	89.5	Crawford, W.	83.9
Minshull	88.7	Wilmot	83.3
Parks	87.6	Hamblin	83.6
Greenwood	86.8	Brennan	82.8
Lamb	86.7	Whipple	81.6
Ferry	86.2	Foley	81.4
Noyes	86.0	Duggan	79.6
Wild	85.8	Carpenter	79.2
Alden	85.7	Ball	79.0
Noble	85.7	Larkin	77.3

HIGH INDIVIDUAL STRINGS

Montgomery	118	Alden	116
Broadhurst	117	Boutiette	113
Lasell	116		

HIGH INDIVIDUAL FIVE STRINGS

Montgomery	528	Johnston, Harold	486
Lasell	498	Driscoll	481
Broadhurst	490		

Attendance in the Shop for Month of November

JOB	FOREMAN	P. C.	St'd'g Last Mo.	St'd'g This Mo.
2-19	A. M. Smith	99.1	50	1
1- 2	W. G. Blair	98.8	1	2
2-20	W. E. Harris	98.79	35	3
2-17	P. C. Houghton	98.3	28	4
2- 8	W. Courtney	98.1	14	5
2- 1	H. E. Keeler	97.3	37	6
3- 4	W. E. Booth	97.2	21	7
1-12	E. C. Smith	96.9	7	8
1- 5	E. H. Hanny	96.8	9	9
2- 6	A. R. Fletcher	96.8	13	10
2- 9	Fred Clough	96.8	44	11
3- 2	A. M. Meader	96.8	8	12
1-11	F. E. Bates	96.7	20	13
2- 2	Robt. Deane	96.7	4	14
1- 8	W. O. Halpin	96.6	56	15
1-23	H. B. Stuart	96.5	5	16
3- 7	S. W. White	96.5	49	17
3- 9	Levi Rasco	96.3	6	18
1- 3	W. S. Bragg	96.0	24	19
1-20	W. J. Johnston	96.0	2	20
1- 6	Sidney Schat	95.9	32	21
1-17	E. S. Blanchard	95.8	40	22
1-19	L. J. Ramsey	95.5	33	23
2- 5	Geo. L. Gill	95.1	10	24
2-10	Jas. Bryant	95.0	51	25
3- 8	Fred Matthewman	95.0	54	26
1-14	J. J. Kelliher	94.9	52	27
3- 1	C. S. Snow	94.8	29	28
2- 4	W. F. Hews	94.7	12	29
1-13	J. A. Welch	94.6	15	30
5- 1	C. T. Burlin	94.5	16	31
0- 1	M. J. Cronin	94.4	27	32
1-24	J. A. Parsons	94.2	26	33
2- 7	J. W. Dale	94.2	18	34
3- 6	A. R. Birchall	94.1	25	35
4- 1	A. C. Ball	93.9	58	36
1-15	C. M. Stuart	93.8	46	37
1-22	W. J. Foster	93.7	17	38
1- 7	G. F. Hanna	93.6	22	39
2-11	Geo. Wilmot	93.5	36	40
2-15	J. B. Glashower	93.5	30	41
1-25	F. J. McGowan	93.0	38	42
2-18	E. C. Heath	93.2	34	43
2-22	J. F. Marshall	92.9	48	44
1-16	J. A. Wood	92.9	53	45
1- 4	Robt. Britton	92.6	31	46
1-10	Elmer Hilt	92.5	11	47
1- 1	B. R. Sweet	91.9	47	48
1- 9	W. O. Halpin	91.9	56	49
2-21	I. E. Peck	91.6	58	50
6- 3	C. T. Moffett	91.56	39	51
6- 2	A. J. Brown	91.4	19	52
1-18	John Spencer	91.1	55	53
6- 1	W. H. Amith	90.6	43	54
6- 0	R. A. Henson	90.5	60	55
0- 3	W. E. Burnap	88.5	41	56
2-16	E. P. Barnes	87.4	45	57
2-14	B. R. Graves	84.9	42	58
1-21	L. T. Barnes	84.2	3	59
1-26	J. A. Hall	80.9	59	60

Bolster Job

IN the year 1868, when the spindle job was originated under the supervision of H. F. Woodmancy, another department was necessary to make a complete spindle.

This department was called the bolster job; and Oscar F. Taft, who was closely connected with Mr. Woodmancy in the manufacture of spindles and bolsters, was placed in charge.

Mr. Taft made the bolsters and steps for all the double-rail spindles both common and Sawyer, until they were superseded by a single-rail spindle in 1882, called the Whitin gravity.

In 1892 Mr. Woodmancy patented a new-style bolster case, the Woodmancy patent doffer guard or latch, which was a great improvement over the old-style case. Since this improvement was placed on the market, there have been many imitations, until the present pressed-steel cap was designed, which is the best yet produced.

The bolster job was started with a few machines scattered about the room which is now occupied by the tool job and chuck job. In 1885 the machines were all gathered together in the room now divided between the Employment Department and the Shop Hospital.

This room was used until more floor space was required by the increasing demand for bolsters. When the new Freight House was built in 1908, the job was moved into the second floor, which position it occupied until 1917, when it was again extended into its present quarters.

Mr. Oscar F. Taft held the position as foreman until 1907, when he was obliged to retire on account of ill-health. At this time Alfred M. Smith was made foreman, which position he now holds.

Mr. Smith, after serving his apprenticeship under Messrs. Howard Burbank, Fred Houghton, and Albert Whipple, became associated with Mr. Taft as assistant in 1891 and has seen many changes made in the line of bolsters and cases used on spinning, twisters, spoolers, quillers, and reels, and also in the method of manufacture.

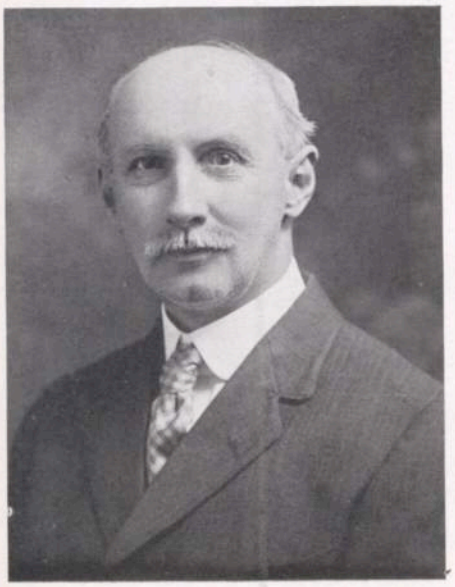
The variety has increased from half a dozen different sizes to the present total of nearly one hundred and fifty, with a yearly output of approximately a million bolsters.

The personnel of the bolster job is as follows:

	In Shop		On Job	
	yrs.	mos.	yrs.	mos.
James Ward*	61	2	36	10
John Marshall	36	8	36	8
A. M. Smith	33	8	33	8
Wm. H. Smith	30	10	30	10
Wm. Malley	29	6	29	6
James Forsyth	27	5	27	5
William Pierson	24		5	
Henry Dalton	23	8	23	8
Dennis Sullivan	19	9	19	9
Michael Riley	19	3	19	3
Jeremiah Sullivan	17	1	3	5
Louis Lancour	16	6	16	6
Joseph Lancour	16	4	16	4
John Wasiuk	16	4	16	4
Abraham Lightbown	15	6	11	6
William C. Dalton	15	2	15	2
Louis Bergeron	14	7	14	7
Fred Ballard	14	0	14	0
Harry Wallace	8	3	8	3
Thomas Park	6	7	6	7
Timothy Skerry	6	7	6	7
John O'Connell	6		4	9
Fred Tattersall	5	8	5	8
Nelson Roberts	5	2	5	2
Jos. Cizelski	5		5	
Chas. McKay	4	6	4	6
Peter Maynard	4	6	4	6

*We draw your attention to Mr. Ward's service record.

Continued on page 13, column 1



A. M. Smith

Oscar F. Taft

Office Notes

The engagement of Dorothy Wheeler, of the Main Office, to George B. Hamblin has been recently announced. The "Spindle" wishes to extend the congratulations of their many friends among the employees of the Whitin Machine Works.

Mr. and Mrs. Neil Currie recently announced the engagement of their daughter Florence to Raymond T. Gifford, of Boston. Her many friends, and especially those in the Employment Department, wish to be informed when to start buying presents for the coming event.

Do you know Mr. Beaudry wears a pedometer to work now? How far is it to Northbridge Hill?

Harold Johnson and Donald Adams were in charge of the dance, Thanksgiving night. The usual good time was enjoyed. Better hurry up, boys, it's getting near Xmas.

Who says "hen parties" aren't as thrilling as "stag parties"? At any rate, two or three of the girls came in to work Wednesday, after the party given the night before to Florence Currie, with a big head.

Florence received a lovely little "sparkler" about three weeks ago; and as such an important event could not go uncelebrated, ten of the girls gave her a dinner down at the Uxbridge Inn, Tuesday evening, November 30.

During the feast, toasts were given and jokes presented to Florence, but it was after dinner that the fun started. What went on behind the closed doors of the parlor is a secret, however; so nuff sed.

Those present were Florence Currie, Jennie Currie, Hazel Anderson, Mary Britton, Bessie Aldrich, Ruth Burnap, Helen Cotter, Grace Brown, Gladys Hanny, and Catherine Munt.

Miss Gertrude Feenstra, of the Main Office, was married December 4 to Raymond Barlow, of Welch's job. Both young people are popular around town. We wish to extend to them our heartiest congratulations and good wishes.

Jennie Currie wishes to inform all those who passed remarks in regard to the cartoon of her wild trip to Ledge Lodge, appearing in the last "Spindle," that the automobile was a perfectly good Buick and not a Ford, as the cartoonist made it out to be. We take great pleasure in drawing your attention to this mistake and hope the feelings of the young lady in question will be back to normal, now that this correction has been publicly stated.

Robert Metcalf became the proud father of a son, James Hoffman Metcalf, November 23.

On December 1 a son was born to Mr. and Mrs. Robert Hargreaves. Bob informs us that the new draftsman weighed 7 7-8 pounds and that he has been named Richard Bradford.

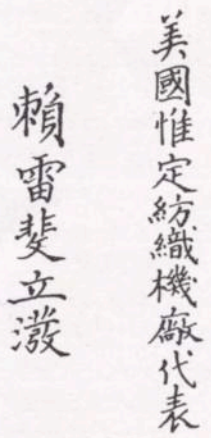
The Employment Department has a new germicide preparation and sprayer. Mr. Norton read the label on the bottle, which was marked "85% alcohol," and a few minutes later could be seen in the act of curing a newly developed sore throat.

Wm. Kearnan suggests that, in the talk on the water supply of Whitinsville at the foremen's meeting, Wednesday, December 1, Henry Owen forgot to mention that prohibition might be one of the reasons for increasing the reservoir capacity.

Why under the sun, we ask you, was Harold Johnston out walking with the minister, Mr. Houston, on Tuesday, December 7?

It has been the custom of the Pay Roll Department to report at 7.45 A. M. on pay day. We would like to ask Helen if any hint from us among her friends would help reduce the length of her at-home hours on Wednesday nights. We'll tell him, Helen, if you say so.

It has been suggested that Robert Brown, of the Drafting Room, obtain the number of his house from Charles Snow. It seems that, for the second time, Bob has been unable to locate his own home on Spring Street. We will vouch for the fact that Bob was in perfect condition both times, but would suggest that he pace off the exact number of steps from the corner of the street to his front door, in order not to disturb the neighbors.



Philip Riley, representing the Whitin Machine Works in the Far East, has an interesting business card in the Chinese language. Mr. Ming Ting Lu, who is now working on the card job, volunteered to give us an idea of how this business card would look; and the above cut reads, "Philip Riley, Representing Whitin Machine Works, America."

We were glad to read in the syndicated news in the leading newspapers of the East that John Lasell, of Williams and Whitinsville, stands out as the foremost goal kicker of all the college football stars in the East this year. Lasell has a total of one touchdown, 27 goals, and one field goal, making a total of 36 points for the year. This also ranks him as the twentieth total scorer of all this year's Eastern football players.

Bolster Job

Continued from page 12, column 3

William Clark	4	2	4	2
James Ingham	4		4	
James Jenkins	3	10	2	3
Edward Bebo	3	6	1	6
Amido Allega	3		3	
Knute Larson	2	11	2	11
Annie Jones	2	9	2	9
Tillie Frieswick	2	6	2	3
Grace Hoakstra	2	6	2	6
Alphonse Guertin	1	9	1	1
Lionel Morrell	1	7	1	7
Teresa Nyholt	1	5		11
Viola Blair	1	2	1	2
Anna Prestera	1	2	1	2
Sadie Sibesma	1	2	1	1
Florence Rasco	1	2	1	2
Charles Riley	1	2	1	2
Margaret Nichols	1	1	1	1
Ida Rivard	1	1	1	1
Marie Belval	1	1	1	1
John Walsh	1	1	0	3
Dominick Divango	1		1	
Elizabeth Belval		11		11
Lawric Thompson		11		2
Geo. B. Smith		11		11
Amide Brare		10		10
James Montville		10		5
J. F. Dunn		6		6
Benj. Petrowsky		3½		1½
Philip Nadeau		3		3
Louis Peet		2		2
George Morrell		2		2
Mathias Porrier		1½		1½
Gideon Poulin		1½		1½

"Dalton's Specials"

Riding bareback seems to be a specialty with Jollimore, as we understand he rode one of the race horses to Pawtucket recently.

Brennan claims the bowling championship of Wood's Office. His average up to date is 63.7. He still maintains he is the champion.

Our stenog, Miss Nellie Vail, passed the Thanksgiving holiday visiting historic places in and near Boston.

Connors, Johnston, and Dalton attended the Holy Cross-Boston College football game recently held at Braves Field, Boston.

The members of the Electrical Supply Room, Wood's Office, have formed a quartette that will appear in public in a short time. The individuals of the quartette are as follows: Frank Mateer, first tenor; Erwin Bragdon, second tenor; Henry Dolliver, bass; and Thomas Hamilton, baritone. Hamilton's favorite song is, "She May Be Only a Moonshiner's Daughter, but I Love Her Still."

Look out! When! What's that coming down the street at such a terrific rate of speed? As it draws nearer, we notice it is George Kane trying out his new Ford.

Miss Belle Hamilton, of the Production Department, secured a book entitled, "How To Get Thin." Perhaps she could give us some information.

The members of the Electrical Department have taken unusual interest in Abraham Twight, their licensed electrician. We wonder why?

Playing Wild West has got to be a regular habit with Wright and Lancourt.

William Smith, of the flyer job, was married to Nora Walsh at St. Patrick's Church, November 22. We extend our congratulations.

Here is an interesting item in regard to castings, which will be a surprise to many of us: Bob Keeler, in going over his record cards of the different castings catalogued and in active use today, reports a total number of 39,337. There are many others which are not catalogued and which we are not using at the present time. From this figure, one has a more definite idea of the vast number of patterns stored in the Pattern Loft under the supervision of Albert Brown.

Harry Wallace, of the bolster job, famous checker player of Whitinsville, played fifteen of the best players of the Blackstone Valley at the Woonsocket Y. M. C. A., Tuesday night, December 7. Mr. Wallace succeeded in winning six of the matches, drew five, and lost four.

Everett C. Stebbins, of Fletcher's job, was married to Mrs. Frances Wallace Morin, daughter of Harry Wallace, at Waltham, Mass., recently. The ceremony was held in the Presbyterian Church. The Rev. Mr. Weaver officiated.

Jones had a story that McGowan missed a rabbit by several yards on December 7, but McGowan reports Jones missed that same rabbit twice.

We hate to pick on our friends in the Foundry, but the famous Buick of the Foundry continues to play its part in the history of Whitinsville. Recently a party of amateur actors journeyed to Somerville, Mass., to witness a play which is to be presented here in the near future. Mr. Donlon, as chauffeur, on his way home discovered the town of Charlestown and the location of its famous penal institution and several other suburbs of Boston, bringing the party back about 4.30 the next morning.

Several friends of Hugh Ferguson have accused him of profiteering since Philip Farrell rented a room in his house on Spring Street.

Robert Britton, one of our famous fox hunters, is so far leading in the count on foxes. Thanksgiving Day he bagged his second fox. Bob, however, claims that so far this season the foxes have not been running very good, but take to their holes very soon after given chase.

In the fox hunters' hall of fame George Gill already has established his right to a corner. Regardless of past reputations and in spite of the fact that we are reluctant to remind anybody of his hard luck, we can't resist sympathizing with Mr. Gill on his great loss Saturday afternoon, November 27. A perfectly healthy fox became a little too friendly with George and in the excitement missed a full charge of gunshot from our fox hunter's gun. Our advice as greenhorns on this subject would be to keep the fox in his place and not allow him to become quite so familiar.

The above photograph shows a group of huskies that were invited to Oakland Beach by John Hey, of the spindle job. The main occupations of the occasion were fishing, clam and oyster digging. They reported a fine time and have voted to accept an invitation next year, if extended.

Somebody caught a crab, which he started out to find after the rest of the party had gone to sleep. What became of that crab seems to be a mystery. The gang is keeping it to themselves, but inform us that Arthur Randall has the right dope. Reading left to right, this hard-working crew consists of Arthur Randall, spindle job; Leon Bailey; George Hanna, foreman of the big planer job; Lucien T. Barnes, foreman of the flyer job; Albert Chandler, of the brush job; John Hey, of the spindle job; and Dr. Schofield.

After a several months' visit to Holland, Louis Jongsma returned to his duties on the carpenter job. Louis has many interesting stories to tell of the old country, and we understand that Roy Foster is thinking of taking out passports for a trip abroad.

Tip O'Neil, our versatile athlete of the spinning job, was much admired by the young lady spectators at Killingly, Conn., during the soccer game with Goodyear. We don't believe that Tip knows anything about this, but a report comes back that a group of very interesting young ladies were heard to remark: "Isn't he a pretty boy? I must get his address and write to him." How do you do it, Tip?

News has reached us that James H. Galvin, of the Freight House, received a parcel on November 3, 1920, by special delivery. It is also stated Jim is going in for marathon running, and we are curious to know what was in that package.

Foundry Notes

John Haggerty spent the week-end in Boston. What was the reason? We would like to know.

One of our office force was lucky Thanksgiving Day, to be present at a "wild" turkey dinner.

Our veteran Pat McGuinness is slipping in the bowling league. Just a little more pep, Pat.

Dan and his Sedan are making a hit these days.

Doc. Walker has joined a dancing class. Youth is returning to the old boy.

Did anybody lose a bracelet in Blackstone?

Our cast-off got a strike on the alleys the other night. He turned around, smiled, and said, "Look at the wreck."

John Lemoine is to be married December 27, 1920. Here's wishing him good luck.

Wilfred Gadboy is downhearted these days. She must make up before Xmas to ease his mind.

According to McLeod's bowling, he would make a good wood chopper.

Production Department

Miss Brown, of the Production Department, has acquired a new pup. Sis reports that she has to take him to bed with her to keep him from disturbing all the neighbors. The pup takes great delight in chewing Miss Brown's ear about five o'clock in the morning.

Katherine Rossiter and Miss Brown had stored two apples on the sill outside the window by Miss Rossiter's desk one noon recently. About three o'clock Miss Rossiter went over to Miss Brown and asked her where the apples were. Very soon afterwards many telephone calls were received expressing thanks for the thoughtfulness in providing lunch.

Investigation shows that the Drafting Room has a long pole which recently has acquired a very sharp spike on its end.

Ed. Newton has gone into the second-hand clothing business. His salesmanship sold his coat off his back, and the Production Department was much upset to see Ed. put his overcoat over his vest and shirt sleeves, en route for home.

Mr. Prudden has the young ladies of the Production Department guessing. They claim that all he needs to bring in is a razor some one of these mornings to prove conclusively that he is running a still. Among the many articles to date are several joints of stove pipe, numerous sized bottles and empty peanut cans. This ought to be pretty good evidence.

A contributor informs us a rumor is going around that Lester Dermody attended the Elks ball in Woonsocket, Friday night, November 19. The rumor seems to be founded on the fact that the following morning, about 10 A. M., Lester reported for work all dolled up in silk socks, dancing pumps, spats, and a monocle on a dream of a black and white ribbon.

Fellow workmen of the speeder job presented a purse of money to Raymond Barlow on the occasion of his marriage to Gertrude Feenstra, of the Main Office, December 4.

Most of us have a favorite poem or one that strikes our fancy. At least, when this statement was made to Mr. Norton, of the Employment Department, he agreed to the extent of producing the following poem from his pocket book, which he had been carrying for some time.

A Plea

Grant to me this: The strength to do my duty,
And smiles of love to welcome my return;
Open my eyes to all the world's bright beauty,
Teach me to make the most of what I earn.

What though I toil, let me be brave and cheerful,
Glad there are tasks that I am called to do;
Let love of life keep me from being tearful,
And love of truth keep me from deeds untrue.

I would not dwell too much on cares that fret me,
Nor magnify through selfish eyes my woes,
When failures come and trivial wrongs upset me,
Let me rejoice that I can bear such blows.

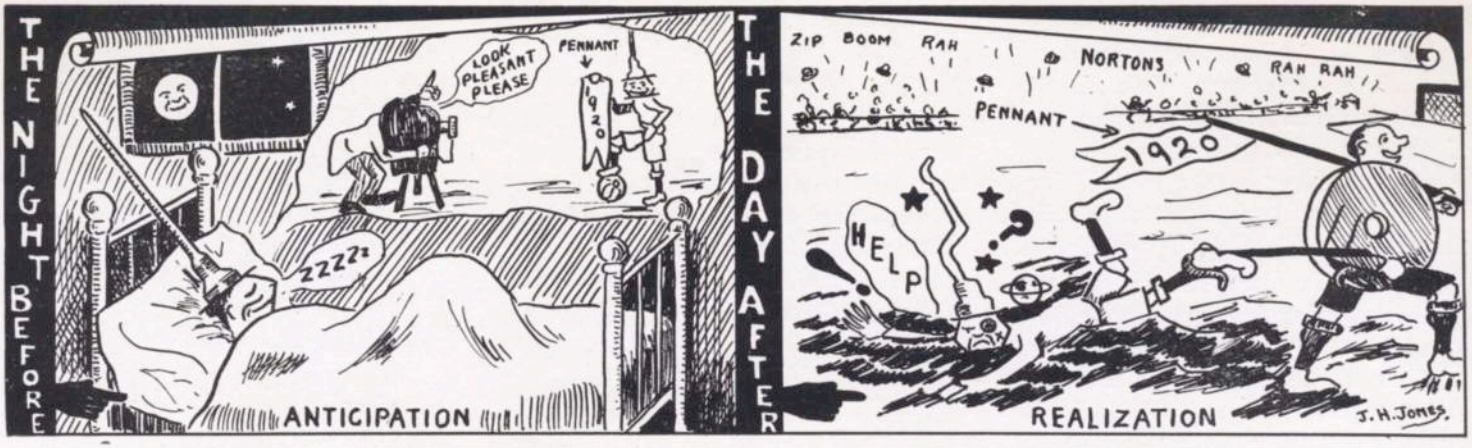
Keep me from envy and the jealous madness,
Which blinds men's eyes to joy that they possess,
And makes them think another's hour of gladness
Is robbing them of fortune and success.

Through every day and every hour that passes,
Let me press forward, glad to take and give;
Looking at life through clear not murky glasses,
And come what may, finding it to live.

Edgar A. Guest.

If you have one that is exceptionally good, send it in.

Several observant citizens notified us on the morning of November 30 that the American flag was seen flying upside down above the Grove schoolhouse.



Soccer

AND STILL THEY FALL

November 13 saw the American Optical football team the guests of the Whitin Machine Works eleven. Although thirteen is counted unlucky, it failed to have any effect whatever on the outcome. It was a good game in many respects, both teams showing up to advantage. The teamwork of the Whitin players was the outstanding feature. The fans that came down from Southbridge were good sports and rooted hard for a win, but it was with a straight face they went back home to report that Whitins had won by the score of 4 to 1.

MARCHING ON

On November 20, the Whitin eleven traveled to Connecticut to play the Goodyear team. The trip was made by automobiles for the comfort of the players. That they appreciated this is shown by their win over Goodyear by the score of 4 to 1. The interesting part of this date was that, while the Whitin team was winning two points, the Norton team was getting only one point, which brought the number of points lost for both Whitins and Nortons equal.

THE PENNANT IS LOST

A murky and cold day was November 27. The Norton field was a sea of mud and water. The field was like a little bandbox, and the playing field was marked at minimum, which was a disadvantage to the visiting players from Whitinsville. The game was a deciding one for the pennant, and both the Norton and Whitin fans were expectant of an exciting game. The teams lined up; and Nortons, who had lost the choice of goals (by the way, it was the only thing they did lose), kicked off.

The heavy Norton team soon forced a corner, but it was cleared by the Whitin defence. W. Jenkins, the inside left of the Norton team, while playing the ball, slipped and collided with a player, which resulted in three bones being broken from the wrist to the elbow. It was a pure accident, and it deprived the Norton team of a good player. After a substitute player had been put into the game the Norton team started to put some pep into the game and literally swept the Whitin team off their feet. A kick from away up the field by the Norton right halfback and misjudgment of the ball by the Whitin goal-keeper registered the first goal of the game.

The light Whitin team seemed to be stuck in the mud, for they simply could not keep the ball long out of their own territory; and the substitute player for Jenkins got the ball out of a scrimmage in the Whitin goal and registered again for the Norton team.

This woke the Whitin team up a little, and they strove valiantly to score; but it was of no avail, as their passing game either fell short or went too far, and the consequence was a Norton player got the ball and made a huge kick away into the Whitin territory, causing the Whitin team to go on the defence.

Another misjudgment of the Whitin defence gave the center half of the Norton team a chance to make the third goal. The Whitin team lacked the pep of the Norton team and thereby missed chances to score; and as the whistle blew for half time, the score stood 3 to 0 in favor of the Norton team.

The second half opened with some good passing by the Norton team. They were playing the game of their lives, plowing through the mud just like truck horses, while the Whitin team simply could not make headway; and it was not long before the center forward of the Norton team dribbled the ball by the Whitin defence and scored a pretty goal. It was all Nortons; the boys seemed to have lost heart, being afraid to tackle the Norton backs as they should have done and thereby taking advantage of some good chances to go through. The Norton backs were aware of this fact and took their time placing the ball well down the field. Some good passing from one to another gave the Norton center forward a beautiful chance to dribble by the Whitin defence and score the fifth and final goal of the game. No alibi is needed for the Whitin team, as they were beaten by a team that was easily their masters on a muddy and wet field; and I am sure the Whitin team will endorse my hearty congratulations to the Norton team, winners of the Triangle Industrial League for 1920.

The lineup:

Norton Company		Whitin Machine Works
Fosberg, g.		g., Keeler
Johnson, rb.		rb., Wilson
Sandquist, lb.		lb., Rothwell
Strand, rhb.		rhb., Hetherington
Lyumgberg, chb.		chb., Cameron
Backman, lhb.		lhb., O'Neil
Manguson, ro.		ro., Gunlag
Pierson, c.		c., Ashworth
Johnson, A., ri.		ri., Holmes
Jenkins, li.		li., Fowler
Solemin, lo.		lo., Jackson

Linesmen: M. Strand, Blakely. Referee: D. Russell, of Southbridge. Time: 40-minute halves.

League Standing

Team	Played	Won	Lost	Dr'wn	P'ts
Norton	10	8	0	2	18
Whitins	9	6	1	2	14
Hamilton Woolen	10	3	4	3	9
American Optical	9	3	5	1	7
Goodyear	8	3	5	0	6
Whittall	7	0	7	0	0

1920 Team Record

Games played, 9; won, 6; drawn, 2; lost, 1.
Goals scored, 29; against, 14.
Goals scored by: Jackson, 7; Fowler, 7; Gunlag, 5; Fleming, 4; Cowburn, 3; Wilson, 1; Hetherington, 1; Holmes, 1.

Inside Facts on Football

(Concluded)

The forward line and halfback line have been dealt with in past issues. It is now time that the defence positions—namely, the right and left backs and the goalkeeper—are explained. The young man who hopes to be successful in playing the back position must have many qualities, some by nature, some by practice. A keen eye, iron nerve, and a sturdy physique are indispensable. Granted that nature has been kind and the young man has these qualities, he must learn to tackle cleanly, to kick and head with certainty, to act promptly and combine with the goalkeeper behind, the back alongside, and halfback in front.

Other tricks of this position may be brought into play as the crafty qualities of the player desire. As D. Boyle, who played fullback for the Celtic F. C., says:

"To tackle means to deprive or prevent an opponent from making further headway with the ball, and to tackle successfully there must be no hesitancy, dilly-dallying, but quick, thorough action in going for the man and ball at once, as audacity often pulls you through. Judgment and experience are the best teachers in tackling an opponent. Some forwards are beaten by the back rushing in as described, but with others one must play a waiting game, letting them do the rushing. Whatever method is adopted, do not hesitate,

and use no half measures. A full-back must be able to kick equally well with either foot, as he must be able to clear the ball, no matter how awkwardly it comes to him. Fast oblique shots, balls coming breast high, some traveling low with as much 'side' and 'top' as a billiard ball, must be negotiated with the utmost certainty.

"Heading is also a valuable asset, as a ball kicked from a corner or out of a scrimmage may be too high to kick, and a neat piece of work with the head may be the means of clearing what would otherwise have been a lost opportunity. Combination is the vital asset of the two backs and goalkeeper. The backs must know how far to leave the goalkeeper, what shots to leave for him to clear, and what shots to clear for him. Give the goalkeeper plenty of elbow room to work; don't hamper his movements and unsight him at a critical time by falling back too close to the goal; have a complete understanding all around. If the opposing left wing has the ball in his possession, the right back should go ahead of his companion and tackle the opposing forward. The left back should hold himself in reserve; and, should his team-mate be beaten, he will be in a position to help the goalkeeper in clearing the ball.

"Above all, the fullback must be thoroughly acquainted with the tactics of the halfback in front. If the halfback is playing the inside forward, then the back must watch the outside man. Under no circumstances should the back get mixed up with the halfback line. By doing so, he leaves his side of the field exposed; and unless the other back be very speedy, disaster will follow. Few fullbacks pass the ball to their forwards; all they think about is taking a huge kick, high and hard, letting the ball go anywhere, as long as their lines are cleared, and frequently having it drop at the feet of the opposing backs, whereas, by exerting half that strength and placing the ball to the forwards, it would in all probability put the opposing team on the defensive.

"To young players I would say, Keep your temper under provocation, remain cool under pressure, avoid all shady tactics, and above all make up your mind quickly and act in conjunction with your team-mates with the utmost promptitude."

Now to turn to the art of good goalkeeping, H. G. Renorie, of the Hibernian F. C., says:

"I think a goalkeeper should not be content to stand and catch cold in his goal, but should follow up his backs and assist them by being prepared for a pass back, when the backs find themselves in a tight corner, and get all the long, bounding balls that are sent frequently over their heads, thus reminding them that there is a goalkeeper on the team. Practice and experience are the best teachers, but the best practice of all is to have half a dozen players told off to pepper one with a half a dozen balls; and under these circumstances a goalkeeper will have more varied shots in five minutes than may come his way in several games; and if making up one's mind quickly be one of the supreme qualities of a goalkeeper, then here indeed will he have ample time and opportunity for developing this habit. In clearing (or getting rid of the ball), a goalkeeper must do the correct thing—that is, grasp the ball with his two hands whenever possible, although there are times when a goalkeeper has no other course open to him than to fist or kick away to that part of the field which best suits his purpose. In fisting out a high ball or kicking at a low ball, there is much danger for the goalkeeper, as a misjudgment on his part may cause the ball to glance from his knuckles or boot into the net; and a sorry man is he, as he turns to pick the ball out of the meshes and at the same time listen to the outspoken remarks of the candid critics on the lines. Grasp the ball whenever possible and the situation at the same time, and do not hesitate at flinging yourself at your opponent's feet or to rush out to meet him as he tears in towards the goal. A fraction of a second will decide this matter either way, for he who hesitates is lost; and a goal may be scored or saved as the goalkeeper's judgment, nerve, and pluck have been in evidence.

"Practice will bring agility, experience will give coolness, but the faculty of doing the right thing at the right time distinguishes the star from the ordinary player."

This concludes my article on "Inside Facts of Football"; and I must say, before I close, that much detail could have been given had space permitted, but I have tried to do the best I could and I hope the quotations I have made from "The Giants of the Game" in years gone by will sink deep into the minds of aspiring young footballers of today, as soccer football is a clean, wholesome game at which all can play.

JAMES H. JONES.

Water Supply

Continued from page 7, column 3

To increase the amount of water and also the head, a dam was put in farther up the brook and called the "Duck Pond," in 1904, but in 1910 the flowage was increased by a dam built just below this one, making reservoir No. 5 with a capacity of 300 million gallons, a flowage of 50 acres at an elevation of 556 feet, and four miles from the center of Whitinsville.

Reservoir No. 6 was built in 1907, still farther up the brook in the woods, 4½ miles from the center, at an elevation of 647 feet and a flowage of 20 acres with a capacity of 60 million gallons.

The water in No. 5 and No. 6 reservoirs was never piped to the village in its original condition. The natural advantages furnished by the brook between No. 5 and No. 4 were made use of and the water sprayed into the air through pipes below No. 5 dam, in order to get the benefit of aeration; and a number of small dams were also constructed along the brook to help in this work. This brook aeration worked out very well. The opportunity the water had to settle in No. 4 reservoir, together with the fact that this reservoir leaked underneath or around its ends into the valley below, although built in the most up-to-date fashion, helped the water to be thoroughly purified first by standing in the reservoir and second by being filtered in the gravel underlying the flats below the dam. Water pumped from test wells driven in this section showed almost the highest test for quality in the state.

Had it been possible to use, without filtering, the water stored in No. 6 reservoir at the elevation of 647 feet, the matter of higher pressure for the village would have been solved; and it probably would not have been necessary to have built reservoir No. 7. However, No. 7 reservoir was finished in September, 1920, and has a capacity of 1.5 million gallons at an elevation of 559 feet. It is constructed on the latest and most up-to-date methods used in underground-reservoir construction. It is 118 feet 6 inches square, 19 feet deep, and the roof is supported on 36 concrete posts 24 inches square. It is built on the principle of the shell of an egg, which for its thickness is able to withstand the highest amount of pressure for the amount of material used. The tops and the bottoms of the arches are rounded, the structure is covered on the top by 2 feet of soil, and the sides with a tapering section of larger area. This top weighting and the earth on the sides are supposed to balance the water pressure inside the reservoir, making a most solid and dependable structure.

The water in this reservoir gives a pressure in the Whitin Machine Works yard of 105 pounds per square inch.

To furnish the water for this reservoir, five 2-inch and four 4-inch driven wells are located in the gravel below the No. 4 reservoir dam and connected to centrifugal pumps by which the water is forced into the main line between the reservoir and the village of Whitinsville.

These pumps have a capacity of 850 gallons per minute, one million gallons per 24 hours each, are driven by electricity, and one of them is running night and day. A 24-inch pipe starts from the No. 7 reservoir down the hill, reducing to 16 and 14 inch as it approaches the village main and, with a check gate at the foot of the No. 4 dam, always holds the pressure of 105 pounds in the village.

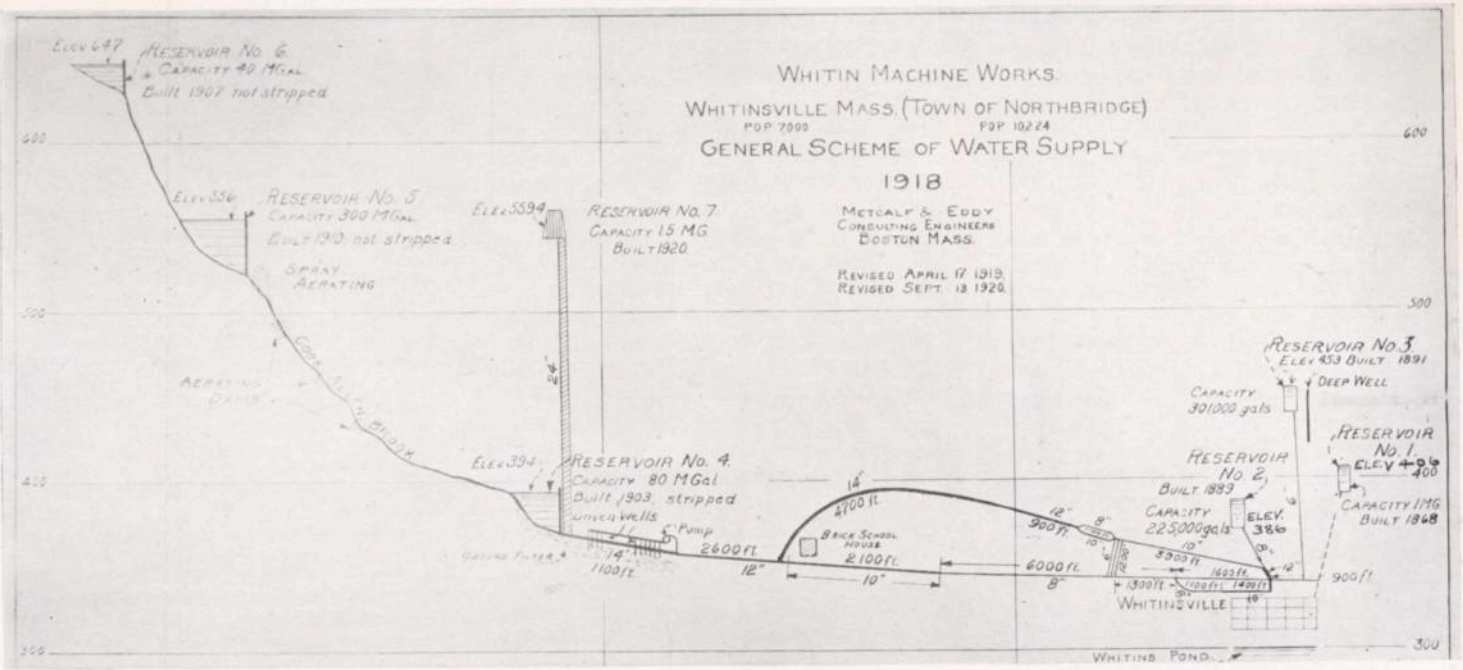
It is rather interesting to compare the elevations of a few of the houses about the village with these different reservoirs. For instance:

	Above Sea Level	Above Whitin Pond
L. M. Keeler's residence	509	209
W. L. Taft's residence	509	209
Top of Prospect Hill	465	165
Castle Hill barn floor	394	94
6 ten. block, No. Main St.	373	73
Whitin Pond	300	

The growth of the village of Whitinsville has of course a large bearing on the question of water supply, and in this connection we note that the Town of Northbridge has now reached a population of 10,224, as shown by the census taken in the spring of 1920; and, allowing 3,000 inhabitants for the villages of Rockdale, Riverdale, and Linwood, we may be sure that Whitinsville at present has over 7,000 inhabitants.

While the water-works primarily is to furnish water for the village, one of the largest factors is how this water is handled inside the shop yard of the Whitin Machine Works, the largest manufacturing plant in the town.

In this connection we find that the shop water service is divided into three systems—namely, the village service, manufacturing water service, and emergency fire service.



Naturally, we find all the fire hydrants on the village service, from the fact that the pressure is up to 105 pounds per square inch, as well as the automatic-sprinkler protection system throughout the plant.

Inside the shop, the drinking water is taken from the sprinkler risers and distributed through bubblers, and the water can be cooled by ice in the summer months.

All of these mains are underground, whether inside or outside of the buildings, except the sprinkler risers, which can be cut off by indicator gates available from the outside, so that, in case of fire, the system cannot be crippled by falling walls breaking the pipes and putting the water service out of commission.

An independent system is being installed to furnish water for manufacturing processes throughout the shop, such as wetting the sand in the Foundry, washing the castings in the Snagging Room, furnishing water for toilets, flush closets, and sinks throughout the plant. This water depends for its head on No. 1 reservoir and for its supply from a pump drawing the water from the river trench and forcing it into the system. This pump is located at the foot of Mr. Keeler's job in the basement of No. 2 shop, and advantage is taken of the old 6-inch and 4-inch lines, which had become obsolete through the raising of the pressure from 30 to 105 pounds. Connections from this underground pipe are taken off in the Foundry, Blacksmith Shop, power house, etc., for manufacturing processes, and all through the rest of the plant for toilet connections.

It is connected to the village service by a by-pass just outside of No. 2 shop, so that the No. 1 reservoir can be filled from the No. 7, should it ever become necessary.

The emergency fire system is made up of a combination of the village system and two 1,500-gallon per minute fire pumps located in the basement of the power house, with the help of double check valves at the west of the Foundry, north of No. 2 Shop, in Memorial Square, and a gate in the Carpenter Shop lumber yard. In case of fire and the breakdown of the water supply from No. 7 reservoir, these fire pumps can be started and a pressure of 110 or more pounds raised inside of the yard limits without pumping pond water, with which these pumps are supplied, out of the village mains. This makes it possible to drain the pond water out of the pipes inside of the yard without draining it from the whole village. This is a health measure, but hardly necessary, as the pond water has always shown very high tests for drinking purposes.

The village system consists of 15 miles of water pipe, on which are located 175 hydrants and 150 gates. The watershed supplying reservoirs 4, 5, and 6 has an area of 1.7 square miles.

Meter tests have shown that the village at the present time requires on an average of 6,400,000 gallons of water per week. This was so near the capacity of the system that a campaign for leaks and waste was immediately inaugurated, with a result that over a million gallons per week were saved alone by stopping the waste from flush closets and the habit of letting faucets run throughout the shops. It also brought out the necessity of putting a manufacturing water supply into the shop, by which advantage is taken of the unlimited quantity of pond water and the fact that this water has only to be pumped against half the head and therefore at a considerable saving.

The increase in pressure from the old pressure of 35 pounds to 105 pounds per square inch is responsible for a large waste. Very few of us ever draw a drink of water from a faucet without letting the water run for a half a minute to become cool, not realizing that surely three times as much water runs from a faucet under 105 pounds pressure as does from one under a pressure of 35 pounds per square inch.

The matter of increased pressure also shows strikingly in a flush closet, as study of the operations of a closet will show. On flushing, the water in the tank begins to flow out at once and continues to do so until the water has entirely gone out of the tank, when the valve closes and the tank begins to fill. During all of this time that the tank is being emptied, water has been flowing into it at 105 pounds pressure per square inch, thus making the water run in longer and so waste a great deal more than it would under the old 35 pounds per square inch pressure. This has in some measure been corrected by reducing valves placed in the houses to reduce the pressure on this class of apparatus and also to protect the piping against the high pressure.

One of the modern ways of stopping waste of water is by placing meters in each house and making the tenant pay for every gallon above a certain amount—this would seem a hardship to us, as we have always had all the water we have cared to draw; and we can put off metering only by being careful and not wasteful.

All of these many chances for waste must surely impress upon us the responsibility each one has in the conservation of our water supply.

This all shows that, while at the present time we have an adequate water supply, yet with the natural growth of the village and the demand of modern life it will only be a short time when further sources of supply must be sought.

English Classes

Left to right: Charles A. Allen (instructor), Avid Paul, David Daranian, Arthur Aahaagema, Zaky Manoogian, Joseph Dyhstra

The smallest of our three divisions in English for those of our employees who can speak English but wish to improve their ability in reading and writing is shown here. The class is taught by Mr. Charles A. Allen, instructor in the Apprentice School.

None of the classes are large, and therefore effective work can be done very readily. Common words in our language and words frequently used are explained, and their use is taught in oral and written sentences.

The improvement, while slow, is nevertheless apparent, and the regular attendance of the men shows that the interest is being kept up.

While the class has made progress, yet it is not too late for new pupils to enter; and visitors to the classes would be welcomed by the teachers and prove a source of encouragement to the men.


BATTLE AXE
L. H. HORNER/20

They need no introduction. Even the rabbits are acquainted. Winning team shown in top picture

Rabbit Pie Supper at Ki Yi Camp

Twenty-three followers of the forest and stream met at Camp Ki Yi and sat down to a rabbit-pie supper.

This is an annual event and has been looked forward to for some time. The committee in charge was W. Jones, Harry Kearnan, Harry Drinkwater, Robert Marshall, James Marshall, Robert Ferguson, George Tebeau, Peter Tebeau, and Louis Veau.

The boys went hunting and split into two teams representing the east and west side. After spoils were counted, the west side was declared the winner.

The west side was represented by W. Jones, Peter Tebeau, Robert Ferguson, and Robert Marshall, and the east side by Harry Kearnan, Harry Drinkwater, James Marshall, and George Tebeau.

Everybody had an abundance to eat; and, after supper was served, readings and stories of the nimrods were told. Lucien Barnes was awarded first prize in the story-telling contest. One of his prize winners was about the old veteran hunter Bert Hill, who became seasick on a freshwater pond.

Thomas Crompton gave a recitation about the folks of a famous alley, which brought long applause.

On leaving, the boys expressed the hope that, before the season was over, they could be present at another spread such as they had just finished. Those present were:

Dr.F.A.Wald, Southbridge	William Deane
G Schelldemidth,E.Douglas	Geo. Ferguson
B. S. Hill	Robert Ferguson
Thomas Crompton	Geo. Tebeau
Herbert Ashworth	Louis R. Veau
Alexander Bassett	Edward Jennings
Archie Fournier	William Donlon
Lucien T. Barnes	Albert J. Brown
Martin Carpenter	Della Du Hamell
Richard Marshall	Robert Marshall
James Marshall	Winifred Jones

Harry Drinkwater

A newspaper clipping was received from the associate editor of the *Southern Textile Bulletin*, in which we learn of the death of Mr. W. M. Wylie. Mr. Wylie first entered business with the Whitin Machine Works on leaving school and was with us until 1885, when he went South to take up farming. We quote a paragraph from the newspaper article of Rock Hill, S. C., as follows:

"Many friends and acquaintances in this city were shocked Friday, December 3, to learn that W. M. Wylie, better known as Harry, died at 2 o'clock that morning. Mr. Wylie was possibly one of the best liked men in this section." Mr. Wylie was 63 years of age at the time of his death.

Raymond McKinnon has purchased a new Camera. Consequently we present Joe Lermond, son of E. D. Lermond of the Carpenter Shop, Herbert Gilstead, Raymond Lermond, and Walter Cambo, son of W. H. Cambo, of the Flyer Job

Indian Trio
Alice and Leland Metcalf, children of Robert Metcalf, and Barbara Alden, daughter of Mr. Alden

Another rabbit hunt was staged on Saturday afternoon, December 4. During the hunt, a rabbit was started, then lost in a swamp. Chief Hunter Jones laid careful plans to capture the rabbit when he was driven from the swamp. Marshall was to shoot up the hill, and instructions were left with Morrow to shoot into the swamp. The hunters had just started for their positions when a loud report almost upset them. Morrow had carried out his instructions literally and fired into the swamp and was much surprised that Marshall had not shot up the hill as instructed. The rabbit has not been seen since entering the swamp.

Scene: Kenney-Kennedy's, men's furnishings, Worcester, Mass.

Cast: Bashful clerk, Ruth B., and Helen C.

Ruth B.: Oh, Helen! See the lovely shirts! Would you?

Helen C.: Would you? What—Oh! You mean would they? Let's ask the bashful-looking clerk with the small moustache.

Bashful Clerk with Small Moustache: Is anyone waiting on you?

Ruth B. (real innocent): What kind of shirts do the men prefer?

Bashful Clerk: The young men prefer a snappy design with soft cuffs, and the old men prefer the stiff cuffs and a moderate stripe or figure. What size, please?

Helen C.: Size about 20 years old, I should say.

Ruth B. (aside to Helen): Never, Helen; he means chest measurement. Make it 38 or 40. Gee! I don't know: maybe it's waist measure.

Helen C. (to B. C.): We don't exactly—(looks at wrist watch)—Thank you very much. We must catch our train. (To Ruth) Let's go to a dry-goods store where we know the ropes.