Thirty-first Annual Convention

National Association of Master Plumbers of the United States

Philadelphia, June, 1913
HON. RUDOLPH BLANKENBURG
Mayor of Philadelphia
The Birthplace of Liberty
Rich in Historic Interest
Foremost as a Manufacturing Center
Noted for Educational Facilities
The City of Homes

By
WILLIAM W. MÁTOS

OFFICIAL SOUVENIR
Thirty-first Annual Convention
National Association of
Master Plumbers of the United States
Philadelphia, June 17, 18, 19, 1913

Published under the auspices of the
Philadelphia Master Plumbers' Association
Philadelphia extends a hearty welcome to the delegates and ladies attending the Thirty-first Annual Convention of the National Association of Master Plumbers of the United States.

PHILADELPHIA, the City of Brotherly Love, extends a hearty welcome to the delegates and the ladies who come from all parts of the country to attend the Thirty-first Annual Convention of the National Association of Master Plumbers of the United States.

The members of the Philadelphia Master Plumbers' Association, to whom was delegated the pleasant task of arranging for the Convention, appreciate in the highest degree the honor conferred upon them, and earnestly express the desire and hope that the Convention will be a most successful and profitable one to all concerned.

In preparing this book for you, we want it to convey our message of hospitality. May it guide your steps to the hallowed places of history, and in after years when you turn its pages, may it bring back to your mind pleasant recollections of the Convention and of the friends you have met in the City of Brotherly Love.
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Penn in the Suit of Armor
Philadelphia, Founded by William Penn in 1683, the Birthplace of Liberty, the typical American City, and known throughout the world as the City of Brotherly Love

WILLIAM PENN, the Founder of Philadelphia, the City of Brotherly Love and the third largest city in the United States, so far as population is concerned, undoubtedly named his city after the ancient city of Philadelphia, in Asia Minor.

Penn, as a young man in England, was deeply religious. Notwithstanding the objections of his father, Admiral Sir William Penn, the Founder continued to devote much of his time to religious matters and especially to the doctrine of the Society of Friends. Frequently his religious fervor got him into trouble and once he was imprisoned for six months in London for preaching the doctrine of the Society.

Being a strong believer in religious freedom, it is no wonder that the Founder, when he laid out his city for his followers in the year 1683, should have selected its name from the Bible. Philadelphia, the ancient city in Asia Minor, is named twice in the New Testament (Revelation i. 11: iii. 7) and Penn knew that the word Philadelphia meant Brotherly Love.

What more appropriate name could have been selected for a city where the predominant thought was to be religious freedom for all its inhabitants?

In the selection of a motto for the city seal, the municipal authorities in later years closely followed Penn's thoughts and took from the Bible, Hebrews xiii, 1, the verse "Philadelphia Maneto," meaning "Let Brotherly Love Continue."

As laid out by William Penn, in 1683, the city comprised only that part now bounded by Vine Street on the north and South Street on the south, with the Delaware and Schuylkill Rivers as the east and west boundaries. From a small beginning and with a mere "handful" of inhabitants, Philadelphia has grown and prospered until today it covers an area of one hundred and twenty-nine
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and a half square miles, with a population of 1,650,000—the third largest city so far as population is concerned—and without question the greatest manufacturing center in the United States.

In keeping with Penn’s thoughts that the city should be a haven of freedom for the people of all nationalities and of all creeds, where all were to be welcomed and make their homes, so is the great city today a "city of brotherly love" and a "city of homes." In possibly no other American city will the home life be found so ideal as in Philadelphia. It is truly a City of Homes,—more than 340,000 all told—and the most of them owned by their occupants.

Penn was not the first to land on the site of his contemplated city. At the time of his first coming, he was greeted by a few people who had preceded him and by a number of Indians. In Independence Hall, Sixth and Chestnut Streets, the Mecca for pilgrims from all parts of the United States, is a large oil painting depicting Penn making a treaty with the Indians. This painting is by Benjamin West, the first American painter. The scene of

Penn’s Treaty with the Indians

Original of this painting is in Independence Hall
Painted by Benjamin West, the first American painter
Penn's Treaty was Shackamaxon, on the Delaware, in the northeastern section of the city, now marked by a small park containing the Penn Treaty Monument. There is no record of any written treaty having been made with the Indians at that time, or in fact at any time since—until February, 1913. Then, two hundred and thirty years after Penn's arrival, there was a treaty signed by the Indians and President William H. Taft, upon the occasion of "breaking ground" for the erection of the Indian memorial, at the Narrows, near the entrance to the Bay of New York. It is quite a coincidence that Penn, the Founder of Philadelphia, should be depicted making a treaty of peace with the original inhabitants—the Indians—and that another Philadelphian, Mr. Rodman Wana-

View of Philadelphia

Windmill Island on the left

Christ Church in the center

maker, should have been the originator of the thought and donor to the country of the great memorial to be erected to the memory of the original inhabitants of the Western Hemisphere.

No review of the history of Philadelphia would be complete without reference being made to the fact that attempts had been made to colonize within the present borders of Pennsylvania as early as 1623. Captain Kornelius Jacobus Méy, a Dutchman, sailed up the Delaware Bay and river in 1623, possibly as far as the site of Penn's city. Cape May is named after him. The Swedes had their early settlements along the river as early as 1638. One of the early forts of the Swedes was located in the neighborhood where today stands Gloria Dei (Old Swedes) Church.

Penn's City—Philadelphia—officially dates from the year 1683. With him there came from England craftsmen of every sort, who at once started work in making homes for themselves and begin-
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ning the occupations which were to sustain them and their city. The Founder gave much thought to the laying out of Philadelphia and it was he who laid out the central square, where now stands the City Hall. His plans also provided that this central square should be the site for buildings for public affairs. The straight streets, crossing each other at regular distances, which plan has since been carried out in the growth of the city, were also Penn's idea. He laid out the present Market Street and the present

William Penn's House

This house was originally erected in Letitia Street and was the first brick structure in Philadelphia, the bricks having been brought from England. Some years ago it was carefully removed to West Fairmount Park, where it is open to visitors.

Broad Street as his two principal thoroughfares, and all the existing streets in the territory originally laid out by Penn for his city, are practically the same today as in his original plans.

The first one hundred years' development of Philadelphia witnessed a really wonderful growth, but it is not at all surprising when one realizes that the followers of Penn included mechanics and workers of all kinds. Within four years from the start, the city boasted of the first printing press in the New World, and also cotton,
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paper and woolen mills; brickyards, shipyards and factories of all kinds. Fifty years after Penn's arrival the population was about 12,000 and the number of houses erected about 3000.

The progressive spirit of the early inhabitants was again shown when they developed the first line of transportation facilities in the country. In 1732, transportation was opened to New York, three days being necessary for the journey. In 1773, the first stage coaches were introduced, making the trip from Philadelphia to New York in two days, and it is very interesting to note that the fare in those early days was exactly what it costs now for a round trip—four dollars.

Although not generally known, to Philadelphia belongs the honor and credit of introducing the first steamboat. In 1788 John Fitch, then living in Philadelphia, conceived the idea of propelling a boat by steam. He constructed a boat equipped with paddles and launched it on the Delaware. This primitive boat, the forerunner of the mighty ocean greyhound of the Twentieth Century, made several trips up the Delaware as far as Burlington and Trenton. In addition to having presented the first steamboat, the city was the pioneer in building ships and has always maintained the reputation of being the largest shipbuilding city in the United States.

Linked with the earliest history of the city is its unsurpassed reputation as an educational center. In the same year that Penn arrived the first English school was founded. In 1689 the Friends' Public School, now known as the William Penn Charter School was established. In 1740 Benjamin Franklin laid the foundation of what is now the University of Pennsylvania.

To Franklin, the founder of the University of Pennsylvania, Philadelphia owes much for the rapid strides made prior to the Revolutionary period. Born in Boston, January 17, 1706, he came to Philadelphia in 1723. He secured employment in a printing office, and in a comparatively short time he owned his own plant and became publisher of the Pennsylvania Gazette. This was in 1729. In 1736 he entered public life and two years later became a member of the General Assembly. In 1737, he was appointed Deputy Postmaster of Philadelphia. He also organized the first police force, the first fire company, a militia force, and in many ways led in various movements for the improvement of the city and the comfort of its inhabitants. He soon became the foremost man in the Province of Pennsylvania and was among the first to foresee the trouble which led to the Revolution. Franklin did much
to avoid the war, and, when he saw that it was inevitable, was largely instrumental in having the Continental Congress issue the Declaration of Independence, of which he was a signer. It was in Philadelphia—even at the time that Franklin was active in public affairs—

that he found time to carry on scientific investigations. As a result of his experimental work in scientific affairs, he was the first to demonstrate to the world that lightning and electricity were the same. Franklin died here—April 17, 1790—and his grave at Fifth and Arch Streets is visited by thousands annually.
Very few Philadelphians know that Philadelphia had a "tea party" before the much-heralded Boston "tea party." The fact is that on October 16, 1773, twenty days prior to the famous Boston "Tea Party" of November 5, 1775, Philadelphia witnessed an enthusiastic mass meeting in State House Square, now known as Independence Square, where strong resolutions were offered refusing to pay the tax on tea. This meeting was called immediately after the news reached Pennsylvania that a three-penny tax on tea had been ordered by England, and the resolutions adopted declared that it was the duty of every colonist to oppose the payment of this tax. The ship "Polly," loaded with tea, was on the way to Philadelphia on December 27, that year. The ship arrived and Captain Ayers came to the city where 8000 excited people met him and he was ordered to take the ship back to England, after one day's grace had been given him to obtain food and water. The people made him understand that they would not buy the stamps under the Stamp Act, and the next day, Captain Ayers left the city and took his ship back to London. This act clearly showed the temper of the American people and gave the plainest evidence necessary that the Revolutionary War was an unavoidable certainty.

The Revolutionary period made Philadelphia the birthplace of the nation. It was here on September 4, 1774, that the First Continental Congress assembled in Carpenters' Hall, bringing together George Washington, John Adams, John Jay, Peyton Randolph and other leaders who were conspicuously active in the movements which led up to the Declaration of Independence and the birth of the nation. Carpenters' Hall is still standing. It is located on Chestnut Street, just east of Fourth Street. The building was erected in 1724 by the Carpenters' Company, a society of carpenters and architects. It is today used as a museum and contains many interesting collections dating from the colonial period.

It was soon after the First Continental Congress met that the war was a foregone conclusion. Hostilities commenced at Lexington, Massachusetts, and in Philadelphia the enrollment of troops was immediately started. Among the very first of the companies organized was the First Troop, Philadelphia City Cavalry, dating from November 17, 1774, and which organization has since been maintained as an active troop of cavalry. Its flag was carried throughout the Revolutionary War and in all wars following, the Troop has taken an active part. It is today part of the National Guard of Pennsylvania. From the time of Washington to the
present, the Troop has acted as the escort of every President of the United States.

The Second Continental Congress met in the State House (now known as Independence Hall) May 10, 1775. Benjamin Franklin, who had just returned from England, was elected a member of the Congress and one of his first acts was to organize the Committee of Safety. This Committee had as its duty the arming and equipping of the Militia and providing for the defence of the city.

John Hancock was chosen president of the Congress and he was one of the most patriotic of the citizens. He was active in every movement to bring freedom and independence to the colonies, and one year later, when he affixed his bold and plain signature to the Declaration of Independence, he exclaimed: "John Bull can read that without 'specs.'"
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It was the Second Continental Congress which appointed Washington the commander-in-chief of the army. He was then in the prime of his life, forty-three years old, erect and strong. The army was then around Boston, and in a little more than a month after the assembling of the Congress, the Battle of Bunker Hill was fought, with its memorable result. When Washington heard of the battle, he made his prediction, which was to become true, that "the liberties of the country are safe."

From the painting by Trumbull

Signing the Declaration of Independence

At the time of the Battle of Bunker Hill, only three colonies, Massachusetts, New Hampshire and South Carolina, had broken away from the rule of King George, but a year later all the colonies were demanding independence. On June 7, 1776, a resolution was presented in the Congress declaring that "these United Colonies are and of right ought to be, free and independent States; that they are absolved from all allegiance to the British crown and that all political connection between them and Great Britain is and ought to be totally dissolved."

That was the resolution, offered by Richard Henry Lee, of Virginia, which gave birth to the Declaration of Independence.
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The Congress debated it calmly and, as every indication showed that the delegates were eager for independence, a committee consisting of Thomas Jefferson, of Virginia, as chairman; Roger Sherman, of Connecticut; Robert R. Livingston, of New York, and John Adams, of Massachusetts, was appointed to draft a declaration along the lines of the resolution presented by Lee.

When the committee had completed its task, it delegated to Jefferson the work of writing the important document which gave birth to the nation. Jefferson wrote the Declaration of Independence in his boarding-house, which was located at Seventh and Market Streets. A tablet upon the wall of the bank building which now occupies the site of the old boarding-house commemorates this fact.

After several days of preliminary discussion upon the Lee resolution declaring for independence, it was expected that Congress would act upon it on July 1, 1776. The State House Square was thronged on that day, but to the disappointment of the crowd, the action was deferred. It was not until the evening of July 4, 1776, that the Congress adopted the original resolution and also the Declaration of Independence. Hardly had the vote been announced than the State House bell—since known throughout the land as the Liberty Bell—rang out the tidings to the people of the City.

What a prophecy was that which was cast upon the bell when it was first brought from England in 1751—"Proclaim Liberty throughout all the land unto all the inhabitants thereof—Lev. xxv, x." Little did its original makers dream that later it would ring out the news of the birth of a nation which at that time owed allegiance to King George.

Copies of the declaration were sent the next day to General Washington, commander-in-chief of the army; to all the commanding officers of the troops in the field and to all the colonies, and at noon on July 8, the declaration was formally proclaimed at the State House, when the Liberty Bell, then so called by everyone, rang for an hour proclaiming liberty to all the people. Thus it is seen that in less than one hundred years after the City of Philadelphia was laid out by William Penn, the Founder, it was here that a new nation was given birth.

The State House, or as it is now known—Independence Hall—is the Mecca for thousands of visitors annually from all parts of the world. It is situated on Chestnut Street between Fifth and Sixth Streets, with Independence Square on its south side. It was built during the years 1729 to 1734 and was first used as
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a "State House" in 1735. From 1775 to 1800, it was used by the Colonial Congress, and by the Legislature of Pennsylvania until 1804. In 1787, as a sequence of the Revolution, the Constitution of the United States was adopted there. In 1790, when Congress decided to remove the capital from New York to Philadelphia, the State House served as the capitol of the nation. In the building at the corner of Sixth and Chestnut Streets, then known as Congress Hall, Washington and Adams were inaugurated for the second term of their Presidency and Vice Presidency, and Jefferson as President in 1797.

From 1776 to 1783 was the period of the Revolutionary War, and of particular interest connecting Philadelphia with the war was the fact that it was a Philadelphian who raised the finances to carry on the war and establish the government. This was Robert Morris, delegate to the Continental Congress and a signer of the Declaration of Independence. He was a financier and freely placed his immense fortune at the disposal of the government. In 1780, three years before the close of the war, he established the Bank of North America in Philadelphia. After the Revolution he served in the General Assembly of Pennsylvania and was also a delegate to the convention which framed the Constitution of the United States. From 1788 to 1795, he was a member of the United States Senate.

Connected with the stirring incidents of the period which gave birth to the nation is a very interesting story connected with the Betsy Ross, or Flag House, located on Arch Street, east of Third. In this little house, which is now standing and well preserved, lived John Ross, an upholsterer by trade. He entered the army and gave up his life in the cause and his widow carried on the business. In May, 1776, Washington, who was then in the city, in company with a committee, called upon Betsy Ross and had her make a sample flag of thirteen stars and thirteen stripes. This was the design that was adopted by Congress, June 14, 1777.

During the summer and early fall of 1777, the scene of war shifted to Philadelphia, when the British under Howe took possession of the city. Congress hastily adjourned and removed to Lancaster, Pa., and the Liberty Bell, already beloved by the people, was taken to Allentown, Pa., to prevent it from falling into the hands of the British. On October 4, 1777, was fought the Battle of Germantown, which resulted in the defeat of Washington's forces. Following this battle the forces of Washington proceeded north of the city and spent the miserable winter months in camp at
Valley Forge. Visitors to the city will find much to interest them, both in the Germantown district of the city and also at Valley Forge, which is readily accessible by train or trolley car.

Benjamin Franklin returned about this time from France, where he had been successful in having the French Government recognize the independence of the colonies. Closely following his return a French fleet approached Philadelphia, whereupon the British abandoned the city. This was in the early summer of 1778. The war by that time was carried into the West and South, and its termination was practically reached by the bombardment of Georgetown, October 19, 1781. The treaty of peace was signed at Paris, September 3, 1783, just one hundred years after the founding of Philadelphia by Penn.

The birth of the nation presented many perplexing problems. After the severance of all ties with Great Britain, the Continental Congress in 1777 proposed Articles of Confederation to the several States, but these were not ratified until 1781. After the Revolution, the Congress found that it did not have power over all the States, and Washington, who was appealed to, advised among others, the Constitutional Convention. This was convened in Philadelphia, May 14, 1787, and remained in session for four months. Washington was the presiding officer. The result of the convention was the adoption on September 17 of the Constitution of the United States, and it was ratified by the several States in the following order:

Delaware, December 7, 1787.
Pennsylvania, December 12, 1787.
New Jersey, December 13, 1787.
Georgia, January 2, 1788.
Connecticut, January 9, 1788.
Massachusetts, February 6, 1788.
Maryland, April 26, 1788.
South Carolina, May 23, 1788.
New Hampshire, June 21, 1788.
Virginia, June 25, 1788.
New York, July 26, 1788.
North Carolina, November 21, 1789.
Rhode Island, May 29, 1890.

The first capital of the new government was located at New York, and Washington was inaugurated as the first President, March 4, 1789. In the following year, the capital was removed to Philadel-
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Philadelphia, and until 1800 this city remained the capital of the nation. As Washington figured so prominently in all the affairs which led to the successful building of the nation, it will be of interest to know that it was in Philadelphia on February 22, 1788, that Washington's Birthday was first officially observed.

While the period from 1775 to 1800 was filled with momentous happenings affecting the interests of the people of the several States, the same period found Philadelphia fast developing into a most important city. The demands from all the States for manufactured articles to take the place of goods formerly imported, severely taxed the factories and mills of the city. But these wants were all accommodated and from that time on Philadelphia has been justly known as the leading manufacturing city in the country.

In thus reviewing a few of the important events from the time of the founding of the city to the beginning of the Nineteenth Century, a period in which the history of Philadelphia is closely allied to the history of the nation, the following additional facts will be of more than ordinary interest:

The first paper mill built in America was erected along Wissahickon Creek (now Fairmount Park), in 1690.
The mariners’ quadrant was invented by Thomas Godfrey, in Germantown, Philadelphia, in 1730. The remains of Godfrey are buried in North Laurel Hill Cemetery.

The first Public Library in the United States was founded here by Benjamin Franklin in 1731.

The first institution devoted to science in America—The American Philosophical Society—was founded here by Benjamin Franklin in 1740.

The first Medical School in the United States was established here in 1751.

The theory that lightning and electricity were the same, was demonstrated here by Franklin in 1752.

The first American Expedition for Arctic Exploration left Philadelphia, March 4, 1753. In this connection it is well to note that the first Arctic Expedition under command of Robert E. Peary, now Rear Admiral U. S. N., retired, the first man to reach the North Pole, was sent out under the auspices of the Academy of Natural Sciences in 1892.

The first School of Anatomy in America was founded here by Dr. William Shippen in 1765.

The first Pianoforte manufactured in the United States was made here by John Behrent, in 1775.

The first mint of the United States was established here in 1792, by act of Congress, the original location being at what is now Seventh and Filbert Streets.

In 1794, the first turnpike road to be constructed in the United States was opened from Philadelphia to Lancaster, a distance of 62 miles.

The first gas-light to be exhibited in the United States was shown here in 1799.

From the beginning of the Nineteenth Century to 1854, the old city of Philadelphia developed rapidly, and surrounding it were twenty-eight distinct Districts, Townships and Boroughs, each with its own charter and administrative officers. The population grew rapidly and industry was to be noticed everywhere. In different directions were scattered large manufacturing plants. Thus, for instance, shipbuilding prospered along the upper Delaware; textile mills were established in the northeastern, southeastern and far northern parts; while in the more central parts, the machine industry had its largest shops.

In 1854, the people of the various adjacent municipalities, tired of the constant friction, succeeded in having the Consolidation Act
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passed by the State Legislature, thus making Philadelphia City co-terminus with the boundary of Philadelphia County, with one government for all the sections and people. From that time to the present, Philadelphia has ranked as one of the most important cities in the United States.

Thus has been shown some of the important facts connected with Penn's City, Philadelphia, from the time he laid it out and when it covered an area of but two square miles and a mere handful of people, until it covers an area of one hundred twenty-nine and a half square miles, with a population exceeding a million and a half. The twenty-eight lamp-posts upon the Plaza of the City Hall, each twenty-eight feet in height and capped with twenty-eight lights, are memorials to the original twenty-eight separate municipalities which were consolidated with the original city of Philadelphia in 1854. Upon each post is a memorial tablet giving the name of the District, Borough or Township it stands for, together with the date of incorporation and copy of its Seal.

The Philadelphia of today can very aptly be referred to as the "City of Homes," the "City of Education" and the "World's Greatest Workshop." To give the visitor some idea of the home life here, it should be known that there are at the present time 343,847 separate dwelling houses in the city, the majority of them owned by those who live in them. Of this number of houses, giving the city its name of "The City of Homes," more than 95 per cent. are of brick construction. Only 11,142 of this number of houses are of frame, and no frame houses have been erected in recent years. In addition, there are 1906 hotels, apartment houses and tenements. It has only been within recent years that the tenement house plan—so common to other large cities—has been introduced into Philadelphia, and these new houses have been established largely in the more central and congested parts. Of the total number of dwelling houses, fully one-fifth are of comparatively new construction, having been erected during the past twenty years.

As an educational center there are 320 public schools, 265 buildings used as schools, under religious control, and a number of colleges, furnishing educational facilities for more than 300,000 students daily. Two of Philadelphia's great Universities alone have a student enrollment of more than 8000, and the various medical and special schools accommodate many more thousands. There are six noted medical colleges here, giving the city the reputation of being the greatest medical educational center in the United States. In connection with education special reference must be made to
Philadelphia Institutions of Learning

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Girard College, the largest and most heavily endowed institution in the world devoted to the care and education of orphan children. It is centrally located and has an enrollment exceeding 1500. In the grounds, which cover forty acres, are seventeen large marble buildings. The body of Stephen Girard rests in the main building, which is one of the notable marble structures in this country. Girard College has an income producing endowment in excess of twenty-five million dollars.

Well might Philadelphia also be called the "City of Churches" for it not only has several of the oldest and most historic in the United States, but it has no less than nine hundred separate places of worship.

The government of the City of Philadelphia is largely vested in the hands of the Mayor, who is elected for a term of four years and who cannot succeed himself in office. The Mayor appoints the heads of the departments of Public Safety, Public Works, Public Health and Charities, Supplies, Wharves, Docks and Ferries, City Transit and the Civil Service Commission. Departments over which the Mayor does not have jurisdiction, the heads of which are elected for terms of four years, are Receiver of Taxes, City Controller, City Treasurer, and City Solicitor. The legislative branch of the city government consists of Select and Common Councils, the former branch being composed of one member for each of the forty-seven Wards of the City, elected for terms of four years, and the latter of one member for every 4000 voters in each ward. The terms of the members of Common Council are for two years. The Board of Education is composed of twenty-one members appointed by the Board of Judges.

The officials of the City at the present time are:

Mayor, Hon. Rudolph Blankenburg
Director of Public Safety, George D. Porter
Director of Public Works, Morris L. Cooke
Director of Public Health and Charities, Joseph S. Neff, M.D.
Director of Supplies, Herman Loeb
Director of Wharves, Docks and Ferries, George W. Norris
Director of City Transit,* A. Merritt Taylor
Receiver of Taxes, Hugh Black
City Treasurer, Murrell Dobbins
City Controller, John M. Walton
City Solicitor, Michael J. Ryan

*Department in operation July 1, 1913.
Philadelphia Churches

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Under the Department of Public Safety are the important Bureaus of Fire and Police, together with the Electrical, Building Inspection, Boiler Inspection, Correction and Elevator Inspection. The task of policing such a great city is no small one, but it is exceedingly gratifying to note that in Philadelphia the Police Department is recognized as second to none in the United States, and in addition, through the effective work of this Bureau, it has often been declared by outsiders that in no other city is the public so well safeguarded. The city’s police strength is as follows: One Superintendent, five Police Surgeons, five Captains of Police, one Captain and twenty-nine detectives, forty-five Lieutenants of Police, each commanding a district; one hundred and sixteen Street Sergeants, sixty-four Patrol Drivers, sixty-four Patrol Officers, two thousand nine hundred and forty Patrolmen, two hundred and fifty substitute Patrolmen, and twenty-four Police Matrons. The city has forty Police District Station Houses, many of which are of modern construction and four Police Boats, patrolling both the Delaware and Schuylkill rivers.

Next in importance to the Police Bureau is the Fire Bureau, which has also earned for itself an untarnished record for efficiency and bravery. At the present time the Fire Department consists of fifty-seven steam engine companies, eighteen hook and ladder companies, six chemical engine companies, one fire boat and two water towers. The strength of the Fire Department is one Chief Engineer, eleven Battalion Chiefs, seventy-seven Captains, seventy-nine Lieutenants, fifty-nine steam engineers, sixty-one firemen, ninety-seven drivers, eighteen tillermen and six hundred and thirty-five hose and laddermen.

Under the Department of Public Works comes the control of all the property of the city (excepting schools), the maintenance of streets, sewage and water supply. Under the City Property Bureau the most noteworthy building is the City Hall. This is the largest building in the world devoted exclusively to the administrative business of a city. The site upon which it stands was selected by William Penn, and for just such purposes. Prior to its erection, the city Government was housed in Independence Hall, but in 1868, City Councils adopted a resolution providing for the erection of a building and planned to erect it in Independence Square. The people objected to that site and Broad and Market Streets was selected by the people themselves—by popular vote—as the only proper place for such a structure. Work on the erection of the City Hall was started January 27, 1871, and nearly twenty-five years
Types of Philadelphia Police and Fire Stations
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were required for its completion. Its cost was upwards of $24,000,000.

From east to west, the City Hall measures 470 feet and from north to south 486 feet, 6 inches. It covers an area of four and one-half acres. The height of the tower is 547 feet 11 1/4 inches, and the width of the base of the tower is 90 feet. The clock face, which is 361 feet above the pavement, is 26 feet in diameter. There are 662 rooms in the building and the area of the floor space is about fourteen and one-half acres.

School Buildings could rightfully be referred to in this chapter as city property, but it is sufficient to state here that in no other city will the public school buildings be found to be of better construction or have so many conveniences. Next to the school buildings, reference should be made to the Philadelphia Free Library System. Especially is such reference interesting from the fact that the Free Library system, with its many well appointed and handsome buildings, only dates from 1894. At the present time, twenty library buildings are in use, fifteen of which were erected under the provisions of a gift by Mr. Andrew Carnegie and fifteen additional buildings are to be built from funds provided by Mr. Carnegie when sites are secured. The city has appropriated $1,000,000 for a great central library which is to be erected on the new Parkway, between Nineteenth and Twentieth, Wood and Vine Streets. In addition to the Philadelphia Free Libraries, there are forty-seven other libraries, open to the public under certain conditions, in the city.

Under the caption "City Property" must be included the bridges of the city, of which there are 571 within the city limits. Of this number, 363 were built wholly or in part by the city. These bridges cover a wide range in character, size and cost, running all the way in cost from $2,500,000 (represented by the Spring Garden Bridge) and 2730 feet in length, down to a concrete arch carrying a railway over a narrow street, representing an expenditure of only $1800.

An important Bureau in the Department of Public Works is that in charge of Highways, and it can truly be said that Philadelphia's streets are well paved and carefully maintained. There are within the city limits 1343 miles of paved streets and 471 miles of roads.

Sanitary Engineers are always interested in the sewage system of a great city, and in this respect Philadelphia's system is well worth studying. There are nearly 1300 miles of sewers within the
Philadelphia Library Buildings

1—Ridgway Branch, Philadelphia Library
2—Mercantile Library
3—Josephine Widener Branch, Free Library
4—Spring Garden Branch, Free Library
city’s limits, a length sufficient if placed in a straight line to reach from Philadelphia to New Orleans. In 1854, at the time of the consolidation of the city, there were only 36 miles of branch and main sewers.

The Philadelphia Filtration System has attracted the interest of engineers in all parts of the world, and much could be written about it. Briefly stated, the water supplied to the city is taken from both the Schuylkill and Delaware rivers, and is filtered at and pumped from four plants in different sections.

The largest plant used, which is well worth a visit, is at Torresdale. This plant supplies the entire city, excepting West Philadelphia, Germantown, Chestnut Hill and Tioga. The water is taken from the upper Delaware river. The plant includes sixty-five slow sand filter beds, each three-fourths of an acre in size; 120 rapid filter beds, each a little more than a quarter of an acre in size, and a filtered water basin of 50,000,000 gallons capacity. This plant has a daily capacity of 240,000,000 gallons. The Torresdale Pumping Station is equipped with eight centrifugal pumps of 40,000,000 gallons capacity daily; auxiliary machinery for washing filters, lighting plant and handling coal, and nine 300 horse-power boilers, equipped with automatic machinery, etc. From the Torresdale filters, the water is delivered through a conduit ten feet, seven inches in diameter, about 14,000 feet distant to Lardner’s Point Pumping Station. This station is equipped with twelve vertical triple expansion engines, supplemented by four engines of different types and represents both as to equipment and capacity one of the most modern plants in the world.

The Belmont plant, corner of Belmont Avenue and Ford Road, in West Philadelphia; the Roxborough plant, on Ridge Avenue near Shawmont Avenue, and the Queen Lane plant, Queen Lane and Fox Street, supply the other sections of the city previously mentioned, the water being taken from the Schuylkill river. These plants have a filtered water basin capacity of 77,000,000 gallons, and a daily capacity of 142,000,000 gallons. The total cost of the filtration plants of Philadelphia to date has been $27,300,000.

To the visitor, the question of transportation is always interesting and today Philadelphia may well feel proud of the transportation facilities offered. The problem of scientifically handling the street transit problem has been harder to solve in Philadelphia than in any other city. The great congested business district (practically confined to a few city blocks just east of the City Hall)
Philetada's Market Street Elevated and Subway Road

(1) Incline from Subway to Elevated at foot of Market Street. (2) An Elevated Road Station. (3) Elevated Loop at foot of Arch Street. (4) Station, Fortieth and Market Streets. (5) Thirteenth Street, Subway Station. (6) Subway Track around City Hall.
made the problem a most difficult one. At the close of every day's business, an immense army of workers in this one district wants to get home quickly. The people live in every direction—north, east, south and west, and naturally all want to save time.

Today, by the subway and elevated railway system on Market Street, the problem of carrying passengers to West Philadelphia and the rapidly building suburbs has been practically solved, leaving to the many cross-town lines centering in the heart of the city more freedom in the use of the central streets. Philadelphia has recently introduced the latest designs in the "Pay-as-you-enter-Car," and passengers enter and emerge from the front end of the car only. Stops are only made at the near side of cross streets, thus enabling passengers to enter and leave at the paved street crossings. This rule of stopping effects a great saving in the running time on each route. For the convenience of visitors, it is well to know that the Philadelphia trolley conductors are instructed to direct inquiring strangers as to the best way to reach any destination desired.
Market Street, looking west from Eleventh
Philadelphia, the world's greatest workshop has more than 16,000 manufacturing plants, employs 260,000 skilled laborers and annually produces more than $700,000,000 worth of manufactured products.

Volumes could be written describing Philadelphia as the "World's Greatest Workshop," but space prevents noting more than the merest outline in this book. Geographically, the city is ideally located to supply the entire world with its manufactured product, for it is situated upon a broad river capable of accommodating the largest ships and within its confines are the terminals of three of the greatest railroads in the country.

Summed up in the briefest way possible, Philadelphia with only one-sixtieth of the population of the United States produces one-twentieth of all its manufactures. It has 16,000 manufacturing plants, employing 260,000 skilled laborers. Each year the consumption of raw material exceeds in value $400,000,000 and the value of the manufactured products is in excess of $700,000,000 annually. In the value of its manufactures of locomotives, carpets and rugs, leather, hosiery and knit goods, woolen goods, street railway cars, iron and steel shipbuilding, felt hats, saws, upholstery goods and oilcloth, Philadelphia leads every city in the United States. Within a radius of five miles of the City Hall, nine-tenths of all the carpets woven in the United States are manufactured.

Philadelphia stands second in the production of foundry and machine shop products, sugar and molasses refining, petroleum refining, worsted goods, chemicals, druggists' preparations, dyeing and finishing textiles, cordage, twine and fertilizers.

In shipbuilding Philadelphia has always stood in the forefront for more than a century and a quarter. A greater tonnage of steel ships is built on the Delaware River than in all the rest of the country.

As to locomotives, the fame of the Baldwin Locomotive Works, with an army of more than 19,000 skilled workmen is international.
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Its immense Philadelphia plant located on Broad Street, between Spring Garden Street and Pennsylvania Avenue and extending west to Sixteenth Street—the very heart of the city—is one of the greatest attractions to all visitors. In past years, it has been inspected by representatives of every nation on the globe. At the present time, the capacity of the great works is nearly 3000 locomotives annually, or about ten daily.

As Pennsylvania is the foremost iron and steel producing State in the country, it is not surprising that Philadelphia should have led in the building of great ships and the manufacture of locomotives. Not only in these two great lines has the city made for itself international fame, but the same is true in the building of bridges, the making of saws, etc. Today, the city as a bridge-builder is favorably known all over the world. As to the reference to the making of saws, it is well to note that this industry was commenced here more than a century ago and the city has since been known as the greatest saw-making center in the world. Many millions of dollars are invested in this industry in Philadelphia and the 2000 workmen so employed draw more than $1,000,000 annually in wages. Originally, the saws used in this country were chiefly made in England, but today Philadelphia made saws sell in Great Britain and her possessions and in continental Europe, and they also have a practical monopoly of the trade all over the Western Hemisphere. Not only does Philadelphia lead in the manufacture of saws, but the same is true in the making of files and other tools.
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Much could be written praising the high quality of Philadelphia-made shoes, and also of all manufactured goods in which leather is used. While not the leader in the making of shoes, its fame has been attained in the tanning of leather. Not far from $20,000,000 are invested in immense tanning plants, giving good wages and employment to thousands of the citizens. As part of the leather industry, it is interesting to state that the leather that enters into bookbinding is largely prepared and extensively consumed in Philadelphia, which is one of the largest book publishing centers in the United States.

As a leader in the manufacture of textile fabrics, Philadelphia's reputation has been made known all over the world. In this particular branch of trade, the city is the leader in the United States. Nearly 100,000 operatives are employed by the fifteen hundred firms engaged in the manufacture of textiles in the city and the amount of money paid out annually in wages is in excess of $40,000,000. This means that more than 100,000 people are engaged in this industry alone. The total value of the textile output, including wool, cotton and the lighter woven fabrics, is more than $200,000,000 annually. New York, Lowell, Lawrence and Providence, four other cities noted for the manufacture of textile fabrics, make but a little more than one-half of the amount produced by Philadelphia.

More hosiery and knit-goods are manufactured in Philadelphia than in any other city in the entire world. In stockings alone, the city produces annually more than 12,000,000 dozen hose and half hose, enough to allow two pairs for every man, woman and child in the United States. Philadelphia is naturally proud of the fact that it can manufacture a better stocking at lower prices than can be made in Europe, with cheaper labor.

In the manufacture of underwear, the city's reputation is also world-wide, more than 2,000,000 dozen garments being produced annually. In the cotton goods industry, there is manufactured here more than 180,000,000 yards of piece goods, sufficient to make a pair of sheets for every family in the United States. The annual production is valued at between $15,000,000 and $20,000,000 and in the printed goods, the patterns produced are copied extensively. To produce this volume of business, there are nearly two hundred establishments and in these factories are made every style of cotton dress goods, calicoes, gingham, plaid, bunting, non-elastic and elastic webbing; damasks, upholstery goods of every kind, every grade of lace curtains, towels, linseys, sewing thread, counter-
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panes, coverlets, fancy shirtings, linings, table covers, etc. A feature about this industry here is the fact that but seldom is there any depression felt among the mills, as is common in the New England States.

Within recent years, Philadelphia has made its name famous throughout the country for its manufacture of shirts, shirtwaists and lighter goods for summer wear. Many mills are devoted exclusively to this industry and thousands are so employed. The business of these mills varies from one hundred dozen a day to as high as twelve thousand.

As to the woolen industry, the output of Philadelphia annually is nearly 30,000,000 yards of woolen goods, enough to make uniforms for all the armies of Europe now in actual service. The city has always led in this industry in the United States, the total value of its output annually being $100,000,000. The output consists of worsted suitings, trouserings, carpets, blankets, woolen, worsted and merino yarns for both weaving and knitting; cassimeres, woolen shirtings, dress goods, flannels, chinchillas, overcoatings, worsted laces, mohair and alpaca fabrics; dress and cloak trimmings, astrakan, imitations of furs, worsted and mohair plusses, carpet yarns and a variety of other goods.

Nearly three-fourths of the upholstery goods made in the United States are manufactured in Philadelphia. Cotton upholsteries are made here in great variety and our cotton tapestries have a world-wide popularity. The largest silk plush mill in the world is located here, and it is also a fact that the first silk plush was made here.

In drugs and chemicals, the name of Philadelphia is world-famed and the total volume of business conducted by the great wholesale drug houses of the city is second to no other city in the country. Some of the greatest authorities on drug manufacture are Philadelphians who have spent more than half a century in the business, setting up a high standard for others to emulate. In this connection it is proper to state that to Philadelphia belongs the credit of establishing the first pharmaceutical college in the country, its purpose being to educate young men in the scientific handling and compounding of drugs and medicines.

The visitor to Philadelphia who desires to inspect any of the great mills and factories in any of the industries which have made the city famous will experience no difficulty in gaining admission to any plant.
Fairmount Park, the largest playground owned by any city in the world, a veritable wonderland of scenic beauty, enchanting drives, romantic walks and places of interest.

Very one of the visiting delegates to the Convention, and their ladies, should make at least one visit to Fairmount Park, the largest public park in the world. It contains 3448 acres of ground and within its boundaries are bits of natural scenery unsurpassed. The visitor to the city desirous of going to the Park finds plenty of diversion and scenes of unusual interest, no matter whether the trip is made by automobile over the principal drives, or by the Fairmount Park trolley road, winding in and out of choice woodland, or by foot, on well kept paths along the main drives or charming footways through playgrounds set apart for children, or through deep ravines, or along the romantic Wissahickon Creek. It really makes no difference where the Park is entered—at the Green Street entrance, or Girard Avenue, or Diamond Street, or Belmont Avenue in West Philadelphia, the Park charms the visitor. During the past year nearly 5,000,000 people enjoyed the beauties of this immense natural playground, and more than 500,000 automobiles, carriages and bicycles used the principal drives.

Fairmount Park dates back to the year 1812, although at that time there was no intention of acquiring the ground, or any part of it, as a pleasure park. The necessity of securing a source of water supply for the future of the city was the cause of purchasing in that year five acres of land in the vicinity of Twenty-fifth and Green Streets and adjacent to the Schuylkill River. A water works was erected there, and a basin established on the hill adjoining. This hill was known as Fair Mount, from which the entire Park later took its name. On this same hill, one hundred and ten feet above the river level, where for nearly a century was the principal reservoir to supply the central part of the city with water, is the site for the new Philadelphia Art Gallery to be erected in the near future. This Art Gallery will form the western terminus of the Parkway, with the City Hall at the eastern end.
Scenes in Fairmount Park
(1) The East River Drive. (2) Statue of Grant. (3) Memorial Hall. (4) Entrance to Zoological Gardens. (5) Horticultural Hall. (6) Tunnel on East River Drive
It must not be assumed that the acquiring of all the land now comprising Fairmount Park was an easy matter. Public opinion in the beginning was decidedly opposed to the idea, the claims being made that the cost would be prohibitive; that the engineering difficulties to be overcome in order to make all parts easy of access would be many, and that in the end it would not be appreciated by the people. There were, however, many public spirited citizens who early foresaw the wisdom of a great pleasure park, and to them Philadelphia to-day owes a debt of lasting gratitude.

At first, additions to the five acres purchased for water purposes were secured as a result of private subscriptions, and in the year 1857 the Sedgley estate was acquired, followed shortly afterwards by the purchase of the Lansdowne estate. These two names still figure as descriptive of two of the most picturesque sections.

By the year 1868, when the Fairmount Park Commission was created by Act of Assembly, the sentiment of the public changed to favor the Park, and from that time on it has grown until now the people of Philadelphia take the greatest pride in their pleasure ground. Many sections of the Park were donated to the city by public spirited citizens, one of the largest of these gifts being that part, west of the river, known as George's Hill. This section, covering some beautiful rolling ground, was the gift of Mr. Jesse George and his sisters.

Fairmount Park contains 42 miles of drives and 44 miles of footpaths, all magnificently cared for by the city. The principal entrance to the Park and the nearest to the center of the city is at Twenty-fifth and Green Streets, at the foot of the old Fairmount Park basin. The first object to attract the attention of the visitor is one of the most important and imposing monuments ever erected in the United States to the memory of George Washington. It was the gift to the City of Philadelphia by the State Society of the Cincinnati and was dedicated May 15, 1897, being unveiled by President William McKinley in the presence of an immense gathering of citizens. In 1783, the officers of the Revolutionary War organized the Society of the Cincinnati, its purpose being to form some means to perpetuate their friendship and to raise a fund for relieving the widows and orphans of those who had fallen during the war. The Society in after years developed into a strong social organization, and in 1810 a movement was started to raise a fund of $150,000 to erect a monument to the memory of their "first President, Commander and Friend, George Washington." By rea-
Statuary in Fairmount Park and in the City

son of the War of 1812, and other delays, the purpose of the fund was hindered for many years, but in the meantime the amount of money collected had grown, by judicious investments, into large proportions. By 1895, with further donations, the sum of $250,000 was ready to pay for the monument, which is to-day referred to as the most imposing, as well as the costliest, monument ever erected to any American, with the single exception of the Washington Monument at the National Capital. The monument stands 44 feet in height, being surmounted with a bronze equestrian statue of General Washington in the uniform of the Revolutionary Army, holding in his hand a pair of field glasses.

Proceeding down the driveway towards the river, the visitor sees the old Fairmount Water Works, now occupied by the Philadelphia Aquarium. In these buildings are now to be found specimens of all the fish of Pennsylvania and from other sections of the country. The old fore-bay adjoining the Aquarium is now a seal pond, possibly the largest in the world, where seals are to be seen in captivity.

Proceeding northward along the river, the path leads the visitor again to the River Drive. Another magnificent work of art is seen on the drive—a heroic bronze statue of Abraham Lincoln erected by the Lincoln Monument Association in 1871 at a cost of $36,000. It represents the Martyr-President in a sitting position, holding in the right hand a pen and in the left hand a scroll of the Emancipation Proclamation.

Just beyond, also on the River Drive, are a dozen quaint boat houses—the homes of the various clubs comprising the Schuylkill Navy. All these houses are of different types of architecture and they form at once an attractive and pleasing addition to the natural scenery. During the spring, summer and fall months the river is dotted daily with the boats from the different clubs, and on frequent occasions the regattas attract many thousands of people to the river.

Turning to the right at the Lincoln monument, the visitor enters upon what is known as Lemon Hill. This is, in reality, old Fairmount Park. Years ago a tall observatory marked this site, from which a beautiful bird's-eye view of the entire Park was obtainable. At the present time there is a great music pavilion located there, where during the entire summer concerts are given by choice bands. Further beyond, in the direction of Girard Avenue, is an object of unusual interest—it being "Grant's Log Cabin." This little structure was used by General Grant at his headquarters at City Point, Va., and was brought to Fairmount
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Park after the War. All the territory between Green Street and Girard Avenue can well be termed Old Fairmount Park. North of Girard Avenue, as far as the mouth of the Wissahickon Creek, is known as East Park, while that part west of the Schuylkill River is known as West Park. Along the Wissahickon Creek, for several miles, the territory is generally known as "Wissahickon Glen."

Girard Avenue Bridge, connecting East and West Fairmount Parks, is the widest bridge in the world and is one of the most interesting to engineers. It was erected in 1875. It is 865 feet long and 100 feet wide with a clearance above the water of 30 feet. It cost to erect $1,535,000 and it has cost less than $1000 per year to maintain since its construction. Just north of Girard Avenue Bridge is the connecting bridge of the Pennsylvania Railroad, over which pass all trains to and from New York.

On the east river drive north of Girard Avenue Bridge is the River Drive Tunnel—140 feet long, 41 feet wide and 23 feet high—through which the drive passes. This tunnel was cut out of solid rock, without any lining whatever, and is very picturesque. The East Park drive from Girard Avenue Bridge to the mouth of Wissahickon Creek is about five miles in length, with a corresponding driveway on the west side, though extending only to the Falls Bridge. The entire East Park section abounds in grand old trees, a succession of hills and ravines, and contains within its area several mansions dating from Colonial days. Half a mile north of Girard Avenue is Mount Pleasant and the MacPherson Mansion. In the year 1778 the Mansion was purchased by Benedict Arnold and occupied by him and his wife for a few months. Later, when Arnold turned traitor, the mansion became the residence of Baron Steuben, who drilled the American Army under Washington. Since 1868 the property has been owned by the city. Close by is another old mansion, dating from 1810, known as "Ormiston," a name derived from an estate in Scotland.

Following the road the visitor approaches Diamond Street entrance to the Park, passing on the way large level spaces where any pleasant afternoon will be found as many as a dozen games of baseball being played, while close by as many games of tennis. A little further to the northward is Dauphin Street entrance, this point being the eastern terminus of the Fairmount Park trolley road.

Just back of the Dauphin Street entrance is Strawberry Hill and Mansion, one of the choicest and most attractive parts of the
great pleasure ground. Here daily will be found during the summer season hundreds of picnickers enjoying an outing under the old trees. Band concerts are given every afternoon and evening. The old mansion was erected in 1742 by William Coleman, a friend of Benjamin Franklin. From the crest of the hill, a magnificent view of the Schuylkill for a mile up and down the river is to be had.

North of Strawberry Mansion is Laurel Hill Cemetery, one of the most interesting cemeteries within the city limits. The Park Drive skirts the cemetery on the river side, well shaded by old trees, making the mile of driveway a veritable tunnel of foliage. At the end of the cemetery limits is Falls of Schuylkill, and a quarter of a mile further on is the entrance to Wissahickon Glen, the Fairyland of Fairmount Park.

West Fairmount Park can be entered from Girard Avenue on the west side of the Girard Avenue Bridge. To the left of the main entrance is the Zoological Garden, the largest and most complete in America and with but one superior in the world. Inside the grounds is the old country seat of John Penn, a grandson of William Penn. The old house was and still bears the name "Solitude." It was erected in 1785 and John Penn, though Proprietary Governor and half owner of the Province of Pennsylvania, loved this spot better than anywhere else. In 1851, when Granville John Penn, a great-grandson of the Founder, and last owner of "Solitude," visited Philadelphia in 1851, he donated the house to the city. Since 1873 it has been used for the offices of the Zoological Society. The Zoological Garden covers a tract of 33 acres and is part of Fairmount Park, though leased perpetually to the Zoological Society. The various collections in the Garden are well worthy of a visit.

Entering the West Park the visitor sees, not far from the roadway, a small two-and-a-half-story brick house. This was Letitia House, the original home of William Penn and the first brick house built in the city. It formerly stood in Letitia Street, a small thoroughfare running south from Market Street, below Second. In 1889 the house was carefully taken down and removed to its present location.

Following the well kept driveway, or walking along the footpaths, through a most picturesque section, the visitor reaches Sweet Briar Mansion, another of the old Colonial homes well preserved. Adjacent is the Children's Playground, where on every clear day in summer hundreds of youngsters are to be found enjoying themselves on the grassy slopes, free from danger.

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Views of the Philadelphia Filtration Plant
1—Entrance to three filters, with sand washers in foreground
2—Interior of clear water basin
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Just beyond, on the level ground, is the old site of the great Centennial Exhibition of 1876, with two of the principal buildings still standing as silent reminders of the first great World's Fair to be held in this country. The first building to greet the eye is the magnificent Memorial Hall, of white marble, which cost to erect $1,500,000. The building is 365 feet in length and 210 feet wide. A collection of antiquities, the property of the Pennsylvania Museum and School of Industrial Art, and the famous Wilstach Art Collection and other notable exhibits are there shown. The original purpose for which this building was intended was to establish a museum of Art, Science and Industry, similar to that of the South Kensington Museum in London. The City of Philadelphia appropriated $500,000 and the State of Pennsylvania $1,000,000 for this purpose. A number of private bequests from time to time have made the several collections noted throughout the world. Immediately in front of the Hall is the memorial to John Welsh, a distinguished Philadelphian who was the leading mind in the Centennial Exhibition.

Less than half a mile to the north is another reminder of the Centennial Exhibition in Horticultural Hall. This great conservatory 380 by 193 feet, and 55 feet in height, is the largest building of its kind in the United States. Its cost was in excess of $250,000, and though erected nearly forty years ago, it is considered a modern building of its kind. The collections show plants from all parts of the world, many of a very rare character. In this building are raised annually 450,000 plants for the decorations of various sections of the Park, exclusive of about 35,000 chrysanthemums, lilies and other flowering plants, grown for the fall and spring public exhibitions.

Just west of Horticultural Hall are the famous sunken gardens, where during the summer months are magnificently arranged flower beds and lily ponds. In the distance is George's Hill, from the crest of which a pretty view of the Park and West Philadelphia is to be had. At the foot of the hill is a notable statue, known as the Catholic Total Abstinence Union Fountain and which was erected in 1876. The principal figure is "Moses Striking the Rock" and surrounding it are statues of Father Mathew, the Irish apostle of Temperance; Charles Carroll, one of the signers of the Declaration of Independence; John Carroll, a member of the Continental Congress, and Commodore Barry, the first American naval officer.

Belmont Avenue, corresponding to Forty-fourth street in West Philadelphia, is the principal thoroughfare through West Fair-
Philadelphia Hotels

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mount Park and extends from Belmont Avenue north to City Line. At the Belmont and Parkside Avenue entrance is the terminus of the Fairmount Park trolley road. The cars run westward passing around George's Hill, and after crossing Belmont Avenue about a mile north pass Belmont Mansion. The old mansion at this point, now used as a restaurant, was formerly Judge Peters' mansion. It was erected in 1745, and during the Revolutionary period sheltered among its guests Benjamin Franklin; Rittenhouse, the astronomer; Bartram, the naturalist, and many other distinguished men of learning. Lafayette, on his return visit to the United States in 1824, spent considerable of his time here. The most famous visitor to the old house, however, was General Washington. Baron Steuben, who for a time lived at Mount Pleasant on the east side of the river; Robert Morris, the financier of the Revolution; John Penn, the Governor of the Province, whose home was "Solitude" on the site of the present Zoological Garden; Thomas Jefferson and other public men were also frequent visitors to Judge Peters' mansion.

In the front of the mansion is a broad plateau where every pleasant afternoon young folks are to be found enjoying themselves playing baseball and other sports. In the fall of the year the Knights Templar of Pennsylvania hold their annual Field Day Exercises, often attracting as many as 50,000 people to witness their maneuvers.

The view from the top of the hill over the plateau is a grand one. The river is to be seen for several miles, with the great city of Philadelphia making a pretty background. The tower of the City Hall is in plain view, although more than five miles distant.

The Park trolley from this point disappears into a beautiful ravine, crossing and passing underneath bridges, until it nears the river. Here the passenger can transfer to cars proceeding across the Park Trolley Bridge to Strawberry Mansion and the Dauphin Street entrance, or can remain in the car and continue northward, skirting the river for more than a mile. The scenery is enchanting. On one side is a hill, covered with the densest foliage; the other side being low land down to the river's edge. Across the river, in full view, the famous East River Drive with endless processions of automobiles, carriages and pedestrians all day long. When nearing the Falls of Schuylkill Bridge, the car enters the beautiful Chamonix Glen, passing on the way an entrancing little lake, and continuing westward until Woodside Park is reached. This is one of the large amusement parks in the city (not in Fairmount Park)
Philadelphia Hospitals

that thousands of people visit daily to hear band concerts and enjoy themselves with the large number of amusements in the place. The trolley road then follows the original route back to the starting point at Belmont Avenue.

Words fail to tell the beauties of the Wissahickon Glen and its enchanting creek. Its name is Indian for "Catfish Creek," and was probably given to the stream from the fact that it abounded in catfish. Years ago it was a common thing for Philadelphians to journey to the old restaurants along the creek to partake of dinners of catfish and waffles.

Just east of Ridge Avenue is a small dam, giving sufficient water for nearly a mile beyond for boating. On the right-hand side of the creek is the driveway, and on the left a footpath leading to delightful picnic grounds. On both sides are towering hills, covered with trees and shrubbery. The scene in all directions is truly fascinating.

For mile after mile this beautiful creek wends its way through the Glen; silent only for the happy laughter of children at play and birds in the trees. Nowhere in America is there to be found such a delightful pleasure spot, and if the visitor has the time, a ride or walk into Wissahickon Ravine will never be regretted or forgotten. Many attractive bridges of stone span the creek at various places, but special reference should be made to Walnut Lane Bridge, one of the city's newest improvements and noted as one of the largest concrete bridges in the world. It was completed July, 1908, at a cost of $267,000. Its main span is 233 feet and the rise of the main arch is 70 feet 6 inches. The bridge itself is 147 feet above Wissahickon Creek.

Philadelphia and all Philadelphians are justly proud of Fairmount Park, and the stranger to the city after visiting Fairmount Park will readily understand why the people are so vitally interested in seeing that the natural beauties of their great pleasure ground are preserved.
Chronological review of many of the most important incidents connected with the history of Philadelphia, from the time of the first settlements to the Twentieth Century.

The stranger to Philadelphia has so many things to inspect, so many historic places to see, so many objects of interest to attract his attention that a week's visit would not give him the necessary time to accomplish everything desired. For the benefit of the visitor, who has very little time to spend in reading, the following review of the city, in chronological form, to the beginning of the twentieth century, will be found a valuable time-saver in acquiring considerable knowledge of the greatness of Philadelphia.

Dating the beginning of the city from the year 1683, when Penn, the Founder, made his first visit with a mere handful of devoted followers, the study of the city's growth in population is interesting. From the most authentic figures obtainable, including the Government Census reports up to and including the Census of 1910, the population developed as follows:

<table>
<thead>
<tr>
<th>Year</th>
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<tr>
<td>1700</td>
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<tr>
<td>1749</td>
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<td>847,170</td>
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<td>1,046,964</td>
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<td>1900</td>
<td>1,293,697</td>
</tr>
<tr>
<td>1910</td>
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</table>

In this chapter of facts associated with the development of Philadelphia, the first few paragraphs refer to events prior to the arrival of Penn, and they must be considered as rightfully belonging to the history of the city.

1609 Hendrick Hudson in the Half Moon visited the mouth of the Delaware.
1610 Lord Delaware visited the Delaware River.
PHILADELPHIA

1623 Captain Kornelius Jacobus Méy landed on the southern part of what is now New Jersey, and the place has since been known as Cape May.

1624 Captain Méy sailed up the river as far as the mouth of Timber Creek (Gloucester, N. J.), which he called Nassau. A fort was built by the colonists who came with him, but they were later killed by the Indians.

1630 July 1. Date of patent, now preserved at Amsterdam, under which Samuel Godwin and Samuel Bloomaert secured title to "the Bay of the South River," otherwise the Delaware Bay.

1631 Arrival of the Dutch ship Walvis at the capes, bringing colonists who settled near Lewes, Delaware.

1633 A party of Dutch built a fort and trading post upon the Schuylkill River near what is now Bartram Park, and purchased lands from the Indians.

1638 Arrival of the ships Key of Colmar and Griffin, bringing an expedition of Swedes, who founded a settlement upon Christiana Creek, near what is today the city of Wilmington.

1643 Lieutenant John Printz, a Swedish governor, and party of Swedes settled within the present boundary of the city, erected a fort and established the first organized government in this locality.

1646 Erection of the original Swedes Church at Tenecong (now Tinicum).

1655 Dutch conquer the Swedes.

1674 English in turn conquer the Dutch.

1677 "Gloria Dei," the second Swedish Church, erected at what is now Christian and Swanson Streets.

1680 Grant of the Province of Pennsylvania to Penn by Charles II.

1681 Lieutenant-Governor William Markham arrived, with a party of colonists.

1682 April 25. Penn signed Frame of Government, practically the first charter for the colonists.

May 5. Declaration of laws and regulations given by Penn.

June. Thomas Holme, Penn's surveyor, examined sites below Chester and ten miles north of the present site of Philadelphia.

October 24. William Penn arrived at New Castle on the Welcome, then proceeded to Upland, which he renamed Chester.
1683 March 10. First meeting of the governor and council held in Philadelphia.

August 16. Penn in a letter wrote—"Philadelphia is at least laid out."

Penn's house on Letitia Street built. First offices of the State.

1684 Brick Quaker meeting house built on Centre Square.

1685 William Bradford established first printing press in Philadelphia. The first work printed in the city was an almanac edited by Samuel Atkins, called "Kalendarium Pennsylvaniense," or "America's Messenger."

1687 First jail built, middle of Market Street, near Second.

1689 "William Penn Charter School," on Fourth Street below Chestnut, established.

1691 Philadelphia incorporated as a city by William Penn, ten years before the first recorded Mayor, Edward Shippen, was appointed.

1693 October 20. Penn deprived of government by William and Mary.

1695 Restoration of government to Penn. Christ Church (Episcopal) built. (Enlarged 1711 and 1727.)


1700 July 2. Gloria Dei (Old Swedes) at Swanson and Christian Streets dedicated.

July 13. First watchman, the forerunner of the city's police department, appointed "to go around ye town with a small bell in ye night time."


1703 October 5. Anthony Morris elected Mayor by the Common Council.

1704 First Presbyterian Church, called "Buttonwood Church," built on south side of Market Street between Second and Third.

1707 Philadelphia Baptist Association organized and church built at Pennepek, or Lower Dublin, in the extreme northern section of the city.

1710 Great Towne House, used as a town hall and seat of the municipal government and Legislature until 1735, erected on High (Market) Street, between Second and Third.

1712 Penn stricken with apoplexy.
1713 First almshouse established by the Friends, Walnut Street between Third and Fourth.

1715 Ferry to Gloucester established.

1718 July 30. Death of William Penn.

December 8. First fire engine purchased for the city.

1719 April. Ordinance passed by the Council for the paving of the streets with stone, and the footways with brick.


1723 October. Benjamin Franklin, 17 years old, arrived in Philadelphia.

1724 Carpenters' Guild established.

1727 Franklin organized club for municipal improvement. (The basis of the American Philosophical Society.)

1729 September 28. Franklin publishes the Pennsylvania Gazette. State House (Independence Hall) commenced.

1731 January. Three fire engines and 200 leather buckets arrive from England.

July 1. Philadelphia Library founded by Franklin.

1732 Catholic Church of St. Joseph, on Walnut Street, erected. First stage route from Philadelphia to New York established.

December. Franklin's first "Poor Richard" Almanac for 1733 published.

1735 October. State House finished and dedicated and occupied by the Legislature.

1736 December 7. Union Fire Company established—first volunteer organization of the kind in the country.

1740 University of Pennsylvania founded—then named "The Charity School."


1741 Buildings for "The Charity School" erected on Fourth Street south of Arch Street.

1742 Franklin Stove invented by Benjamin Franklin.

1745 Market house, on Second Street south of Pine, established.


1749 Academy planned by Franklin in 1743, combined with "The Charity School."

First theatrical company visits Philadelphia.
Bell for State House, which later became known as the "Liberty Bell," ordered in London.

*September.* Streets of city first lighted with lamps.

1752 State House Bell arrived.

1753 Charter granted by Thomas and Richard Penn, incorporating "The Academy and Charity School."

State House Bell first rung from the State House steeple.

1754 Chime of eight bells hung in Christ Church.

1755 Confirmatory Charter granted, incorporating the "College, Academy and Charity School," which later became the University of Pennsylvania.

1756 *December.* Pennsylvania General Hospital opened.

1757 *May 17.* First commencement at the College on Fourth Street below Arch, with seven graduates.

1760 Germantown Academy founded.

1762 *November.* Act passed for "Regulating, pitching, paving and cleansing the streets, lanes and alleys, etc.," within the central part of Philadelphia.

1764 First fish market established.

1765 University of Pennsylvania Medical School founded by Dr. William Shippen, Jr.

*March 22.* Stamp Act passed; resented by people.

*November 6.* Non-importation agreement adopted by merchants and importers in Philadelphia.

1766 *November 12.* Old Southwark Theatre, South and Apollo Streets, first permanent theatre in America, opened. *(Burned May 9, 1821.)*


1769 *June 3.* Transit of Venus successfully observed by the American Philosophical Society at temporary observatory in the State House Square.

1770 Carpenters' Hall built.

The home of Dr. William Shippen, Jr., founder of the University Medical School damaged by rioters, the outcome of an excitement caused by supposed removal of dead bodies from the city burying grounds for dissection in the school.

1773 *December 26.* Ship *Polly*, laden with tea, arrived in port: sent home with cargo intact.
PHILADELPHIA

1774 July 15. Provincial Assembly of Colonies called to consider ways and means of preserving liberty.

September 4. First Continental Congress met in Carpenters’ Hall.

November 17. Philadelphia Troop of Light Horse organized. This organization, which has been in existence ever since, is now known as the “First Troop, Philadelphia City Cavalry.”


A Piano, probably the first built in this country, made by John Behrent, Third Street below Brown.

May 10. Second Continental Congress met in the State House.

1776 June 11. Articles of Confederation prepared by committee of Second Continental Congress.


July 8. Proclaiming the Declaration, State House Square, accompanied by the ringing of the “Liberty Bell.” Declaration read to the people by John Nixon.

End of Colonial system.

1777 September 27. British under General Howe occupy Philadelphia.


October 15. Battle of Germantown.

1778 May 18. Meschianza, on occasion of General Howe’s farewell, held at the Wharton mansion and grounds at Walnut Grove (junction of Fifth and Wharton Streets).


1779 Incorporation of the University of the State of Pennsylvania.

1780 Bank of North America originated by Robert Morris. Incorporated December 18, 1781.

1782 First English Bible printed in the United States published by R. Aitken, on Market Street.

1783 End of the Revolution.

Continental Congress moved to Princeton, N. J.

1784 December 21. American Daily Advertiser, afterwards the Aurora, first daily newspaper issued in America, printed in Philadelphia; Benjamin Franklin Bache, editor.

1785 First city directory issued.

59
1786  July 26. Steamboat built by John Fitch, the first to be propelled by steam in America. Operated on the Delaware from Philadelphia.

1787  Constitutional Convention of the States held in Independence Hall.


1789  First Congress of the United States under the new Constitution holds its initial session.

1790  April 17. Death of Benjamin Franklin, aged 84 years.

1791  Union of the University of the State of Pennsylvania and the College, under the title of the “University of Pennsylvania.” “Trustees of the University of Pennsylvania” incorporated.

1792  October. United States Mint established east side of Seventh Street, above Filbert. The only mint in the United States up to 1835.


Epidemic of yellow fever in Philadelphia. Four thousand deaths in four months.
1794 First turnpike road in the United States opened from Philadelphia to Lancaster, 62 miles.

1796 April 4. Select Council, consisting of twelve citizens, to serve three years, created by Act of the Legislature.

June 26. David Rittenhouse, the astronomer, dies at his home, Seventh and Arch Streets.

August. First gas light in America exhibited on Arch Street above Eighth.

1797 August to November. Yellow fever epidemic. 1292 deaths.

1798 April 4. An Act passed allowing chains to be placed across the streets in front of churches to prevent passage of wagons during service.

Yellow fever epidemic. 3645 deaths.

1799 April 3. Governor signs bill removing the seat of the State Government to Lancaster. In effect November, 1799.


1801 January 1. City first supplied with water from the Schuylkill river through wooden street mains. Centre Square Water Works, first in America, in operation.

Philadelphia Society for the free instruction of indigent boys opens a night school.

First Navy Yard established.

1802 University of Pennsylvania removed to the site now occupied by the Philadelphia Post Office (Ninth and Chestnut Streets).


1804 Coach route established from Philadelphia to Pittsburgh.

March 5. Bank of Philadelphia incorporated.

1805 Pennsylvania Academy of the Fine Arts founded, the pioneer in America. Incorporated March 7, 1806, and first building erected on Chestnut Street between Eleventh and Twelfth Streets.


1808 Steamboat Phoenix arrives at Philadelphia, the first steamboat to navigate the ocean.

1809 First Sunday School, under the control of the churches and confined to religious instruction, organized.

September. First experimental railroad track in the United States laid in the yard of Bull's Head Tavern.
1810  First steam ferry between Philadelphia and Camden.  
     Elm on site of Penn's treaty with the Indians blown down.  
     This was known as Penn's Treaty tree, and is prominent  
     in the West painting.

1812  March 10.  The Pennsylvania Company for Insurances on  
     Lives and Granting Annuities chartered.  
     War of 1812 begun.  Financed by Stephen Girard.

1813  January.  Spring Garden Street Bridge opened.  (Burned  
     September 1, 1838, and replaced by a wire suspension  
     bridge.  This was replaced in 1875 by the present struc-  
     ture, the costliest bridge in Philadelphia.)  
     May.  Battalion State Fencibles organized.  (This military  
     organization celebrated its one hundredth anniversary,  
     May 1913.)

1814  President Monroe visited Philadelphia.

1815  February 17.  Illumination in honor of Peace Treaty.  
     September 5.  Fairmount Water Works Pumping Station  
     completed.  (Dam completed 1822.)

1816  City purchased State House (Independence Hall) and Liberty  
     Bell from the State for $70,000.  
     April 10.  Second United States Bank established.

1819  July 12.  First United States Custom House erected on  
     Second Street, below Dock.

1820  Musical Fund Society established.

1821  Apprentices' Library incorporated.  
     Philadelphia Law Library established.  
     Saturday Evening Post established.  
     Pennsylvania Institution for the Deaf and Dumb opened.  
     Mercantile Library Association organized.  
     First Odd Fellows' Lodge in Pennsylvania organized in Phila-
     delphia.  
     Philadelphia College of Pharmacy, the first of its kind in the  
     United States, founded.

1824  February 5.  Franklin Institute organized.  
     September 28.  General Lafayette tendered a reception by the  
     city.  
     December 24.  Musical Fund Hall, Locust Street west of  
     Eighth, opened.  
     American Sunday School Union founded in Philadelphia.

1825  Schuylkill Canal to Port Carbon opened.
April 7. Jefferson Medical College incorporated.
Penn Treaty Monument erected at foot of Beach Street, Kensington. (Now known as Penn Treaty Park.)
Arch Street Theatre, west of Sixth Street, opened.
May 19. Name of Centre Square changed to Penn Square.
June 29. Philadelphia Inquirer first issued as the Pennsylvania Inquirer.
Corner-stone of the United States Mint laid at Juniper and Chestnut Streets.
William Cramp established the great shipyard at Kensington, since known as Cramp's Shipyard.
First one-cent daily newspaper published in the United States by Christopher C. Conwell. It was known as the Cent.
Girard's gifts to the city announced.
April 2. Corner-stone of Moyamensing Prison laid.
April. Girard National Bank incorporated.
July 5 to October 4. Cholera epidemic in city. 935 deaths.
November 23. Railroad to Germantown opened and steam locomotive engine first used.
First triennial parade of the Fire Department.
First omnibus line, Navy Yard to Kensington.
Pennsylvania Institution for the Instruction of the Blind opened.
October 15. Board of Trade organized.
Railroad, Canal and Portage lines operated through to Pittsburgh.
February 8. Streets first lighted with gas.
March 25. Public Ledger established.
February 9. Laurel Hill Cemetery Company incorporated.
September 19. Corner-stone of Central High School laid, east of Penn Square, on present site of the John Wannemaker store. Opened October 21, 1838.
1841 City Purchases the gas works.
   October 12. John Morin Scott, the first Mayor, elected by the people.

1844 Lemon Hill, Fairmount Park, bought for public use.


   April 19. Illumination for victories in Mexico.

1848 January 1. Girard College opened.

1849 May 21. St. Mark's Church, Locust Street near Sixteenth, consecrated.
   Degrees first conferred by Central High School, under provisions of Act of the Legislature.

1850 March 11. Woman's Medical College of Pennsylvania, oldest regular college for female physicians, incorporated.
   July 9. Great fire in maritime section, four hundred buildings burned.

1851 September 30. Girard College dedicated.

1852 Manufacture of galvanized iron begun in Philadelphia.

1853 May 31. Corner-stone of second Central High School building laid, southeast corner Broad and Green Streets.

1854 February 2. Consolidation Act, extending the city so as to include the whole of Philadelphia County, passed.
   June 30. Consolidation Act went into effect.

1855 January 3. First horse car line established in Philadelphia.
   From Willow Street along Front Street to Cohocksink Depot, a distance of about one and one-half miles.
   May 21. Wagner Free Institute of Science opened by Governor Pollock.

   September 27. Masonic Hall, on Chestnut Street above Seventh, dedicated.
1856  
April 19. Police and Fire Alarm Telegraph established.  
May 13. Office of Chief of Police created.  
Streets first swept by revolving machine brooms.  
October 1. Corner-stone of the Pennsylvania Hospital for the Insane laid.  
October 7. United States Agricultural Exhibit opened.

1857  
August 1. Philadelphia Press established.  
December 13. Cathedral of SS. Peter and Paul dedicated.

1858  
January 20. Fifth and Sixth Streets Passenger Railway opened to the public.  
January 20. First Steam Fire Engine purchased by the city arrives.  
Church of the Holy Trinity, Nineteenth and Walnut Streets, built.

1859  
September 1. City celebrates laying of first Atlantic Cable.  
Zoological Society founded; first in America.

1860  
Bethany Presbyterian Church opened.  
October 9. Prince of Wales (King Edward) visited Philadelphia.

1861  
February 22. President Lincoln raised "Star Spangled Banner" over Independence Hall.  
April 13. Patriotic fervor stirred by news from Fort Sumter.  
Beginning of Civil War; financed by Jay Cooke & Company.  
May 8. First artillery regiment, Pennsylvania volunteers, Col. Francis E. Patterson, leaves city for the South.  
May 14. First Regiment, National Guard of Pennsylvania, leaves for the War.  
May 18. Cooper-shop Volunteer Refreshment Saloon, which fed more than 600,000 soldiers passing through the city
during the Civil War, opened on Otsego Street, near Washington Avenue.

December 14. Christ Church Hospital opened.

April 20. Cathedral opened for vespers and papal benediction.

November 15. Union League organized. During the Civil War this organization raised fourteen regiments for active service.


June 16. Mayor Henry issued proclamation calling citizens to the defense of the city.


June 7. Great Sanitary Fair held in Logan Square for the benefit of Union soldiers. Visited by President Lincoln and wife June 16.


November 20. Cathedral of SS. Peter and Paul consecrated.

Fairmount Park dedicated.

April 3. City illuminated in honor of fall of Richmond.

April 15. Date of assassination of President Lincoln in Washington; suspension of business and universal mourning in the City.

April 22. Lincoln's body rested in state in Independence Hall.

May 14. New house of the Union League, Broad and Sansom Streets, opened.

July 4. Magnificent illumination and pyrotechnic display at Penn Square (site of the City Hall) in honor of the close of the Civil War.

June 20. Public Ledger building, Sixth and Chestnut Streets, opened.

June 23. Chestnut Street Bridge opened.

July 4. Reception to Battle Flags of Pennsylvania Regiments, returned to the State, held in Independence Square.

Reception to General McClellan.

May 29. Monument to Washington and Lafayette, Monument Cemetery, dedicated.

July 5. Washington Monument in front of Independence Hall, the gift of the public school children, dedicated.
Ridgeway Library, South Broad Street, built.

1871 March 15. Paid Fire Department goes into operation.
August 10. Construction of City Hall begun at Broad and Market Streets.
September 22. Lincoln Monument on Fairmount Park Drive dedicated.

1872 State Constitutional Convention held in Philadelphia.

September 25. Masonic Temple, Broad and Filbert Streets, dedicated.

1874 Zoological Garden, first and largest in America, opened.
July 4. Girard Avenue bridge opened.
July 4. Corner-stone of City Hall laid with Masonic ceremony.

1875 October 30. Corner-stone of the Academy of Natural Sciences laid. Opened May 2, 1876.
November 21. Moody and Sankey, evangelists, held their first religious services in the old freight depot, Thirteenth and Market Streets (present site of Wanamaker's).

1876 May 10. Centennial Exhibition in Fairmount Park opened.
September 28. Pennsylvania Day at Centennial; 275,000 people in attendance.
October 30. Girls' Normal School, Seventeenth and Spring Garden Streets, dedicated.
November 10. Last day of Centennial Exhibition.

1877 May 15. Ex-President U. S. Grant sailed from Philadelphia for his trip around the world.
September 17. Jefferson Medical College opened.

1878 First telephone exchange established.
Dental School added to the University of Pennsylvania.

1879 December. First electric lighting used in city in the store and warerooms of John Wanamaker, Thirteenth and Market Streets.
1880  Ground broken for Broad Street Station.
1881  December 3.  Chestnut Street lighted by forty-seven electric lights.  First electric street lights in the city.
1882  October 6.  Bi-Centennial of the founding of Germantown.

October 22-27.  Bi-Centennial Celebration of the landing of William Penn.  

William Penn's cottage (Letitia House) removed from original site near Second and Market Streets, to West Fairmount Park.

1883  *Ladies' Home Journal* established.
1885  *June 1*.  New Charter of Philadelphia (The Bullitt Bill) approved.
1887  *September 15-17*.  Constitutional Centennial Celebration.
1890  *May 14*.  Philadelphia Bourse, only one in America, and largest in the world, established.
1892  Foundation of the Wistar Institute of Anatomy, connected with the University of Pennsylvania.
1893  Formal opening of the Reading Railway Terminal, Twelfth and Market Streets.
1895  *March 27*.  Offices of the City Government removed to the City Hall.
1897  *May 27*.  Washington Monument, at Green Street entrance to Fairmount Park, unveiled by President McKinley.
1898  *October 25-27*.  Peace Jubilee Celebration, commemorating the close of the Spanish-American War.
1899  National Export Exposition, first in the commercial history of the United States, held in Philadelphia.

*April 27*.  President McKinley dedicated Grant Monument, Fairmount Park.

*December 31*.  Magnificent illumination of new City Hall and starting of the great clock at midnight in the presence of a multitude of citizens.
Points of interest in Philadelphia, all of which are easily reached from the central part of the city, and which all visitors should see before they leave.

STRANGERS to Philadelphia will find it a comparatively easy matter to locate any given address. Market Street is the east and west dividing line. All house numbers north of Market Street on cross streets, read NORTH; those south of Market Street read SOUTH. Thus, 1300 North Broad Street is thirteen squares north of Market Street; 700 South Fifteenth Street is seven squares south of Market Street.

Main streets running north and south are numbered Front, Second, Third, etc. Broad Street corresponds to what would be Fourteenth Street. Thus, 1500 Market Street is Fifteenth and Market Streets; 3600 Market Street is Thirty-sixth and Market Streets.

Every policeman in the city is specially instructed to direct strangers to any required destination.

ACADEMY OF THE FINE ARTS—Broad and Cherry Streets.
ACADEMY OF MUSIC—Broad and Locust Streets. The late King Edward, on his visit to the United States in the early sixties, attended a performance in the Academy, and the box he used has since been known as the “Prince of Wales Box.”

AMERICAN PHILOSOPHICAL SOCIETY — Independence Square, Fifth Street below Chestnut. Benjamin Franklin first president.

BANK OF NORTH AMERICA—Oldest institution of its kind in America. Founded 1781 by Robert Morris.

BALDWIN LOCOMOTIVE WORKS—North Broad Street from Pennsylvania Avenue to Spring Garden Street, and west to Sixteenth Street. Employs 19,000 men.
PHILADELPHIA

BARTRAM'S GARDENS—Located between Fifty-third and Fifty-fourth Streets, Eastwick Avenue and the Schuylkill River. Once the home of John Bartram, the celebrated botanist. The park contains a huge cypress tree, said to be the largest specimen known. Take Darby cars.

BETSY ROSS HOUSE—Arch Street, north side east of Third, where first American flag was made for George Washington, May, 1776.

BOYS' CENTRAL HIGH SCHOOL—Broad and Green Streets.
CATHOLIC HIGH SCHOOL—Broad and Vine Streets.
CURTIS BUILDING—Sixth to Seventh, Walnut to Sansom Streets. Home of the Ladies' Home Journal and Saturday Evening Post.

BOURSE—Midway between Market and Chestnut Streets, from Fourth to Fifth Streets. Located in it are the Trades' League, Commercial Exchange, Maritime Exchange, Board of Trade, Grocers' and Importers' Exchange, Drug Exchange, Hardware, Merchants' and Manufacturers' Association, Coal Exchange, Oil Trade Association, Paint Club and National Association of Manufacturers.

BUILDERS' EXCHANGE—On Seventh Street, west side, midway between Chestnut and Market Streets. Headquarters of the Philadelphia Master Plumbers' Association. Also located here are the Lumbermen's Exchange, Stonemasons' Association, The Bricklayers' Company, The Master Carpenters, The Builders' Company, Master Plasterers' Association, Planing Mill Association, Master Painters' Association, Metal Roofers' Association. In addition, a Mechanical Trades' School is maintained here. Exhibition rooms open daily, 8 a.m. to 5 p.m.

CONGRESS HALL—Southeast corner Sixth and Chestnut Streets, where George Washington was inaugurated President of the United States for his second term in 1793, and John Adams as President in 1797.

CARPENTERS' HALL—Head of small court running south from Chestnut Street, between Third and Fourth Streets. Erected 1724, where the first Continental Congress met.

CATHEDRAL OF SS. PETER AND PAUL—Eighteenth Street, between Race and Vine Streets. First opened for services, Easter, 1863.
CHRIST CHURCH—Second Street, above Market. Erected 1695. Among the worshipers here were Washington, John Adams, Benjamin Franklin and John Penn.

COMMERCIAL MUSEUMS—Thirty-second and South Streets. Open daily.

CRAMPS’ SHIPYARD—Beach and Ball Streets.


FRANKLIN’S GRAVE—Southeast corner Fifth and Arch Streets in Christ Church cemetery.

FRANKLIN INSTITUTE—15 South Seventh Street. Organized 1824.

FREE QUAKER MEETING HOUSE—Erected 1783. Southeast corner Fourth and Arch Streets.

GIRARD COLLEGE—Girard Avenue, from Ridge Avenue to West College Avenue. Founded by Stephen Girard, merchant and mariner. Opened January 1, 1848. Passes can be obtained from office of Girard Trust, Twelfth Street, above Chestnut.

GIRLS’ HIGH SCHOOL—Seventeenth and Spring Garden Streets.

GIRLS’ NORMAL SCHOOL—Thirteenth and Spring Garden Streets.

GLORIA DEI (OLD SWEDES) CHURCH—Front and Christian Streets. Erected 1698.

HORTICULTURAL HALL—West Fairmount Park. Originally built for the Centennial Exhibition, 1876. Contains many rare tropical plants.

INDEPENDENCE HALL—Independence Square, Fifth and Sixth Streets, Chestnut and Walnut Streets. In the Hall are to be seen the Liberty Bell and many relics of the Revolutionary period.

MANUFACTURERS’ CLUB—Broad and Walnut Streets.

MASONIC TEMPLE—Broad and Filbert Streets. Open daily from 10 a. m. to 2 p. m.

MERCANTILE CLUB—Broad Street, above Jefferson.

MERCANTILE LIBRARY—18 South Tenth Street. Incorporated 1822. Contains about 200,000 volumes.
PHILADELPHIA

MEMORIAL HALL—West Fairmount Park. Erected in 1876, for the Centennial Exhibition, at a cost of $1,500,000. Contains the valuable Wilstach Art Collection and many other interesting exhibits.

METROPOLITAN OPERA HOUSE—Broad and Poplar Streets.

NORTHEAST MANUAL TRAINING HIGH SCHOOL—Eighth Street and Lehigh Avenue.

PENN TREATY PARK—Shackamaxon Street Wharf, on the Delaware. The site of the Treaty between Penn and the Indians in 1683.

PENNSYLVANIA HISTORICAL SOCIETY—Thirteenth and Locust Streets.

PENNSYLVANIA HOSPITAL—Occupies entire block at Ninth and Spruce Streets. Chartered 1752.

PHILADELPHIA AQUARIUM—Fairmount Park, near Green Street entrance.


PHILADELPHIA NAVY YARD—League Island—Foot of Broad Street. Take Fifteenth Street car.

RIDGEWAY LIBRARY—Broad and Christian Streets.

SOUTHERN MANUAL TRAINING HIGH SCHOOL—Broad and Jackson Streets.

ST. PETER'S CHURCH—Third and Pine Streets. Erected in 1758. Here lies buried Commodore Decatur.

TEMPLE UNIVERSITY AND GRACE BAPTIST CHURCH—Broad and Berks Streets.

UNITED STATES CUSTOM HOUSE—Chestnut Street between Fourth and Fifth Streets.

UNITED STATES MINT—Spring Garden Street from Sixteenth to Seventeenth Streets.

UNITED STATES POST OFFICE BUILDING—Ninth Street, from Market to Chestnut Streets.

UNION LEAGUE—Broad Street, from Sansom to Moravian Streets, and extending back to Fifteenth Street.

UNIVERSITY OF PENNSYLVANIA—Thirty-fourth Street and Woodland Avenue. Founded by Benjamin Franklin, 1740.
WASHINGTON MONUMENT—Green Street entrance to Fairmount Park. The gift of the Pennsylvania Society of the Cincinnati. Unveiled by President McKinley in May, 1897. Cost about $250,000.

WIDENER FREE LIBRARY—Northwest corner of Broad Street and Girard Avenue. Formerly the home of Mr. P. A. B. Widener, who donated it in memory of his wife to the city for library purposes.

WIDENER HOME FOR CRIPPLED CHILDREN—Broad Street and Olney Avenue.


WILLIAM PENN HIGH SCHOOL FOR GIRLS—Fifteenth and Wallace Streets.

WILLIAM PENN HOUSE—Fairmount Park at western end of Girard Avenue bridge. The first brick building erected in Philadelphia. Originally erected near Second and Market Streets, but carefully removed to the Park in 1889.

WILLOW GROVE—Twenty-three miles north from City Hall, on Old York Road. A delightful ride and a beautiful place to visit. Take trains from Reading Terminal or trolley cars on Thirteenth or Eighth Streets.

ZOOCOLICAL GARDEN—In Fairmount Park, west side of the Schuylkill River, and close to Girard Avenue bridge. Covers thirty-three acres and contains many buildings devoted to the exhibition of animals and birds from all parts of the world.
A glimpse into the past, when Plumbers did not meet together to discuss questions of sanitation or exchange ideas to further benefit themselves and the public.

Let's take the Road to Yesterday
To the Valley of Long Ago,
When you and I sat dreaming—
Day Dreams, in the shadow of the Dear Old Shop.
And as we turn back the pages of the years,
Recalling the scenes of our youth
And renewing again the friendships of the past,
Let's clasp the hand of those we meet,
And weep for those who walk no more.
Dear Old Times—
Let's call them back again—
And mingle with the boys and girls of our youth
On the Road to Yesterday.

I am in a reminiscent mood today. My thoughts are traveling back through the stream of time to the day when I shouldered a kit and began my apprenticeship to this business of plumbing. Some years have passed since then and some gray hairs have appeared in my head, but the scenes and incidents of my early days are passing in rapid review before my mind, and I am living them over again as clearly as though it were indeed, but Yesterday.

Those friends of my youth! Some have passed away, and at their graves I pause to lay in fond remembrance the wreath of immortelles as a tribute to their memory. Some are with the living and I am sure that their minds will sometimes travel back as mine does to the things we did in boyhood days. So I invite them to join with me and take this trip on the "Road to Yesterday."

The Old Shop! Do you remember the path we trudged and how we slid by the office, hoping to dodge a hydra-headed monster, known as the boss? He seemed to have eyes everywhere and to our youthful minds appeared a creature whose principal object in
life was to make the existence of the "cub" a burden. How we misjudged him, this boss! We could not realize then that he wanted us to learn how to do things right. And do you remember the days when the old tanks were lined and our part was to keep the round irons hot and be damned by lesser monsters—the "Journs," those solder artists who could wipe joints on broom-sticks or crow-bars—mechanics—but of a time that will never return.

How hard those problems appeared to us, and how we wondered if we should ever solve the mysteries of the vent and anti-syphon pipe, or "throw the solder" as did those masters of ours in the Old Shop. We laugh now at the rude attempts of the men of those days after sanitation, and wonder how the old bath-room outfits, lined tubs, boxed-up-sinks and pipes that always froze in winter, ever passed as articles of comfort and health. They are gone, those specimens of crude plumbing. Only a memory of the past remains and we are now a part of the system that has brought into use the sanitary appliances of the present day. Let us hope that "our boys" will bring into use many newer and better ideas than we have, and that it will be just as pleasant for them, in the future, to look back to their early days as it is for us.

I have again stepped from the past into the present and my thoughts are now of the National Association of Master Plumbers, how it started, how it developed, what it has accomplished and of the good fellows in its ranks, but another pen will trace its history and another mind will take you from the "Road to Yesterday" to the Present.

GEORGE F. UBEB

On the "Road to Yesterday"—"Rapid Transit" in Ye Olden Times
The first turnpike road in the United States was from Philadelphia to Lancaster, 62 miles, and was opened in 1794.
Frank J. Fee
New York
President National Association of Master Plumbers
Purposes for which the National Association of Master Plumbers of the United States was organized; officers for 1912-1913, and list of previous conventions.

The National Association of Master Plumbers of the United States was organized in New York, in the latter part of 1882, and incorporated under the laws of the State of Delaware, November 30, 1903, for the following purposes:

The advancement of sanitation and the encouragement of sanitary laws and the better enforcement thereof.

The improvement of plumbing appliances and plumbing work.

The education of the members of the craft in sanitation and in all that pertains to the best methods of conducting such business.

The establishment of harmonious and equitable relations between master plumbers, journeymen plumbers, and other employees, and manufacturers and jobbers in supplies used in the plumbing, heating, gas fitting and drainage business.

The education of the apprentice in plumbing and the establishment of an apprenticeship system.

The seal of the National Association bears this inscription:—


The officers of the National Association, elected at Salt Lake City, Utah, July 18, 1912, for the term ending with the adjournment of the Thirty-first Annual Convention, at Philadelphia, June, 1913, are as follows:—

President
FRANK J. FEE..................................New York

Vice President
CHRIS. IRVING ..............................Denver, Col.

77
Officers of the National Association

William McCoach
Treasurer
S. Louis Barnes
Director

Chris Irving
Vice-President
Charles Murphy
Secretary
Secretary
CHARLES MURPHY ................. New York

Treasurer
WILLIAM MCCOACH .............. Philadelphia

Directors
A. C. EYNON ....................... Canton, Ohio.
JOHN TRAINOR .................... Baltimore, Md.
JEREMIAH SHEEHAN .............. St. Louis, Mo.
W. H. HALSEY ...................... Milwaukee, Wis.
ROBERT E. QUINN ................. Paterson, N. J.
I. J. BROWN ......................... New York, N. Y.
CARL J. STEIN ..................... Chicago, Ill.
RICHARD J. WELCH ............... Lowell, Mass.
THOMAS HAVERY ................. Los Angeles, Cal.
FRED H. GAWTHROP .............. Wilmington, Del.

National Vice Presidents
Alabama .................. CHRISTOPHER BAILEY .... Montgomery
Arizona .................. J. H. MULREIN ....... Phoenix
Arkansas .................. A. V. ROGOSKI .... Little Rock
California .............. EDW. W. CROWELL .... Los Angeles
Colorado .................. J. C. ST. JOHN .......... Colorado Springs
Connecticut .............. ARTHUR J. McMANUS .... Hartford
Delaware ................ ISAIAH N. EATON .... Wilmington
District of Columbia.WILLIAM CONRADIS .... Washington
Florida .................. S. G. BOUIS .......... Jacksonville
Georgia .................. A. M. SMITH .......... Atlanta
Idaho .................. A. ADELMANN ......... Boise
Illinois .................. JOHN W. WARD ..... Rock Island
Indiana .................. WILLIAM J. WOOLEY .... Evansville
Iowa .................. R. KNAUER ............... Des Moines
Kansas .................. E. D. DRAPER ..........., Kansas City
Kentucky ................ J. J. O'NEILL .......... Ashland
Louisiana .............. JAMES H. AITKEN ..... New Orleans
Maine .................. P. A. MAHONEY .... Portland
Maryland ................ JOHN B. MACFARLANE ...... Cumberland
Massachusetts .......... JAMES S. CASSEDY .... Cambridge
Michigan ................ WILLIAM A. DECKER .... Grand Rapids
Minnesota .............. GEORGE K. Belden .... Minneapolis
Mississippi .............. S. A. CARNES .......... Laurel
Missouri ................ J. C. BRICKEY .... Kansas City

79
Directors of the National Association

Carl J. Stein

Robert E. Quinn

A. C. Eynon

John Trainor

Fred H. Gawthrop
<table>
<thead>
<tr>
<th>State</th>
<th>Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montana</td>
<td>R. G. Forbes</td>
<td>Butte</td>
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<tr>
<td>Nebraska</td>
<td>J. C. Bixby</td>
<td>Omaha</td>
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<tr>
<td>Nevada</td>
<td>F. W. Cook</td>
<td>Fallon</td>
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<tr>
<td>New Hampshire</td>
<td>Fred T. Buxt</td>
<td>Nashua</td>
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<tr>
<td>New Jersey</td>
<td>Harry J. Farrell</td>
<td>Camden</td>
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<tr>
<td>New Mexico</td>
<td>F. M. Morgan</td>
<td>Albuquerque</td>
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<td>New York</td>
<td>Frank B. Lasette</td>
<td>New York</td>
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<tr>
<td>North Carolina</td>
<td>S. M. Stevens</td>
<td>Asheville</td>
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<td>Ohio</td>
<td>Harry S. Smith</td>
<td>Warren</td>
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<td>Oklahoma</td>
<td>D. W. Fitts</td>
<td>Oklahoma City</td>
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<td>Oregon</td>
<td>W. N. Smith</td>
<td>Astoria</td>
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<td>Pennsylvania</td>
<td>Charles K. Will</td>
<td>Lancaster</td>
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<td>Rhode Island</td>
<td>Thomas E. Manney</td>
<td>Providence</td>
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<tr>
<td>South Carolina</td>
<td>A. D. Palmer</td>
<td>Columbia</td>
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<tr>
<td>South Dakota</td>
<td>L. H. Skiff</td>
<td>Brookings</td>
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<td>Tennessee</td>
<td>W. W. Cronin</td>
<td>Memphis</td>
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<td>Texas</td>
<td>Joseph Netzer</td>
<td>Laredo</td>
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<tr>
<td>Utah</td>
<td>Charles J. Higson</td>
<td>Salt Lake City</td>
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<td>Virginia</td>
<td>A. W. Fairer</td>
<td>Norfolk</td>
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<td>Washington</td>
<td>M. Isbester</td>
<td>Spokane</td>
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<tr>
<td>West Virginia</td>
<td>Robert W. Kyle</td>
<td>Wheeling</td>
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<tr>
<td>Wisconsin</td>
<td>Jacob Schuh</td>
<td>Milwaukee</td>
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<tr>
<td>Wyoming</td>
<td>Jett E. Nash</td>
<td>Cheyenne</td>
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</tbody>
</table>
Directors of the National Association

Richard J. Welch    William H. Halsey    Thomas Haverty
Jeremiah Sheehan    I. J. Brown
The previous Conventions of the National Association, with place of meeting and the name of each President elected, are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Where Held</th>
<th>President</th>
<th>President's Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1883</td>
<td>New York, N. Y.</td>
<td>Col. George D. Scott</td>
<td>New York</td>
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<tr>
<td>1884</td>
<td>Baltimore, Md.</td>
<td>Andrew Young</td>
<td>Chicago</td>
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<td>1885</td>
<td>St. Louis, Mo.</td>
<td>James Allison</td>
<td>Cincinnati</td>
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<tr>
<td>1886</td>
<td>Deer Park, Md.</td>
<td>James Allison</td>
<td>Cincinnati</td>
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<tr>
<td>1887</td>
<td>Chicago, Ill.</td>
<td>John Byrne</td>
<td>New York</td>
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<tr>
<td>1888</td>
<td>Boston, Mass.</td>
<td>John Trainor</td>
<td>Baltimore</td>
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<tr>
<td>1890</td>
<td>Denver, Col.</td>
<td>Robert Griffith</td>
<td>Chicago</td>
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<tr>
<td>1891</td>
<td>Cincinnati, Ohio</td>
<td>Joseph A. Macdonald*</td>
<td>New York City</td>
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<td>1892</td>
<td>Washington, D. C.</td>
<td>Jeremiah Sheehan</td>
<td>St. Louis</td>
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<td>1893</td>
<td>Milwaukee, Wis.</td>
<td>Daniel G. Finnerty</td>
<td>Boston</td>
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<td>1895</td>
<td>Philadelphia, Pa.</td>
<td>James Meathe</td>
<td>Detroit</td>
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<td>1896</td>
<td>Cleveland, Ohio</td>
<td>William H. Doyle</td>
<td>Philadelphia</td>
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<td>1897</td>
<td>New York, N. Y.</td>
<td>Thomas P. Culloton</td>
<td>Chicago</td>
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<tr>
<td>1898</td>
<td>San Antonio, Tex.</td>
<td>Samuel L. Malcolm</td>
<td>New York</td>
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<td>1899</td>
<td>New Orleans, La.</td>
<td>P. M. Murphy</td>
<td>Chicago</td>
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<td>1900</td>
<td>Baltimore, Md.</td>
<td>P. Tierney</td>
<td>Providence</td>
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<td>1901</td>
<td>Kansas City, Mo.</td>
<td>E. D. Hornbrook</td>
<td>Kansas City</td>
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<tr>
<td>1902</td>
<td>Atlantic City, N. J.</td>
<td>E. D. Hornbrook</td>
<td>Kansas City</td>
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<tr>
<td>1903</td>
<td>San Francisco, Cal.</td>
<td>E. D. Hornbrook</td>
<td>Kansas City</td>
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<tr>
<td>1904</td>
<td>St. Louis, Mo.</td>
<td>David Craig</td>
<td>Boston</td>
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<tr>
<td>1905</td>
<td>Atlanta, Ga.</td>
<td>Charles T. Boyd</td>
<td>Chicago</td>
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<tr>
<td>1906</td>
<td>Atlantic City, N. J.</td>
<td>R. B. Moodie</td>
<td>Dayton, Ohio</td>
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<tr>
<td>1907</td>
<td>Louisville, Ky.</td>
<td>T. A. Hill</td>
<td>New York</td>
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<tr>
<td>1908</td>
<td>Boston, Mass.</td>
<td>W. H. Halsey</td>
<td>Milwaukee</td>
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<tr>
<td>1910</td>
<td>Chicago, Ill.</td>
<td>A. Selden Walker</td>
<td>East Orange, N. J.</td>
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<tr>
<td>1911</td>
<td>Galveston, Tex.</td>
<td>Alfred C. Eynon</td>
<td>Canton, Ohio</td>
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<tr>
<td>1912</td>
<td>Salt Lake City, Utah</td>
<td>Frank J. Fee</td>
<td>New York</td>
</tr>
</tbody>
</table>

* Died October, 1891, and was succeeded by Jeremiah Sheehan, of St. Louis, Vice President.
PROGRAMME

Monday, June 16

Arrival and Registration of Delegates.

8 P. M.—Reception to visiting Delegates and their ladies, by the
members of the Philadelphia Master Plumbers' Association and Ladies, Ball Room, Bellevue-Stratford.

Tuesday, June 17

10 A. M.—Thirty-first Annual Convention, Ball Room, Bellevue-Stratford.
Invocation.
Address of Welcome by the Mayor of Philadelphia, Hon. Rudolph Blankenburg.
Address of Welcome by Edward F. Roberts, President of the Philadelphia Master Plumbers' Association.
Response by Frank J. Fee, of New York, President of the National Association.
Appointment of Committees on Credentials, Resolutions, etc.
President's Report.
Treasurer's Report.

2 P. M.—Report of Committees and Regular order of business.
2 P. M.—Automobile sightseeing tour of the city for the Philadelphia and visiting Ladies.

Wednesday, June 18

10 A. M. } Convention discusses reports.
2 P. M. }

1 P. M.—Luncheon in Roof Garden, Bellevue-Stratford, to the
Philadelphia and visiting Ladies.

9 P. M.—Reception and Dance, Ball Room, Bellevue-Stratford.

Thursday, June 19

10 A. M.—Convention receives reports of Special Committees, and
proceeds with nominations.

2 P. M.—Annual Election of Officers and appointment of Committees.

2 P. M.—Special tours for the Philadelphia and visiting Ladies to points of historic interest.

8 P. M.—Theatre Party for Delegates and Ladies.

Friday, June 20

1 P. M.—Automobile ride for Delegates and Ladies through Fairmount Park and thence to Willow Grove for dinner and entertainment. Special train at 10.30 P. M. returning to the city.

84
Brief sketch of the Philadelphia Master Plumbers' Association, how and when organized, and a review of the benefits it offers to its members.

FROM the date of its organization in January, 1883, the same year in which the National Association was instituted, to the present time, the Philadelphia Master Plumbers' Association has been of the greatest value to the members of the craft in this city. Not only has the Philadelphia Association been of distinct value in a business sense to all the plumbers of the city, but it has also been the means of bringing the members of the craft together like one great family so that there could be an interchange of ideas and sociability.

In fact, the members of the Philadelphia Association of Master Plumbers feel that one of the greatest purposes for which they were organized was that of sociability and friendship. While competition will always be keen in business, the Philadelphia plumber of today never hesitates to meet his competitor with a kind word and enter into competition with him upon an honest and sincere basis.

In January, 1883, immediately after the National Association was formed, a meeting of the master plumbers of Philadelphia was called by George F. Uber and Harry Burke, at which the Philadelphia Association was formally launched. The initial meeting, which was well attended, was held at the southwest corner of Thirteenth and Mt. Vernon Streets. Among those who were present on that occasion and who pointed out the value of such an organization for the benefit of the Master Plumbers of Philadelphia, were Col. George D. Scott, of New York, the first President of the National Association; Joseph A. Macdonald, of New York, who became President of the National Association in 1891; T. T. Burns, also of New York, and several others. It did not require much oratory to convince the Philadelphia Master Plumbers of the wisdom of organizing and committees on Constitution and By-Laws, Membership, Finance, etc., were named. Upon the adoption of a resolution on organization, the following temporary officers were elected to serve until a permanent organization could be effected:
Edward F. Roberts
President Philadelphia Master Plumbers' Association
On February 19, 1883, the various committees made their reports, after which the Philadelphia Master Plumbers' Association was duly organized and the original temporary officers were formally elected to serve for the ensuing year. On January, 1885, the Philadelphia Association was chartered with the following charter members:

John J. Weaver  William W. Mensinger
William M. Wright  Enoch Remick
Albert M. Hicks  George T. Gabell
A. G. Bond  John E. Eyanson
William Harkness, Jr.  George F. Uber

At the present time the Philadelphia Association has a membership of close upon four hundred, which is eighty per cent. of the total number of registered plumbers in the city. The officers for the present year are:

President .......... Edward F. Roberts
Vice Presidents ...... William Boal
George F. Uber
Samuel W. Barnes
D. F. Durkin, Jr.
George Moeller
Secretary ............ S. Louis Barnes
Treasurer ............ H. B. Lentz
Sergeant at Arms .... Elvin H. Mackay

Directors
R. H. Pflug-Felder  Fred P. Speth
H. L. Righter  Thomas B. Sutch
Martin J. Morgan

Solicitor ............. Charles S. Wood, Esq.

As to what the Philadelphia Association has accomplished during its thirty years of existence, much could be written. It has banded the master plumbers together in a way which nothing else could ever have accomplished; it has acted at all times officially in
George F. Uber

Chairman of the General Committee on Arrangements Thirty-first Annual Convention National Association Master Plumbers of the United States
the interests of the craft in general and never for any selfish purposes or for individual benefits; it has built up an organization which commands the highest respect, not only of official Philadelphia, but the respect and confidence of the entire public of the city, and it has also been the means of successfully bringing about the high standard of good fellowship among its members. No better illustration of the cordiality which exists in the large membership is to be found than at any of the meetings of the Association. Matters of interest to the trade and to the members are presented and fully discussed without the slightest discord. For thirty years this has been the rule at all the meetings and it is doubtful whether any other organization—trade or social—can present such a history of harmony. It is no wonder that many very complimentary references have been made during the past to the unmatched success of the Philadelphia Master Plumbers' Association and the protection it has given to its members.

One of the important and successful features of the Philadelphia Association is that known as the Labor Bureau. This was established in 1906 and during the seven years of its existence has provided for its members a means of securing good help, thus correcting a number of the abuses incident to the employing of labor. On a number of occasions, this Bureau has assisted Master Plumbers' Associations of other cities and helped locals in the establishing of similar Bureaus. Originally the Bureau was in charge of a business agent, who, while attending to the general business of association agent, devoted a portion of his time to the duties of the Bureau, but the results were not satisfactory. After several experiences with salaried agents, the work of the Labor Bureau became part of the regular Association business and was placed in charge of one of the members. The Association then installed and has since maintained an office for the Labor Bureau at 1613 Pine Street, completely equipped with card files, telephones, working quarters for a resident clerk and offices for the member in charge of the work. D. F. Durkin, Jr., is the present manager of the Bureau.

The system of card files installed show the different classes of labor that may be used in the business of Plumbing and Heating, such as Plumber, Plumber and Fitter, Fitter, Laborer, Plumber's Helper, Fitter's Helper, Plumber's Apprentice, Office Boy, Bookkeeper, etc. Applications are received from any person desiring a position in any of these classes, and the applicant's name, age, address and former employers' names placed on a card. When calls for help are received from the Master Plumber (member of the Philadelphia Association)
Officers and Committeemen Philadelphia Master Plumbers' Association

Harry B. Lentz
William H. Doyle
George Moeller

Robert J. Long
William Boal
Jacob Bugger

Fred P. Speth
Robert J. Hoben
E. H. Mackay
these cards are referred to and in most cases it is possible for the Labor Bureau to immediately give valuable information concerning the character, ability and earning capacity of the applicants.

The rules adopted for the Labor Bureau are as follows:

"This Bureau has been organized and is maintained by the Philadelphia Master Plumbers' Association, for the use of its members in good standing. All others not members of the Association desiring to use the Bureau must apply to the President of the Association and upon his written order, access will be given to the files.

"All applicants for positions are invited to register and the Bureau will use every endeavor to place competent persons in good positions. No expense is placed upon the applicant and there is no favoritism. Character and ability are the tests of fitness.

"This Bureau does not regulate wages or the hours of labor. The applicant is permitted to make his own terms.

"This Bureau will, however, keep a record of all applicants registered at the office and will secure this information through its Association members.

"When a position is secured for an applicant a card with full instructions will be mailed or given at the office.

"It is the duty of all applicants registered at the Bureau to keep the clerk fully informed as to whether they are employed or unemployed. Two sets of files are used, the employed are so marked unless they report to the contrary.

"Any member of the Association in good standing shall have full access to this Bureau and when in need of help shall be given prompt consideration.

"All calls shall be filed in the order received. They may be sent through mail, by telephone or in person.

"When a member applies for help the list of applicants of the class will be given, with such information as the Bureau may have with the salary asked for by the applicant.

"It is the duty of all members using this Bureau to report on all the employees they have in their shops and to make further reports on all persons hired or discharged during the year with a record of their character and ability.

"During busy season it is not always possible to furnish first-class help. The Bureau will send out the best in all cases where it is possible to obtain them. When it is not a record may be had of the deficiencies of the person sent.
Officers and Committeemen Philadelphia Master Plumbers' Association

Harry L. Righter       Thomas B. Sutch       Gregor Drummond
D. F. Durkin, Jr.      Samuel W. Barnes
Martin J. Morgan       Robert H. Pflug-Felder
                        R. H. Watson
"Members before hiring any help at their shops should call the Bureau. We may have their record and save you the cost of experimenting.

"Office hours of The Labor Bureau are from 8 a.m. to 5 p.m. and 12 m. on Saturdays, at 1613 Pine Street, Philadelphia, Pa."

Another important feature of the Philadelphia Master Plumbers' Association is the Credit Information Bureau, in charge of Robert H. Pflug-Felder, with offices at the southeast corner of Eighth and Norris Streets. This Bureau was established by the Board of Directors of the Philadelphia Association in February, 1912, and Mr. Pflug-Felder was requested to establish the work. Through his individual efforts Credit Information Bureau has, at the present time, a file of more than 120,000 credit reports on individuals, firms and corporations. All the records are properly indexed and so arranged that information can be furnished promptly in answer to a telephone call. The information is furnished to the members of the Association without cost. Based on information given to the Bureau, it is estimated that this credit service, during the first year of operation, has prevented possible or likely loss to the extent of between $30,000 and $40,000.

Among the many features of the Master Plumbers' Association of Philadelphia that serve to concentrate the interest and loyalty of the members, the "Beneficial Fund" holds a conspicuous place. It consists of an organization limited to the members of the Association, that secures to the widow or family of each deceased member the payment of a sum equal to $2.00 from each of the members enrolled.

This payment is made immediately upon proof of the death of a member, and is intended to relieve the widow or family of the deceased member from some of the cares and expenses incident to his sickness and death, and being payable to his widow or family, it is not liable for attachment for any debt.

The operation of the Beneficial Fund has made manifest the fact that the men engaged in the plumbing art enjoy long lives. During the past twenty years with an average of nearly four hundred members in the Master Plumbers' Association of Philadelphia, there have been but eighteen deaths, and during the past four years only two deaths have occurred among the members of the Beneficial Fund.

The collection and disbursement of the Beneficial Fund is managed without the payment of any charge for services, or a commission of any kind. The President, Secretary and Treasurer of the Master Plumbers' Association act as the President, Secretary and Treasurer of the Beneficial Fund, and all members of the Master
Ladies' Reception Committee

Mrs. Robert J. Hoben
Mrs. William McCoach
Mrs. H. L. Hurlburt

Mrs. Harry L. Righter
Mrs. Jacob Bugger

Mrs. M. Uber Nazel
Mrs. George Moeller
Plumbers' Association of Philadelphia, who are in sound health at the time of making their application, are eligible to membership.

At the Thirtieth Annual Convention held at Salt Lake City, Utah, July, 1912, Philadelphia was selected as the meeting place for the Thirty-first Annual Convention. That news was received with the greatest pleasure by all the members of the Philadelphia Master Plumbers' Association, and steps were taken at once to prepare for the convention, with the hope that it would be the most successful and profitable in the history of the National Association.

President Roberts appointed George F. Uber as chairman of the general committee for the Convention arrangements, and he was given able assistance by a number of the leading members of the Philadelphia Association. The ladies who were appointed on the Ladies' Reception Committee enlisted in their work with the greatest enthusiasm.

The Committees in charge of all the arrangements are as follows:

General Committee on Arrangements.—George F. Uber, Chairman; William McCoach, Harry B. Lentz, D. F. Durkin, William Boal, Gregor Drummond, Jacob Bugger, Robert J. Hoben, Harry L. Righter, William H. Doyle, George Moeller, R. H. Watson, Samuel W. Barnes, Edward F. Roberts, President Ex-Officio; S. Louis Barnes, Secretary.

Hotel Committee.—William McCoach, Chairman; S. Louis Barnes, George F. Uber, George Moeller, Edward F. Roberts, Harry B. Lentz.

Publicity Committee.—William H. Doyle, Chairman; Joseph T. Kinsley, Robert H. Pflug-Felder, S. Louis Barnes, Christopher J. Doyle.


Exhibition Committee.—Harry B. Lentz, Chairman; Gregor Drummond, Robert H. Pflug-Felder, Harry K. Bisbing, Martin J. Morgan.

Entertainment Committee.—D. F. Durkin, Jr., Chairman; John J. Melon, Richard Ormrod, H. J. Schisselbauer, Joseph
Ladies' Reception Committee

Mrs. Samuel W. Barnes  Mrs. Edward F. Roberts  Mrs. William Boal
Mrs. S. Louis Barnes  Mrs. Francis T. Withim  Mrs. A. L. Drummond
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Ladies' Reception Committee

Mrs. Thomas B. Sutch
Mrs. L. E. Gebhardt
Mrs. J. G. Lowener

Mrs. Harry B. Lentz
Miss M. R. Murphy

Mrs. Robert H. Pflug-Felder
Mrs. Christopher J. Doyle
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Ladies' Auxiliary.—Mrs. Harry L. Righter, Chairman; Mrs. William McCoach, Mrs. Edward F. Roberts, Mrs. S. Louis Barnes, Secretary; Mrs. Samuel W. Barnes, Mrs. Wm. Boal, Mrs. Harry B. Lentz, Mrs. R. H. Pflug-Felder, Mrs. Robert J. Hoben, Mrs. Francis T. Witham, Mrs. George Moeller, Mrs. Jacob Bugger, Mrs. H. L. Hurlbert, Mrs. Christopher J. Doyle, Mrs. Thomas B. Sutch, Mrs. J. Gilbert Lowener, Mrs. M. U. Nazel, Mrs. Thomas J. Barry, Mrs. M. Drummond, Miss Sarah Durkin, Miss Murphy, Mrs. L. E. Gebhardt.
First Public Trades School in America to teach plumbing and other trades, established in Philadelphia in 1906, meeting with unqualified success from the beginning.

In October, 1906, the Board of Public Education of Philadelphia opened the first public trades school in America. The above statement in itself tells a big story, for it will not be long before vocational training of the mind of the young man will be a distinct feature with the public school systems in all large cities in the country. In Philadelphia, this special work met with marked success from the start and has attracted much attention.

A few words of the public school system in Philadelphia will be interesting here. In addition to High Schools for boys and girls, there are 320 separate school buildings, with a teaching force exceeding 4000 and an enrollment of students in excess of 165,000. The total average cost per pupil per year is $33.66 and the gross outlay for education about $8,000,000 per year.

The Public Trades School is maintained in a school building at Twelfth and Locust Streets, where are conducted day and night classes, with instruction in these trades—Architectural and Mechanical Drafting; Bricklaying; Carpentry; Electrical Construction; House and Sign Painting; Pattern Making; Plumbing; Printing and Sheet Metal Work.

The day school is conducted from 9 a.m. until 3:30 p.m. and is open to young men who have completed the grammar school course, or who are fifteen years of age and able to carry on the work of the school. About half of the school day is spent in the shops and half in the class rooms, where drawing, mathematics, English, and the science of the trades are taught. After a three year course, the day students are graduated and granted diplomas by the Board of Public Education. These graduates are not classed as journeymen, but they start well along in their trades with a foundation upon which they can become the highest type of mechanic. Many young men attend the day school for a year or two in order to get a start in their trade before taking a position.
The Evening School from its organization has been a great aid to young men desirous of advancing in the trades of their selection. From 7.30 to 9.30 the school work is carried on, and the demand for instruction has been so great that every year hundreds of young men apply for admission who cannot be accommodated because of lack of space. This will be remedied in the near future as it is the plan of the Board of Public Education to establish Vocational Schools in different sections of the city.

The Evening Term covers six months and extends from the last of September to the end of March. None of the classes are in session more than three evenings a week, but because of the large enrollment, most of the shops are open five nights every week, and two classes alternate in attendance. This arrangement makes it possible to accommodate a double class with an average attendance of five hours per week.

To give some idea of the thoroughness of the several courses, the following tables show the subjects upon which the student must show efficiency:

**Architectural and Mechanical Drafting**—Drawing, Physics, Mathematics: mensuration, algebra, geometry and trigonometry.

**Bricklaying, Carpentry and Pattern Making**—Shopwork, Drawing (Architectural or Mechanical as related to trade) and Mathematics: mensuration and simple accounts.

**Electrical Construction**—Shop work and Theory of Electricity and Magnetism. Physics, including elementary electricity, Mathematics: mensuration, algebra, one book of geometry and elements of trigonometry, and Drawing.

**Electrical Wiring**—A special course entitling pupils to certificate, but not to a diploma.

**Plumbing**—Shop work and theory, Mathematics: mensuration and simple accounts.

**Printing**—Shop work, English (spelling and punctuation), Mathematics: percentage and simple accounts.

**Sheet Metal Work**—Shop work, Mathematics: mensuration and simple accounts.

**House and Sign Painting**—Shop work, Mathematics: mensuration and simple accounts.

In several of the classes because of the demand for instruction only those young men are admitted who are regularly employed at those trades during the day. Out of this arrangement has grown
PHILADELPHIA

a coöperation between the master associations and the school which has resulted in a great increase in the efficiency of the school work.

In the trade of plumbing the Master Plumbers' Association has for several years sent committees of its members to visit the school and advise with the principal and teachers as to the subject matter to be presented to the students and the manner of presentation, and at the close of the term has given gold watches to the best boys in the class. The visits by the employers have been a great inspiration to the boys and the advice has been of great help to the principal and teachers. Mr. Richard H. Watson, the grand old man of the plumbing trade in Philadelphia, has for two years given a gold school fob as a prize to one of the members of each graduating class.

In June, 1912, the first class in plumbing was graduated from the Philadelphia Trades School. The cut accompanying this article shows the type of young men in attendance at the school. Five members of this class have already been granted masters' licenses, and fourteen of them have passed the examination required by law.
PHILADELPHIA

for a journeyman's license. The others have not yet reached the age of twenty-one.

Last June there were twenty-six graduates from the evening school in the trades of plumbing and electrical construction. Twenty-six young men, who, by attendance at evening school for terms varying from four to six years, accumulated the required credits in shop and classroom work. Every member of this class is now employed at his trade.

In developing the course of study for the plumbing classes, it has been the aim of the school authorities to plan work which would give to the plumbers' apprentices the knowledge of the science and practice of their trade which would make them the highest type of workman. Having in the classes only those young men who work at the trade during the day, it has been possible to eliminate a large amount of actual shop work from the school work and spend the time either in the presentation of matters of science or of practice which could not be had during the regular work of the day. Following is the outline of the work in theory and practice:

COURSE IN PLUMBING

First Year

1. Plumbers' tools and their use.
2. Jointing—flux used in soldering, solder.
3. Materials for drains, soil, waste and vent pipe.
4. Fittings for drains, soil, waste and vent pipe.
5. Materials for supply pipes, jointing, etc.
6. Supporting pipes, lead, cast iron, etc.
7. Location of traps.
9. Size of waste pipes for different fixtures.
10. Size of soil pipes for water closets and small fixtures.
11. Size of soil pipes for branch lines.
12. Location of air inlets, vents, traps, etc.
14. Water closets, siphon jet, washout, washdown, siphon, range, latrines, hoppers, etc.
15. Urinals; method of supplying with water.
16. Water closet tanks, special valve device.
17. Location of water closets and urinals.
18. Ventilation of water closet apartments.
19. Area of drainage for different sizes of pipe.
PHILADELPHIA

20. Ventilation of drainage systems, offsetting vertical soil and vent fixtures.
21. Yard and area drains, size and kind of cesspools.
23. Arrangement of drain, soil and vent pipes.
25. Test for drainage systems. Method of applying.

Second Year

1. Sewers and sewerage systems.
3. Detail of drainage construction, loop system.
4. Detail of drainage construction, back air of countervent.
5. Detail of drainage construction, continuous vent.
10. Filtration, water supply, coagulum, etc.
11. Heads of water, pressure.
12. House supply tanks, capacity, weight of water.
14. Circulating range boilers, water fronts, etc.
15. Circulating range boilers, direct pressure, tank pressure.
16. Return system of hot water supply.
17. Errors in hot water circulation.
18. Double boilers, boilers on different floors, and method of connection.
19. Hot water generators, temperature.
20. Pneumatic water supply.
21. Ventilating shafts, areas.
22. Air chambers, vibration, etc.
23. By pass in drainage systems.
25. Drainage of fixtures below sewer level, sewage lifts, ejectors.

Third Year

1. Composition of water.
2. Artesian wells, deep wells, ordinary dug wells, bored wells, springs, etc.

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3. Causes of pollution of water supply.
4. Method of supplying country houses by hydraulic rams, pumps, windmills, etc.
5. Air, of what it is composed.
6. Compressibility of air.
7. Causes of vitiation.
8. Humidity, humidizing, washing, etc.
10. Reading and measuring plumbing from plans.
11. Correcting defective plumbing plans.
12. Sewage disposal for country houses.
13. Light wells, leaching wells, broad irrigation.
14. Subsoil irrigation, septic tank system.
15. Bacterial action in septic tanks, disposal of effluent.
17. Storage tanks and overflow.
18. Plumbing systems for hospitals and institutions.
19. Plumbing systems for factories and mills.
20. Plumbing systems for office and store buildings.
21. Plumbing systems for apartment and tenement houses.
22. Process for obtaining permits, license, etc.

Fourth Year

Drawing—Architectural, with emphasis on plumbing plans.
Mathematics—Review of the fundamental processes; addition, subtraction, multiplication and division; fractions, percentage, square root, mensuration, bookkeeping.

Business Methods—Bonds, notes, drafts, interest, discount, percentage, checks, receipts, bills, etc.

The teachers in the plumbing section are all plumbers with years of experience. Mr. John S. Bross, in charge of Theory and Practice, is Assistant Chief Inspector of the House Drainage Division of the Bureau of Health, and Secretary of the Board of Plumbers' Examiners. Mr. George R. Jaggard and Mr. George S. Barnholt, the shop instructors, are both journeymen working as foremen at the trade during the day.
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Beginning January 1, 1913, this Company will Manufacture only Full Standard Weight Pipe.

In the past, the diversified purposes for which pipe was used led to a number of so-called "Merchant" grades, varying to some extent from standard pipe. This change from standard weight was warranted for certain purposes, but the necessity for various stocks on the part of dealers produced uncertainty in the mind of the consumer as to the weight of pipe received, and from time to time substitutions were made.

The result of substituting a light weight pipe where standard weight should have been used frequently involved both trouble and misunderstanding, whereas full weight pipe, if there were no other, could be used just as well for all purposes where "Merchant" weight had been used.

To the ultimate consumer and user, who is not always equipped to weigh and inspect every length of pipe, the advantages of a single HIGH standard are obvious.

To readily identify "NATIONAL" material, and as protection to manufacturer and consumer alike, the practice of National Tube Company is to roll in raised letters of good size on each few feet of every length of welded pipe the name "NATIONAL" (except on the smaller butt-weld sizes, on which this is not mechanically feasible).

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We have recently issued a booklet, "MODERN WELDED PIPE," which treats of the manufacture, uses and characteristics of tubular products. While this book was not issued for general distribution, we will gladly send a copy to any person whose letter-head or activities would indicate a legitimate use. Ask for N. T. C. Bulletin No. 12.

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