

# Graduated by Years from 0 to 100



*Taylor Instrument Companies*

ROCHESTER 1, NEW YORK, U.S.A.

## 1851-1951

This is an informal story of the first 100 years of Taylor Instrument Companies written by Arch Merrill for the employee publication, *The Taylor Meteor*. Arch Merrill is well known in Western New York as the author of "A River Ramble," "The Lakes Country," "Rochester Sketch Book" and a host of newspaper stories touching on local lore. Recognizing that an industrial organization which has been in business in the same locality for 100 years is inextricably bound up with the development of the community, Arch Merrill has skillfully intertwined the history of Taylor with the history of Rochester. Only 1,000 reprints of the Meteor stories have been authorized and we hope this numbered copy will be an interesting addition to your library.



*Taylor Instrument Companies*

*Established 1851*

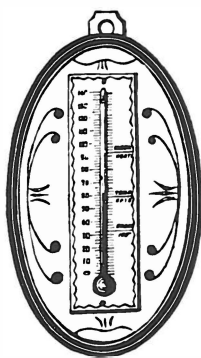
ROCHESTER, NEW YORK

This is number 890

# Graduated by Years from 0 to 100

ARCH MERRILL

## PART I



In the Fall of 1851 a Rochester industry was born. It began life without benefit of newspaper headlines, oratory, the cutting of ribbons or the blare of bands.

A century ago new businesses were springing up all the time in this expanding mill town of some 37,000 inhabitants. With them the press was little concerned; not when it could discuss such stirring issues as the extension of slavery into the new territories, the struggle for control of the Whig Party between the forces of President Millard Fillmore and Thurlow Weed, the proposed enlargement of the Erie Canal and the promotion of a new railroad from Rochester into the Genesee Valley.

Besides, this particular new industry that was founded in the Fall of 1851 was such a tiny one. No one then could foresee its eventual greatness. It was a two-man, one-room industry.

It began in the best American tradition. Two young and ambitious men pooled their slender material resources and their considerable skills and energy and started a business—the making of thermometers. They rented a “plant” consisting of one room over the Post Drug Store at 4 Exchange Street, on the west side of that thoroughfare just south of the Four Corners, in those days the hub of the Flour City.

The partners were David Kendall, aged 35, and George Taylor, a mere youth of 19. Both were of Yankee stock and both were newcomers to Rochester.

The senior partner of the new firm of Kendall and Taylor brought to the infant business a thorough mechanical knowledge. He had been virtually raised in the thermometer business. His father, Thomas Kendall, Jr., a Yankee

mechanical genius, had founded in 1820 at New Lebanon, Columbia County, New York, one of the first, if not the very first, thermometer factories in America. The senior Kendall, who had been a master mechanic in New England woolen mills, retired to live on his country place but kept up various mechanical experiments. One of them was the making of a thermometer that would equal the expensive imported ones of that day. Thomas Kendall finally perfected a superior instrument, one which made the graduation of the scale coincide accurately with the varying calibers of the bores and therefore, assured a higher order of precision than the old system of using dividers.

As a boy, David Kendall must have helped his father in his shop and, as a young man, he was for a time associated with his eldest brother, John, in the family business of making thermometers at New Lebanon. The name of Kendall was associated with the industry until the death of John Kendall in 1892. At that time he was called the oldest thermometer maker in the United States.

So, in 1851 David Kendall had the technical “know how” to give to the little firm in Rochester.

His 19-year-old partner, George Taylor, had recently arrived in Rochester from his birthplace, Stoddard, New Hampshire, where his father was a prosperous farmer and a member of the State Legislature. An uncle had moved to Rochester some years before, which probably accounted for George Taylor’s settling in this city on the Genesee.

In the beginning young Taylor had no practical knowledge of the thermometer business, although he soon acquired it. He had an excellent business head on his young shoulders and a flair for selling and merchandising. He took over the bookkeeping and selling end of the business, as well as looking after the final assembly work, packing and shipping. Kendall did all the tube making.

Kendall and Taylor had no payroll worries. They did all the work themselves—in their single room over the drug store at the Four Corners.

Such were the humble beginnings 100 years ago of the Taylor Instrument Companies, one of Rochester’s major industries, which today occupies more than 400,000 square feet of floor space in its Ames Street plant and employs nearly 2,000 men and women.

The firm’s entire line in 1851 consisted of a few styles of tin-case thermometers, for which the cases were purchased from Taylor’s uncle who ran a small metal-working shop; a few carved wood-case thermometers and some mercurial barometers. The wooden cases and metal scales were bought already cut and trimmed to size, so the only manufacturing done by the partners was blowing the tubes, graduating the scales by hand, finishing and mounting. In those days, only instruments indicating the vagaries of the weather were made. They were mighty important to shippers, merchants, mariners and farmers, as well as to folks who just wanted to know how cold or how hot it was or whether the barometer was rising or falling.

Today the Taylor Instrument Companies manufacture for a world-wide trade not only weather instruments, but, also, a vast array of precision instruments for the household and the medical profession and for the control of industrial processes.

On October 31, 1851, about the time the two partners set up shop, they drew up an inventory listing total assets of \$919. Of those actual physical assets, \$600 was put down as “knowledge of the business.” So the actual physical assets of Kendall and Taylor amounted to only \$319 in the beginning.

And that is a far cry from the present valuation of the Taylor Instrument Companies which runs into the millions. “Great oaks from tiny acorns grow.” The tiny acorn planted in a



one-room factory took firm root. For within a few months, the young firm moved to larger quarters in the imposing four-story Rochester Novelty Works Building on the western fringe of the business district and near the Erie Canal, at 10 Hill Street, now called Industrial Street.

That building also housed the refrigerator factory of Smith, Badger & Company and the plant of Woodbury, Booth & Pryor, makers of stationary steam engines.

Kendall and Taylor came on the Rochester industrial scene in a stirring period of expansion and transition. Although the waters of the Genesee were turning many mill wheels and the flour milling industry was a symbol of the city, the steam age was emerging and a new reliance was being placed upon that new source of power. Shipments of coal, by canal boat and railroad, from the Pennsylvania fields, were increasing yearly.

Rochester was becoming a city of diversified industries. There were shoe factories, tanneries, ten machine shops, two stove factories, a chair factory, edge tool shops, two cotton mills, a paper mill, an agricultural implement plant and the small pants and vest shops that were heralds of the mighty clothing industry.

The nursery business was expanding and spreading the fame of Rochester, a shipping point for the wheat, fruit and other products of a rich countryside. The Genesee Valley was still a great wheat-producing center and kept the stones of the massive mills around the Falls of the Genesee turning busily.

The pioneers were dying fast and a younger, vigorous element was taking the reins. New horizons were dawning and more Rochester capital was being invested in distant fields; in Mid Western land, in the young railroads and in that brand new enterprise—the magnetic telegraph.

A movement was on foot to consolidate the nine competing railroad lines between Buffalo and Albany into one system. Traffic on the Erie Canal was huge and the Genesee Valley Canal, although still uncompleted its entire length, was a busy waterway.

It was a stirring time, that year of 1851. The discovery of gold, with the rush of the "Forty Niners" to California, and the military victory over Mexico that swelled the boundaries of the Republic were fresh in memory. Calhoun was dead but Clay and Webster, in the twilight of their careers, and the young Stephen A. Douglas were carrying on the great national debate over slavery and free soil. There were 30 stars now in the American flag with California the last state to be admitted into the Union.

Progress was in the air. The Erie Railroad, the first rail link between the Atlantic seaboard and the Great Lakes, had finally been built over the formidable hills of the Southern Tier. In France, the Minister of the Interior authorized a man named Petin to try out his new balloon-ship, on the condition that he take with him only seven persons. At the great Exposition of Industry in London one of the awards went to Charles Goodyear for the manufacture of "India rubber fabrics." An-

other American company, the Brooklyn Flint Glass Company, received an award for its product. The Flint Glass Company was the predecessor of the Corning Glass Works, from which Taylor has been buying glass thermometer tubing ever since they started making it shortly after George Taylor organized the business.

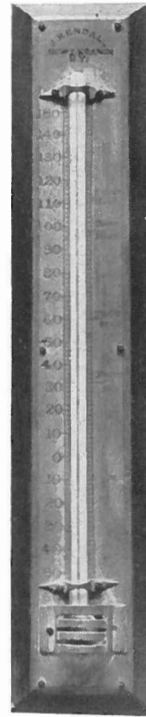
There were significant events in Rochester, too, in '51, such as the completion of the second Court House with its stately dome, the establishment of the Free Academy, the first commencement exercises of the University of Rochester, housed in an old hotel in Buffalo (West Main) Street, and the laying of new pavements of Medina blocks in Buffalo and State Streets.

In the first year of their partnership, Kendall and Taylor must have worked long hours in their little shop. One wonders whether they could afford the dazzling new gas lights that had been turned on in Rochester for the first time only two years before, or did they have to work by the flickering light of tallow candles or whale-oil lamps?

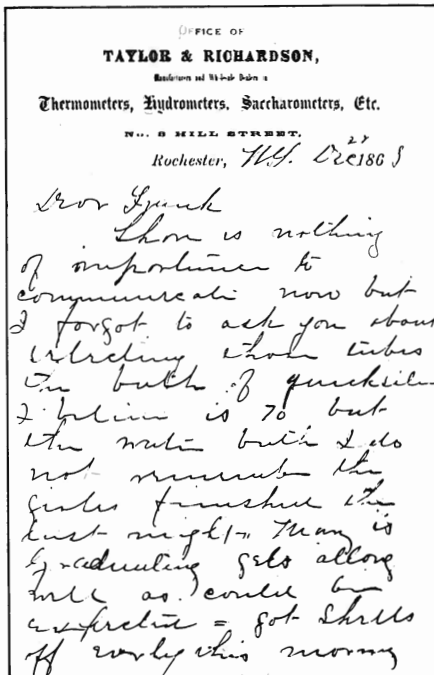
Did they have the time and cash to enjoy the cultural and recreational treats of 1851? They could have heard the golden voice of Jenny Lind, "The Swedish Nightingale," in the new Corinthian Hall where, also, that year Adeline Patti appeared with an eight-year-old violinist prodigy named Ole Bull.

If they cared for political oratory, they could have mingled with the crowds at the State Fair where Stephen A. Douglas, "The Little Giant" of Illinois, was the spellbinder, or have heard the thunderous eloquence of Daniel Webster in the old Reynolds Arcade.

For recreation there were picnics at Falls Fields near the Upper Falls, horse racing at the Union Race Course out East Avenue, steamboat rides on Lake Ontario, stagecoach trips to Avon



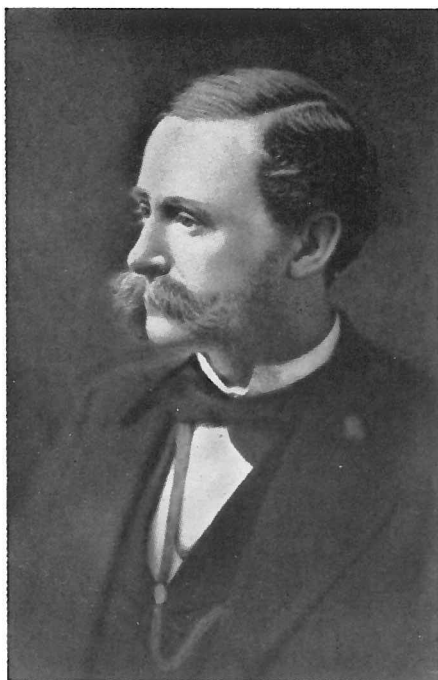
This thermometer made by the father of David Kendall at New Lebanon, N.Y.



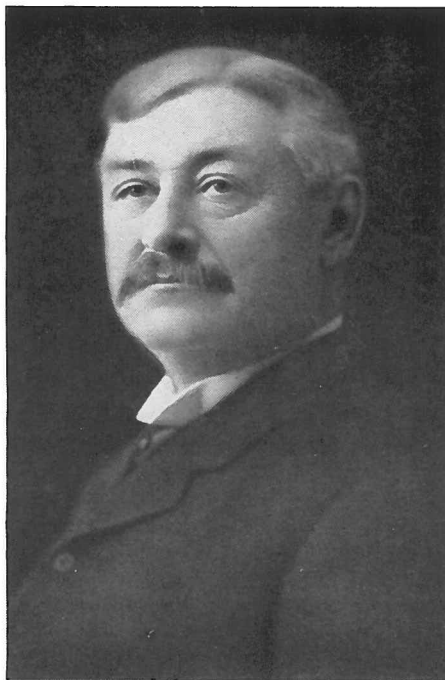
The letter above was written by Hamlet Richardson to Frank Taylor only two years after the business was renamed.

◆ This page reads as follows, "There is nothing of importance to communicate now but I forgot to ask you about stretching those tubes the bath of quick-silver I believe is 70 but the water bath I do not remember the girls finished these last night. Mary is graduating gets along as well as could be expected. Got shells off early this morning—"





George Taylor established the business in 1851. His old journal is the source of most of our early history.



Frank Taylor entered the business in 1866 and was president of Taylor Bros. until 1900. He died in 1920, a Director.



Hamlet Richardson entered the business in 1866; left it in 1872 because of ill health. No picture of David Kendall exists.

Springs, a famous resort with big hotels; and a stock company was playing at the Metropolitan Theater, now the Embassy.

There were some interesting people living in Rochester in 1851. Some of them were destined for national fame. One was a strong-limbed young woman named Susan B. Anthony who was helping out on her father's farm way out Brooks Avenue way when not engaged in temperance and anti-slavery crusades. Frederick Douglass, born in slavery, was printing his abolitionist paper in a little downtown shop and helping men and women of his race escape to Canada and freedom via the Underground Railway. Daniel Powers, who had come to Rochester a few years before, a penniless country boy, was operating a private bank at the Four Corners.

It was an exciting time, and the birth of the Taylor industry passed unheralded and unsung.

Kendall and Taylor were too busy to think about publicity, anyhow. Tradition has it that when enough stock had been assembled to fill a trunk, Taylor, the salesman of the two, would slide off his bookkeeper's stool, don his beaver hat and go out on the road, selling until the trunk was empty. Then he would hasten back home to help make enough

stock to repeat the process.

#### Kendall Withdraws

The partnership lasted only two years. In April 1853, David Kendall withdrew and began the manufacture of barometers under his own name in the Smith Arcade at the Four Corners, the present Lincoln Rochester Trust Company site. Later on he was heard of in Cleveland, making barometers for the marine trade. Then he pushed on West to Michigan where he became a manufacturer of fine furniture. He never returned to the pioneer family thermometer business at New Lebanon.

Twenty-one year old George Taylor stayed on at 10 Hill Street and directories of the period list him as a "manufacturer and wholesale dealer in thermometers and barometers."

His struggles in building up his little business during those early years are revealed in his "Journal and Order Book," covering the 1853-1859 period when he was carrying on without a partner.

First of all, he had to hire a tube maker to fill David Kendall's shoes. The first entry in his book covers the expenses of a trip to New York to find an experienced man. He found such a man, one O. T. Taylor (not a relative), for soon there appear entries showing

payments to this sole employee of ten shillings, six pence per 10- to 12-hour day, or \$7.88 per six-day week. George Taylor noted rates of pay in shillings and pence and extensions in dollars probably because in New Hampshire, where he received his schooling, the English way of computation was retained long after it had been abandoned in other sections. In June he took on another employee, one Margaret Strickland. The journal does not define her duties for which she was paid all of \$1.50 per week.

That same month, Taylor purchased various types of paper from William Alling of Rochester with entries appearing later in the year under Alling & Cory, the present name of the paper firm with which Taylor is still doing business—after 98 years. In 1853 Millard Fillmore was no longer President, nor was his Whig Party ever to know power again. In retirement in his mansion on Buffalo's Niagara Square, the ex-President's thoughts may have wandered back to the time in his youth when he came to Rochester to work for that same pioneer paper firm.

An early inventory of the Taylor assets showed 40 barometers on hand valued at \$9.00 each, the cost price. The selling price was \$14.00 each. Tools and

machinery were valued at \$204.33. Total assets were listed as \$910.58 and, besides the stock and equipment, included \$343.23 in open accounts taken over from Kendall and Taylor. Those figures compare favorably with the original 1851 inventory which listed total assets of \$919, of which \$600 was put down as "knowledge of the business."

In July, I. T. Thomas was paid \$14 for cutting a head stamp or steel die at two shillings per letter and covering these words: "Freezing, temperate, blood heat, fever heat, spirit boils, water boils." This presumably was for tin case thermometers. Thomas also was paid for soldering 997 tin cases. Another die made by Thomas read: "Geo. Taylor, Warranted, Rochester, N. Y." That legend appeared at the top of the tin case thermometer scales and represents the first use of the name Taylor alone on such products. It is a name that has stood for accuracy and high quality ever since.

### Advertising Since 1853

In August of 1853, Taylor decided to do his first advertising, for there is an entry of \$6.00 paid the Rochester printing firm of Curtis & Butts for 500 circulars. Way back in those days, the first of the thermometer-making Taylors sensed that it "pays to advertise."

For four months he had been building up his stock. His first real shipment to a dealer was made on August 26. It went to D. Harter of Crawfordsville, Indiana, and it consisted of:

"6 dz. 12" thermometers at  
\$6.00 dz. less 20%  
8 dz. 8" thermometers at  
\$4.50 dz. less 20%  
8 dz. 7" thermometers at  
\$4.00 dz. less 20%."

The Taylor Instrument Companies shipping department today would consider that a trifle, but it meant a lot to young George Taylor 98 years ago.

The next day shipments of 58 dozen thermometers, a total billing of more than \$200 to Albany and Buffalo concerns, were recorded. The little business was getting on its feet.

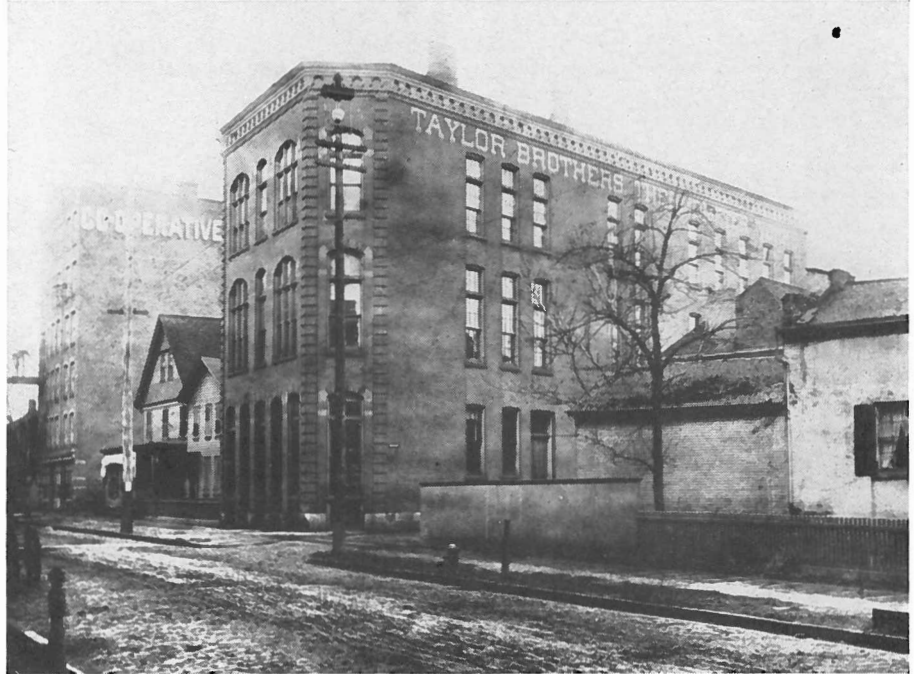
In September, George Taylor had four employees on his payroll, two men and two women, and he enlarged his line to include "Mahogany and Gothic" styles, as well as standard tin cases. These were doubtless wood-back thermometers with fancy molded edges as the journal records purchase of molding, and instruments of those types were

still being sold 20 years later.

A notation opposite the account of a customer in Keene, New Hampshire, reads: "Sent to father for collection."

Back in New Hampshire, "father" was an influential man and he collected the account which involved exactly \$15.37.

At the end of February 1854, Taylor's



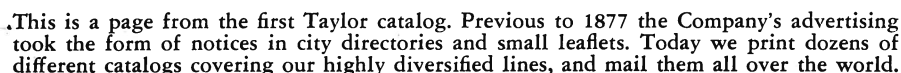
This view of the Company's plant was taken much later than the period covered by Arch Merrill's accompanying article. The building is still standing on what is now Industrial Street.



In one of these old stores on Exchange Street, Taylor Thermometers and Barometers were manufactured way back in the early days. Note the muddy road and the car tracks. Unfortunately, nobody at the time the picture was taken thought to designate the Taylor "factory."

By 1855, the ledger showed many new customers in new territories, notably Ohio and Illinois. The firm in the last twelve-month period had done nearly \$5,000 worth of business and was now equipped to make all its tubes in its Rochester plant, instead of buying most of them. Things were going so well that 22-year-old George Taylor married and set up his own home. He

George Taylor kept a record of every business transaction made by the infant Company from 1851 to 1859. This portion of it shows items for rental to Badger and the purchase of paper from Wm. Alling, predecessor of Alling & Cory Co.





also purchased in August 1855, a \$125 buggy, the hallmark of a successful man in the 1850's.

New Items in Line  
In 1855 the line was increased by the addition of mantel, churn, distillers'



The entire Manufacturing Division of 1890 poses for a picture. First row, George Grover; second row, Thomas Gaffney, Jack Thompson, Henry Paulstick; third row, George Stork, Otto Kaestner, Jim McQuarters, Martin Goebel, Fred Smith, J. Hammond, Tom Morris, William Helmbold.

and brewers' thermometers, heralding the widespread use of instruments in industry. A fire in 1856 interfered briefly with operations, but the loss was covered by insurance and sales that year for the first time shot past the \$5,000 mark.

While 1857 brought no great gain in sales, it showed a wider distribution of Taylor products. The books listed 95 accounts in 36 communities in 12 states. At least a half dozen of those customers are still buying from the Taylor company.

There still were only four employees on the payroll; one man, one boy and two girls, who were paid at rates varying from 25 cents to \$1.25 a day. All of them did not work every day of the month, and the total monthly payroll amounted to from \$50 to \$60.

Taylor was buying glass tubing from the Bay State Glass Company of East Cambridge, Massachusetts, in two sizes, "thermometer tubing" and "thermometer tubing large." The latter was for use in distillers' thermometers, a new and important market. A little over 200 pounds of tubing was purchased during 1857 and about two flasks of mercury, (76 1/2 pounds to the flask) at an average price of 50 cents per pound.

General business conditions were bad in 1857 when James Buchanan was President, and the rift between the North and the South was widening. Money was tight and collections almost impossible to make. Most sales were made on six months terms and most settlements were by sight draft, drawn after the six months had expired. There were many bank failures, and Taylor urged his customers to pay in New York Exchange or in bank notes on New York or New England banks, declaring that all others were of dubious value. Frequently he returned bank notes to customers as "counterfeit." On small balances he often asked for payment in New York bank notes and even postage stamps.

George Taylor weathered that economic storm, although sales fell off in 1858. His operating costs were not high. He paid only \$12.50 monthly for the floor space in the Novelty Works Building that he rented from Badger, Acer and Company. The Badger of the firm was his uncle, and that concern also supplied metal cases for his mantel thermometers, japanned the tin cases and made small tools for Taylor. It also bought finished thermometers for resale

Time Book for the Week ending		Oct 20th 1873									
DATE.	NAMES.	Sun.	Mon.	Tue.	Wed.	Thurs.	Fri.	Sat.	Sund.	Price	Amount.
1873											
Oct 20	DE Seitz	10	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	12	30
	Joe Busby	10	10	10	10	10	10	10	10	12	00
	Ed Goodenough	10	10	10	10	10	10	10	10	12	00
	Pat Kane	10	10	10	10	10	10	10	10	10	00
	Frank Bump	10	10	10	10	10	10	10	10	6	50
	J. M. Taylor	10	10	10	10	10	10	10	10	6	00
	El Bennett	10	10	10	10	10	10	10	10	4	00
	L Newcomb	10	10	10	10	10	10	10	10	4	00
	M. Bure	0	1	1	1	1	1	1	1	3	
	Mary Averill	0	10	10	10	10	10	10	10	3	33
	Maria Achrane	0	10	10	10	10	10	10	10	2	50
	Annie Rabbit	10	10	10	10	10	10	10	10	4	00
	A. Mogridge	0	0	0	0	0	0	0	0		
	Ella Hughes	0	10	10	10	10	10	10	10	2	67
										9	179

This old Time Book is interesting because it shows the length of hours, the wages and the names of all employees. Among them is J. M. Taylor who eventually became president from 1910 to 1913. He certainly "worked his way up from the bottom."

on a jobbing basis.

At that time Taylor employed his first salesman, John P. Dabney. Dabney apparently worked on a straight 10 per cent commission and, as his sales for a trip never amounted to more than \$400 or \$500, one wonders how he made ends meet. There is no record of an expense account. Dabney covered a large territory, selling in New York, Philadelphia, Baltimore, Washington, Cincinnati, Louisville, St. Louis, Chicago and smaller cities in between.

Skies were brighter in 1859, with a 20 per cent increase in sales pushing the total for the year over the \$6,000 mark for the first time. Taylor's books show increased purchases of glass tubing, many more customers and, what is most significant, withdrawals of several hundred dollars at a time from his commercial bank account for deposit in a savings account. Yankee persistence, energy and thrift were paying off.

Copies of letters written by George Taylor in 1857-58 shed light on business and industrial practices of the day.

They seem almost incredibly primitive today. He bought brass for his scales in New York and always ordered it cut to size as he had no way of cutting it himself from sheets. In a letter to a firm soliciting his business for leather belting, he replied that he had no use for such material because he used no power in his business. That meant that stamping the numerals on the brass scales, as well as all other processes, was done by hand. He recommended to customers that they allow him to have a steel die or head stamp of their name made for use on their scales, because it was impossible to do a satisfactory job when the name was stamped on from single-lettered dies. One is appalled now at the thought of the hand work involved in single-stamping names on several dozen scales.

### "Accuracy First"

George Taylor was a stickler for accuracy and stood back of all his products. Some of his competitors were less

careful, for in one letter he informed a customer that he would be unable to supply him with a new tube to fit his instrument as the tube then on it (made by a rival) could not be made to fit. It stood just 62 degrees too low. Which would seem to be a record for inaccuracy in a temperature measuring device.

Unfortunately, Taylor's "Journal and Order Book" and letter file of the period cover only the years 1853-59.

Dark clouds were gathering over the land, and in 1861 the great storm burst after Abraham Lincoln was elected President over a divided opposition. Confederate shells burst on Fort Sumter and the Southern States left the Union—the Nation was plunged into long and bloody civil war.

While there are no records to tell the story, the thermometer-making business and other "non-essential" industries undoubtedly suffered under the impact of war. And in 1861 George Taylor, resourceful as he was, could not convert to "war production," as did his successors in later, greater wars.



The Company opened for business in a single room over the old Post Drug Store on Exchange St. but moved to larger quarters in the Rochester Novelty Works building which appears in the left foreground of the old woodcut of Rochester as it looked in the 50's.



You are looking at the entire manufacturing division of Taylor Bros. as it was back in 1900. The only two in the business are George Helmbold (1) and Art Gaiser (68). How many of the faces can you remember? (1) Geo. Helmbold; (2) Lucy Friday; (3) Chas. Fahy; (4) Cary Johnson; (5) Min Jackson; (6) Unknown; (7) Ed Nacey; (8) J. Vogler; (9) Unknown; (10) Unknown; (11) Min Calmyer; (12) Amanda Miller; (13) Min Berler; (14) Kate Johnson; (15) Alice Friday; (16) Julia Helmbold; (17) Iola Friday; (18) Unknown; (19) Unknown; (20) Ida Speel; (21) Berth Howe; (22) Mart Gable; (23) Unknown; (24) C. Yancer; (25) Unknown; (26) Unknown; (27) Fred Smith; (28) J. Rohnan; (29) Eva Miller; (30) Ida Harris; (31)

Jen Baird; (32) Unknown; (33) Lizzie Weissinger; (34) Irene Price; (35) Ollie Hogg; (36) Lill Johnson; (37) Unknown; (38) Cecilia Nacey; (39) Mame Johnson; (40) J. Lynn; (41) J. Webber; (42) Mary Scied; (43) Pat Kane; (44) Jack Thompson; (45) Tres Singer; (46) Jule Besser; (47) Alie Beisigle; (48) Stella Hertzler; (49) Josie Munding; (50) Mary Wintercorn; (51) Mary Dress; (52) Bessie Lee; (53) Anna Moore; (54) Unknown; (55) A. Humphries; (56) Unknown; (57) J. Nacey; (58) Unknown; (59) E. McGee; (60) S. Taylor; (61) Unknown; (62) C. Marcellis; (63) J. McQuatters; (64) W. Cramer; (65) L. Meade; (66) H. Dunmere; (67) J. Fahy; (68) Art Gaiser; (69) Giser; (70) Jake Shaffer.

## PART II

**P**eacetime "normalcy" had returned to the Flower City in 1866.

The four bitter years of Civil War were over and the veterans of the Union Army were back at their civilian jobs. Some of their comrades would never return and others came home with empty sleeves and wooden legs. Still fresh in Rochester memories were the battles and the casualty lists, the peace at Appomatox, the murder of Lincoln and the disastrous Genesee flood of '65.

But it was no time to live in the past. It was a time to be up and doing. There were so many things to make and to sell. Industrialism was on the march in the victorious North. New markets were being opened. New towns were springing up in the West beside shiny new railroad tracks. Peacetime trade with Europe was restored.

Out into the expanding market went the products of this mill town on the Genesee—flour, flower seeds and shrubs,

shoes, stoves, perfumery, Kimball's tobacco, Cunningham's stylish carriages, Hayden's elegant furniture, and the agricultural products of a rich countryside.

The men's clothing industry was emerging from scattered little vest and pants shops. Badger's factory in the Novelty Works Building in Hill Street (Industrial) was turning out drills for the new oil fields in Pennsylvania and iron products for the new railroads. The Iron Horse was cutting deeply into the



local traffic of the Genesee Valley and Erie Canals.

Rochester industry was becoming more diversified. Skilled hands were needed to turn out the new precision goods being made here. Some of those goods were being made in small shops, like the lens-grinding business of John Jacob Bausch and Captain Henry Lomb.

That post-war year of 1866 also saw two other young men making thermometers in another little shop at 145 Buffalo (now West Main) Street between Washington and Plymouth. The partners were Frank Taylor and his cousin, Hamlet Richardson. Both were New Hampshire-born. Frank Taylor, who had come to Rochester in 1862, was a younger brother of George Taylor, who, in partnership with David Kendall, had in 1851 first started making thermometers in one room over the Post drug store in Exchange Street near the Four Corners.

In 1871, after a brief venture in the retail shoe business, George Taylor joined his brother and cousin in the manufacture of thermometers, a field in which he had pioneered and in which he was to remain the rest of his days.

Soon the firm moved to the Novelty Works in Hill Street, where Kendall and Taylor had made thermometers 20 years before. Their stay in the room over the drug store had been brief.

In 1872 Richardson withdrew from the business because of ill health and sold his interest to George Taylor. At still another stand, 37 Exchange Street, the firm of Taylor Bros. began business. The partnership under that name was to continue for 18 years.

Shortly, the Taylors were back in Hill Street again. The moving back and forth between Hill Street and the Four Corners area was over. In Hill Street they stayed, first at Nos. 3-5 and later in the three story building at No. 14, which the firm occupied, along with others in the neighborhood as the business grew, until 1906 when Taylor moved to the present site in Ames St.

It was in 1871 when the shop was in Exchange Street and employed only seven hands that young Pat Kane came to work for Taylor. He became an expert tube maker and remained with the Company for 53 years, until his death in 1924.

### Future Presidents

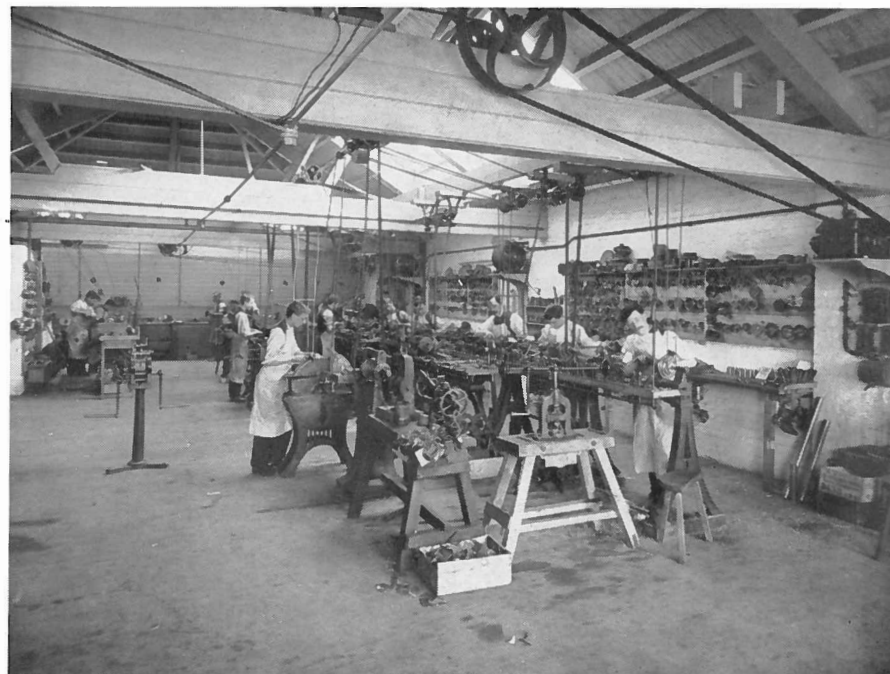
— In 1873 two sons of George Taylor, J. Merton, then 17, and G. Elbert, 14,

began work for the Company, at least part time. Both in later years were to play important parts in the destinies of the industry and both were to serve as its president.

Taylor Bros. weathered the financial depression of the mid-1870's (in General Grant's time they called them panics), which saw banks close and many businesses fold up.



This picture was taken in the offices of Short & Mason, Limited, London, England in the late Victorian era. The men in the picture are (seated) Roland Arnison, standing, l. to r.: Herbert Long, Frank Collinson, G. Elbert Taylor. Seated next to window, Wallace Beales.



The machine division of Short & Mason, Limited, was small back in the old days but the products turned out had a world-wide reputation for beauty and precision, even as they have today.



G. Elbert Taylor succeeded Frank Taylor as president of the Company in 1900, thereby becoming the third chief executive of the organization. He held the post till 1910. His son, Fred Taylor, is at present a vice president.

Those were formative years in which the Company was gradually becoming established and was gaining a reputation for square dealing and for accurate products in a highly specialized field. It was an era of hand labor, of the craftsman who could make a finished product all by himself. Machinery, mass production and the assembly line were in the future.

Rochester by 1880 had nearly 90,000 inhabitants and was surely and steadily forging ahead industrially and commercially. The new State Line Railroad, later the Buffalo, Rochester & Pittsburgh, had been completed and tapped the coal fields of Pennsylvania. The New York Central in the 1880's elevated its tracks through the downtown section and built a new station on Cen-

tral Avenue, east of North St. Paul Street. H. H. Warner and the other patent medicine kings were in full flower. In 1883 W. S. Kimball's cigaret and tobacco factory employed 800 hands, the largest force in any one industry. Bausch & Lomb was building the largest optical factory in the world. A young bank clerk named George Eastman had invented a machine for coating photographic dry plates and a whip manufacturer named Henry A. Strong backed his young friend. In 1888, the firm put out a small box camera called the Kodak, and an industrial saga was begun.

### Solid Growth

In that expanding era, Taylor Bros. marched along, not spectacularly, but

with solid certitude. George Taylor handled the sales and office work while his brother took charge of the factory production and personally made all the tubes used in brewers' thermometers, an important line at the time.

Preserved among the records of the Company is an illustrated Taylor Bros. catalog and price list, dated January 1, 1877. Consisting of only six pages between a pinkish paper cover, it offered these articles "with a liberal (unstated) discount to the trade": common tin case and metallic case thermometers, flange dairy thermometers, dairy thermometers in common tin cases, cabinet thermometers with walnut cases, brewers' thermometers, barometers, churn thermometers, glass hydrometers, weather glasses and fever thermometers. That was the Taylor line 74 years ago.

The catalog did not indicate which of those products were made or assembled in the Rochester plant and which were imported. Certainly in 1877 the fever thermometers listed came from overseas. For it was not until 1866-67 that clinical thermometers, now a necessary adjunct to every sick room and every household, were in use, and then only in English hospitals. Few were known on the battlefields of the Civil War. Up into the 1880's virtually all the clinical thermometers were being made abroad.

So the year 1886 marks a milestone in Taylor history. That was the year that Elisha Benzoni, who had made fever thermometers in London, England, joined the staff. He was hired primarily to teach Taylor Bros. employees to make fever thermometers which the plant had not produced previously and which were in demand. Benzoni trained a crew of young men who became expert tube makers and foremen. Among them were Jimmy and Charlie Fahy and Lyman Greene. Elisha Benzoni remained with Taylor all the rest of his working days. He was the father of Herbert J. (Rip) Benzoni, a glittering name in Rochester football annals.

The trade also was demanding industrial thermometers for vulcanizers, process kettles and other uses, and Taylor Bros. had orders on their books for such instruments. At first the customary round tube bulbs were tried, with little success.

Then Benzoni stepped into the breach. Drawing on his experience in making fever thermometers and electric

light bulbs, he conceived the idea of using cylindrical bulbs for industrial thermometers and taught his crew to make them. While the bulbs thus turned out were satisfactory, the cases were crude and impractical.

In New York City the Hohmann and Maurer plant was beginning to turn out industrial thermometers that were in every way satisfactory, and Taylor became interested in the progress of this firm, of which A. B. Hohmann was president and Henry M. Maurer superintendent.

### Major Step

Temperature measurements in industrial processes were usually pretty crude in those days. Craftsmen had their particular and peculiar ways of judging whether a product was "done" or not; such as dropping a bit of paper on the surface and watching for changes in color, shape, etc.

The Industrial Thermometer was destined to eliminate this kind of "educated guesswork," and it became widely accepted in many American industries where its place is still secure. Hohmann and Maurer introduced many improvements in the functioning and design of their product as can be easily seen by comparing some of the original models now in the Taylor museum with present day specimens. Notable among them were the black oxidized scale finish with white numerals, and the detachable glass front that replaced the earlier styles whose glass front was held in place with putty.

Hohmann and Maurer's success led to Taylor Bros. forming a business alliance with the New York firm, and the eventual purchase of the business by Taylor, who moved the plant to Rochester in 1896, where for years it was operated as a separate division of the Company. At the time of the merger, Hohmann withdrew but Henry Maurer joined the Taylor organization and was an active official of the Company until 1924.

In 1886 young G. Elbert Taylor made the first of his many sales trips to Europe. That led to the development of a considerable foreign market.

George Taylor died in 1889. Thirty-eight years before, he and David Kendall had set up their first little shop. He had been instrumental in developing that two-man business into a sound and flourishing industry.

His death brought a change in the company's financial structure. Hitherto,

Taylor Bros. had been operated as a partnership. On January 20, 1890, it was incorporated as Taylor Bros. Company with a capitalization of \$75,000. That figure seems small today but \$75,000 "wasn't hay" in 1890. Frank Taylor became president under the new setup.

There were at first only two stockholders, Frank Taylor and his brother's widow. Shortly some stock was transferred to George Taylor's sons, J. Merton and G. Elbert. In 1896 another son, Charles W., received some stock, and at the same time the name of the first stockholder not a member of the Taylor family appeared on the books. That was Herbert J. Winn, who in March 1893 had begun work in the company's office, and who in later years was to become its president and an influential figure in its affairs, as well as a remembered leader in the business and civic life of Rochester.

### Watertown Addition

In 1891 another important step was taken—the purchase of the Watertown Thermometer Company which had been making weather instruments in the North Country city since 1886. It specialized in advertising thermometers. Taylor continued to operate it as a separate unit.

Another milestone of the eventful 1890's was the opening in 1891 of the first branch sales office, in New York City, where Charles W. Taylor took charge.

The minutes of the Board's meeting of January 1896 contains this prophetic item:

"Moved by J. M. Taylor and seconded by G. E. Taylor to take up the United States Navy business at once, as it was thought to be a good field."

Two years later, the United States went to war with Spain and sea power played a major part in that conflict, but there is no record that Taylor received any large Navy orders in 1898. However, in two later, greater wars, the Company did a large business with the United States Navy, and other branches of the Military Service.

The European business had grown so that in 1898 a branch office was opened in London, and Herbert Winn was put in charge. He expected to stay in England six months and remained six years. He was instrumental in the acquisition in 1900 of the important English firm of Short & Mason, makers of meteorological and other scientific instruments.

Winn for several years was its managing director.

In 1899 two floors of a building at 29 Elizabeth Street were leased for offices and the entire building at nearby 14 Hill Street was devoted to manufacturing.

With the turn of the century began a decade of tremendous expansion for the Taylor Company. The moving spirit in that expansion was G. Elbert Taylor who, in October 1900, became president, as successor to his uncle, Frank Taylor. G. Elbert Taylor was a man of bold imagination and ever sought new fields to conquer. He was deeply interested in the foreign market and spent much time abroad. He is remembered as a master salesman-promoter of great vitality.

His older brother, J. Merton, was a practical factory man, with every detail of the plant at his fingertips. He is remembered with affection by old time employees because of his fair, generous and kindly relations with all his associates. They recall how J. M. used to carry the Company pay schedule in a long leather wallet that stuck out of his back pocket.

Events moved swiftly in the new order signaled by G. E. Taylor's taking the helm. The three companies, Hohmann and Maurer, Watertown Thermometer and Short & Mason, which had been operated as individual corporate units, were purchased outright.

A large number of new stockholders were added to the rolls of Taylor Bros. Company and the policy, since followed, of allowing key men in the organization to acquire stock, was begun. And for the first time Taylor stock was made available to Rochester business men. Edward Bausch, John M. Taylor, the hat and glove manufacturer—not a relative, and William H. Driscoll, the Company attorney, were added to the Board—the first members not of the Taylor clan.

Other signposts of expanding business in the early years of the century under the new regime, were the opening of a second American branch office, in Chicago, and increased expenditures for advertising the Taylor products.

The year 1904, when Teddy Roosevelt was in the White House and downtown Rochester boasted some 180,000 inhabitants, was an epochal one in the history of the Taylor Company.

The leather-bound, 266-page Taylor



Bros. Company catalog of that year offers a striking contrast to the six-page paper pamphlet of 1877. A vast array of precision instruments had been added to the little line, mostly weather thermometers, that had been listed only 27 years before.

In 1904 the trade was offered thermometers for every conceivable use—for confectioners, for dairymen, for brewers, for hop curing, for maple syrup makers, for railroad coaches, railway track laying, as well as pocket size models for travelers. There were incubator thermometers, steam and power plant gages and hypodermic syringes. Ten pages were devoted to clinical thermometers, which had been an imported novelty in 1877. And there was the whole Short & Mason line of meteorological and other scientific instruments which included barometers, boat compasses, sun dials and altitude indicators.

A picturesque item was "The Weather Cottage" or "Swiss Barometer," which was "so adjusted that with the approach of fair weather, the male figure is drawn back into the house and the female figure emerges, but an approaching storm reverses the position of the figures."

Among household thermometers was the "radial scale" type, invented by G. Elbert Taylor and designed "to suspend by an accompanying chain and snap from the chandelier or gas bracket," a nostalgic reminder of "gas light" days.

Advertising thermometers were designed to symbolize various businesses. A coal dealer could buy one in the shape of a coal scuttle, a hatter in the form of a hat, a haberdasher in the shape of a shirt, and so on.

By 1904 much of the old hand operations had been supplanted by machinery, but the stamping (naming) of thermometers was still being done by hand.

It is recalled that there were no time clocks to punch in those days. Employees on coming to work wrote the hour of arrival on a sheet of paper hanging on the wall. Sometimes the paper got lost or was torn. At that time the Company had more than 300 employees. In 1890 there were only 60. The business was being carried on in three separate buildings, with insufficient space in any of them.

### The Big Decision

Faced by an imperative demand for larger quarters, Taylor Bros. Company on September 6, 1904, announced a

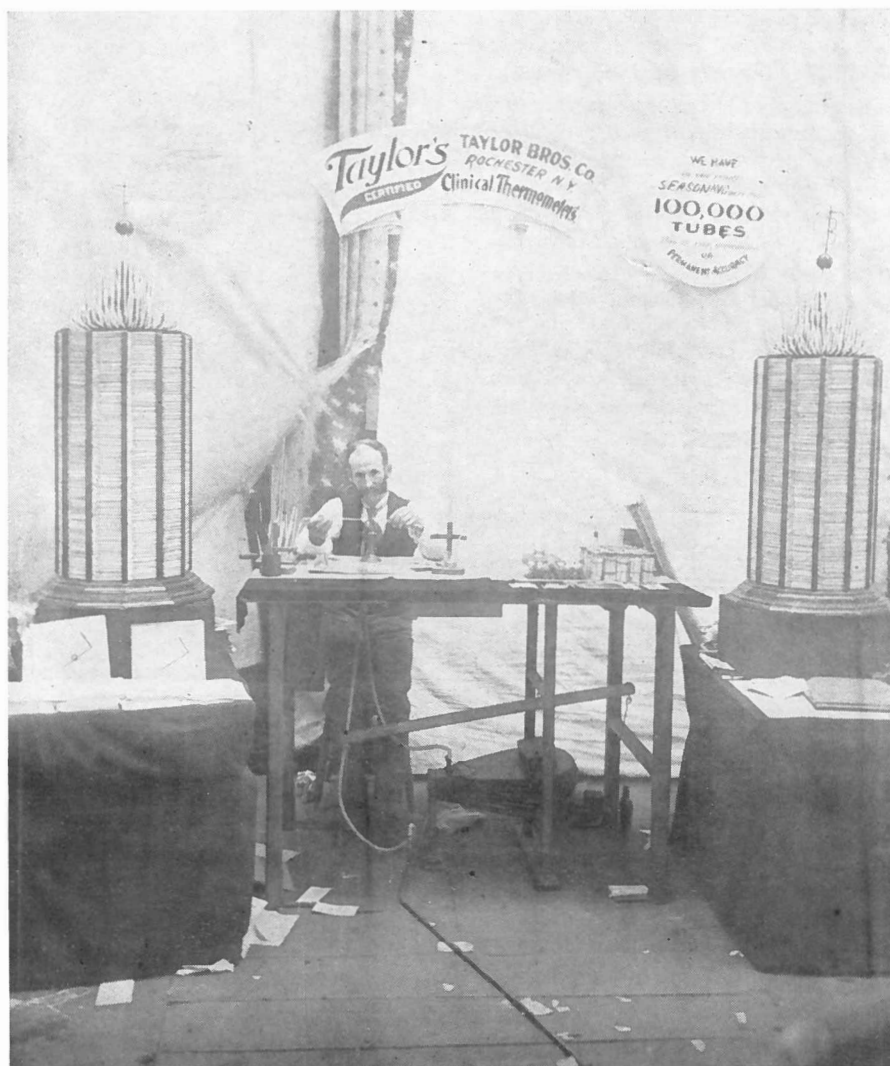
bold move. A site for a large new factory was purchased in Ames Street, south of the main line of the New York Central and the B. R. & P. tracks and near West Avenue. The site had a frontage of 310 feet and a depth of 322 feet. Plans were drawn for a factory with 60,000 square feet of floor space.

Hitherto, Taylor's plant had always been in or near the downtown section—in Hill Street most of the 53 years of its existence. Ames Street in those days was considered way out in the country. It was a residential section, with no hint of its future industrialization.

But George Eastman had set an example by building his Kodak Park plant far down Lake Avenue in the then Town of Greece. Rochester was expanding in every way. The huge new Sibley

store had risen at Main and Clinton to supplant the one swept by fire near the St. Paul Street corner. A new State Armory on East Main Street and a new Public Market were under way. Work was being pushed on the Barge Canal in the Town of Greece and on the new Cobb's Hill Reservoir. Interurban trolleys were clattering off in all directions on newly-laid tracks.

Even while its new factory was being built, the Taylor firm did not halt its general program of expansion. In 1905 two more companies were acquired. They were the Davis & Roesch Temperature Controlling Company of Newark, N. J., makers of control devices, and the R. Hoehn Company of Brooklyn, manufacturers of commercial type and fever thermometers. The owner of the



John Lane was always known as the dean of thermometer makers, having started work in 1871. Here he is at some exhibit demonstrating the art. Note the source of his compressed air.

Hoehn Company, Isaac Mayer, joined the Taylor management, moved to Rochester and was for years an official of the Company.

In 1905, also, the third American branch office was opened, in Boston, with H. J. Winn (home from England) as its manager.

### "The Good Old Days"

A sidelight on the times is a notation in the minutes of the Board dated December 1905, just before Taylor bade farewell to Hill Street. J. M. Taylor told of his difficulty in obtaining competent help because of the ten-hour day in the plant, while some other factories had a nine-hour day. He was authorized to reduce working hours to conform to the new trend.

Some departments were moved from Hill Street to the West Side site in the summer and fall of 1905, and early in 1906 the new plant was complete.

Still remembered is the gala Christmas dance for employees and their families in the new plant on December 21, 1905. It was a sort of "dedication." Everybody from charwomen to the "top brass" was there, and J. Merton Taylor and his wife proudly led the grand march.

The Taylor staff left Hill Street with many memories. Some of them had worked there a long time. They never forgot old times there and such friends as Sanford "Sandy" Langlois, the engineer-boiler stoker, who made razor strops in his spare time. They remembered the canal boats and the towpath and the color that once pervaded the old street now called Industrial.

In 1906, which was still the "horse and buggy" age, Ames Street did seem "way out in the country." The city line was at Hague Street and that was the end of the street car line, too. Only recently the trolley tracks had been extended from the Bull's Head. Around

that historic crossroads, the residential section clustered and the popular J. M. Taylor, who lived on Kenwood Avenue, assured his neighbors that the smoke from the new Ames Street factory would not trouble them.

There were only a few houses in the immediate neighborhood of the new plant. Apple orchards stretched around it and Jersey cattle cropped the grass on the nearby estate of Judge Henry G. Danforth. It was almost a pastoral setting into which Taylor Bros. Company moved in 1906.

And gazing at the new two-story factory with its three wings, built in the shape of the letter "E", G. Elbert Taylor was heard to remark:

"We'll fill it some day."

That day came in short order, and today the factory that was new 45 years ago is only a small segment of the Taylor Instrument Companies' sprawling plant in one of Rochester's most important industrial areas.



This rare print from the collection of P. R. Jameson was the front of the building as it looked sometime between 1906 and 1912. It was taken by George Helmbold of Dept. 5.

## PART III

**T**he first faint dawn of a new day was streaking the industrial sky in 1906, the year that Taylor Bros. began operations in the new plant on Ames Street, "way out in the country beyond the Bull's Head."

It still was the horse and buggy era but there were significant portents of a new order. One herald of the coming mass production machine age was the "horseless carriage." Only a few of the new vehicles were chugging around Rochester in 1906, scaring carriage horses and eternally breaking down. Skeptics called the automobile a passing fad and many a stranded autoist in linen duster and goggles and his lady, swathed in veils, had to listen to the taunting cry: "Get a horse!" They little knew that in a few short years the derided motor car was to revolutionize a people's way of life.

There was another portent, in the sky literally. That was the aeroplane (1906 spelling). Late in 1903 the Wright brothers had proved to an unbelieving world that man could fly, and by 1906 other pioneers were risking their necks in frail crate-like flying machines. An industry was being born that would mean much to Taylor in future years.

Despite the new "gadgets" on the highways and in the skies, it still was the era of the craftsman who worked from his experience and not from blueprints. Science had not yet become the handmaiden of industry. There were no draftsmen, no laboratory technicians, no sales engineers in the Taylor organization that in 1906 moved from Hill Street beside the old Canal to the far West Side.

It did not take that organization long to learn the new techniques and adjust itself to the new order. In the years of industrial transition that followed the Company's removal to its new plant, its record is one of steady advance. Often it led its field in developing new devices for industrial processing.

In 1907, the second year in the new factory, the Company took a forward step to end confusion and duplication of lines being made by several separate units. Taylor Bros. and the affiliates were consolidated into a new corporation, the Taylor Instrument Companies.

Shortly the word "Tycos" was adopted as the trade mark for Taylor

Instrument products. Gradually all the older trade marks used by the various companies were dropped and their products became a part of the general Taylor line. "Tycos" was used almost exclusively until 1932, when the trade mark, "Taylor," was substituted. However, the "Tycos" name still clings to the sphygmomanometer line and a deluxe brand of fever thermometer.

In 1908 the Company recognized the need of providing a place where employees could eat their noonday meals. In those days most workers carried dinner pails from their homes to their shops. "The Full Dinner Pail" had been used successfully as a slogan by the Republicans in the McKinley campaigns.

That dining room was the forerunner of the present large plant cafeteria which can seat about 750. The price of a full meal remained at 25 cents until 1947 when it was raised to 35 cents. In 1949 it became 35 cents without dessert, 45 cents with dessert. The Company cheerfully absorbs the deficit resulting from the operation of its cafeteria as "a good investment."

In 1908 Taylor made an arrangement with German manufacturers to handle their line of recording instruments on this continent. Early in 1909 two of the instruments were ordered by the City of Chicago "in connection with the milk pasteurizer to be used under the new regulations of the Chicago Board of Health." Chicago, if not the first, was among the first cities to require pasteurization of milk.

Within two months, an additional 100 instruments were ordered. J. Merton Taylor, in charge of production, saw the possibilities in this new market and experiments were started in making the recorders in the Rochester plant. The first appropriation for the experiment was the modest sum of \$100.

By February 1910, the development of capillary type recording thermometers had progressed so that the factory made up 25 of them, with distinct improvements on the German model. By May, 250 were being processed, indicating the rapid growth of the line. Making of instruments for the dairy industry has always been an important part of the Taylor output.

### First Sphygs

Around 1905, the medical profession

began to demand accurate portable instruments for determining blood pressure of patients. The Short & Mason division in England and the Rochester factory began experimental work on such instruments in conjunction with Dr. Rogers of the New York Life Insurance Company. In 1907 the first ones were released for general sale. Made in England, they were called the Dr. Rogers Tycos Sphygmomanometers.

By April 1910, 1,000 of the instruments were being made in Rochester, and early in 1911 the first American made sphygmomanometers were put on the market. At first they were imitations of the Short & Mason product. Later many improvements, originating in Rochester, were added. That was only one of the Company's many contributions through the years to medical science.

About that time, N. W. Ayer & Son of Philadelphia became advertising agents for Taylor, the first employment of a national agency to handle its advertising.

At that time the incubator thermometer business ran into hundreds of thousands of pieces a year. It was before the days of large automatically controlled incubators, and small glass tube thermometers and hygrometers were used in relatively small incubators of the period.

Another important line was the advertising thermometers. They were made in Watertown and the sales and office work conducted from Rochester.

Late in 1909, P. Richard Jameson, who had made the first selling trips to America for Short & Mason, started out from Rochester on a sales trip that was to take him around the world and that lasted an entire year. Travel was slower in those days. It was a milestone in Taylor sales history for it was the first introduction of the Company's line to Asia, Africa and Australia. The man who made the world trip is now a vice president of the Company and senior executive in point of service.

In 1910 the era of expansion through purchase and consolidation of rival companies came to an end. G. Elbert Taylor resigned as president and director, and his brother, J. Merton, was elected president.

Steps were being taken during these years to strengthen the position of the





Herbert J. Winn who was president of the Company from 1913 to 1938 when he became Chairman of the Board. He remained in this office until his death in 1945.



J. Merton Taylor was associated with the Company from the time he was a very young man. He became president in 1910 and died suddenly in 1913.

Company nationally and to consolidate the gains made in the decade of rapid expansion. One of the first moves was the closing of the Watertown Thermometer Company plant and moving much of its equipment to Rochester. New factory buildings were erected to take care of the Watertown production and a new power plant added. These projects added 16,000 square feet to the plant's floor space. Many Watertown employees came to Rochester at the time the plant was moved here and many of them are still with the Company.

Taylor made history early in 1911 by establishing what is believed to have been the first research department in the American instrument industry. It was J. Merton Taylor's idea and H. Y. Norwood, who retired only last sum-

mer, was placed in charge. From the new unit stemmed the later engineering and research departments.

Also in 1911, the first Company hospital was opened. A trained nurse was added to the staff in 1916. Now a physician and three full-time nurses are employed to handle 18,000 cases a year.

Expanding business, particularly in the control instrument line, led to an extensive building program which was completed in 1913. A third floor was added, surmounted by the distinctive dome that is a landmark of the West Side. The green dome is symbolic of observatory science and within it are inscribed the names of great scientists and the names and pictures of the founding fathers and later leaders of the Taylor industry.

The year 1913 saw the adoption of the Saturday afternoon holiday, with the reduction of the work week from 54 to 52½ hours.

It also saw the death of a well-loved leader, President J. Merton Taylor, and the appointment of another esteemed executive, Herbert J. Winn, to the presidency. Mr. Winn had been with the Company since 1893, had been treasurer since 1907 and he was to serve as president for a quarter of a century, until 1938 when he became Chairman of the Board. The name of Herbert J. Winn is a shining one in the annals of the Taylor Company.

### Still in Operation

It was also in 1913 that Lewis B. Swift, now president of the Company

## A Distinguished Company

This picture was taken at Manitou in August of 1916. L. to r.: Joseph Vogel, Ferd Smith, Frank Taylor, John Lane, Herbert Winn, Isaac Mayer; H. W. Maurer, Sr.; John Taylor, Pat Kane, Henry Dummer, Lyman Greene, Charles Fahy.



and then head of the recorder sales department, installed the 40-foot capillary tube thermometer for recording outside temperatures that still stands in the lobby of the main offices. In all these 37 years it has never been taken down, and it has kept an accurate record through two wars and all kinds of Western New York weather.

The next year was marked by development of the first electric contact controller for use in the then rapidly flowering automobile plants of the Middle West. The instrument industry was to play an important part in the tremendous production of the "horseless carriage."

After 1913 came a steady expansion of the Company's sales and service facilities. Branch sales offices were opened in Philadelphia, St. Louis, Toronto (the first in Canada) and Washington. The Central and South American markets were opened and an export sales department established.

During that period, industrial manufacturing methods were virtually revolutionized as science pointed the way to safer, better and more economical production through the use of indicating, recording and control instruments of the type made by Taylor. Of prime importance was the development of instruments that controlled as well as recorded.

When Europe went to war in 1914, the tramp of the Kaiser's goose-stepping armies and the roar of the defending guns of the Allies had their impact on Rochester and the Taylor plant during the anxious years before 1917 when the United States entered the conflict.

### First Fighting Planes

For the first time, aircraft was used in a major war. In 1914 leading American airplane manufacturers who had contracts with foreign governments ap-

proached Taylor in regard to making altitude barometers for planes. Hitherto, such instruments had been made only in England and in Continental Europe. Taylor submitted a sample in ten days. The plant here had been doing experimental work for two years. The first order in 1914 was for 47 airplane barometers. They were the first made in America. They read to 7,000 feet, indicating that was the limit to which planes could soar in 1914.

During 1915 and 1916 this instrument, which was five inches in diameter and weighed 2½ pounds, was made for virtually all United States airplane manufacturers and was standard equipment for most of the craft of the period. The 7,000-foot scale proved insufficient and gradually the range was extended to 16,000 feet. Up to the time America entered the war, 1,449 of these instruments had been produced.

With the rapid advance in both plane and instrument design stimulated by

the war, it became evident that a smaller altimeter with a higher range was needed. Short & Mason in London was making such an instrument for the British government and the United States War Department accepted the English design with slight modifications. The new instrument was much smaller in diameter and weighed only 14 ounces.

In September 1917, the government ordered 10,000 of these instruments and deliveries started in a short time. The range was stepped up to 30,000 feet and before the war ended, nearly 40,000 had been made and accepted by Uncle Sam. Taylor made 99 per cent of the altimeters used by United States airmen in World War I.

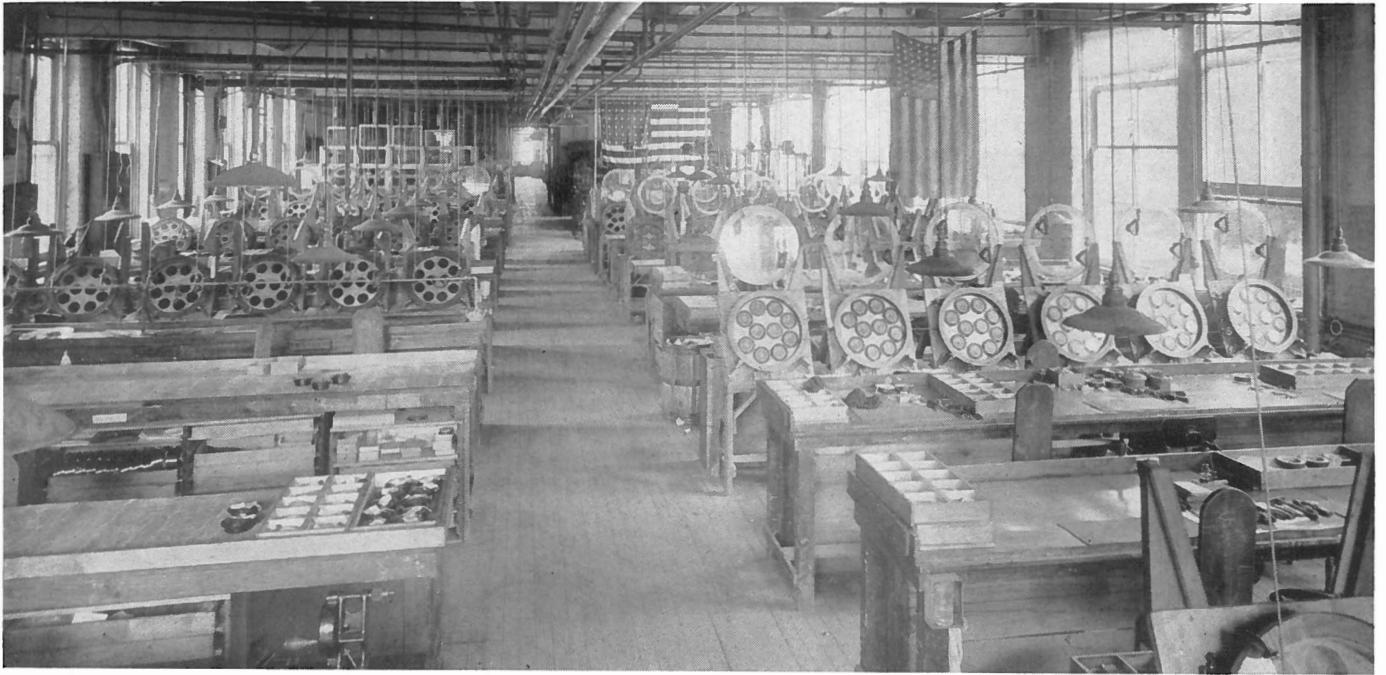
### Other War Jobs

The plant also made other types of barometers for government use, including an altimeter for the Engineer Corps, brass case barometers for the Navy, the



## Proud Day

This was a ceremony marking the dedication of the Servicemen's Flag during World War I. The address is being delivered by The Rev. David Lincoln Ferris, then Rector of Christ Church, Rochester, and later the first Bishop of the Episcopal Diocese of Rochester.



Here is how Department 14 looked during World War I when we were supplying nearly 100 per cent of the altimeters for the Air Corps.



The Tycos Quarter Century Club of 1919 (1) E. A. Linder; (2) Jack Thompson; (15) George Grover; (16) Martin Goebel; (17) Bill O'Brien; (3) Joe Vogel; (4) T. M. Stewart; (5) Lyman Lou Pritzbure; (18) Charles Fahy; (19) James Fahy; (20) E. Greene; (6) Ella Thompson; (7) Sanford Langlois; (8) H. W. Benzoni; (21) J. Schatzlein; (22) A. Beiseigel; (23) Ferd Smith; Maurer, Sr.; (9) J. Fox; (10) H. W. Bradfield; (11) George (24) Hannah Smith; (25) John Lane; (26) H. J. Winn; (27) Helmbold; (12) William Helmbold; (13) Frank Baker; (14) P. Kane; (28) A. Smith; (29) J. Hammond; (30) L. Merklinger.



Emergency Fleet Corporation and the Army Signal Corps. For the Air Corps Taylor made airplane inclinometers, stratasopes and equipment for feeding oxygen automatically to airmen when flying at high altitudes. All of these instruments totalled 17,000.

Rochester's Preparedness Parade of June 10, 1916, found a large delegation of Taylor employees marching in the rain. Also that June, the Tycos News, first employee publication, made its debut. That first issue announced the suggestion system, under which employees were rewarded for ideas, a system that has been in effect ever since.

Of prime scientific importance was the establishment in 1916 of the first chemical laboratory.

The entrance of the United States into the war brought a tremendous increase in production with corresponding addition to factory, personnel, equipment and products. Employees increased by 112 per cent, from 600 to 1,270 at the peak, and payrolls increased 272 per cent.

The war brought a heavy demand for pocket compasses. Previously, the line had been made by Short & Mason in England. The Rochester plant received its first order from Uncle Sam in June 1917, to be delivered at a rate of 2,000 a month. By October the monthly output reached 52,000, and that figure was maintained throughout the war. A special building for making compasses alone was erected and 22 days after construction started, manufacturing operations were actually in progress. All told, more than 800,000 of these instruments were delivered before war's end.

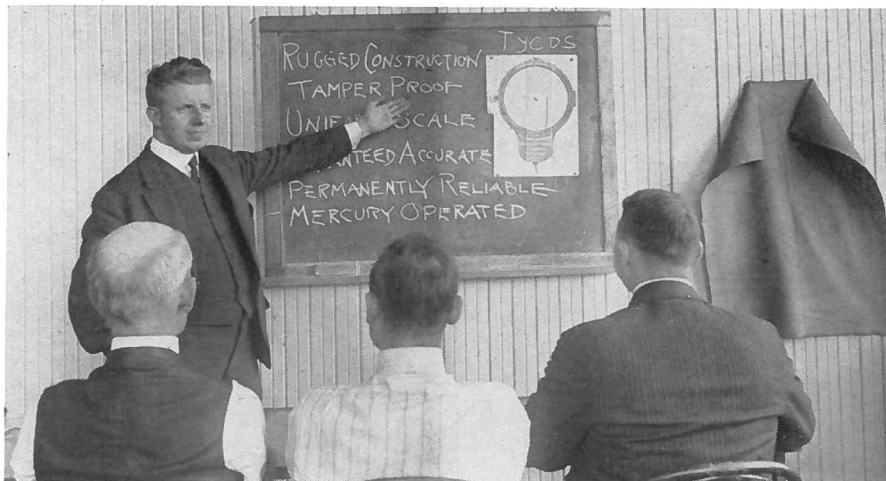
### Etched-Stems

There, also, was a heavy war-born demand for fever thermometers. Production was built up from a pre-war average of 3,000 pieces per week to nearly 10,000. At the same time, industry was using other types of etched stem thermometers made in the same department that produced the fever thermometers.

In the first World War, manufacturers were limited in the production of civilian goods only by their ability to obtain materials. Of course, war orders received priority. During the war Taylor's production of industrial thermometers nearly doubled. Even greater rises were noted in the sale of regulating devices and recording and index thermometers.



This picture taken in 1913 holds special interest today because it reveals the old smoke-stack, the old water tower and the fast freight carriers of the times.



Lewis B. Swift tells a small but interested audience about the wonders of the Taylor pear-shaped Recorder.



This was the day of the "horseless carriage." The picture was taken prior to 1913 and shows the Pierce-Arrow belonging to Isaac Mayer (front seat). With him in the back, l. to r., are P. R. Jameson, H. W. Kimmel and A. B. Maurer.



Expanding production brought about purchases of land for factory use extending to the Buffalo, Rochester & Pittsburgh (now Baltimore & Ohio) Railway tracks in 1917. The next year property along Ames Street to West Avenue was acquired. There a factory was built for making altimeters, but the war ended before it was completed and the building became a storeroom. The remainder of the land was used as an athletic field.

In that other war more than 30 years ago, the fires of patriotic fervor burned brightly. A total of 128 Taylor employees followed the Colors into the armed services. Two of them made the supreme sacrifice. On the home front, amid the strains of "Over There" and "The Long, Long Trail," there were flag raisings, rallies, drives for funds for "smokes", Liberty Loan campaigns, knitting and sewing groups. The Tycos (now Taylor) Fellowship Club, formed in 1918 with 700 members and still going strong, took over many of those activities during the war. The social and athletic activities of the plant have been centered in this Club since its inception during the first World War.

Then there came an autumn day in 1918 when the old City Hall bell rang out glad news and all the factories closed and the workers rushed up town to take part in the most joyous and biggest celebration the town had ever known. The day was November 11, 1918, the first Armistice Day. Three days earlier there had been a false re-

port of peace but this was the real thing.

Taylor's service to the government in the war did not pass unnoticed. The Company received a certificate from the War Department in recognition of "the distinguished service, the loyalty, energy and efficiency in the performance of the war work by which the Taylor Instrument Companies aided materially in obtaining victory for the arms of the United States." That was the equivalent of the "E" award the Company received in another war 25 years later.

The war accelerated the development of many new devices, notably in the chemical and explosives fields. It proved that the instrument industry is a key stone in the wall of our national defense. It also vindicated the morale-building efforts of the Company because many of the employees hired for the wartime emergency remained with the Company, some of them to the end of their lives.

An important post-war development was the setting up in 1919 of a sales engineering department in charge of Lewis B. Swift. It exemplified the new scientific approach. Instead of having a salesman call and take an order, the Company now could send skilled engineers into a plant to survey its industrial needs and offer scientific advice as well as equipment.

### Steady Advance

Through the 1920's, the Taylor Com-

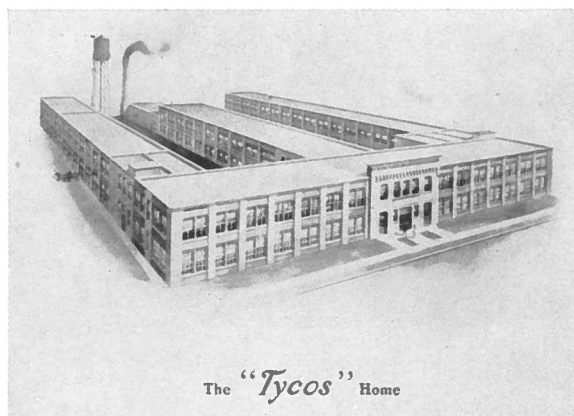
pany kept an even keel, gradually expanding its plant and sales organization, but not falling into the pitfall of over-extension, as did many other companies in that gaudy, roaring, dizzy decade.

Branch offices were opened in Cincinnati, Cleveland, Los Angeles, Seattle and Tulsa. Death took some of the older executives and former executives of the Company, among them Isaac Meyer, who had remained with Taylor after the purchase of his R. Hoehn Company; and former President G. Elbert Taylor who died on July 2, 1923.

In 1928 a \$56,000 factory building program was put through and in 1930 a new \$200,000 power plant was constructed. It was thought that this plant would be large enough to serve for all time. But when the second World War came, the plant was hard pressed to meet the demands on it.

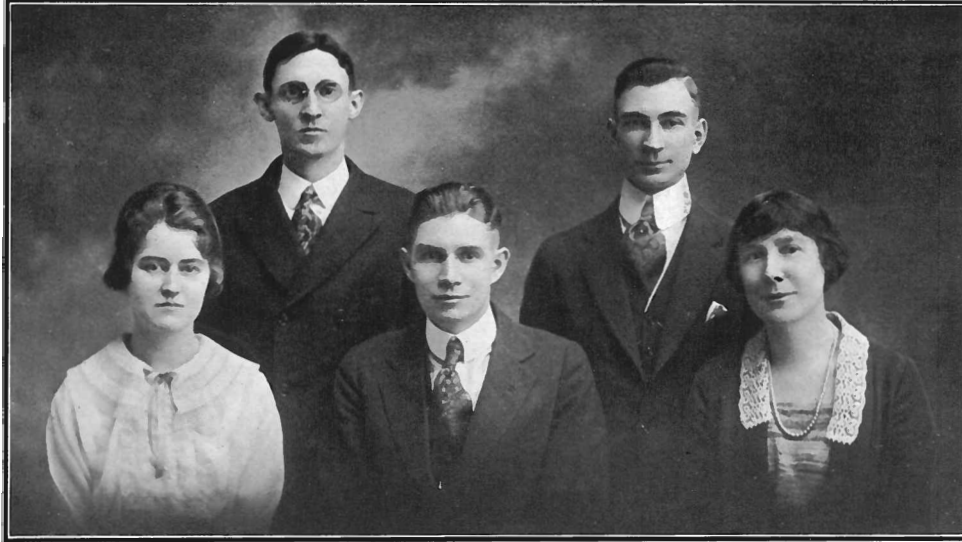
America's mad ride on the market band wagon ended on a fall day in 1929 when the economic pillars crumbled in Wall Street, and the shadow of history's worst financial depression crept across the land.

Industry almost immediately felt the impact of the crash. But there was no panic on the quarter deck of the Taylor ship. Its captain had steered a firm, straight course. The craft was staunch and tight. In its eighty years it had weathered other storms. It faced this one without shrinking and with confidence.



The only picture in existence of the plant as it looked originally is this architect's drawing. When the building was actually completed, the wings were shorter than shown here. The total area of the 1905 plant was 60,000 sq. ft.

# When the Fellowship Club was Young



These are the elected officers of the Tycos Fellowship Club in 1920. Front row, l. to r.: Marguerite Beck, financial secretary; William H. Calver, president; Elizabeth McNerney, recording secretary. Back row, l. to r.: Herbert Noble, treasurer; Tony Schatzlein, vice president.

The Taylor Fellowship Club was formally organized on March 15, 1918, when 600 Taylor people assembled in the company offices to hear the proposed "articles of incorporation" and act favorably upon them. From old reports in the April 1918 issue of the employee publication "Tycos-Fellowship,"

it appears that a "House of Representatives" made up of personnel from every department in the plant was charged with the actual launching of the club. It appointed a nominating committee which brought in a single slate of officers as follows: S. P. Gartland, presi-

dent; W. H. Calver, vice president; A. J. Schatzlein, secretary; D. C. Barry, treasurer. Directors nominated were, F. M. Herrick, F. B. Smith, Curtis Hart, Mae Bird. All officers and directors were elected by a single ballot cast by temporary secretary Tony Schatzlein.

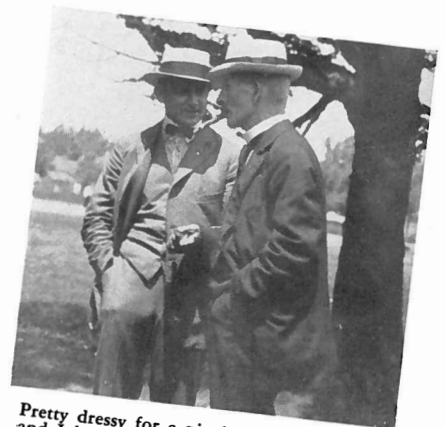
In commenting on the organization



The "roaring 20's" those days were called, but not because of the automobiles. In this group are, l. to r.: Reine Cone, Everett Newell, Elizabeth Houston, Art Underwood, Mary Ward.



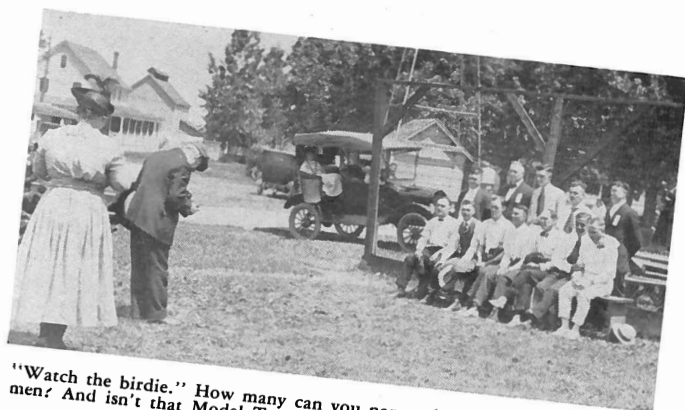
The happy faces under these extensive hats are Lucy Scheg and Marguerite LaVien.



Pretty dressy for a picnic are Paul Heuser and John Lane.



Probably a little story telling going on here. L. to r.: Ed Rosenhagen, Ray Taylor, George Voss, Frank King.



"Watch the birdie." How many can you name of these picnicking Taylor men? And isn't that Model T a sleek job?

of the Club in "Tycos-Fellowship," the late William F. Johnson, employment and service manager, said "... our Tycos Fellowship Club is underway and what a start and what a promise of a hope fulfilled! Just one year to a day from the time the inspiration of a Tycos Fellowship Club was received,



Jack Thompson and "his girls" held a picnic "several years ago." Do you remember (front, l. to r.) Hilda Pasch, Mary Traub, Jack Thompson; (back row, l. to r.) Minnie Bealer, Alice Humphries, Ida Cook, Marie Hetzler, Jennie Leurgans, Anna Leurgans?

we held our first regular meeting."

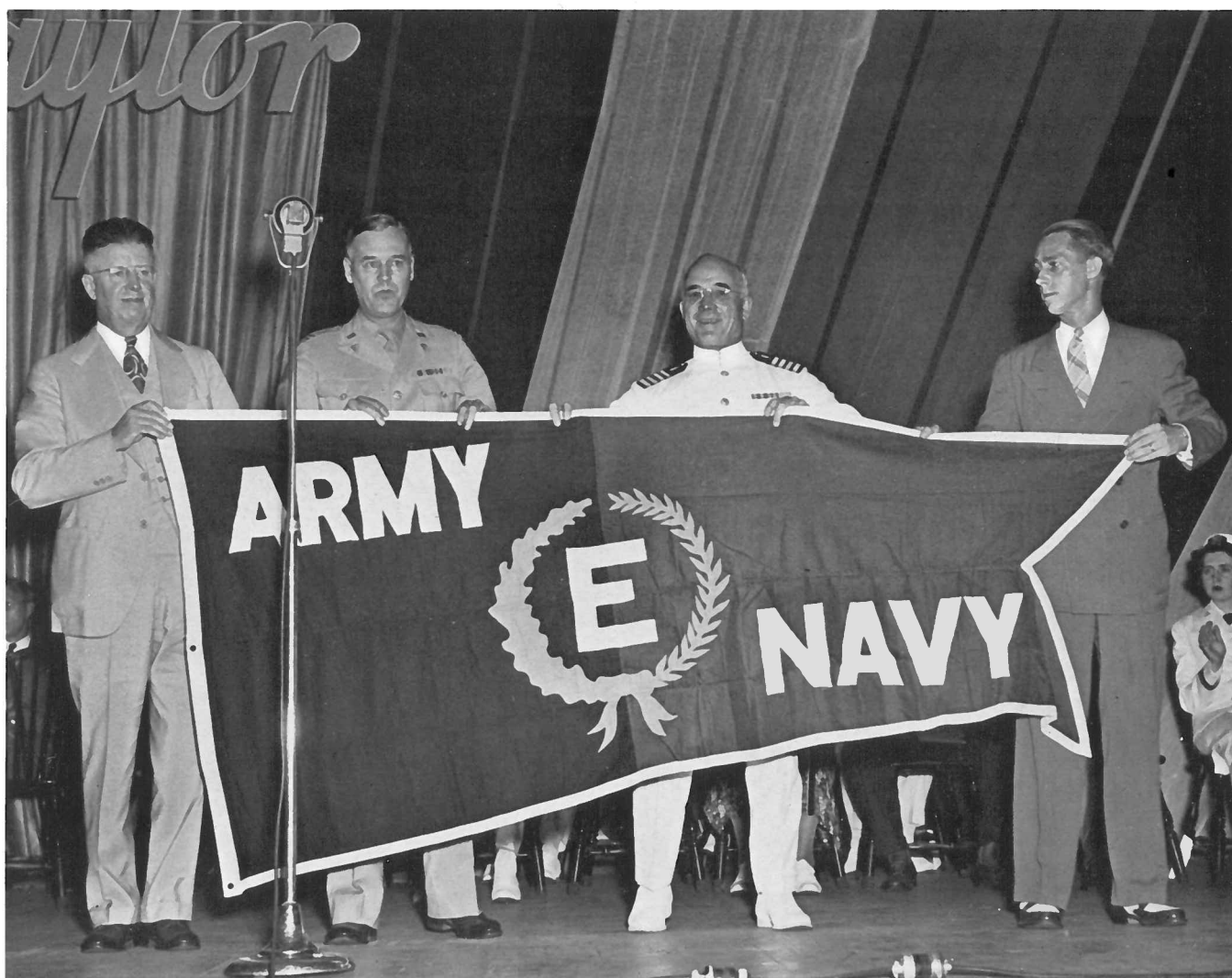
Today the Club has over 2,000 members and the program has been expanded to include activities of interest to just about everyone. But the dues are still one dollar a year just as they were in 1918.



Striped silk shirts and "buns" were the order of the day thirty years ago. Front row, l. to r.: Bill and Harold Duffus. Second row, l. to r.: Leila Johnson, Lucretia Paugh, Nettie Hofschneider, Laura Linden. Third row, l. to r.: Marguerite Brath, Helen Dembs, Peggy Redding, Rena Lorenz, Dorothy MacDonald.



The picnic committee poses. You'll recognize some familiar faces here. Kneeling, l. to r.: Henry Dummer, Tony Schatzlein. Second row, l. to r.: George Earle, Leo Fox, Ferd Smith, George Whitehead (?). Third row, l. to r.: Charlie Wilson, Ray Foster.



On July 29, 1943, Taylor men and women were presented with the Army-Navy "E," "for high achievement in the production of materials needed by the Armed Forces." The ceremony took place at the Eastman Theater.

## PART IV

**A**ny craft can skim gracefully over placid, sunlit waters. It is the storm that tests the mettle of a ship and of its crew. The good ship "Taylor" kept her colors bravely flying amid the greatest economic storm in history.

The depression years of 1931-1933 were dark ones for the Taylor Instrument Companies, as they were for every industry in the land. Sales in all lines were down. The only years in the long history of the Company when operations showed a net loss were those of 1932 and 1933.

Yet, even when the skies were blackest, Taylor, not content merely to ride out the tempest, courageously plunged ahead in two fields of operation.

One was in design. The noted industrial designer, Walter Dorwin Teague, was engaged to restyle many of the Company's products, particularly in the Commercial Division. He also introduced new ideas in the industrial instrument line.

The other bold step was in the field of advertising. The Company, putting its advertising and publicity in the hands of the nationally known firm of Batten, Barton, Durstine & Osborn, em-

barked on an extensive campaign which included much wider use of advertising in magazines of national circulation. At the same time the trade mark, "Tycos" was subordinated to the name "Taylor."

New captains came to the fore in 1938 when Herbert J. Winn resigned as president and treasurer. Lewis B. Swift, head of the Engineering Department, was chosen president and Herbert J. Noble was named treasurer. Shortly a new office, that of Chairman of the Board, was created and Mr. Winn elected to that position. In this capacity, although shifting many of his duties to younger shoulders, he was still able to



give guidance and counsel to the organization he had served so long.

The new president, Lewis B. Swift, had started working for Taylor in 1904. From 1908 to 1912, while he was a student at Cornell University, he worked at the plant during summer vacations. On his graduation in 1912, he returned on a full-time basis. He rose to head of the Sales Engineering Department in 1919, and chief engineer and a member of the Board in 1928. Mr. Noble began with Taylor in 1907 and advanced to the office of controller before taking the treasurer's post. The new captains were capable and experienced men and now in 1951, Taylor's Centennial Year, they are still at the helm.

The 1930's, a period that saw the United States battling the economic crisis, also saw the war clouds gathering in Europe as mad Adolf Hitler fashioned the military monster that was to challenge civilization.

During those years between the wars, the Taylor Company was advancing surely, steadily, with little fanfare, in its field. Engineering research and development were stressed as never before. New equipment was replacing the old and obsolete. Science was on the march, especially in the medical and industrial fields.

So when Hitler sent his armored legions blitzing across Poland in September of 1939 and plunged the world into war, the Rochester plant under the green dome was ready for the unprecedented demands to be made upon its skill and its production capacity.

### Fulscope Introduced

A most significant event of the historic year of 1939 was Taylor's development of the new line of air-operated FULSCOPE\* recording and indicating controllers. It gave industry an instrument unparalleled in adjustability, interchangeability and durability. It came at a fortuitous time, particularly to aid new war-born industries such as plants producing synthetic rubber and high octane gasoline.

During 1940 and 1941 the war brought a heavy demand for Taylor instruments from concerns that were producing materials for the Allies and for the American defense.

That volume was a mere trickle, however, compared to the torrent of demands made on the industry after the Japanese sneak attack on Pearl Harbor in December of 1941 brought the

United States into the global conflict.

There is no more glittering chapter in the Taylor story than the Company's record of service to its country in the second World War.

Almost immediately the armed services, other government agencies and industry wanted Taylor instruments. The urgency gave the instrument industry a new status in "the arsenal of democracy." The war production mobilizers came to recognize the vital importance of precision instruments. They learned such products could not be turned out like mess kits, and they increased the priority status of the industry accordingly.

### First War Fatality

As in the first World War, the plant turned out enormous quantities of compasses of standard and of new design for the armed forces. It happened that on April 14, 1943, the day that Taylor produced its one millionth compass for the Army and presented it to an Army captain in an informal ceremony in the factory dining room, the first Taylor employee to die for his country in the war, Lt. William D. Sells, a twice-decorated airman, was killed in Southwest Pacific action.

The demands of the Medical Corps for sphygmomanometers was so great that for a short time none was made for civilian use. Manufacture of all types of weather thermometers ceased early in 1942 to allow concentration solely on war material. No barometers or hygrometers were available for civilian use. The old World War I type of altimeter was discarded but vast numbers of altitude barometers, brass case and other styles of barometers, were produced for the armed services.

With the use of many metals severely restricted, many substitutes were evolved, especially in the plastic field. An example was the Navy type Six's thermometer, of which thousands were made. Use of molded plastic for the cases produced a lighter, and generally more satisfactory instrument—and saved many a ton of brass.

The Company supplied a major share of the industrial type mercury-in-glass thermometers used by the Maritime Commission in its vast shipbuilding program. Taylor also furnished many of the same type of thermometers, as well as electric contact thermometers and other instruments used on the Navy's submarines, destroyers, aircraft

carriers and men of war.

The plant also handled several sub-contracts for other manufacturers. It made air speed indicators for an airplane instrument company. They were extremely delicate instruments and a new department was set up for their production. Another sub-contract covered tools for a maker of shell cases. From Bausch & Lomb came a sub-contract calling for instruments of a type entirely foreign to the Company's regular lines. That required the erection of a new building. Many smaller sub-contracts were handled for Rochester and area manufacturers, because of Taylor's capacity for finishing, plating and machining. Many of them were urgent orders.

### Group Insurance Change

In the midst of the war production rush, the Company announced a revised group insurance plan with increased benefits to employees, without additional cost. The employee participation was 92 per cent.

The evening of July 29, 1943, was one to be remembered. High ranking officers of the Army and Navy and several thousand Taylor employees and their families assembled in the Eastman Theater for the presentation of the coveted Army-Navy "E" award for war production. The award was made upon the recognition of the medical departments of both services in recognition of the Company's contribution to that branch. But ten other branches of the service joined in approving the award.

The pennant was presented by Col. John A. Rogers, executive officer of the Surgeon General's Office in Washington, and accepted by President Swift on behalf of "The men and women of the Taylor Instrument Companies." The "E" lapel pins were presented by Capt. Claude W. Carr, commandant of the U. S. Naval Hospital at Sampson on Seneca Lake, and accepted by Elmer C. Hursh, president of the Fellowship Club.

All through the war the "E" pennant flew proudly from the tall pole at West Avenue and Ames Street, and just as proudly the hundreds of Taylor employees wore the lapel pins which bore a replica of the "E" banner.

### Important Anniversaries

It was also in 1943 that the Taylor Fellowship Club, which had been founded as the Tycos Fellowship Club



Lewis B. Swift became president of the Company in 1938. It was the culmination of a Taylor career which started when he was a high school boy back in 1904. He served successively as Short & Mason record clerk, correspondence filing clerk, billing clerk, commercial sales order clerk and in charge of the Order Dept. Upon his graduation from Cornell University he became head of Recorder sales in the Industrial Sales Dept. He organized the Application Engineering Dept., reorganized the Engineering Division and in 1929 became a Director. He was elected Vice President in 1934.

in 1918 in the midst of another war, held its 25th anniversary banquet in the Chamber of Commerce, with 1,100 members present. The gathering also marked the 50th anniversary of Herbert J. Winn's association with the Company.

For months a plant department had been working on a mysterious project known as a "Tent Heater." In November of 1943 the Chemical Warfare Service authorized the Company to reveal the use of the dial thermometers being made. They were part of the apparatus

used to generate smoke, covering troop movements.

### Plant Guarded

During the war years, elaborate precautions were taken to prevent sabotage or spying. Armed guards, sworn in as auxiliary police, were on duty 24 hours a day and admission to the factory was by pass only. Before Pearl Harbor, the plant and grounds were brilliantly floodlighted but after our entry into the war, a dimout was observed.

In 1944 the tide of war began to

swing toward the Allies and industrial America strained its resources to provide the tools that would deliver the knockout punch. It was a busy time at Taylor, so busy that no formal ceremony accompanied the presentation of the Army-Navy "E" production award for the second time, in April of that year.

In October 1944, two new members were elected to the Board of Directors: Raymond E. Olson, then manager of the sales engineering department, and M. Herbert Eisenhart, then president of Bausch & Lomb.

In December of that year, the Company received the largest government order of the war in its regular line. It was from the Army Engineers and it called for half a million liquid-filled wrist compasses, used by paratroopers. As it turned out, the order was cancelled before completion for the next year brought the end of the great conflict.

Hitler's Reich that he boasted would "last a thousand years" reeled and fell—and on V-E Day, May 8, 1945, the entire Taylor personnel assembled in the plant dining room for a religious service of thanksgiving for victory in Europe. The employees were free to leave for the day or to stay on the job. The plant was well staffed until the closing whistle. The Pacific war was still to be won.

### H. J. Winn Dies

On June 27, 1945, the whole Taylor organization was saddened by the death of Herbert J. Winn, Chairman of the Board. He had been associated with the Company for 52 years. He had been its president for 25 years, serving in that capacity longer than any other man. Many "Herbert J.'s" in the organization were named after him. Hundreds knew him as a friend and a counselor, not merely a "boss." There were many Taylor men and women at the memorial service in Christ Episcopal Church on June 30.

August of 1945 was a fateful month in the world history. It brought peace and Allied victory—in the wake of the atomic bombs that destroyed the Japanese cities. A new and terrible force had been loosed upon the world.

Rochester celebrated V-J Day with scenes reminiscent of the first Armistice Day of 1918. The Taylor plant was closed so that employees might join the peace jubilee. "The war is over!" Those joyous words were on every lip.

## Secrets Revealed

With war's end, the lid was lifted on two top military secrets and for the first time Taylor employees learned of the important part they had played in the victory. They had helped produce the major weapons, one of them the mightiest ever forged by man. These were the revelations that thrilled Taylor workers in August of 1945:

1. The Company was the prime contractor for the research, development, design and manufacture of the very large quantities of process control instruments used in the gaseous diffusion plant of the atomic bomb project.

2. Taylor produced the Periscopic Sight for the A-26 Invaders, the war planes that struck terror to the Japanese and German air fleets.

Production of the A-bomb was a race between Germany and America. America won and Taylor made its contribution to the victory.

In 1943 the Rochester plant was inspected by a committee charged with finding industries throughout the nation capable of handling the many ramifications of the secret Manhattan (atomic bomb) Project. Because of its facilities and its engineering staff, Taylor was made the prime contractor for the process control instrumentation for the gaseous diffusion plant project.

Taylor very quickly made working models of a series of pressure control instruments. They were thoroughly tested, drawings made and a heavy tooling program gotten underway. Highly specialized testing, aging and calibrating equipment was also designed and constructed. The project had top priority because of the extreme urgency, and until war's end was shrouded in the utmost secrecy. Only a handful in the organization knew exactly what was being produced.

Even today the whole story cannot be revealed, but it can be told that pressure instruments of great accuracy made by Taylor were, and still are, used in the gaseous diffusion process in atomic manufacture. There are eleven miles of instrumental control panels in the process.

## Fire Power Control

The part played by the plant in making the Sights for the A-26 Invader was revealed in dramatic fashion. The Army Air Corps brought one of the war planes to the Rochester Airport and

there for the first time many a man and woman who had worked in Department 29 discovered the Taylor nameplate on the Sight.

Those employees of Taylor, Eastman Kodak and Bausch & Lomb, who had actually worked on the Sights, were given a special close-up view of its operations. The Sight controlled .50 caliber machine guns housed in two, long, round, close clinging turrets, one on the top and the other on the bottom of the central fuselage. The apparatus was a "mechanical brain" that never erred. That the Japanese and Germans found out—to their sorrow.

Taylor instruments also played their part in the manufacture of life-saving penicillin. The entire supply of the "wonder drug" went to the armed services during the war.

The second World War brought to the Ames Street plant the largest employee force in its history. In 1939 there were only 1,000 employees. Before the war ended the total was a peak of 2,300 workers. More women were employed than ever before, and they proved that their sex has its place in war production, as well as in the home. Many who joined the Taylor staff in the war days are still on the job.

During the war, some departments worked 24 hours a day in three shifts. At the request of the War Production Board, the whole organization worked regular hours on all holidays, with the exception of Christmas Day.

New departments had to be established to handle a tremendous amount of war-engendered clerical work, and men were transferred here from branch sales offices to help out. Taylor specialists were loaned to the War Production Board with which the closest relations were maintained.

The war called into the armed services a total of 483 Taylor employees. Fourteen gave their lives to their country. In honor of the service men and women, a plaque was designed by John C. Wenrich, prominent Rochester architectural renderer who worked at Taylor during both World War I and II, and made in the plant by members of the Wood Shop and Paint Dept.

## No Post-War Layoffs

At war's end many industries faced a difficult reconversion problem. Some of them had to lay off many workers. That was not the case at Taylor. The Company was able to resume its manufacture

## Half A Century

This series by Arch Merrill could not be considered complete without drawing attention to the men and women who have worked for the Taylor organization 50 years or more. Their great contribution is, and has been, to give continuity to the long term objectives of the Company. They have helped build and maintain a great tradition of fine instruments made by fine people.

### Active

#### Years

George Helmbold	58
Arthur Gaisser	54
P. Richard Jameson	54
Agnes Smith	50

### Retired

John A. Thompson	65
Louis J. Merklinger	60
Charles Fahy	58
William O'Brien	58
Louise Pritzbur	57

### Deceased

Martin Goebel	57
Ferdinand Smith	57
James Fahy	54
Patrick Kane	53
John Lane	53
Albert Beiseigel	52
Henry W. Kimmel	52
Herbert J. Winn	52
Harry W. Bradfield	51
George Grover	50

of goods for the civilian market with little interruption of the steady flow of employment.

For that happy situation there were several reasons. One was the policy of shunning layoffs for the sake of showing a low inventory figure. Another factor was the policy of transfer and reassignment of personnel to meet changing conditions in various departments. The Company believes in keeping its skilled workers busy at steady work.



Moreover, Taylor did not have to accept very many contracts for products not in its regular or allied lines. During the war, it kept to its field, that of making high precision instruments. Hence, it had no great reconversion problem.

So, by October of 1945, two months after V-J Day, the commercial line was rolling again at the Ames Street plant. Three years devoted to war production had ended. But echoes of the great war lingered on into the years of the uneasy peace.

In November 1945, Donald Lamb, now assistant superintendent, returned from a four-months inspection tour of German industry in the Allied zones. He had been one of 300 industrial specialists, one of four from the instrument industry, to make the tour.

At the start of 1946, the splendid record of the organization in the eight war bond drives since the beginning of the war was made known. Taylor people had purchased approximately two millions in bonds and the total was well over 100 per cent for the combined quotas.

### High Award Made

At a meeting in New York in February 1946, President Swift accepted in behalf of Taylor Instrument Companies, the seventh biennial award for Chemical Engineering Achievement. It was shared by 119 corporations and colleges which had helped in the atomic bomb project under the war name of the Manhattan Engineering District. Along with the award went pins for 475 employees who had worked on the history-making project.

### S & M Bombed

The important contribution of the English arm of the Company, Short & Mason, Limited, to the war was revealed in Rochester in April 1946, when the managing director of the English firm, Rowland Arnison, visited the plant here. He told how the German radio announced at the start of hostilities that Short & Mason was a prime bombing target because of its importance as a supplier of aircraft instruments to the Royal Air Force. The British government provided another plant outside London while the Walthamstow plant was still operating. Short & Mason escaped with minor damage from German bombers.

But the British people were in the

grim grip of post-war austerity and in May of 1947 Taylor employees, through the Fellowship Club, shipped to Short & Mason personnel 250 boxes of hard-to-get edibles. Into some of the boxes a personal message was slipped and the ties between the two plants were welded more closely together through the gifts and letters that followed.

A signal honor came to Taylor in 1946 when Arthur Zuehlke, head of the tube systems design department, was one of the 150 scientists invited by Col. Stafford Warren of the University of Rochester to witness the atom bomb tests at Bikini. Colonel Warren was then in charge of the radiological safety section of "Operations Crossroads."

Early in 1946 stock of the Taylor Companies was listed for public sale for the first time. The offering was 21,170 shares at \$30 a share. The year also saw the 25th anniversary banquet of the Quarter Century Club, made up of employees with more than 25 years of service. It is one of the oldest such clubs in Rochester and its annual dinner is a red letter event on the Taylor calendar.

In October 1946, Treasurer Noble and General Sales Manager Olson became vice presidents and a year later Mr. Noble, while retaining his office as treasurer, was advanced to a newly created post, that of executive vice president and assistant general manager. September 1, 1947, saw adoption of a contributory pension plan in which 99 per cent of the eligible employees joined. It cost the Company two million dollars to pay up the past service premiums under this plan.

Early in 1948 the first Regional Red Cross Blood Center in the nation was set up in Rochester and the mercy organization turned to the Taylor Company for the necessary instruments. The first order was for 255 aneroid blood pressure instruments (Sphygmomanometers). To date the Company has furnished the Centers with some 2,500 of the instruments.

Along that same line, the Company in August of 1948 received from the Bureau of Medicine and Surgery of the U. S. Navy a certificate of achievement for production of sphygmometers and clinical thermometers during the war.

The annals of 1948 include the appointment of two new directors: Rodney C. Mertz, head of the legal department, and Karl H. Hubbard, chief engineer; the completion of a one-story

building, 90 feet wide by 217 feet long, on the south side of the plant, and the launching of a new magazine, "Taylor Technology," as a successor to "Taylor-Rochester," directed primarily to industry and with an initial mailing list of about 10,000.

In May 1949, Walter Dorwin Teague again was retained as design consultant and nine new styles in commercial instruments were introduced. That same month Henry W. Kimmel, a vice president, secretary and director of the Company and president of the Canadian organization, passed away. He had started service with Taylor 53 years before as an office boy.

### Taylor Family

George H. Taylor, then assistant secretary, was advanced to the secretarial post and Rodney C. Mertz became assistant secretary. Fifteen months later Mr. Taylor died and was succeeded by Mertz. George H. Taylor was the son of Frank Taylor, one of the original Taylor Brothers.

Another son of Frank Taylor, Raymond, is associated with the Company at present, as are two direct descendants of the founding father, George Taylor. They are Fred Taylor (a vice president), grandson of the first George, and his son, Hart. Charles Taylor, the brother of J. Merton and G. Elbert Taylor, had a son, George S. Taylor, who is also with the organization.

Midsummer of 1949 saw the election of Herbert J. Noble as president, treasurer and director of Taylor Instrument Companies of Canada Limited, the across-the-lake arm of the industry with headquarters in Toronto; at the same time Raymond E. Olson was elected vice president. Taylor is an international organization with roots in three nations and on two continents.

### Thompson Retires

In August 1949, Jack Thompson retired after 65 years with the Company, the longest period of active service in Taylor history. He had seen the Company grow from cramped quarters in scattered Hill Street buildings beside the old Canal to the ever-expanding modern plant on the West Side. His service had bridged the gulf between the old days of the craftsman and the new era of scientific machinery and had spanned three wars.

The twelve-year period from 1939 to 1951 was a highly fruitful one in terms



of new developments and designs. The climax, industrially, was the TRANSET\* System which includes the TRANSAIRE\* Transmitter, TRANSET Recorder and Indicator, and TRI-ACT\* Controller, a complete pneumatic transmission system. Its popularity is sweeping the country, and accounting in many ways for increased productivity at a time in the Nation's history when industrial might is needed to protect humanitarian right.

Commercially, nearly every product has been restyled and several new items added, notably the Indoor-Outdoor Thermometer and the Dial Type Maximum-Minimum Thermometer.

### Taylor Is Mobilized

In this year of Centennial, while war clouds again darken the skies and the world watches a shifting battle line in far Korea, Taylor again is helping forge the weapons of defense, especially in the new field of atomic energy. To meet the new demands, the Ames Street plant is expanding, adding 44,000 square feet

of floor space to its plant on the south side.

In 1951 the government knows the vital importance of the instrument industry in the pattern of national defense.

Taylor is not Rochester's largest industry. It is one of the city's oldest. This company has had no mushroom growth. For one hundred years it has forged steadily ahead, from a little, one-room, two-man thermometer shop over a drug store to its present layout with a floor space of more than 400,000 square feet and some 2,000 employees.

For a century the Taylor watchword has been quality, not quantity. The founding fathers of the firm made honest and accurate products. Those who followed never deviated from that fundamental principle.

The Taylor plant houses an abundance of technical skill and scientific know-how, as well as a fortune in complicated machinery.

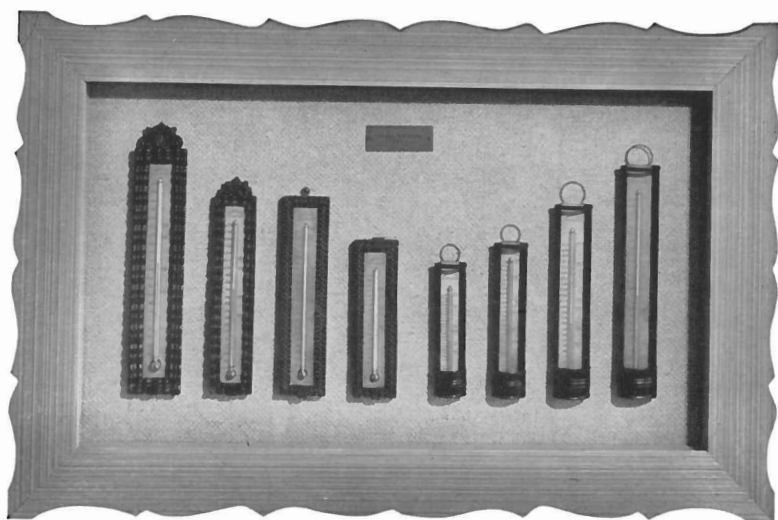
### Company Character

But under the green dome at 95 Ames Street, Rochester, N. Y., there resides something still more important—a spirit of friendliness. It pervades the Taylor organization. It is epitomized in the Taylor Fellowship Club with its 2,000 members. The Club fosters three major events each year—the Christmas party, the annual banquet and the summer picnic. All the year around its program of social and recreational activities keeps the name of fellowship a living thing.

The terms, "management" and "labor," have no place in the lexicon of President Swift and his fellow executives. They abhor the implied distinction. To them everybody in the place is a fellow-worker, each doing his particular job.

To a long record of scientific achievement and commercial integrity, the Taylor Instrument Companies can add another proud accomplishment—in the field of human relations.

\*Trade-Mark

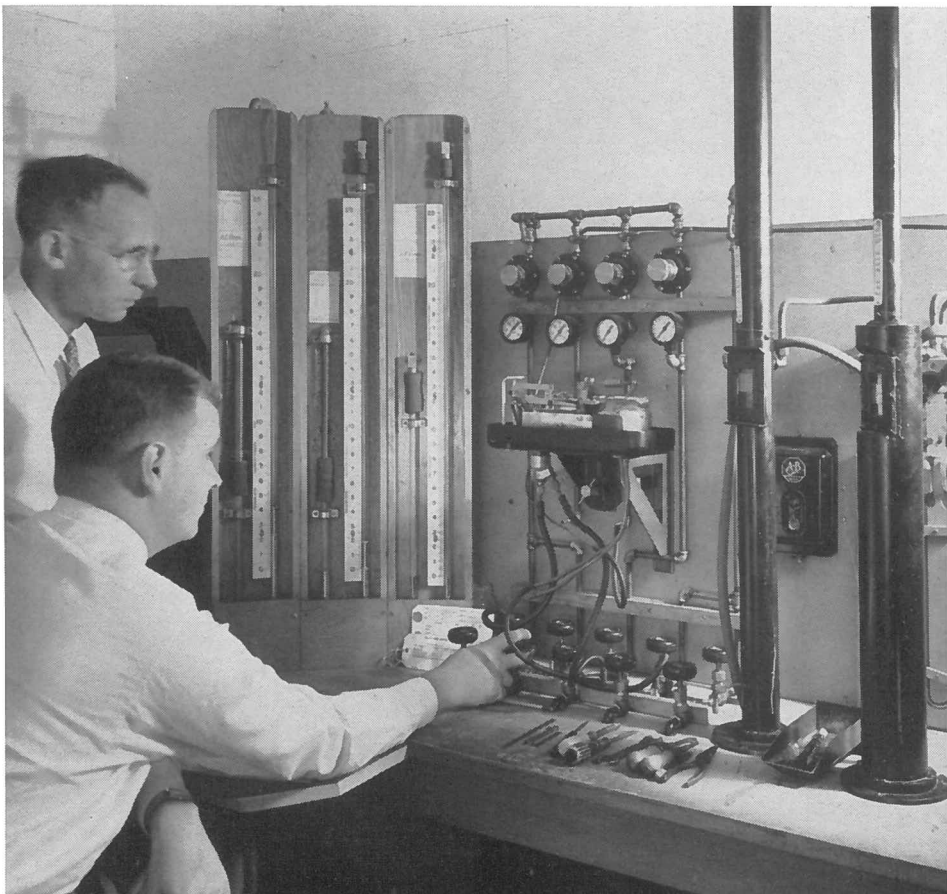


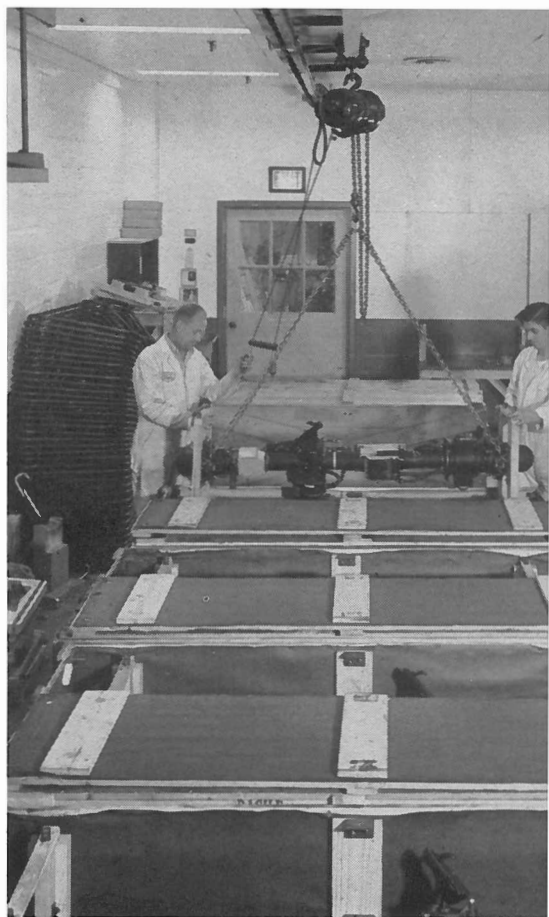
This display of early Taylor thermometers could easily have been assembled by George Taylor in the 1850's, since they were all made by himself at that time. From a few thermometers to the vast array of consumer and industrial instruments, the Taylor organization has grown to a leader in its field.





During World War II, Building 44 housed the highly secret instrumentation program for the gaseous diffusion plant of the atomic bomb project.





In another part of Building 44 Taylor men and women assembled the complex periscopic sight for the A-26 Invader, a deadly fighter plane.

