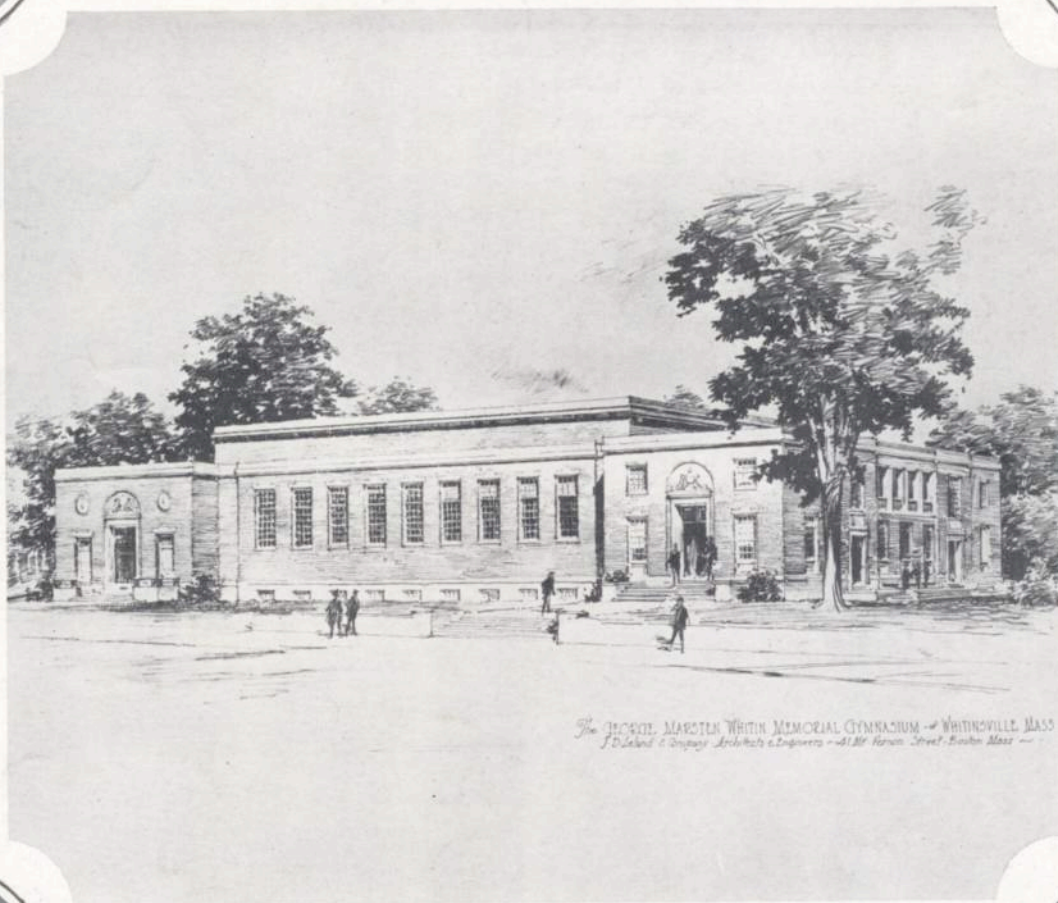


TrajNet



The WHITIN Spindle

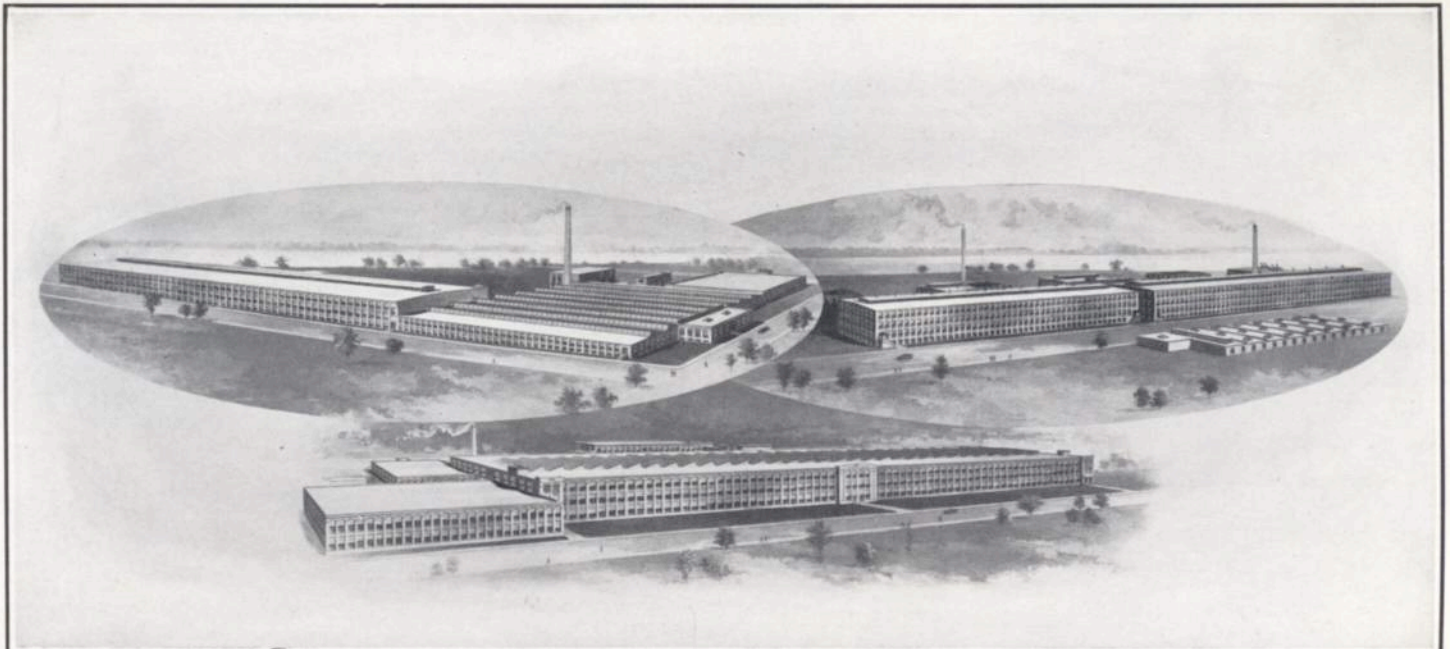


The JOSEPH MARSH WHITIN MEMORIAL GYMNASIUM - WHITINVILLE, MASS.
J. B. Leland & Company Architects & Engineers - 61 Mt. Vernon Street - Boston, Mass.

FEBRUARY

VOL. 3 No 7

REPRODUCED



Manomet Mill No. 3—New Bedford, Mass.—Manomet Mills Nos. 1 and 2
Manomet Mill No. 4

Manomet Mill No. 4. Left to right: Thomas Bullen, Overseer of Weaving; John A. Valentine, Master Mechanic; Fred C. Covill, Office Manager; Lois Levasseur, Overseer of Spinning; George H. H. Gilligan, Overseer of Finishing; Richard De Martin; Overseer of Carding; Walter Spencer, Yard Boss.

Charles H. Robbins, Superintendent of Mill No. 3; Arthur C. Cory, Superintendent of Construction; Maurice L. Chase, Superintendent of Mill No. 4; Luke H. Rooney, Superintendent of Mill No. 2; Jack Walmsley, Mechanical Superintendent; Bernard McCarthy, Superintendent of Mill No. 1.

Whitin Machine Works Road Men at the Manomet Mills: Thomas O'Brien, Pickers; H. R. Adams, Spinning; James McCaffery, Pickers; Benjamin Bates, Twisters; Samuel Card, Combers; Albert Jennings, Combers; Frank Slocum, Speeders; Frank Herbin, Twister; Fred Raynor, Cards; Ernest Thayer, Cards.

The WHITIN Spindle

VOLUME 3

WHITINSVILLE, MASS., FEBRUARY, 1922

NUMBER 7

Manomet Mill No. 4, the Largest Single Mill Unit in the World, Equipped with Whitin Machinery

Every member of the Whitin Machine Works is naturally interested in the mills where our machinery is installed. Few of us know that we are at present equipping, in Manomet Mill No. 4, the largest single mill unit in the world. Except for a few looms and warpers, every textile machine in the mill has been produced here in the Whitin Machine Works and installed by our road men. Many of us have seen on the erecting floors the french-gray machines with the apple-green trimmings. All these machines are being especially built for this mill.

On February 8 and 9, the shop photographer and the editor of the "Spindle" had the pleasure of visiting the Manomet Mills, and were given the privilege of taking many photographs. They brought back with them some interesting views of the No. 4 Mill and several pictures of the personnel connected with the Manomet Mills and of the Whitin road men. We are showing these photographs in this month's issue of the "Spindle."

We were given, through the courtesy of Mr. Jesse A. Knight (agent of the Manomet Mills), besides the photographic privilege, considerable information concerning the size, production, and equipment of the mills,



Jesse A. Knight, Agent of the Manomet Mills

which, summed up, might be expressed as follows:

When all the machinery has been installed in the No. 4 Mill, the Manomet Mills will be by far the largest producer of combed cotton yarns the world has ever seen; for it will turn out, including the new mill, no less than 750,000 pounds of combed yarns per week. No other single company in the entire world can even approach the Manomet output of combed yarns. Sir Herbert Dixon, president of the British Fine Cotton Spinners' and Doublers' Association, when he was in America at the time of the World Cotton Conference, said that the output of all the plants in that association, comprising some 3,000,000 spindles in a large number of different mills, was in the neighborhood of 800,000 pounds a week. The Manomet Mills, at times, will alone equal the entire production of the huge British association of fine yarn spinners.

Some idea of the tremendous volume of yarn that will be turned out of the Manomet plant can be gained when it is stated that the spinning frames will yield 10,831,697 miles of yarn per week, or 3,761 miles of yarn per minute. In other words, they can spin in a minute more than enough yarn to reach from Boston

to San Francisco. It would take the plant only one hour and four minutes to spin enough yarn to reach from the earth to the moon. In two months it could turn out enough to reach from the earth to the sun.

Based on the amount of raw cotton consumed, the Manomet Mills will rank second in the United States, requiring approximately 100,000 bales annually. In the great Amoskeag plant at Manchester, N. H., they consume approximately 125,000 bales yearly, being the only mill in the United States to use a larger quantity of raw material. In the value of the cotton used, however, the Manomet will rank first, as the character of the product that it makes is such as to require special high-grade extra-long staple cotton. There will be approximately 4,500 people employed in the Manomet Mills.

The entire plant will have about 320,000 spindles, and, of this number, the Manomet Mill No. 4 will have 115,200.

THE NEW MILL

The new mill measures 1,187 feet long and has a total floor space of 653,400 square feet, or 15 acres. The main mill is 897 feet long and 168 feet wide, one of the widest cotton mills in New England. It is three stories high, and its windows extend from the floor to the ceiling. The main mill has a saw-tooth roof similar to a weave shed.

The first floor is devoted to spooling, warping, and twisting machines.

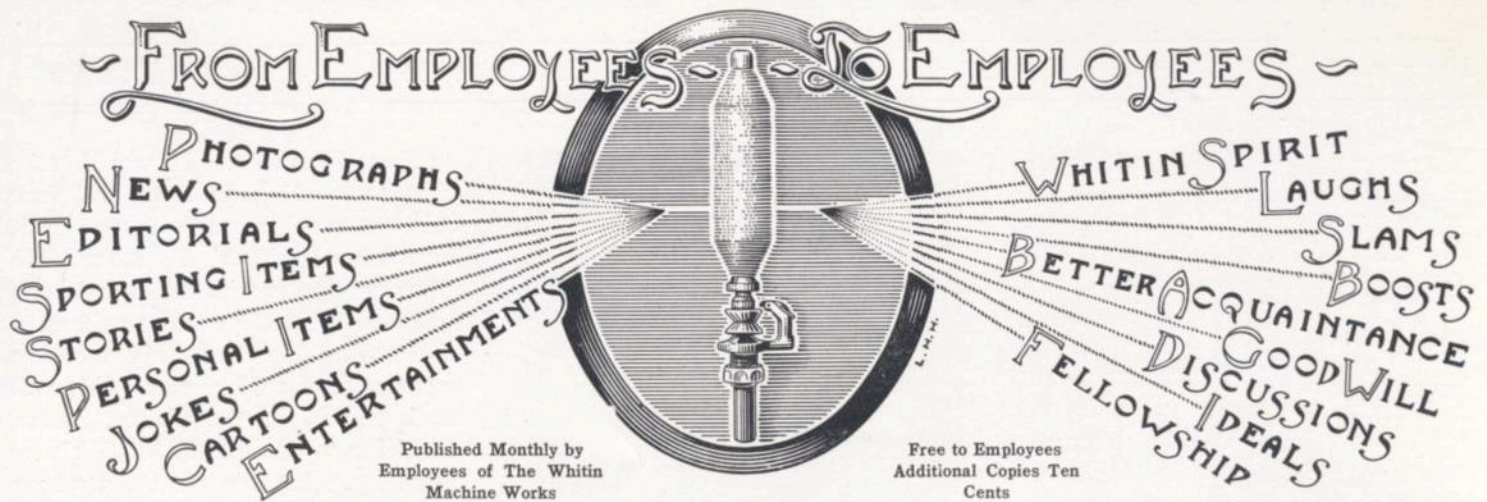
Continued on page 7, column 1



Arnold C. Gardner, Treasurer



Maurice L. Chase, Superintendent, Mill No. 4



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Member of Industrial Editors Association of
New England

What's Wrong with Your Work?

IV

ARE YOU A "DICE BOX"?



KNOW a business executive who prides himself on his ability as a guesser. He frankly admits to his intimates that a great deal of his success in life is due to his daring in making snap decisions based on sheer guess-work. "Sometimes I fail to hit the mark," he concedes, "but even if I guess right only forty percent of the time, I figure that I am scoring a higher average than most business men get."

There are a good many "guessers" in the business world, although probably only a few of them are as frank as this friend of mine in disclosing their methods of arriving at decisions. The majority of this type prefer to say that they "act on intuition." In my opinion that means pretty much the same thing; for, in the course of more than a quarter of a

century's experience in business, I have never as yet come across a man who really possessed "intuitive judgment." I am strongly inclined to think that "there is no such animal." As I once heard Thomas A. Edison remark, "Intuition is often another name for mental laziness."

Snap judgment, it can safely be said, is a bad thing in business. We might just as well reach our decisions by throwing dice as by random guessing. The average of success, in either case, would be about the same. Perhaps, if anything, the odds would be in favor of the dice method. At all events, the salaried employee who substitutes rough guess-work for logical thinking and planning is of no more use to his—or her—employer than a dice box would be.

There is, however, one form of guessing which is not only advantageous to the business worker, but which is more or less essential to his success. It is called Logical Conjecture, and it is based on the Faculty of Analysis, which we have already discussed, and the Logic of Mental Processes, which it is my purpose to deal with in this article.

Lack of Logic—the experiments we have been making at our plant for the past twelve months have convinced us—is one of the principal handicaps which prevent the salaried employee from getting out of the rut. All of us reason logically at times. Our problem is to acquire the faculty and habit of reasoning logically at all times.

The kind of logic with which we

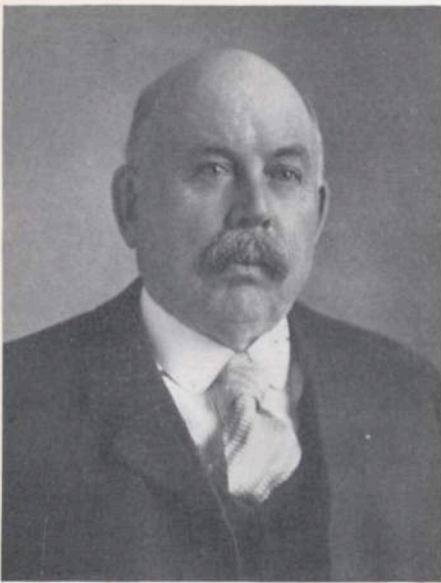
are concerned is not the brand that abstruse philosophers use. We need not measure the quality of our logic by the maxims set down in college text books. The logic that is needed in business is a mental compass which gives proper direction to human reasoning.

To be logical does not mean that we must be ponderous and slow. On the contrary, if we habituate ourselves to logical processes of thought, we are likely to develop noteworthy speed in reaching our decisions.

Logical conjecture, aided by imagination, is one of the most valuable forms in which logic can be employed in business. In plain words, it consists largely of the ability to put yourself in the other fellow's place, and, after considering what motives might reasonably be ascribed to him, decide what thought ought logically to predominate in his mind. Such a thought may be a thing to avoid as one would avoid a pestilence, or it may be something to encourage and expand. In either case it is obvious that you are more likely to adopt the proper course in dealing with your man if you know "what is in the back of his head."

Examples of logical conjecture in business could be given almost without end. Assume, for instance, that you are employed in the sales department of a company which deals with retail merchants. A bulletin has been sent out by you to several hundred of these dealers, but you have accidentally failed to include certain enclosures which were necessary to a proper understanding of the bulletin.

Continued on page 5, column 2



Emory Burbank

Death of Former Foreman of Whitin Machine Works

On Thursday, February 9, a retired member of the Whitin Machine Works, Emory Burbank, died at his home on Hill Street. Mr. Burbank started in the Whitin Machine Works in 1873. In 1879, Mr. Burbank was put in charge of the spinning job along with Mr. L. M. Remington. In 1892, Mr. Burbank was transferred to fill the position as foreman of the loom job, in which capacity he was employed until his retirement ten years ago. Mr. Burbank was very active in the community life of Whitinsville, being a member of several lodges, and was well known as a trapshooter at the Mumford Gun Club. The funeral was held from his home on Sunday, February 12, at 2 P. M.

We were sorry to hear of the death of Henry Burr, on Saturday, February 4. Until recently, Mr. Burr had been a member of the comber job, now under the foremanship of B. L. Benner. Mr. Burr is one of our old-timers, having begun work in the Whitin Machine Works on April 1, 1873. His record was not one of continuous service, he having spent twelve years employed elsewhere. For the last twenty years or more he was employed on the comber job, and at the time of his retirement, January 21, 1921, he was the oldest man in service in that particular department. Our sympathy is extended to the family and friends in their loss.

What's Wrong With Your Work?

Continued from page 4, column 3

Obviously, in such a case, the bulletin will not be fully understood, and this means that it may be misunderstood. How should you go about the job of rectifying the blunder?

How would it do to send out another bulletin with a set of enclosures, and say nothing about the previous abortive mailing of the bulletin? No; because a dealer who had read the first bulletin without the aid of the enclosures, and thus received a mistaken conception of the proposition contained therein, might rely on such conception, and, thinking it unnecessary to read the bulletin again, toss the second copy into his waste basket without noticing the enclosures.

By logical conjecture you will soon arrive at the conclusion that the proper course to pursue is to send a letter of explanation to each dealer concerned, together with a duplicate of the bulletin and a set of the omitted enclosures.

In order to develop the capacity to conjecture logically you must, of course, first acquire a logical mind. Can this be acquired, or is it an inborn quality? Our tests have convinced us that it is largely a matter of training.

A good way to develop the Logic of Mental Processes is to begin with the mistakes that crop up in your work. This applies to errors of judgment as well as to those which result from inaccuracy. If you get into the habit of reasoning over your mistakes for the purpose of conceiving every possible consequence that may arise from them, and with the object of taking the proper steps to minimize those consequences, you will soon discover yourself applying similar logical processes of thought to all of your work.

You will still be a "guesser," but instead of doing your work by the dice-box kind of guess-work, which is wholly destructive in its results, you will have the habit of Logical Conjecturing, which is highly constructive.

TRADE PRESS FEATURE, INC.



Edward Hall

Retires from Active Duties After Fifty-Four Years

Edward Hall, a member of the Blacksmith Shop, who has worked for us fifty-four years, was retired the first of February. Mr. Hall began work in the Blacksmith Shop for Mr. Sproat in 1865. His father worked there before him, which would make one believe he came naturally by the trade. Mr. Hall has had experience on all kinds of blacksmith work from drop hammers and trip hammers to tool fixing. He was employed for thirty-two years as a blacksmith before taking up tool fixing, the occupation he was working at when he was retired. We hope that Mr. Hall will enjoy his leisure and keep up the interest which he has shown in the shop for more than half a century.

Considerable interest is being shown this year among the checker players in Whitinsville. Recently at a tournament at the Worcester Y. M. C. A., Harry Wallace, of the milling job, was called on to substitute for Mr. Hanson, champion checker player of the Pacific Coast. Mr. Wallace played eighteen boards, winning ten games, losing four, and drawing four.

The checker players of Whitinsville are planning to organize a club in the near future. The club, if organized, certainly should make a good showing against any challengers, under the coaching of Mr. Wallace.



Benjamin Bates

Thirty-Four Years on the Road Setting Up Whitin Machinery

Benjamin Bates, now in charge of erecting twisters in Manomet Mill No. 4, has been employed by the Whitin Machine Works since November, 1888. All but six months of these thirty-four years, Mr. Bates has been one of our road men. This makes him the oldest man in years of service on the road today. Mr. Bates started in the shop under Charles Pollock, foreman of the spinning job, before going into the mills.

Nine years ago Mr. Bates was sent to France by the late G. Marston Whitin, and spent six months over there setting up 42 frames of spinning and 20 frames of wet twisters for the Duho, Tremaux, and Delplanque Mills, at Lille, France. Undoubtedly, the machinery in this mill was captured by the Germans and shipped to Germany during the war.

The longest time Mr. Bates was away from the shop was while he was at Galveston, Tex., when he put in thirteen months in that city. Mr. Bates has set up machinery all over the New England States, Middle Atlantic States, and Southern States, and has been employed in Canada (in the cities of Montreal, Kingston, and Toronto) and in several mills in small towns in Ontario and New Brunswick. He has been as far west as Denver, Colo., where he spent eight months in the Overland Cotton Mill. The last five years Mr. Bates has made his home in New Bedford.

His address is 98 State Street, that city.

While in New Bedford he has had charge of several large contracts, including 192 spinning frames and 60 wet twisters at the Nashawena Mills. At these mills he has, at various times, been directly responsible for the erection of 630 of the 700 Whitin frames. About six or seven years ago he put in a group of 450 frames in the Quissett Mills, New Bedford.

Mr. Bates has been back to the shop many times for short periods between jobs, and on several occasions has found time to enjoy his chief hobby, that of fox hunting, with Bob Deane, George Gill, and several other of our famous fox hunters.

Quarter Century as Card Fitter



Ernest E. Thayer

Ernest E. Thayer, one of our road men on cards, is now in charge of the card erecting in the Manomet Mill No. 4, New Bedford. Mr. Thayer has had a service record of more than twenty-five years in the Whitin Machine Works. He has always been employed on the card end of our erecting work. Before joining the Whitin Machine Works, he was employed at the Nourse Mill, Woonsocket, R. I. He went from there direct to the Social Mills in Woonsocket, to help L. M. Keeler and A. E. Robie, who were setting up cards at that time. He was hired in October, 1894, by the agent of the Whitin Machine Works, John Prest.

Most of Mr. Thayer's time on the road has been spent in the

Southern States. He has been employed on many large jobs. One of them was in the White Oak Mills, at Greensboro, N. C., where he helped install three hundred cards. At Fries, Va., he had charge of a 160-card job. He has set up machinery in every state this side of the Mississippi, except Florida, Pennsylvania, and Delaware, and has been on business through four states the other side of the Mississippi. The 261-card job at the Manomet Mill No. 4 is now practically completed under his direction.

Erected Spinning Frames for Twenty-Three Years

In January, 1899, H. R. Adams, who is in charge of the spinning erecting in the Manomet Mill No. 4, came to work for the Whitin Machine Works. He has been with us ever since. On the first of April, 1899, he was sent to Fall River to help Benjamin Bates and his brother, F. J. Adams, to erect spinning frames. Mr. Adams is working at present on a large unit of spinning of 420 frames which are a little more than half completed. He has working with him eighteen mechanics from the Manomet Mill.

About five years ago, Mr. Adams had the opportunity of setting up 104,000 spindles at the Amoskeag Mills, Manchester, N. H. He was on this job twenty-two months, and placed machinery in five different mills of the Amoskeag Company.

Mr. Adams has had charge of many other large jobs, including the Ponema Mills, Taftville, Conn., in which 178,000 spindles were installed; the Lawton Mills, of Plainfield, Conn., in which about 50,000 spindles were installed. Mr. Adams,

Continued on page 15, column 1



H. R. Adams

Manomet Mills

Continued from page 3, column 3

The equipment includes one of the biggest installments of large-size twistors to be found in the United States. The spoolers were built under the supervision of John Wood, and were installed by William Ferguson.

The twistors were built under the supervision of Frank Bates, and were installed by William Ferguson, Benjamin Bates, and F. M. Herbin.

The second floor is given over to card and combing machinery, together with drawing frames and speeders. The card machinery was built under the supervision of Albert Birchall, and is being installed by Ernest Thayer and Fred Raynor.

The combers were built under the supervision of Ernest Barnes, and will be installed by A. K. Jennings.

The drawing frames were built on the drawing job under William Johnston, and were installed by the men who put in the cards.

The speeders were built under the supervision of John Welch, and are being installed by Samuel Card and F. J. Slocum.

The entire third floor is to be occupied by spinning frames, of which there are to be 480, carrying 115,200 spindles. At this writing more than half of the spinning frames have been erected on the floor. They are being shipped knocked down from the spinning job under Frank Bates, and are being installed by H. R. Adams, assisted by mechanics from the mill.

The picker building is an addition to the main building and measures 130 x 110 feet. This is two stories in height and has the opening and waste room on the first floor, with the dust pit in the basement and the breakers, lappers, and finisher pickers on the second floor. The picking machinery was built under the supervision of Frank McGowan, and the installation is being completed now by our road men, James McCaffrey and Thomas O'Brien. J. J. McGowan has been giving his personal attention to the problems connected with the installation of this machinery.

CHARACTER OF PRODUCT

The mill is equipped to produce

a fabric which will be used in making cord tires for automobiles. The warp and weave rooms are in operation now and are producing a fabric 5 feet in width, of 23's yarn, five ply of which are first twisted together, and three ply of the resulting plied yarn again twisted together, making a fifteen-ply yarn or a five-ply three-

MANOMET MILLS

GENERAL OFFICES
BELLEVILLE AVE.
NEW BEDFORD, MASS.

INCORPORATED IN 1903
UNDER THE LAWS OF THE COMMONWEALTH
OF MASSACHUSETTS

CAPITAL STOCK, \$8,000,000

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MANUFACTURING AGENT
JESSE A. KNIGHT

ply, as it is called. This yarn is really a very strong cord. A tremendous quantity of this fabric can be turned off of one loom in a day, as there is very little filler to be woven between the warp. The filling space is as low as two and one-half picks to the inch, which means that production can be speeded up in comparison with the average weaving.

ELECTRIC POWER

We were able to take a photograph of the switchboard through which the current for the mill passes. The board consists of thirty-three switches and is 58 feet long. The power is purchased from the New Bedford power plant and is brought into the building through six transformers, each about the same size as the two new transformers we have installed east of the Blacksmith Shop.

The electric plant is built to take care of 10,000 horsepower, and it is estimated that, for the machinery and lighting, the mill will consume 8,500 H. P. under full load.

LIGHTING

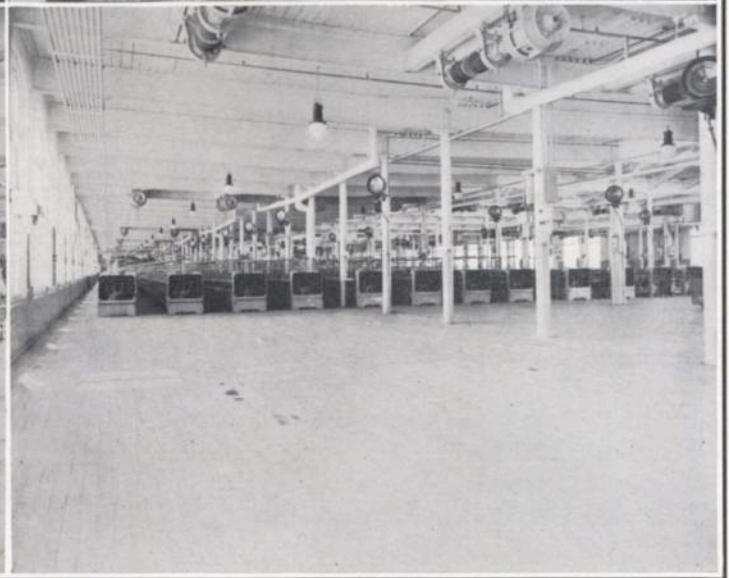
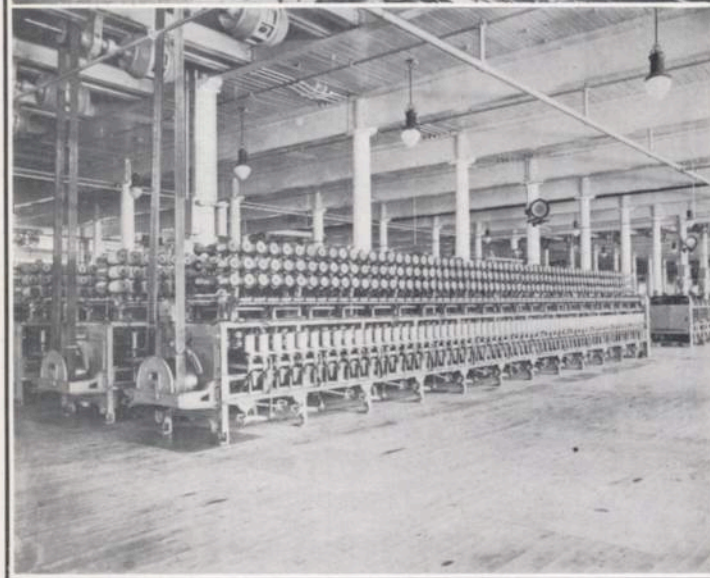
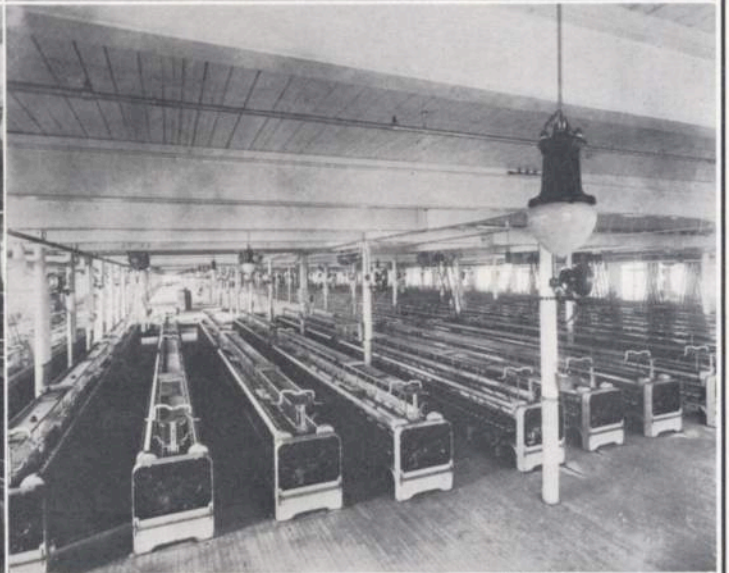
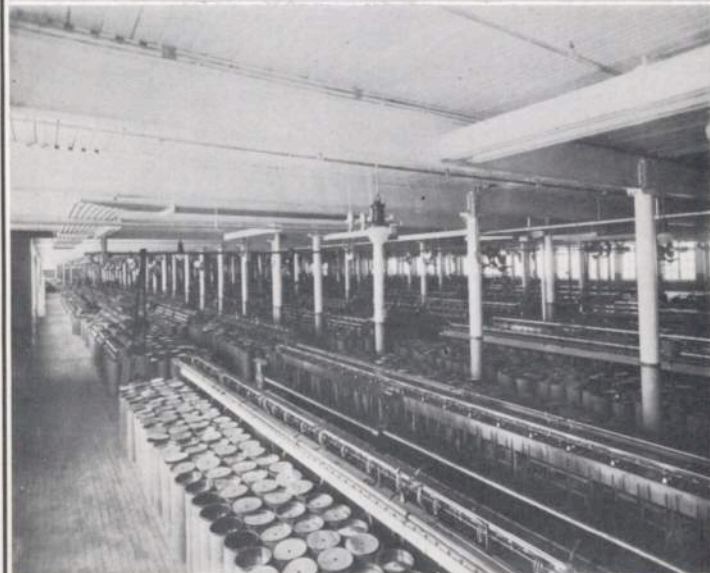
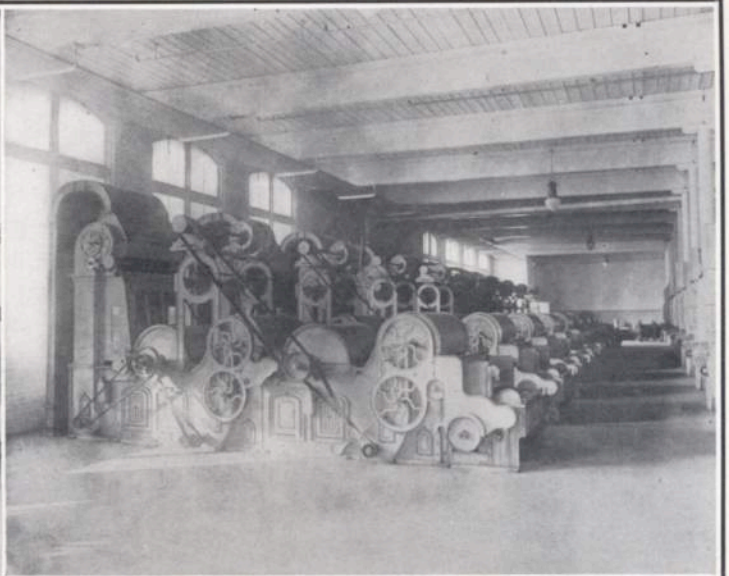
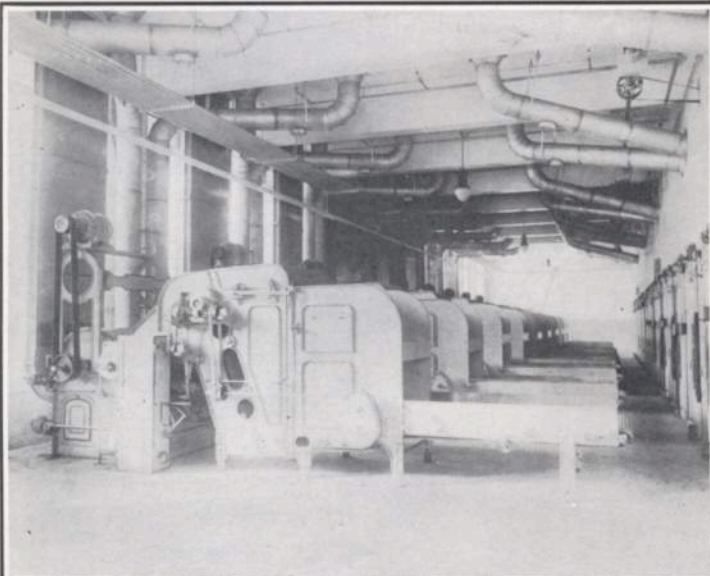
The lighting of the plant is especially well thought out. The light on the spinning floor, with its saw-tooth roof, is as near the same intensity of that outdoors as it is possible to produce in a mill. The two lower floors, with their 18-foot windows and arc lights, are so well lighted that in the darkest corners it was not necessary to expose the camera for more than ten minutes, the average photograph being taken with a two- to four-minute exposure.

Jesse A. Knight has been agent of the Manomet Mills for the past thirteen years. The mills at that time contained approximately 127,000 spindles and consisted of Mills Nos. 1 and 2. No. 3 Mill was built about five years ago. Under Mr. Knight's direction the plant has nearly tripled itself in production and size.

The plans for both the construction and the equipment of the Manomet Mill No. 4 were furnished by C. R. Makepeace & Co., mill engineers, of Providence, R. I.

The machinery furnished by the Whitin Machine Works for No. 4 mill consists of the following:

- 2 Bale breakers
- 6 Condensers
- 9 Buckley openers
- 9 Breaker pickers
- 12 Finisher lappers
- 261 Revolving flat cards
- 24 Sliver lap machines
- 24 Ribbon lap machines
- 144 Combers (D2 model)
- 24 Drawing frames, containing 336 deliveries
- 12 Slubbers (912 spindles)
- 46 Intermediate roving frames (5,152 spindles)
- 140 Roving frames (23,520 spindles)
- 480 Spinning frames (115,200 spindles)
- 32 Spoolers (5,000 spindles)
- 136 Model B dry twistors (21,760 spindles)
- 36 Model D dry twistors (4,752 spindles)



First Floor of the Picker Building, showing the Buckley Openers.

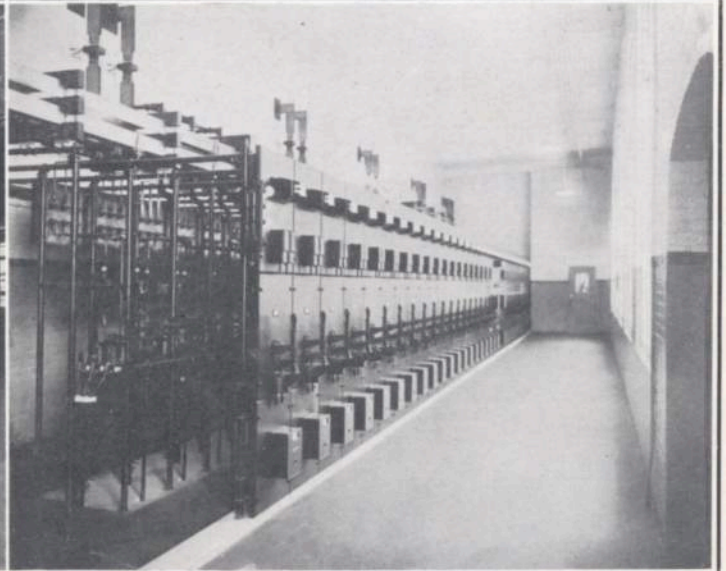
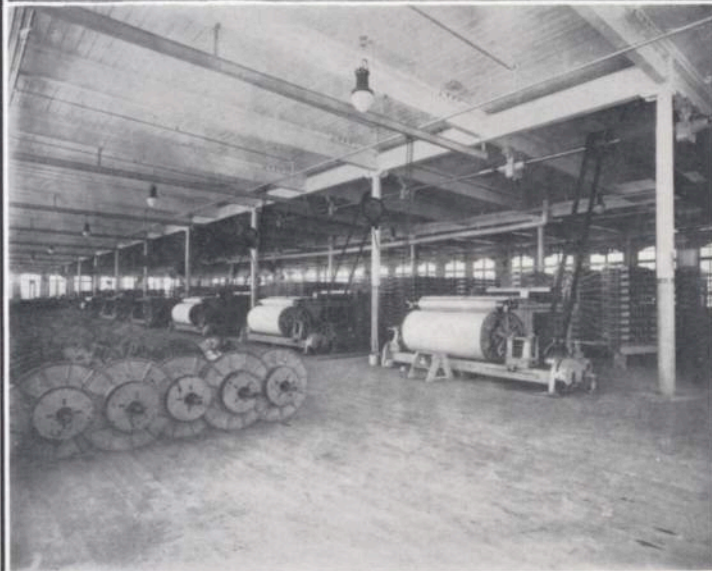
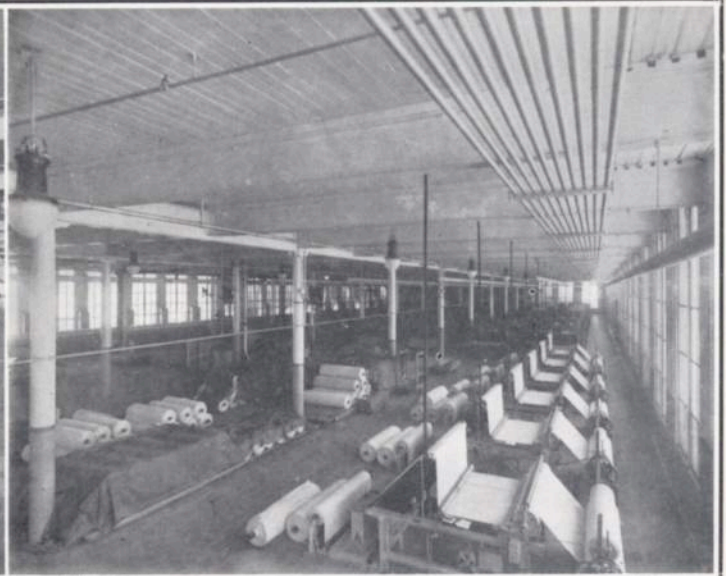
View of the Slubbers on the Roving Floor.

Model D Twisters.

Breaker Lappers in the Picker Building.

Spinning Floor; looking north from the camera lens to the farthest window was a distance of 890 feet.

This picture does not show quite one half of the distance across the Spinning Floor, from one side wall to the other. You will notice twelve head ends of our spinning frames.



Looking south on the Spinning Floor, those dark spots in the distant aisle are the Superintendents of the Manomet Mills and Mr. Knight, inspecting a machine.

The Warping Room.

Office, No. 4 Mill. Mr. Chase, Head Watchman, at the Gate.

The Weave Room, showing the machines used to inspect and clean the fabric after it comes off the loom.

Power-House Switchboard, 58 feet long, containing 33 switches.

Main office of the Manomet Mills at Mill No. 3. Archie Cooper, Secretary to the Agent, is just leaving the office. Mr. Cooper is the son of James Cooper, one of the spinning experts of the Whitin Machine Works.



Pattern Loft

The Pattern Loft, or Pattern Safe, is conceded to be the most valuable part of the plant, for in it are placed for safe keeping the patterns used in the construction of the different machinery built by the Whitin Machine Works. The patterns are never destroyed unless replaced by improved ones. Repair orders, therefore, can be filled. This means that for the past seventy years patterns have been accumulating, and that



Albert J. Brown

from a small beginning we now have about 42,536 parts used on our machines.

Patterns are made from wood, iron, aluminum, and brass. Among the wood patterns are many that have been made of mahogany. These are very valuable, having required many weeks to make them by skilled workmen. Aluminum is used because of its lightness. Many of the smaller patterns are put on gates,

as many as twenty in some cases. This enables the moulder to get out castings much faster than by using single patterns. All of these patterns represent many hours of thought and labor. Some of the patterns in the loft are very old, having been used in making castings for the first pickers built by John C. Whitin.

The first Pattern Loft was in the room over the old Cast Iron Room, where the present Dip Room is located. In 1891, the addition to the west end known as Shop No. 7 was built, and a part of the first and second floors was reserved for a Pattern Loft.

Up to this time the patterns had not been catalogued, but with the rapid growth of patterns it became necessary to number the patterns. This task was assigned to Henry McLean, who was then foreman of the Pattern Making Department. After the patterns—that is to say, the regular patterns—had been numbered and placed in the new loft, Mr. McLean suggested that a man be put in charge. Before this time the patterns were looked after by the superintendents of the Machine Shop and Foundry. The foreman of each job went to the loft and hunted until he found the patterns he wanted, and sometimes he had a long hunt; so when he finally did find his patterns, he would order enough so that he would not have to hunt again very soon. This, of course, was pleasing to the moulder, especially if the job was a good one.

If the foreman failed to locate the patterns wanted, then the superintendent would be called upon to find the lost patterns. William Taft, who was then the superintendent,

decided that he was spending too much time in the Pattern Loft, and it was decided to act on the suggestion of Mr. McLean.

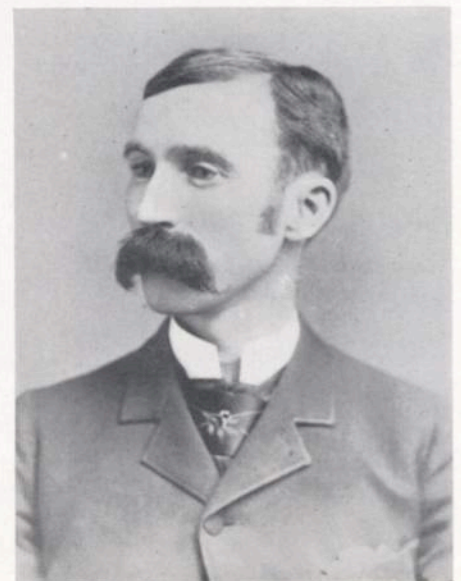
William H. Cole was put in charge of the loft and proved to be especially fitted for the place. He was, prior to this time, superintendent of the Foundry, but had resigned owing to poor health. His health being much improved, he was called upon to assist Mr. McLean in the work of cataloguing and placing the patterns in the new loft.

H1-170, cam, was the first pattern taken out under the new system on April 1, 1894, by L. L. Remington, who was then foreman of the spinning small work. A book record was kept of all the patterns taken out, and the date they returned to the loft.

In the summer of 1896, Mr. Cole's health began to fail; and Albert J. Brown, who had worked for several years in the Foundry, began work in the Pattern Loft. Mr. Cole died October 19, 1896, and Mr. Brown was put in charge.

Until August, 1904, the pattern numbers were stamped in the patterns but did not show in the casting. This made it very difficult to fill repair orders. An engraving machine was installed in the loft, and the work of cutting the pattern numbers was started. Winford W. Jones, who was then working for David Marshall, was sent to assist Mr. Brown in numbering the patterns.

The accumulation of new patterns made it very difficult to store all the



William H. Cole

patterns in the old loft. In May, 1909, Shop No. 6 was built. This building is three stories high, connected with the Foundry. The first floor is used for a cast iron cleaning room, the second and third floors being planned for a Pattern Loft.

In many ways the loft is in advance of most Pattern Safes. The shelves are made of steel and iron and can be adjusted to different heights. In May, 1909, the work of moving the patterns was begun. After the patterns had been placed on the shelves, the work of locating them in the pattern catalogue was begun, and the card system now in use was started. In all of this work Mr. Brown was ably assisted by Wm. H. Hoch, who spent four months in the loft.

We have taken quite a little pride in our loft. Insurance inspectors have said it is the best they have seen in their visits of inspection around the country. Our card system has been copied by many of the leading plants.

Winford Jones is on the job today. Richard McGrath, who started when the new loft was opened, is still on the job. On February 15, 1911, John E. Leonard came to us as order clerk and stenographer. James Bunker was with us from September, 1917, to October, 1919. On October 6, 1919, Mr. Bunker resigned his position to take an extended honeymoon trip. On October 13, 1919, Mrs. Robert K. Marshall succeeded Mr. Bunker. January 7, 1921, Mrs. Marshall resigned her position, and Walter D. Brown came to us from the Stock Room.

We have often been asked the question, How many patterns are there in the loft? Recently we took the time to go over the list, and found that we have 76,098 individual patterns that are catalogued and at least 50,000 that have no pattern number, they being used for miscellaneous purposes, making in all about 126,098 patterns in the loft.

Editor's Mail Bag

From Liverpool, England

George Brown, of Liverpool, Eng., has received several copies of the "Spindle" from one of his friends here in the shop. Mr. Brown worked in the shop in 1895 for a short time, and also in the greenhouses on the Whitin estate. A letter was received from him recently in which he writes as follows:

Dear Friend:

Many thanks for the two numbers of the Whitin "Spindle" which I received on 18th inst. I think they are splendid, and one is of especial interest to me—i. e., the November issue, in which are given photos of men taken in 1895, the very year in which I started to work in the shop. I recognize, I think, John Firth, No. 3 on fourth row in Blacksmith Shop. Hardy Weatherburn is supposed to be in the same group; but I am afraid that I cannot locate him, unless it is he at the right hand of the back row.

There is on the stripper job, No. 1 on back row, Arthur Farrand, whom I remember. His father was John Farrand.

Then there is Mr. William McAlister, who was in charge at Mr. John C. Whitin's when I was at the other Whitin's greenhouses under Mr. Williamson.

The "Spindles" are very interesting, and I am thinking of writing to tell the editors so. When I was in the shop, just for the winter of 1895, I was on the loom job under Mr. Dale.

Yours sincerely,
GEORGE BROWN.

From Honolulu, Hawaii

The editor of the "Spindle" recently received a letter from Honolulu, Hawaii, from one of the Whitinsville boys in the army. The letter was sent from the Schofield Barracks, but the writer forgot to sign his name. He evidently appreciates several copies of the "Spindle," and enclosed a poem he says the boys of his company are all familiar with. We'll say it is good. It reads as follows:

MIDNIGHT ON THE OCEAN

(NOTE:—The following is from the sub-base ballast of the Coco Colo Canal Zone. If Balboa beer does this to people, we are fortunate to be in Hawaii.)

'Twas midnight on the ocean, not a horse-car
was in sight,
When I stepped into the corner store to get
myself a light.
The man behind the counter was a woman
old and grey,
Who used to sell bananas on the road to
Mandalay.
She said, "Hello there, stranger"; her eyes
were dry with tears,
And she put her head beneath her feet and
stood that way for years.
Her children were all orphans except one
tiny tot,
Who lived alone across the street above a
vacant lot.
As we gazed out through an open door, a
whale went drifting by;
His legs were hanging in the air, he wore a
green necktie.
The quietness of the noise was still, the
evening star was dawning,
A dead horse galloped up and said, "We
won't get home 'til morning."
"Women and children first," he cried, as he
passed his plate for more;
He took his hat from off the rack and hung
it on the floor;
An axe came walking through the air, the
clock struck twenty-six,
I turned my eyes toward the sky and saw a
flock of bricks.
And they buried him in the evening when the
grass was parched with dew,
And he took his razor with him in case his
whiskers grew.

FINIS

I Am Your Town

Make of me what you will—I shall reflect you as clearly as a mirror throws back a candle beam.

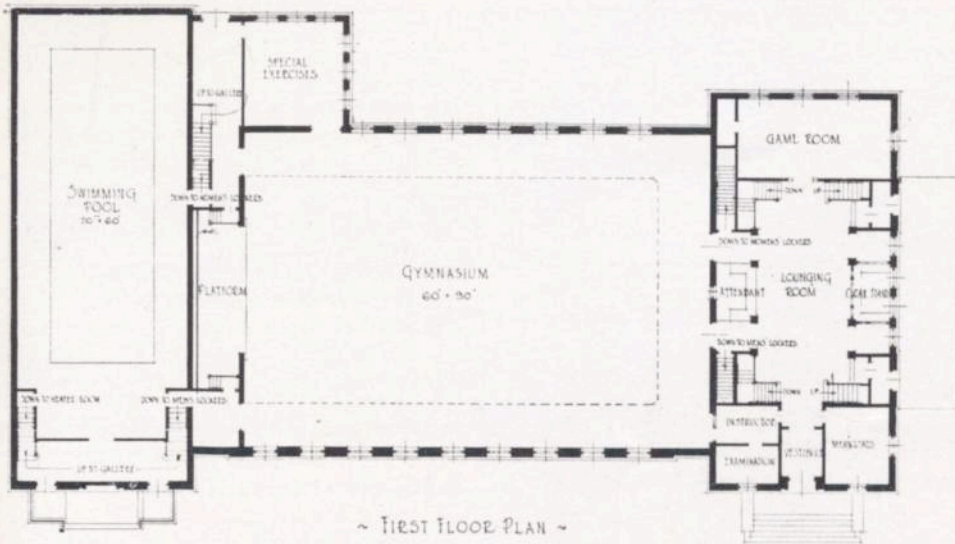
If I am pleasing to the eye of the stranger within my gates, if I am such a sight as, having seen me, he will remember me all his days as a thing of beauty, the credit is yours.

Ambition and opportunity call some of my sons and daughters to high tasks and mighty privileges, to my greater honor and to my good repute in far places; but it is not chiefly these who are my strength. My strength is in those who remain, who are content with what I can offer them, and with what they can offer me. It was the greatest of all Romans who said, "Better be first in a little Iberian village than be second in Rome."

I am more than wood and brick and stone, more even than flesh and blood—I am the composite soul of all who call me Home.

I am your town.—*American Legion Weekly.*





~ FIRST FLOOR PLAN ~

GEORGE MARSTON WHITIN MEMORIAL GYMNASIUM AT WHITINSVILLE, MASS. J. D. LELAND & COMPANY - ARCHITECTS & ENGINEERS - 47 N. WELDON STREET - BOSTON, MASS.

New Recreation Building for Whitinsville

The late general manager and treasurer of the Whitin Machine Works, Mr. George Marston Whitin, who was known to most of us, had in mind the erection of a recreation building for our use and for those who reside in Whitinsville.

Today, his wish is to be realized, for his daughters, Mrs. Keeler, Mrs. Mason, Mrs. Swift, and Mrs. Crane, familiar with his desire, have decided to erect, this spring, in his memory, a building to be known as the "George Marston Whitin Gymnasium."

Not only will this building be a fitting memorial to their father, so beloved and admired by all who knew him, but it will provide recreation and pleasure to the inhabitants of the town during their leisure hours—which, throughout Mr. Whitin's life, interested him quite as much as production during business hours.

The building will be constructed of Harvard water-struck brick with limestone trimmings, and, in general, the plan consists of a main building with lower wings on each side.

The right wing on the first floor will have a large entrance lobby, game room, physical directors' offices, and coat rooms, and will open directly into the great gymnasium, 60 x 90 feet clear floor space.

The gymnasium is provided with a spectator's gallery on three sides; and at the end, a small stage for

general use, apparatus, storage rooms, and rooms for wrestling, fencing, etc.

The gymnasium is designed so as to be available, not only for that purpose, but to provide accommodations for assemblies, seating 1,500 persons. It is in reality a community center for all kinds of entertainment, such as dances, moving pictures, concerts, theatricals; and athletic exhibitions, such as basketball games, swimming, boxing, and wrestling matches, etc.

The second story over the lobby provides club rooms, a large reading room where all the current literature will be available, and ladies' rooms—for the building provides for women as well as men.

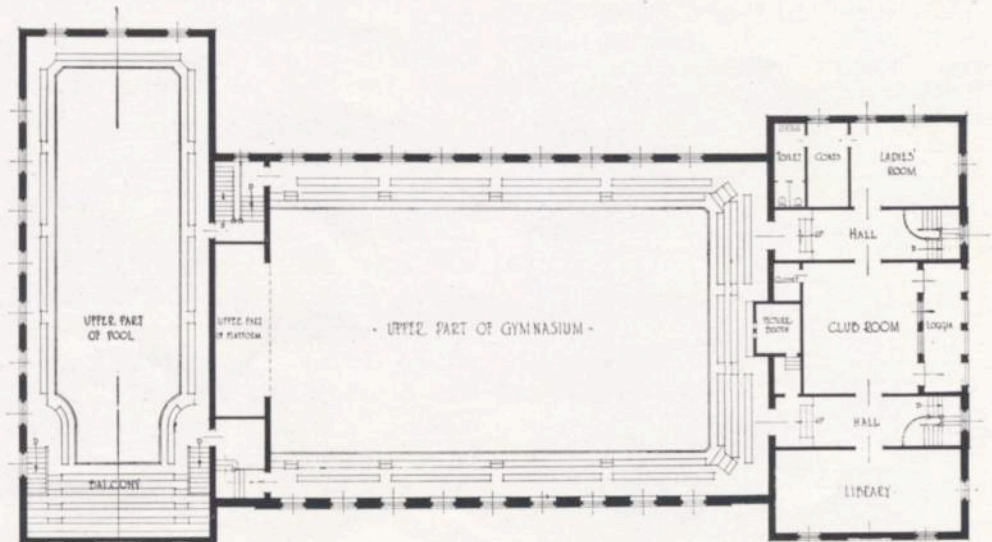
The left wing will be entirely

devoted to a swimming pool, 20 x 60 feet, which is the standard for inter-collegiate races. There will be provided diving boards at the deep end of the pool; and at the shallow end, arrangements to allow those who cannot swim to receive instruction and enjoy the pool without danger. The filtration of the water is an extremely important factor in pool planning, and the most up-to-date methods of filtration, purification, and temperating will be provided. A spectators' gallery has also been provided to run around the entire pool, allowing 300 persons to enjoy the water polo games, swimming, and diving exhibitions.

The basement of the building will contain a large billiard and pool room, locker rooms for both men and women, with showers, lavatories, hair-drying room, etc., pertinent to such a building.

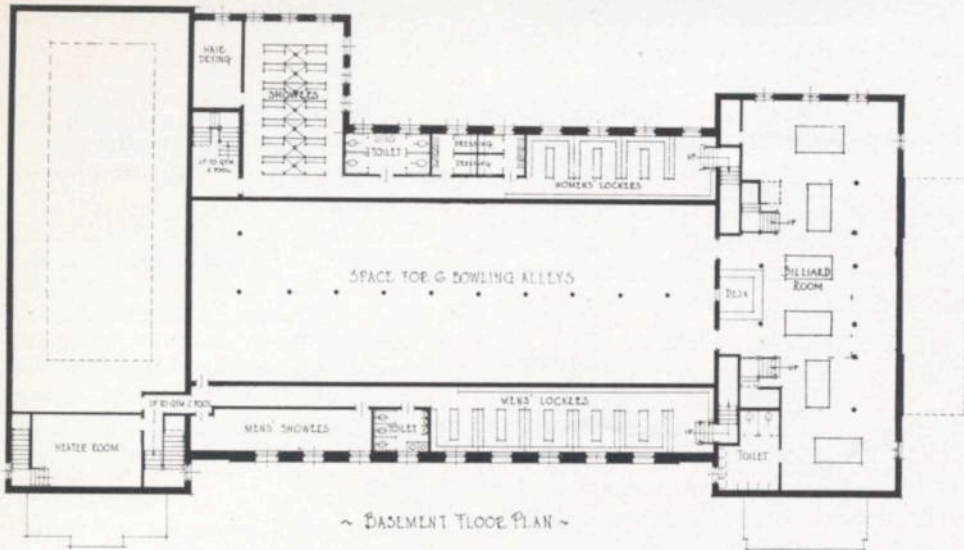
One of the most ingenious considerations in the plan has been the supervision and isolation of men and women when enjoying either the gymnasium or the pool. After passing the desk in the main lobby, the women go to the right and the men to the left, and never come in contact again until they pass the same desk in going out of the building.

In the basement is also provided space for six bowling alleys with spectators' galleries and shooting gallery. These features, however, will not be installed until it is de-



~ SECOND FLOOR PLAN ~

GEORGE MARSTON WHITIN MEMORIAL GYMNASIUM AT WHITINSVILLE, MASS. J. D. LELAND & COMPANY - ARCHITECTS & ENGINEERS - 47 N. WELDON STREET - BOSTON, MASS.



~ BASEMENT FLOOR PLAN ~

GEORGE MARSTON WHITIN MEMORIAL GYMNASIUM AT WHITINSVILLE, MASS. J. D. LELAND & COMPANY - ARCHITECTS & ENGINEERS, 107 VERNON STREET, BOSTON, MASS.

terminated whether the demand warrants their installation.

Another feature included in the building is the lunch counter, soda fountain, etc., which is so appropriate in any community center.

The location of the building is particularly pleasing, as it is to be placed at the lower end of the John C. Whitin estate, which was laid out as a park; and this park, with its walks, beautiful drives, fountains, and pools, is all to go with the new building. This land is being donated by the heirs of John C. Whitin: Mrs. George Marston Whitin and her brothers, Mr. Chester Whitin Lasell and Mr. Josiah Manning Lasell.

The plans are being drawn and construction will be carried on under the supervision of the architects

and engineers, J. D. Leland & Company, of Boston and Worcester.

Home Garden Club Meets

At this year's first meeting of the Whitin Home Garden Club, Mr. Leon C. Midgely, of the Worcester County Farm Bureau, was the speaker of the occasion. The meeting was held in the Apprentice Room of the Whitin Machine Works, and was called to order by President Harley E. Keeler. The subject for discussion was the problem of saving the orchards from any further damage due to the recent sleet storm. Mr. Midgely struck a note of optimism, and showed the members that by careful pruning much more could be saved than was at first thought possible.

Mr. Keeler read a report to the members showing the results, in terms of production, of the various garden sections of Whitinsville. The tabulation of this report will be found below.

According to the by-laws, the annual meeting will be held in the early part of March, the exact date to be decided upon later. Every member of the club is urged to be present at this meeting to elect officers for the coming year. Plans are already under way to make the third season of the club's existence one of the most successful. The management of the Whitin Machine Works has promised the members of the club that it is ready to plough more land than ever, if the demand calls for it. The Executive Committee of the club is planning to have a bigger and better exhibition this coming fall in Memorial Hall.

The production report for 1921 is tabulated at the bottom of the page.

Harry Luther, of the Carpenter Shop Office, recently attended a church supper. We should expect anyone working in the Carpenter Shop to know a strong chair when he saw one, but during the singing of one of the hymns Mr. Luther evidently put his attention on the timber of his voice rather than that in the chair. The resulting vibrations caused the complete collapse of the chair, bringing the tenor of the hymn down several octaves.

Production Report of Home Garden Club

	No. of Gardens	Potatoes—Bu.	Cabbage—Lbs.	Dry Beans—Qts.	String Beans—Bu.	Corn—Doz.	Beets—Bu.	Cucumbers—Bu.	Tomatoes—Bu.	Peppers—Bu.	Carrots—Bu.	Peanuts—Lbs.	Onions—Bu.	Turnips—Bu.	Greens—Bu.	Cauliflower—Lbs.	Parsnips—Bu.	Squash—Lbs.	Pumpkins—Bu.	Pop Corn—Bu.	Muskmelon—Per	Watermelon—Per	Green Peas—Bu.	Dry Peas—Qts.	Celery—Bu.	Kohlrabi—Bu.	Money Value	Average per Garden
Plummers	9	110	1,930	2 1/2	21	142	9 1/2	27	20	1	12	100	3	130	3	130	3	200	2	200	30	30	9	6	56	8	\$584	\$65
Outside Districts	8	141	875	124	45	315	12	2	43	25	18	8	6 1/2	10	75	1 1/2	190	30	30	2	200	9	6	200	8	977	122	
Northbridge Center	5	198	1,650	64	12	700	1 1/2	2	17	3	5	2	7	120	4	190	1	30	30	1	1	1 1/2	8	8	643	128		
Reservoir	5	161	610	64	12	700	7 1/2	12	10	5	8 1/2	6	4	30	1	30	1	625	43	9	1	1	1	1	1,278	36		
Brick School House	35	512	1,950	68	20	123	10	9	15	4	8 1/2	7	7	5 1/2	30	1	1	625	43	9	1	1	1	1	1,135	56		
Fairlawn	20	295	1,830	354	20	406	15	7	35	20	8	3	6	4	4	4	50	1,100	50	1	1	1	1	1	585	58		
Crescent Street	10	129	1,150	70	13	139	15	31	10	8	3	3	6	4	4	4	50	1,100	50	1	1	1	1	1	1,676	45		
Taylor Hill	37	422	1,450	65	48	539	20	18	69	2	20	1	16	10	45	2 1/2	1,130	160	6	12	6	10	1	1	175	44		
Johnston Place	4	98	60	48	10	100	1 1/2	6	3	3	3	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	
Totals	133	2,066	11,505	795 1/2	197 1/2	2,559	92	38	255	27 1/2	105 1/2	6	22 1/2	104 1/2	32 1/2	370	13	2,325	1,260	6	82	79	32 1/2	70	200	8	\$7,959	...

Grand Total, money—\$7,959.00.
Grand Average per Garden—\$60.00.



John F. Holmes, one of our superintendents of construction in the Orient, sent us the above photograph of Manager Danrjo Araki and Chief Engineer I. Oguri of the Fugi Gas & Spinning Co. of Nagoya, Japan. This photo was taken at the entrance to their office. The Whitin Machine Co. had sold this company a twenty thousand spindle unit, and recently sold them another twenty thousand spindle unit. The president of this mill, Mr. T. Wada, is very prominently identified with textiles in Japan.

Office Note

Mrs. George B. Hamblin entertained the girls of the various offices at her home on January 25. The evening was made interesting and, at times, exciting by the awarding of prizes for games which proved most difficult. At ten o'clock a delicious supper was served. Mrs. Hamblin was assisted by Mrs. McKaig and Mrs. Lincoln.

Another important event of the week was a costume ball held on January 27, by the Woman's Club. At nine o'clock a surprise feature was carried out by twelve of the office girls, representing Pierrettes and Pierrots, who performed their parts in a most striking manner, rendering a delightful song, "Au Clair de la Lune." Following this was the grand march, after which dancing was resumed until 12 o'clock. The costumes of all attending were most attractive.

According to our Main Office humorist:

If Gladys hurt her hand, would Herbert "Ball"?

The reason Harry Scott resembles a piece of tissue paper so much is because he is so "tear-ible."

If Lucia's finger nails were dull, would Walter "Buff-um"?

"Do you know Isabelle?"

"No, what about her?"

"Isabelle necessary on a bicycle?"

Harry Kearnan, a member of the metal pattern job, passed the cigars around to the boys during the last week of January. On January 28, Mr. Kearnan became the proud father of a baby girl who has been named Margaret Rita. We didn't happen to receive any of the cigars, but we extend our congratulations nevertheless.

We do not know whether Waldo Johnson, of the outside paint job, ever went swimming with his glasses on or not; however, we know it has been done. A few weeks ago Mr. Johnson, who boards at the Blue Eagle Inn, was returning to the Inn. While walking on Church Street he slipped and fell. When he arrived at the Blue Eagle he sat down to read his newspaper and discovered that he couldn't see the type. Feeling for his glasses, he found that they were not in their accustomed place. They were later found by the use of a flashlight borrowed from Buffum's drug store.

William Hamilton, a member of the shaft-hanging crew of the Carpenter Shop, was telling the boys that down in Nova Scotia, where he comes from, they recently had six feet of snow in twenty-four hours. It may be so, but the boys think there is a catch somewhere.

Dalton Specials

Wanted—A young lady to teach "Gummy" how to use a thimble. Anyone may apply for this job.

Introducing jazz music in Manchaug and Douglas seems to be a specialty for William Denoncourt, a member of Charlie Stuart's job.

David Lemoine captured the booby prize at the workmen's whist party held recently in Odd Fellow's Hall.

Fishing through the ice seems to be a favorite pastime for Paulie Plant. Paul claims they bite better on a windy day.

Thomas Gordon Hamilton is out with a challenge to any checker player in the shop, barring none but Frank Mateer.

Bugs from the Cupola

None of our fishermen seem to be getting any fish these days. One of our sports says he would go if the fellow who borrowed his shiner can would bring it back. We wonder who that fellow can be.

We are sorry to report that "Con" Hourihan met with a serious accident February 4. While loading some wood onto a team, he slipped and fell on the ice, causing a severe injury to the face and head. He is at St. Vincent's Hospital at this writing.

"Bill" Campbell is given the reputation of being the best chess player in the Blackstone Valley. Harry Kearnan had to bow before him lately, when he lost his hold on the championship.



Patricia, daughter of W. E. Shiller, with her sail boat. Her father is one of our road men.

The sail boat was given to Miss Patricia by Uncle Edward Rooney, a comber expert of the Whitin Machine Works.

Bowling is coming back again. Dorsey and Shugrue gave an exhibition at the Linwood Club lately, and they showed real form.

"Bill" Ward, foreman of the Core Room, has just broken up an old walnut desk that had been in use for fifty years.

"Cy" went to Milford on a sleighing party and arrived home in the early hours of the morning. He fell asleep and was hearing sleigh bells in his dreams. The next day he needed an alarm clock to keep him awake.

"Chic" had his photograph taken in Milford lately. They will soon be given out to a few of his selected friends.

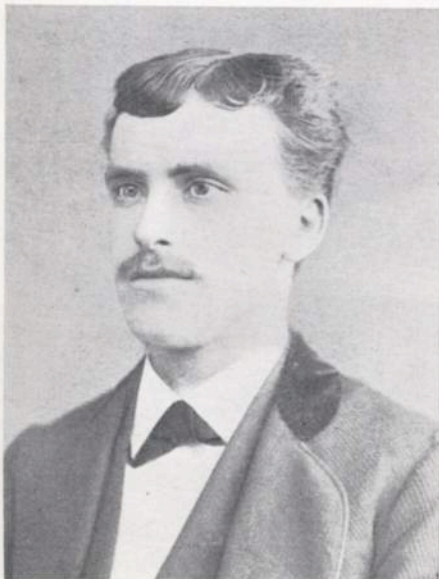
Twenty-Three Years Erecting Spinning Frames

Continued from page 6, column 3

like most of our older road men, has traveled over practically every state east of the Mississippi, and has been in one railroad wreck, besides having the experience of seeing considerable of the machinery which he was installing in the Cocheco Division of the Pacific Mills ruined by fire. This was about fourteen years ago. The fire occurred in the month of December, and it was necessary, not only to chop the ice away from the machines, but also to work in the fire-charred mill for several weeks without any roofing. After the fire, he placed 214 spinning frames in this mill.

We recently heard a good story about Joseph Damour, of the Electrical Department, while he was at Winter Harbor last summer. An old salt was cooking a fish dinner in which Joe became very much interested, and inquired of the cook why he put salt on a codfish, to which the old salt replied, "Why not?" Joe's answer was that he didn't see any necessity for the salt, as the codfish came from salt water.

The members of Wood's Office were present at a christening and funeral on the same day, held at John Connor's desk. Triplets were born to a mouse family which made its home in John's desk. One, however, died before medical aid could be rushed to the scene. As the survivors outnumbered the dead, there was more joy than sorrow at the occasion.



Mystery Picture—Taken several decades ago of a well-known member of the shop. If you can't figure it out, look for the answer in the next Spindle.

How to Keep Well

PREVENT THAT HEADACHE!

Are you one of those fortunate individuals who never suffer from a headache? If so, you may still read this letter with some benefit, as the best cure for a headache is not to let it happen.

If you are one of the less fortunate, one of those who accept headaches as a part of everyday life, you will do well to study this question a little and start with the precept that most headaches are due to "physical sins."

If you suffer more or less frequently from headaches, ask your doctor to help you search for your sin, instead of letting it find you with a headache.

As a headache is a symptom and not a disease, there is a plentiful supply of drugs that will relieve the symptom and thus mask the true cause.

For this reason there is no warning or danger signal so frequently neglected as a headache. A tablet or a powder, and "pouf"—the headache is gone. Why bother?

CAUSES OF HEADACHES

Eye-strain has been charged with as much as 80 percent of the responsibility for headaches, and, no doubt, it is the chief immediate cause. In many cases, however, eye-strain would have little effect without a background of nervous insufficiency. By eye-strain is meant, not only strain due to defects of vision, but to over-use and improper use of the eyes—reading in a dim light, or in a too brilliant direct light, or facing the light.

NOSE AND THROAT AFFECTIONS

The nasal cavities, like the ear cavities, are very close to the brain. Thus, pressure, ulceration, or infection in these cavities may touch extremely sensitive nerves. A nose headache is usually confined to one side, but it is located in the back of the head. Brow-ache or cheekache, if accompanied by discharge from the nostril on the same side, call for immediate investigation by a nose and throat specialist.

TEETH

The teeth must not be forgotten as a possible cause of headache remote from the affected tooth.

DIGESTIVE AFFECTIONS

Many obstinate cases of constipation, attended by undoubted poisoning, are not associated with headaches. Constipation, in a subject whose bowel function is usually regular, is more likely to cause headaches. Over-eating and improper eating are, of course, frequent causes of head pain.

The so-called bilious headaches, often accompanied by stomach distress and vomiting, usually have little to do with bile, and may even be due to eye-strain.

OTHER CAUSES

Flat-foot, neurasthenia, tight shoes, tight corsets, and tight collars, the habit of scowling, and excessive gum chewing, must also be included in the possible causes of headache.

CAUSED BY DISEASE

Headaches due to disease of the brain are likely to come early under medical treatment, and do not call for description here.

Headaches due to kidney troubles may, however, pass unrecognized as such for many years. In all cases of chronic headache, the urine and blood pressure should be carefully examined.

Violent or frequent coughing may give rise to head pain, as well as chest pain. Violent and obstinate coughing is often due to an inflamed throat or larynx. Complete rest of the voice by avoidance of talking, and proper remedies for the control of cough are indicated. Will-power can do much. Most people with laryngitis and bronchitis, and even with consumption, cough about twice as much as they need to. There is no use trying to cough up inflamed and swollen throat tissues. Give them a rest.

There is a form of so-called rheumatic headache caused by fibrous masses under the scalp and tissues of the neck. This headache is relieved by massage. German authorities claim that such headaches are very common, but they are not so reported in this country.

TREATMENT OF HEADACHES

It is now about twenty-five years since the coal-tar products became available to the general public as headache remedies. The enormous consumption of these remedies justifies, to some extent, the charge that Americans bear pain badly.

These drugs were first thought to be harmless, but many cases of death from over-doses and from heart depression have been reported; and there is every reason to believe that the repeated and continuous use of such remedies has a weakening effect on the circulation. Whether their widespread use has anything to do with the increase of circulatory troubles in the past thirty years is worthy of consideration. We are justified, however, in denouncing the indiscriminate use of headache powders, practically all of which contain these powerful drugs.

Many simple home remedies are available that are absolutely without danger.

For the nervous form of headache, rest and sleep in a darkened room are sufficient, without the aid of drugs.

In the congestive, throbbing form of headache, a hot foot bath, and an ice bag or cold compress to the head, often prove effectual.

When the stomach is at fault, it should be emptied.

When the bowels are at fault, they should be emptied and then trained by diet and exercise to do their work properly.

If the eyes are overstrained, proper glasses and rest and protection from the light will often prove effectual.

Where the headache is due to organic disease of the heart or kidneys, the instruction of the physician should be rigidly followed out. Any attempt at self-drugging under these conditions is an exceedingly dangerous practice.

There are two bad ways to stop headaches. One is to knock the individual senseless with a club, and the other is often like unto it—to take a headache powder.



Annealing Department

A large number of the castings on their way from the Foundry to the Machine Shop pass through the Annealing Room and are here annealed for drilling and machining purposes, or case hardened, to increase their strength and to make them more durable.

The first foreman in charge of the Annealing Room was Dennis Dorsey. He established this department just before the gold rush in 1849, according to information received from Richard Donovan, of the Foundry. Mr. Dorsey was Mr. Donovan's father-in-law. The Annealing Room was then a part of the Cast Iron Room. After the death of Mr. Dorsey, the department came under the direction of Hugh Magill. Mr. Magill evidently took Horace Greeley's advice and went west, after which the department was placed in charge of Daniel McNeill. Under Mr. McNeill the first case hardening was introduced



Robert Henson

into the Whitin Machine Works. Previous to this time all the metal had been treated by annealing only. This case hardening was first done on spinning rolls. Mr. McNeill died in January, 1917, after a short illness of one week, and was succeeded by Alexis Waldow in February, 1917. At this time the Annealing Room was made a separate department from the Cast Iron Room, and the hardening of high-speed cutters and drills was introduced under the supervision of W. O. Aldrich. Mr. Waldow was a victim of the influenza epidemic of the fall of 1917, and died on September 22.



Alexis Waldow

The present foreman, Robert Henson, who had just completed eight years of service in the navy, was placed in charge on October 7, 1917.

At the present time the Annealing Room turns out a tremendous amount of work, but with less ovens than in the past, due to more modern methods of heat treating. We are case hardening and carbonizing set screws, pins, bolts, nuts, spinning rolls, and rings; also high-speed steel from which we make drills, cutters, reamers, shell plates, and bushings.

The Annealing Room has ten oil furnaces. Three of these are used for high speed hardening, in which

the temperature is raised as high as 2,400° F. It is in these furnaces that the high-speed cutters, etc., are hardened. The temperature in five of the oil furnaces is raised as high as 1,900° F.; and the remaining two, known as the lead pot furnaces, are used for the hardening of spinning rolls and carbon steel, in which the temperature is raised to 1,500° F. daily.

There are seven ovens in the coal furnace used for annealing, the temperatures of which are raised to 1,450° F. The temperatures of all these furnaces are read by means of an electrical apparatus known as the Wilson Mauler Pyrometer. This instrument records in colored ink the temperatures of the individual ovens and makes possible a reading of each oven once every nine minutes.

During the normal period of production it was estimated that 121,000 pounds of castings passed through the Annealing Room in one week. The number of spinning rolls annealed for an average week is about 3,825.

The personnel and service record of the job are as follows:

	IN SHOP		ON JOB	
	YRS.	MOS.	YRS.	MOS.
Joseph Lemoine	16	0	3	3
Albert Galipeau	11	1	10	5
And. Asadoorian	11	11	11	11
David Brunell	10	8	2	8
Mesak Arakellian	9	10	9	10
Y. Tiberian	5	1	1	7
John Deome	4	10	0	10
Robert Henson	3	5	3	5
Albert Erickson	2	5	0	11
Raymond Bergeron	0	8	0	1
Ernest Pellett	0	8	0	8
Moses Hubert	0	7	0	4
L. B. Cherry	0	4	0	4



Daniel McNeill