

FIRST LAMP-LIGHTER NAMED IN 1837

By MARY F. BRIGHTMAN

THROUGH the eyes of a former Worcester girl there has come down to us a charming description of a lamp-lighter of long ago. Could it have been Bailey Clements, our first official lamp-lighter, that Elizabeth Bigelow saw from the window of her grandfather's house?

Little Elizabeth was six years old when Bailey Clements was lighting the early street lamps of Worcester. Her grandfather was "Squire" Abijah Bigelow; his house stood at Front and Church streets. There was a street lamp on the corner.

In her memoirs, written in 1896, Elizabeth Bigelow Updike writes "... my mind went back to the old, almost forgotten times, when as a little girl, I stood, in the dusk of the evening at my grandfather's parlor window to see the lamps lighted. A little old man, muffled up in a comforter, came along at a dog trot, with his short-ladder and oil cans, and putting a ladder against the post, lit the evening lamp, and ran on to the next one. And so we say 'ran like a lamp-lighter.'"

Robert Louis Stevenson also had pleasant childhood memories of a lamp-lighter. He wrote affectionately of him:

With lantern and with ladder,
he comes posting up the street . . .
When I am stronger and can choose what I'm to do . . .
O Leerie, I'll go round at night and light the lamps with you.

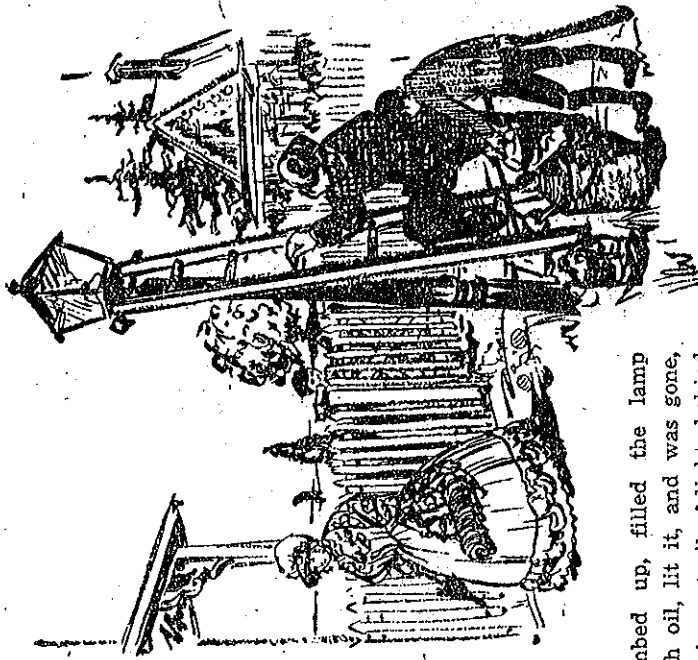
THERE was always something romantic about a lamp-lighter. In the dusk of evening he made his rounds, lighting the street lamps of the town. Oil lamps they were, in the early days, with a small flickering flame, affording a gleam in the night for all wayfarers.

The streets of Worcester were not regularly lighted by the Town until 1837, although for a number of years previously there were private lanterns on the streets. Paid for and lighted by private subscription, they were located before the larger stores, and the homes of important citizens.

The first lamp-lighter, to be officially appointed, was Bailey Clements. He was named in March, 1837 "to have charge of the lamps and cause them to be lighted during the year," a duty he performed faithfully for many years.

It is a far cry from the picturesque lamps of yesterday to the modern version. Our streets are lighted by incandescent lights, controlled from a central power station. Today, the lamp lighter simply throws a switch that lights a whole neighborhood. Altogether, Worcester has some 7400 street lights. Yesterday, a few flickering candle-like lights illumined the center of the town; today, brilliant, steady lights that, seen from one of our seven hills, resemble a countless number of jewels.

BAILEY CLEMENTS went about on foot, from street to street. He carried a torch, an oil can, and a ladder. Adjusting his ladder against the lamp-post, he hurriedly



climbed up, filled the lamp with oil, lit it, and was gone, leaving a trail of lights behind him.

Only on dark nights were the street lamps lighted. For several nights each month the people found their way about by the light of the full moon. In the early days, street lights cast their meager light only in the center of the town. At a town meeting in 1837, when Clements was appointed, it was "voted that the town cause the lamps in the streets, in the Centre School District, to be lighted for the current year."

It is evident from the early records that the citizen erected the lamp-posts, and furnished the lamps. It was voted at a town meeting in 1838, "that the Town do take charge of, and

erect lamp-posts and place lamps thereon."

It is recorded that in the early days in Worcester there was no street light in front of the Town Hall. On March 7, 1831, the town meeting voted "a street lamp in front of the Town Hall postponed indefinitely."

Bailey Clements passed away July 15, 1846, after lighting the streets of Worcester for nine years.

THE lamp-lighter has received lasting fame through verse, story and song. In 1854, Maria Cummins, Boston author, published her widely read book, "The Lamp-lighter." The scene, laid in New York, is the story of Gertie, a forlorn waif, who is adopted by a kindly, but poor, lamp-lighter, old True-man Flint. An early "best seller," the book had great success, and was translated into foreign languages. It sold 70,000 copies in the first year after publication.

The childhood memory of a lamp-lighter inspired our Worcester native and well known song writer, Charles Tobias, to commemorate him in song. He, too, remembers the lamp-lighter, who came each evening at dusk to the corner of Providence and Harrison streets. His popular song, "The Old Lamp-Lighter" recalls that:

"He made the night a little brighter
Wherever he would go."

How dark our streets would have been without our lamp-lighters!

cause to be lighted, the lamps recently put up in Thomas street, at the expense of the individuals."

These townsfolk, who put up their own street lights, belonged to a lamp association. There is a statement in the early town records that "the Town will defray the expense of lighting the Lamps of the Lamp Association."

At another meeting in 1844, it was voted that "the Town will be at the expense of lighting one lamp in Park street at the point where the Norwich Rail Road crosses the same, and the lamp on Park street near the south-west corner of the same, the Petitioners to

W C 1 - Lighting

A SLOW GOODBYE TO AN ERA

450 Gas Lamps on Streets

By SIDNEY B. McKEEN

When Worcester got its first electric street lights in 1883, the city was set agog.

The move prompted Mayor Samuel Winslow to prophesy that "the time is not far off when all our streets will be lighted by electricity."

At that time, the city had just over 300 gas lamps to light its streets. The lights burned every night until 11 o'clock "except on moonlight nights."

Pleas for Replacement

Today, the city has more than 450 gas lamps and they burn every night, moon or not.

Gradually, the friendly old sentinels appear headed for extinction, relics of a bygone era. But their passing has been slow, despite sporadic attempts to replace them.

In 1936, the late Mayor Walter J. Cookson advised the city to get rid of the gas lights in favor of electric. His plea was repeated in 1950 by the late City Manager Everett F. Merrill and in 1955 by Mayor O'Brien.

But the gas lights still burn, as they did more than a century ago, on many streets just outside the downtown business section, an irritation to some, a source of pleasant nostalgia to others.

Modernized in 1941

Gas lights hit their peak about 1920 when there were 635 spotted about Worcester's residential areas close to the heart of the city.

Then in 1941 they were modernized. Alabaster-rippled glass globes replaced the transparent enclosures that allowed a view of the flickering flame inside.

Many objected that the gas lights then began to look just like electrics, robbing them of the charm they had in the days of yore.

Gone, too, were the youngsters who traveled the city with sticks and matches to light the night.



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MAY 23

Street lamps solid fixtures of old charm

Gaslights brighten streets
and hearts of residents

7-6-12 Jan 2020

The old army is just 28 strong now, where once it numbered more than a thousand. The cast iron sentinels are scattered around the city, sometimes in groups of three or four, sometimes stalwartly alone. They're in good neighborhoods and bad, on main thoroughfares and back roads, quietly doing what they have been doing for a century or longer — shedding light on the world around them.



James
DEMPSEY

There are few things as nostalgic as an old gas streetlight, with its solid iron column rising to the two cruciform ladder handles, the whole device crowned by a glass globe inside which the delicate mantles

glow. Almost everyone who enjoys gaslight describes it as having a softness that is somehow more comforting than the harshness of electric light.

Once, all public illumination in Worcester came from the city's gaslights. They were tended by men who bore ladders, tapers and matches, and whose predictable evening rounds became a well-loved part of a neighborhood's life. Old-timers will remember the song Worcester's Charles Tobias wrote about the man who cared for the lights along the Harrison Street of Mr. Tobias' childhood in the first decades of the century. The Harrison Street lights and their tender are long gone, but they live on in the words and music of "The Old Lamplighter."

Nostalgia for gas streetlights is a relatively recent phenomenon. In the 1940s and 1950s, the city was busily uprooting these outdated old lights and replacing them with brand spanking new electric incandescents. Even as late as 1971, Worcester was planning to phase out its remaining 58 lamps.

But as the technology of illumination marched on, from incandescent to mercury vapor to high-pressure sodium to metal halide, at some point it was realized that there was something quaint and unique about these pieces of Victorian street furniture, and the city began maintaining them.

Today, that job falls to John Corazzini. A painter by trade, Mr. Corazzini supplements his income by caring for the city's 28 gas lamps for a modest \$130 a month.

"I use a pipe wrench, screwdrivers — a flat and a Phillips head — a lighter to light them, Windex and paper towels and mantles," he said. "They're basically easy to manage." The only problem is getting spare parts, which often have to be ordered from England.

Looking after the gaslights has always been more love than labor. Mr. Corazzini took over the job from his brother-in-law, Paul Sestito Jr., who took over from his father, Paul Sestito, who took on the job from a co-worker at Commonwealth Gas Co., Joseph Socha.

The work remains the same. Mr. Corazzini paints the iron poles, cleans the globes, replaces the disintegrated mantles, and, more often than not, has a conversation with someone who lives nearby.

People tend to be proprietary about their gaslights, Mr. Corazzini said as he pointed out gas lamps along Mt. Hope Terrace, a small dirt road off Institute Road. And as if on cue, Celia Demers pulled up in her car to tell Mr. Corazzini that the lamp outside her house was out.

"I know," said Mr. Corazzini. "I light it, it flickers, and two days later it's out again. I don't know if the line is pinched or choked with carbon."

He promised to work on it later that day.

City's Few Gaslights Come in Three Styles

3715 Dec 1935
Most of the remaining gaslights in Worcester can be found between Millbury and Southbridge streets, on Crown Hill and off Institute Road.

All of the gas lamps that remain in the city rest on one of three post styles: the Welsbach No. 40, the Newport, and the Worcester. The Worcester style probably received its name after the city ordered a goodly number of that type of pole for its streets, according to Michelle Lahner of the Welsbach Corp. of New Haven, Conn., which supplied Worcester's gaslights.

The Newport post rests on a base that rises about two feet above the pavement. The main post is a fluted column ending in a ladder bar — the place where the lamplighters used to rest their ladders.

The Worcester style post, the most common in the city, consists of a rather plain-looking tapered column that rises without break to the glass lamp at its top. As a rule, the Worcester and Newport posts were installed just before or just after the turn of the century.

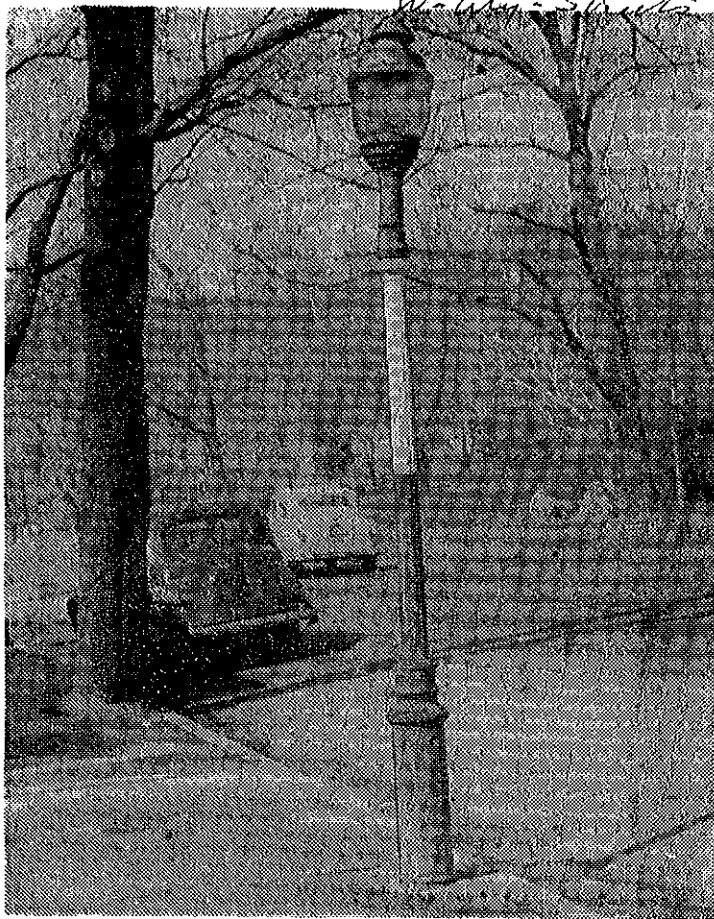
The Welsbach No. 40s came later and are much more ornate than the Newport or Worcester poles. The Welsbach pole consists of two heavy base sections and a shaft of twisted iron that spirals to the lamp housing. Like the Newport, but not the Worcester, the Welsbach has a cross bar for the lamplighter's ladder.

Gaslight locations, with the number of lights found at each site, are: Agawam Street (1), Colton Street (1), Columbia Street (1), Cottage Street (3), Dayton Street Place (1), Elm Street (1), Farnum Street (3), Gladstone Street (2), Greenleaf Terrace (2), Huntley Street (1), Langdon Street (2), Mt. Hope Terrace (4), Ripley Place (1), Washington Street (1), Oxford Street (1), Oxford Place (1).

Worcester Patn. Coll.

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GAS LIGHTS ON THE WAY TO OBLIVION?
Elm Street Light Shows Signs of Tilting Age

Merrill Moves To End Gas Lamps

City Manager Merrill today made the first move in the city's history to get rid of gas street lights.

He submitted a capital outlay item for the City Council's approval of \$2500 for removal of 50 of the ancient lamps.

The items was requested by the Street Lighting Bureau of the Department of Public Works.

According to the Bureau, there are currently 591 gas street lights in use in the city. Most of them are scattered just outside the downtown area in the center of the city.

Last year, the Bureau revealed,

the city spent \$14,761.10 for maintenance, and gas to keep the old lights running. There were 594 lights in use last year.

Worcester Gas Light Co. officials reported the first gas lights were installed around 1850, when the first gas main were laid. None

of the present gas lights are that old, however, they stated.

The gas company sells gas to the Welsbach Street Lighting Co., which, in turn, sell it to the city.

Preserving City's Gaslights Gives Lamplighter a Glow

By Chris Pope
Of the Telegram Staff

3715 Dec 1985
One by one they die, snapped by wayward snowplows, split by sliding cars or smashed by vandals who seem to work overtime cracking the 400-pound wrought iron poles on which they rest.

When the poles break, they're finished as surely as a person with a broken spinal

cord. Workers scoop up the shattered metal, throw it in the back of a truck and haul it to the junkyard.

Then the soft spray of light they cast becomes a memory, and their moody glow gets traded for the sharp, electric incandescence of the '80s.

Turn to LAMPLIGHTER Page 23A

Worcester Pam. Coll.

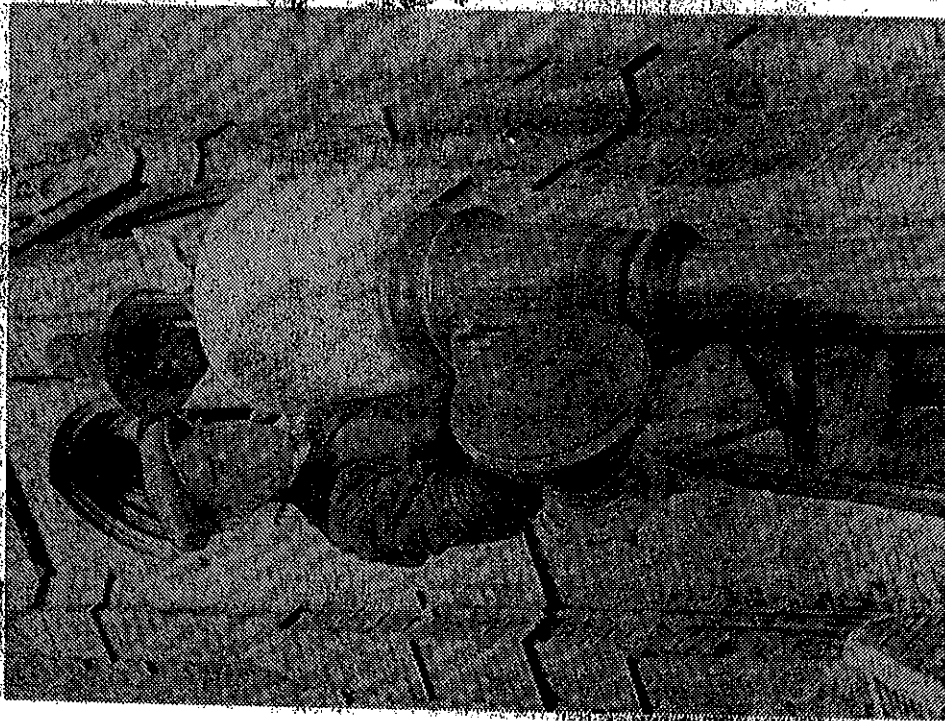
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W - City - Lighting

Y, APRIL 2, 1948

The Other Fellow's Job



Light Trimmer

T. Frank Joyce, 21 Elm street, has been a street light trimmer for 20 years. And he knows the 70 lights that line Main street as well as he knows the inside of his hat.

Every 228 hours the carbons in the lamps have to be adjusted or replaced. This duty varies with the length of the days. During the winter, Mr. Joyce is quite busy.

There are 6500 volts in the line that feeds the lights. The carbon stick is a metal tube about one inch square filled with carbon granules. A spring conductor forces it up against a copper electrode to cause the arc light.

The lamp's occasional sputter is caused by pitting of the copper electrode. Pressure on the carbon will force it quickly against the copper closing the gap, but the surge of voltage will

Photo by J. J. ...

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City - Lighting Council Unit To Ask For Light Plan

The Public Services Committee of the City Council voted last night to ask the Bureau of Street Lighting and Massachusetts Electric Co. to suggest top priority areas for modern street lighting and to recommend an ordered lighting plan for these areas.

Earlier in the evening, the three-man committee voted to recommend to the council stop-gap lighting on 13 city streets, amounting to approximately \$2,675.

Committee members said they decided to ask for an ordered lighting plan so that their entire budget would not be eaten up by stop-gap measures.

Lighting improvements, the committee will recommend to the Council next Monday include Aylesbury Road, two 3,500-lumen mercury vapor lights; Beacon Street from Kilby to Jackson Streets, 15 7,000-lumen mercury vapor lights; Beaver Brook Park way, two 1,000-lumen incandescent lights; Brigham Road, eight 3,500-lumen mercury vapor lights; Crowningshield Road, four 1,000-lumen incandescent lights; Dewey Street, five 7,000-lumen mercury vapor lights.

Also, Garrison Avenue, one 1,000-lumen incandescent light; Goddard Street, one 1,000-lumen incandescent light; Hiltop Circle, one 1,000-lumen incandescent light; Jeanette Street, one 1,000-lumen incandescent light; Lowell Street, five 3,500-lumen mercury vapor lights; Marlboro Avenue, two 1,000-lumen incandescent lights, and Mendon Street, five 1,000-lumen incandescent lights.

W. Street Lighting

City's gas lamps are still shedding light

The soft, warm glow of gas lamps still lights the streets of some of Worcester's most charming neighborhoods. Once, over a thousand lamps graced the city, but today there are only forty remaining. Many of those currently operating date back as far as 1897.

Nowadays the gas lamps are kept burning 24 hours a day, because it is apparently less expensive than maintaining individual timing mechanisms to turn each lamp on and off. In the recent past, semi-automatic timing devices did the job, but they had to be manually reset every eight days.

In the glory days of gas lamps, before the electric street lights came on the scene, it was the proverbial lamplighter who lit the lamps each evening at dusk. In fact, a hit song of the 1940's "The Old Lamplighter" was written by composer Charles Tobias—who was born and raised in Worcester. The song was inspired by his childhood memories of that colorful gentleman going about his rounds on Vernon Hill.

The lamplighter may be long gone, but his modern equivalent can be observed most weekends, cleaning and maintaining the city's gas street lamps. Once a month Joseph Sucha takes down the glass globe of each and every lamp, cleans the inside of the globe, replaces the fine fabric mantle if need be, and re-lights the lamp.

Joe works for Commonwealth Gas during the week, but on week-ends he moonlights for the City of Worcester. Listening to Joe talk it's clear that the work of maintaining the gas lamps is a labor of love.

Although just 38 years old, he has fond memories of gas street lamps. "I grew up on the Island (Millbury St.)," Joe explained, "and we were the very last section of the city to switch over to electric. I remember the gas lamps from when I was a boy."

Joe has a thing about the "old days." His hobby is collecting antique bottles that he finds around the city, often digging up the streets for Commonwealth Gas.

But according to Joe, he's not the only one who's on a nostalgia kick. People often stop to talk to him while he's working on the lamps. They reminisce about the era that gas lamps recall: a slower, more peaceful time. He says that he hasn't had any complaints from the people who live on the few



remaining gas-lit streets. Instead, the residents tell him how much they appreciate the beauty of the lamps. Several people have even asked where they could buy one for their own use.

Joe's maintenance route takes him to some of the most picturesque areas in the city. Here is a suggested mini-tour for those who would like to discover the gas street lamp at its best.

Farnum St. is off Institute Rd. three blocks from Park Ave. There are four lamps on this block of comfortable but understated, single-family homes. Pace yourself as you stroll up the sloping tree-lined hill; it's steeper than it may appear. At the crest of the hill is Bancroft Tower; the stone lookout perch that boasts one of the best views in the city. It's all downhill from there.

Continue on the same road, keeping to the right, until you come to Mt. Hope Terrace. This narrow, private way, is unpaved, and features four gas lamps in a distinctly rural setting. Mt. Hope Terrace meets Institute Road at the bottom of the hill.

Charles Helman

PLAN WOULD ELIMINATE ALL CITY'S GAS LIGHTS

The last of the city's gas street lights may soon be a memory.

At one time, according to Horace H. Bigelow, superintendent of the Bureau of Street Lighting, the city had as many as 2,000 gas street lights.

Now there are less than 300, he says, and they are scattered about the city.

With an eye toward elimination of the last of these lights, the City Council Public Service Committee plans to study a contract with Welsback Co., preparatory to formulating a program to accomplish that objective.

Today, the contract calls for the city to pay the company \$10,560 a year for the gas street lights.

The total, City Manager McGrath said, includes cost of maintenance and of gas consumption.

Bigelow said the last big batch of gas street lights was removed a couple of years ago from the Clark University area. Several others were removed at about the same time from the Murray Avenue district, he said.

Street Lighting Plan Gets OK

The Public Service Committee of the City Council Tuesday recommended installation of 10 7,000-lumen street lights on Grove Street, between Kimball and Lansing Streets.

Improved lighting for several adjoining streets was also recommended.

The committee voted nine 3,500-lumen lights for Leslie Road, two 3,500-lumen lights for Vega Lane and two 3,500-lumen lights for Venice Street.

Also recommended were: the removal of two 1,000-lumen lights, to be replaced by three 21,000-lumen lights, on Airport Drive; installation of one 7,000-lumen light at Leeds Street and Whitmarsh Avenue; installation of single 3,500-lumen lights at Monroe Avenue and Nevada St. and on Clark Street.

Also, installation of single 1,000-lumen lights on Oneida Avenue, Wilde Avenue, Brewster Road, Carolina Street, Purchase Street, Corning Avenue, Jenkins Street, Samoset Road, Zenith Drive and at the intersections of Maranook and Maravista Roads and Wells and Plantation Streets.

City Street Lighting Costs Rise \$36,728

The cost to the city for street lighting in 1961 was \$507,473—an increase of \$36,728 over the preceding year, Horace H. Bigelow, superintendent of the Bureau of Wires, reported yesterday.

Under an agreement with the Massachusetts Electric Co., the city pays only for the electricity consumed. Street lights are owned and maintained by the company.

In his report, Bigelow also said that loss of electrical inspectors because of the city's low pay scale has handicapped his department.

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W-City - Lighting

Electric and Gas

9,587 Lights Illuminate City's Streets

By ROGER B. MAY
Telegram Staff Reporter

Shortly after the sun sets at 8:16 tonight 9,587 electric and gas lights and 438 gas lamps will blink on throughout Worcester. Included in the thousands of streetlights are many that have special characteristics.

Some decide for themselves when they will go on and off. Four are the only ones of their kind in the city lighting system. More than a hundred do not belong to the city. And many others have wide differences in size, shape and power.

According to the Bureau of Street Lighting, there are 64 types of lights in the city, far cry from New York City which has 64 types but still enough to confuse those who

study the subject in detail.

Most familiar to Worcester residents are the incandescent incandescent and gas lamps, many of which are mounted on poles.

Incandescent lamps are of many sizes, from 100-watt to 1,000-watt. They are used in many places, from streetlights to home lighting.

Close to the center of the city, in the downtown area, are the only four of their kind in the city lighting system. More than a hundred do not belong to the city. And many others have wide differences in size, shape and power.

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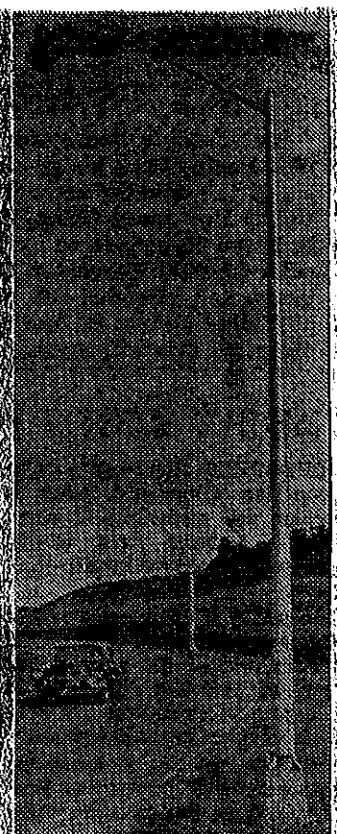
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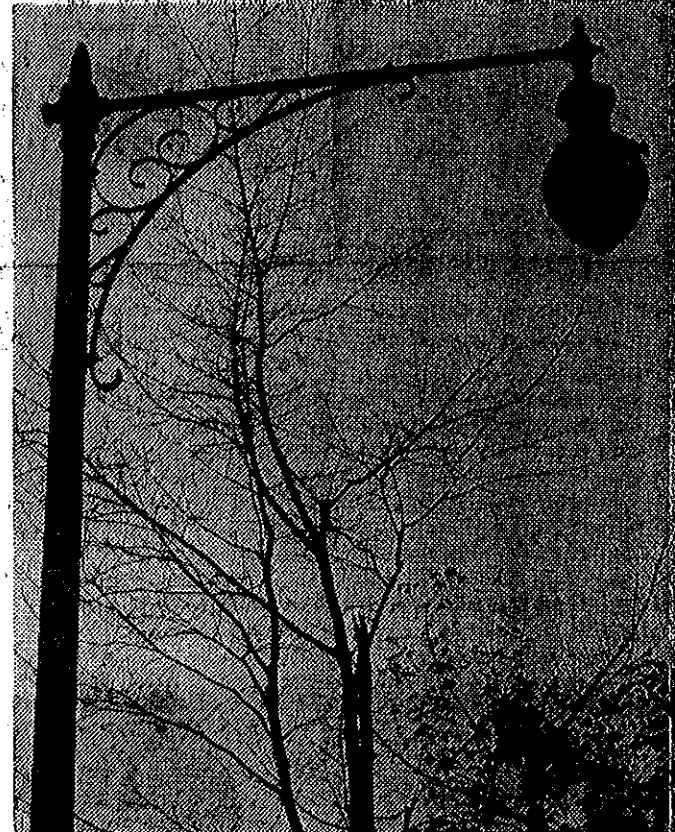
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NO PROBLEM

Mercury vapor lamps on Airport Drive are owned and maintained by the airport.



"THE TEARDROP"

This and 1,434 others make up Worcester's inventory of 6,000-lumen incandescent lamps.

There are 20 of these, each with a light bulb worth \$200.

At the end of the Lincoln Street Tunnel are the only four of their kind in the city lighting system. More than a hundred do not belong to the city. And many others have wide differences in size, shape and power.

Downtown Area
The downtown area has the newest lights, but it also has most of the oldest. Still going strong are 438 gas lamps which have managed to survive year after year despite a gradual replacement program.

Gas lamps in Worcester date back to June 22, 1840, when the first gas lamp was lit. The first electric lamps were installed in 1889.

The few hundred remaining have proved to be a sturdy lot. Since the beginning of the year none has had to be replaced, and since 1941 only 173 have been removed.

Incandescent lamps are maintained by a private company. Each costs up to \$2.25, worth 60 gas.

On Airport Drive are 102 mercury vapor lights with ratings of 11,000 lumens. The city does not have to worry about them but keeps them lighted on the same schedule as city-owned lights.

Elsewhere in the city there are 1,629 mercury vapor lamps varying from 3,800 to 35,000 lumens in strength. Incandescent lamps, numbering 7,619 in all, range from 1,000 to 15,000 lumens.

One of the unique features of city streetlights is the individual electric eyes which are being adapted to all types of lamps. With an electric eye attached, a light can decide for itself when it is time to turn on and off according to the degree of darkness.

A Century With The Gazette

Lighting Change Is Cause For Citywide Celebration

By Ray Butler

Gazette Staff Reporter

Three am, and still dark, was the city that had long been forgotten by June 17, 1914 — the Night of the Great Light.

It was the night that Worcester's up-to-date street lighting snapped on like a "dead end" right out of the "dark" era. Ornamental gas lanterns came out over the central portion of the city.

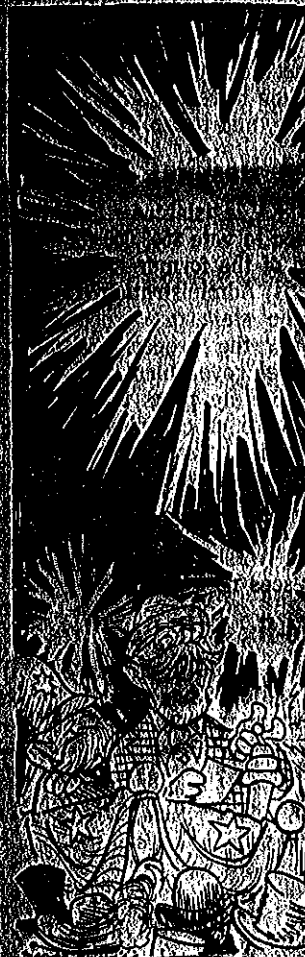
A flock of guests, on a night parade, a half-hour reception from Crompton Park, and a guest list of more than 70 mayors and former mayors from cities all over the Commonwealth were part of the day-long celebration.

Mayor's Speech

Mayor George M. Ward, whose honor it was to give the magic switch at 8 p.m., gave a brief speech in which he outlined the progress that had made in providing light since the 1840's when the so-called lamp-lighter had made his rounds.

In 1848, the year Worcester became a city, an ordinance to street lighting was signed by Mayor Levi Lincoln. In the same year, a rather municipal Council deemed it expedient the sum of \$211.23 to Simon Holt, the lamp-lighter.

In 1849, the mayor continued Worcester adopted gas lamps, until 1910 when the 300 remained and in 1913, electric arc lights and ones were replaced. The new lighting in some form gas lamps, however, persisted was not a new thing, but the



As the judging and presentation of the loving cups concluded the crowds went home. The silent lights burned as a reminder of the celebration the city had just witnessed.

change that June 17, 1914 brought was even greater than most expected.

The spectacle was a revelation to all the reporter for The Evening Gazette wrote.

"Few ever received a more striking manifestation of the value of light over half-light and darkness." (Some what cynically he commented.) To many the wonder was that the city had not installed the new lighting long before.

Throughout the hectic day that preceded the switching on of the light, buffets, receptions, and tours of various parts of the city were being afforded the distinguished guests.

The highlight of the day was at 4 p.m. when the balloon soared from Crompton Park.

Cut In Full Force

The police department was out in full force, in anticipation of the 100,000 persons expected to flock to the downtown area for the spectacle. One patrolman was dispatched to the reviewing stand to guard the button that would switch on the lights, lest some adventuresome soul spoil the show with a premature lighting.

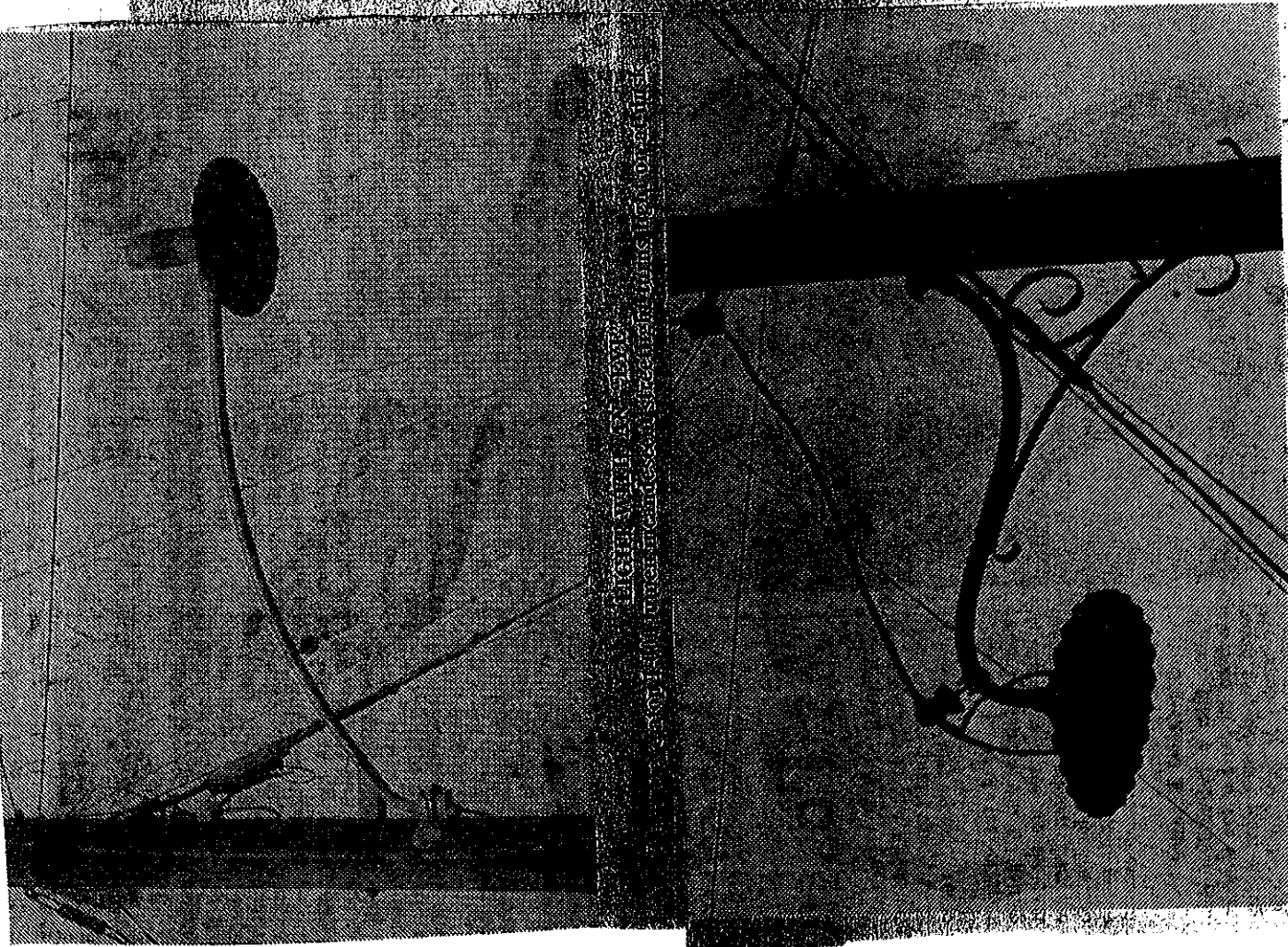
Five minutes before the day's climax, a salute of 21 aerial bombs, "releasing strange and fantastic figures in the air," was fired from Institute Park. As the glowing embers of the bombs drifted to the earth, the switch was pulled and the adjectives, our street meters, our a hearty cheer.

As soon as the lights were gleaming, the 1800 highly polished automobiles began their parade from Armory square, passing in front of the "flag-festooned" reviewing stand.

About 50 of the cars, gathered from many neighboring towns, were decorated for the float contest that the visiting dignitaries judged.

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W-CITY - Lighting



RIGHT AND LEFT - SOME
300,000 lumen incandescent streetlights lining Highway 101



"GASLIGHT"
Nineteenth-Century atmosphere is retained by 433 gas
lamps

"OLD FAITHFUL"
More than 900 lumen incandescent streetlights shine in the city than all types put to-
gether

OCT 19 1981

Worcester Public Library

LIGHTS

By **FREDERICK L. RUSHTON**
 Sunday Telegram Staff

HENRY A. KNIGHT ^{ST. J. A. 1935} has been superintendent of lighting of Worcester streets since 1893. That was the year in which the office was created. In his long and active career he has witnessed a remarkable development which has been largely, of course, of his own fashioning.

Fifty years ago, it seems significant to point out, few cities in the country concentrated very much attention on the growing urgency of highway illumination.

Previous to Mr. Knight's taking over of the office, Worcester was served by a street lighter named Patrick Ronayne. Mr. Ronayne had his own program of operation and a comparatively small area to illuminate. In all there were less than 2400 lights—gas, gasoline and electrically operated which were depended upon to facilitate night-time traveling in the city.

The presumption is that travel after dark was not very popular. Street lighting, or the remarkable expansion for which it was destined, was not envisioned then. The horseless carriage had not made its appearance and after dark the place for a horse was in his stall. Mr. Knight mentioned, while reminiscing the other afternoon in his office at City hall, that he had not expected to remain in office more than two or three years because he had other propositions under consideration.

In Mr. Knight's first term, the expenditure for salaries, labor of

lighting and materials amounted to something over \$86,000. Today that figure has been more than tripled. He recalled that a large number of gasoline lamps then in use were burned on a moonlight schedule made out in advance with the aid of the Old Farmer's Almanac.

"It was always necessary," he mentioned, "to figure on pleasant weather."

On nights when the heavens conveniently provided a full moon display there was seen to be no necessity of lighting the lamps and burning thereby valuable fuel. If a storm appeared, it was considered that the place for the wayfarer was in his home and not on the street.

AT that period hand-lighting was still in vogue throughout the city. The system called for the employment of eight "drivers," each of whom supervised a district. They were referred to as drivers, Mr. Knight explained, since it was necessary for them to operate a team in order to transport the gasoline. The lamps had to be filled every day, the amount of fuel in each being calculated to last through the night.

The drivers, in turn, employed boys in the various neighborhoods to perform the nightly and morning chore of lighting and putting out the lamps. They were paid about a half cent a lamp, Mr. Knight recalled. Each boy had a six to eight-foot ladder, a blow torch and a pole with a match stuck to the end of it. A large amount of heat being needed, it was necessary to use the torch to coax the gasoline lamp into illumination while the match was sufficient inducement for the other. The boys would start out from their homes, with the ladders over

Before long the downtown area would be fairly well illuminated. It remained dark beyond Webster square, Park avenue and Lincoln square.

A RECORD of a driver "Charlie" Kelley in the early 1890's showed that for taking care of 257 lamps and six police signals—the latter also were both gas and gasoline operated—he was paid \$161.71 for the month of April. Out of that he had to furnish his team, fill the lamps and pay the boys.

Prior to Mr. Knight's appointment, the practice had been followed of purchasing the gasoline in New York and having it shipped to this city in

barrels. This was observed to be an expensive procedure since a six per cent shrinkage loss was incurred. One of Mr. Knight's first acts was to have the city buy a small block on East Worcester street, adjacent to the railroad tracks, and turn it into a gasoline shop. Here the fuel was bought f. o. b. out of tank cars and stored in huge containers in the shop. For many years the "lighters" drove their teams up to this shop every morning to get their supply of gasoline and for many years Mr. Knight was on the scene, to supervise activities, every morning at 6.30 o'clock. The shrinkage loss, he said, was reduced to about two per cent.

MR. KNIGHT installed no radical changes in the existing system but developed and expanded it according to the demands of the times. In this connection his annual report to the City Council in 1905 is of interest:

in its general character," he wrote, "varies but little from year to year. The ever-present problem is how to obtain maximum efficiency - at minimum cost, and how to make such extensions of the service as the citizens may demand without unreasonably increasing the total expense of the department..."

"The safety of the general public demands street lights in the alleys behind important business blocks, and the 'gangs,' with which every city is more or less infested, usually move on when a light is located near their rendezvous.

"As a general proposition, a street, in the thickly settled parts of the city, is well lighted when one can read his watch midway between any two lights, and a street leading to the surrounding towns is well lighted when one can see the shadow of the team he is driving midway between any two lights.

"THIS is the standard adopted some years ago by this department, and the

lights installed during recent years have been spaced on this basis, on the principle that it is better to thoroughly light one-half of the length of a street than to half light the whole of it. The practical application of this standard, and a proper regard for the cost of lighting per street mile, renders different classes of lights necessary.

"For the business part of the city, and at the intersection of streets where the shade trees are not too numerous, or the foliage does not interfere with the efficiency of the lamp, arc (electric) lights are used exclusively. An arc light, placed at the intersection of two streets, properly located and under proper conditions, is the cheapest and best method of illumination in use. If, however, the same arc is placed midway between street corners, from one-fourth to one-half the light is wasted, and proper illumination can be obtained by the use of smaller lights. In these cases, on streets carrying a small amount of travel, or where the shade trees are in such condition as to obstruct light, the Welsbach (gas) system has been found preferable. . . ."

In that year there were in use some 4000 lamps as compared to 2400 when he assumed office and approximately 7500 today.

Total expenditures amounted to \$131,000 or an increase of about \$50,000. It is significant that the cost in 1933 was only \$239,000 despite the greater percentage increase in the number of lamps.

Generally the principles defined in Mr. Knight's 1905 report have governed his development of the Worcester system through the decades. It has been largely an experimental undertaking with little opportunity of copying or following standardized practices established by others. At the time of his taking over the reins, cities had made very little progress in this direction. He recalled that at one time, in an attempt to study their methods, he sent out a questionnaire listing 10 or 12 simple but pertinent questions. Only a comparatively few returned answers of any material assistance. In response to the question "What do you figure for depreciation?" one city father responded, obviously very much puzzled:

"What do you mean by depreciation?"

A PRINCIPAL achievement of Mr. Knight's administration was the having of all overhead wiring cleared in the two-mile circle of the downtown district. In this endeavor he was motivated not only by a sense of the ugliness of the obstructions but also by a realization of their constant threat to the continuity of the service in Winter. A committee which comprised also the City Engineer and Superintendent of Streets took the matter up with the State Legislature and received its authority to have the wires buried underground. The Electric Light Co. which by that time was providing and maintaining the service, under contract to the city, was not at first inclined to favor the proceeding. In this connection Mr. Knight recalled a certain stormy night many years ago that he spent with William Coughlin, then superintendent of the Electric Light Co., in the Faraday street station.

"We saw one circuit after another going out. We managed to keep one going on Main street. The rest of the city was in complete darkness. About 3

put out the last circuit. There was nothing else left for us to do so we bundled up and departed for home. 'Well,' I remarked as we stumbled along, 'will you bury those wires?'

"Yes!" came the answer quickly. "Yes!"

Down went the wires. Today Mr. Knight takes pride in the fact that Worcester has a larger area cleared than most cities of its size. Many cities, in fact, have never undertaken any effort in this direction.

BUT in the matter of a 'white way' several have taken precedence although this circumstance is not especially regretted by Mr. Knight.

"Some," he said, "would like to have their city look like a sunburst your wife wears to the opera. Personally, as far as the hazard element is concerned, I think a brilliant illumination is more dangerous than one to which the eye accustoms itself without sudden effort."

The situation today finds only a few miles of highway still unlighted and these stretches usually are new streets or streets on the city outskirts which extend through an unpopulated section. The gasoline lamp has been entirely abandoned and those remaining now are served either by gas or electricity. The former have been retained because, in Mr. Knight's estimation, their illumination is more effective on streets lined by shade trees and greatly darkened by overhanging foliage. Therefore the gas lights, of which there are some 600, are

popular in residential districts. Lower in height than their electric relative, they have also the advantage of giving off rays which exhibit a tendency to spread out under the branches. Each is equipped with an automatic starter. Mr. Knight remarked that an installation on Florence street is especially effective in overcoming a darkness area caused by foliage.

YOU have noticed, possibly, the difference in the intensity of light at certain street corners. The answer, of course, is contained in the physical features of the location. Along Chandler street, for example, it has been found advisable, because of the great width of the

employ arcs which a measurement of 15,000 candelas or about 750 watts. This is the most powerful in use in the city.

On Chestnut street, which is especially narrow, it has been discovered that the buildings act as reflectors and a light of less power can be used to advantage. The ornamental installations which you see on the Common are of an early vintage but will be noted to have an effective radius of illumination. The greatest number are of the 1000 lumen or 62.5 watt variety and are located on side streets on which travel is comparatively light. There are some 4000 of these, as compared to about 1300 of the 6000 lumen type and 100 or so of 2500 lumens.

A lumen (perhaps you will not be interested but in case you are—) is the conventional unit of luminous flux or the flux emitted by one international candle through one steradian. All of which, you say, is not very "illuminating!" We agree. Roughly the lumen is usually thought of as being equivalent to 10 candle power—a 6000 lumen being of 600 candle power.

THE practice today is to turn on the lights 20 minutes before sunset and the same period before sunrise. The Old Farmers' Almanac is still followed as an authority on the predicted variation in the movement of the sun and moon. On Dec. 28, at the height of the dark period, your streets burst into illumination at 4.25 p. m. whereas on Nov. 1 they were not lighted until 5 p. m.

In the matter of spacing installations Mr. Knight has followed the procedure of erecting none, if possible, at distances of greater than 400 feet and usually the shortest in-between area has been 200 feet. Sometimes, of course, auxiliary installations have been needed to control certain hazards.

BEING street-lighting generalissimo of Worcester for such a long period has been an interesting experience as Mr. Knight sees it. It has been a pleasant one, too. There have been innumerable problems which he has had to meet and overcome to the average satisfaction of the citizens. Like many in executive capacities, with a small operating force, he has been burdened also with

were times, too, when it seemed as though every house-owner in Worcester wanted to see a bright, new electric light pole directly in front of his residence. But all these are circumstances and situations which go with the job. He has found in it an immense satisfaction. Perhaps he sees in Worcester, in the night, in the darkness there, a thousand twinkling monuments to his career.



HENRY A. KNIGHT, SUPERINTENDENT OF WORCESTER STREET LIGHTING SINCE 1893.

A casual survey of newspaper clippings shows how it has gone. In 1946 there were still 601 of them in the city; in 1955, there were 530; in 1957, 483; in 1962, 295; in 1973, 80.

Now, said Paul Sestito as he took a visitor on a tour recently of Worcester's remaining natural gaslights, there are just 26 of these solitary sentinels sprinkled throughout the city like fireflies in a black velvet night.

For Sestito, the task of protecting the last few survivors of Worcester's gaslight era is a part-time labor of love. A worker for Commonwealth Gas Co., he devotes some of his off hours to keeping the city's diminished supply of gaslights alive and well.

For \$130 a month, Sestito, 46, patrols the 13 streets where gaslights continue to burn in Worcester, cleaning their glass globes, troubleshooting their worn-out or broken parts, painting their graffiti-covered poles and replacing their woven-cotton mantles.

Glowing Mantles

For those too young to remember, the mantles are what make a gaslight glow. Made of woven cotton, they are coated with such minerals as cerium, thorium, aluminum or magnesium. When touched with a match for the first time, the woven thread is reduced to ash, but the fragile mesh of minerals keeps its shape and glows from the heat of the gas as it burns inside.

"A mantle will last you a few months, maybe more," Sestito said as he drove past Greenleaf Terrace, a private way off Pleasant Street about halfway between Newton Square and Richmond Avenue. "I've gotten a year out of some of them."

Sestito has been taking care of the gaslights for six years now. He inherited the job from another gas company worker, and intends to pass it on eventually to his son, Paul Jr., 14, a student at St. John's High School in Shrewsbury.

"Paul's been going around with me for the past few years, helping me clean and fix them," the elder Sestito said. "I've been showing him what I know, so as soon as he gets old enough to drive, he'll be able to take over."

What parts Sestito can't fix or salvage from irreparable gaslights are

"I hope I don't live to see the end of them. I think it would be a shame. I really don't know why I like them so much. I just do. It's because they're a part of history, I guess."

Paul Sestito

ordered for him by the city from the Welsbach Corp. of New Haven, Conn. Although the cost of parts has risen steadily through the years, the city still seems willing to provide him with what he needs to keep the lights glowing, Sestito said.

In the 1890s, the Welsbach Corp., located at that time in Baltimore, took the incandescent mantle invented by Baron Auer von Welsbach of Heidelberg, Germany, and introduced it into the United States. The superheated mantles were such an improvement

over the old gasoline lamps that preceded them that within a few years the company had established a network of gas-lighted street lamps in many U.S. cities, including Worcester.

A Musical Inspiration

During their heyday in the years before World War I, more than 1,000 Welsbach gas lamps bathed the streets of the city with a yellowish glow. The glass-globed lamps were capable of casting as much light as a 76-watt

electric bulb. They were owned and maintained by the company, which hired children and elderly men to travel throughout the city with long sticks and matches to defeat the night. Now, the remaining gaslights are kept lighted around the clock on the theory that keeping them going is cheaper than maintaining individual clocks in each lamp.

While they were around, however, the lamplighters served as a source of inspiration to at least one city dweller. One of the city's lamplighters spurred Worcester-bred composer Charles Tobias to write "The Old Lamplighter," a best-selling hit of the late 1940s about some unknown city employee who lighted the gaslight in front of Tobias' boyhood home at 79 Harrison St.

"He made the night a little brighter, wherever he would go," went the song's lyrics, "the old lamplighter of long, long ago."

But not too many years later, the lamplighter's job was taken over by built-in automatic timers, and gradually Worcester's romance with gaslight began to fade.

In 1936 Mayor Walter J. Cookson counseled the city to replace its gaslights with electric lights as soon as possible. "Cookson Takes First Step to Junk Street Gas Lamps," read the Worcester Telegram headline announcing the mayor's idea.

Anti-Gaslight Campaign

City Manager Everett F. Merrill took up the anti-gaslight cudgel in 1950, and Mayor James D. O'Brien continued the campaign in 1955. Perhaps contributing to the demise of the gaslight was the replacement in 1941 of the clear glass globes on many of the lamps with more modern-looking alabaster glass globes. The replacement globes caused many people to say that the gaslights then began to look just like electric lights, stripping them of their former charm.

As it turned out, however, getting rid of the gaslights proved to be a difficult task. In many cases, phasing them out involved digging up pavement and disconnecting lines from gas mains. Faced with that, the city hit upon the policy of waiting until there was some other good reason to dig up the street and taking out the gas lines and the

lights they fed at the same time.

And so it went. Attrition of the lights continued slowly during the tenure of City Manager Francis J. McGrath until, in 1967, Welsbach discontinued servicing the lights and the city took them over. Errant motor vehicles and vandals have been picking them off one by one ever since.

Sestito, for one, hates to see them go.

"I hope I don't live to see the end of them," he said. "I think it would be a shame. I really don't know why I like them so much. I just do. It's because they're a part of history, I guess."

Proprietary Interest

Apparently Sestito is not alone in his feelings. During the past few years, he has noticed that people with gaslights still on their streets have taken an almost proprietary interest in them.

"They kind of watch them, you know. Whenever I come around to check on them, they come outside and start questioning me to make sure I'm not there to take them away. They really help out with the vandalism too. I haven't lost one to that in a long time now," he said.

So just maybe, the gaslights will be able to hang in there for yet a while longer.

"I hope so," Sestito said as he drove along Water Street to complete his inspection tour. "I just love to keep them going."

"Look," he said pointing at the solitary gaslight on Columbia Street, off Water Street. "Look at that lonely one down there. I've got to remember to come back and get it all cleaned up for Christmas."

W C - LIGHTING

April 10, 1957

Celebrated in Song

Perhaps the most nostalgic piece about lamplighters was a tune written by composer Charlie Tobias, that was nationally popular in the early '40s.

Tobias is a former Worcester man and his song pays tribute to the lamplighter who lit the old lamp outside his boyhood home on Harrison street . . . "he made the night a little brighter, wherever he would go, the old lamplighter, of long, long ago."

Today, the romance is gone, argue the fanciers of antiquity.

The "lamplighter" today is a representative of the Welsbach Street Lighting Co. of Philadelphia who is assigned here full-time to make the rounds and keep an overall eye on the lights. For years the lights have been operated automatically from built-in clocks.

It costs about \$50 to replace the average gas light, but it's not quite as easy as all that.

No Underground Wiring

First of all, according to Horace H. Bigelow, superintendent of the Street Lighting Bureau and a member of the bureau staff for 46 years, many streets, particularly on the city's west side, have no underground wiring.

That means tearing up an entire length of street and that in turn means a lot of money.

Secondly, there are many property owners who just don't want a tall new pole in front of their homes. And they have a right to be heard at open hearings.

Advocates of replacing the gas lights argue principally in terms of safety and crime prevention. They point out that the illumination from a gas lamp is comparable to that from the smallest electric street light, about 76 watts.

The most wholesale conversion of gas to electricity in the city was last year in the area around Clark University. College officials warned the dimly-lit neighborhood just wasn't safe for girls at night.

Baltimore Problem

That 11 p. m. curfew in the so-called Gay Nineties points up the fact that people didn't stay out so late in the old days.

In Baltimore, Md., like Worcester and Boston, one of the more than 30 American cities which haven't said "23 skidoo" to the lamps, protests came in against conversion to electricity from indignant swains who took a dim view of kissing their sweethearts good night in brightly lit doorways.

Baltimore's reputation among the romance-minded was increased when the city adopted for a time, lamp domes frosted on the side facing doorways.

The city has had requests from time to time from antique-lovers who want to buy the gas lights which have served their last useful purposes. They want them mostly for yard decorations.

City Not the Owner

In the 1890's, the city had nearly 2,000 gasoline lights, a first cousin of the gas lamps. By 1910, the last 300 of these gave way to 75-watt tungsten lights.

Multi-deck parking garages have come . . . streamlined cars . . . automation . . . but the gas lights burn on, as they have since 1849, nostalgia personified.