

Ophthalmology

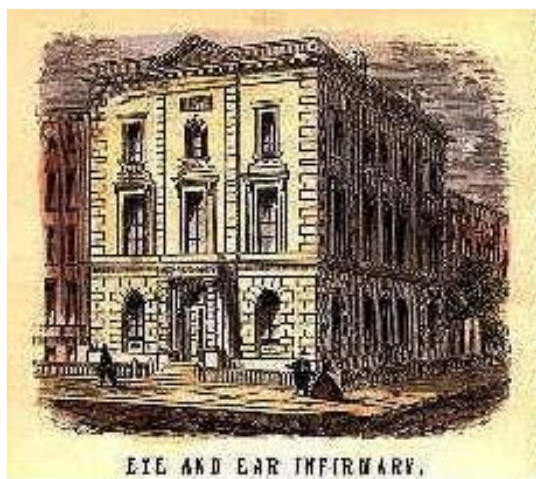
A historical review of the Department of Ophthalmology at New York Eye and Ear Infirmary

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The year is 1820. The Congress of Vienna, which changed the face of Europe, is a recent memory. In England, George IV sits on the throne; the future Queen Victoria is but one year of age. The country is well into the Industrial Revolution. Across the channel, Bismarck, the future "Iron Chancellor" of Prussia, is only five years old. Louis XVIII is King of France while, on the distant Isle of St. Helena, Napoleon is languishing in exile. Goethe, Schiller, Byron, and Scott are the literary toasts of a romantic age; in music, Beethoven is halfway through the completion of his Ninth Symphony. Eastward, the Ottoman Empire extends, as yet, to the Adriatic. In the medical world Purkinje, Corvisart, Laennec, Louis, Dupuytren, Bell, Jenner, Cooper, Scarpa, and Frank are among the leaders.



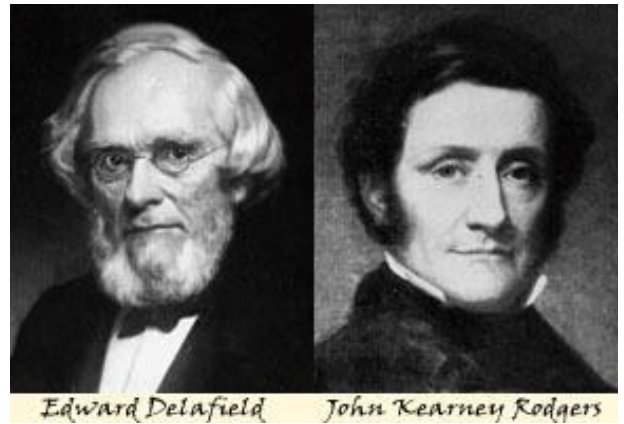
On this side of the Atlantic, Mexico has not yet won her independence, but Simon Bolivar is leading South American patriots to victories over the Spanish. Northward, the young American nation has just admitted Maine as the twenty-third state of the Union, but the flag of Spain still flies over Florida. The War of 1812 and the victory over the Barbary States are of recent vintage, but there are still those among the citizenry who witnessed Washington's inauguration on the steps of Federal Hall. James Monroe is completing his first term as President, his doctrine yet to be proclaimed while the Sage of Monticello, Thomas Jefferson, sits in retirement, revered as the author of the Declaration of Independence. DeWitt Clinton presides in Albany as governor, and New York is a thriving metropolis of 150,000 people.

This, then, is the historic background and setting for one of the greatest events in the ophthalmic history of the Western Hemisphere—the founding of the New York Eye & Ear Infirmary, destined to become the oldest specialty hospital in the hemisphere and the third oldest hospital in New York City.

Early Training of Delafield and Rodgers

Earlier in 1816, 2 young graduates from the College of Physicians and Surgeons, Edward Delafield, M.D., and John Kearney Rodgers, M.D., dissatisfied with the level of medical teaching in America, followed the trend of the times and embarked for Europe (illustrations, left). Delafield was twenty-two years of age, and Rodgers was twenty-three; both were native New Yorkers and had completed their clinical training at New York Hospital, Delafield as medical resident and Rodgers as surgical resident. Their travels brought them to London where they met a Bostonian, Edward Reynolds, M.D., who had also come to Europe to pursue postgraduate medical studies.

Reynolds introduced Delafield and Rodgers to the London infirmary for curing diseases of the eye, later famed as the Royal London Ophthalmic Hospital (Moorfields). This institution had been founded in 1804 by John Cunningham Saunders, M.D., and had been uniquely successful as a charity from its very inception. The two Americans enrolled in the ophthalmic training program and for the first two years were enthusiastic students under Sir William Lawrence, Benjamin Travers, John Richard Farre, M.D., and the great Sir Astley Cooper. It is



interesting to note that ophthalmic teaching in England was practically nonexistent prior to 1817. It was then that Guthrie¹ gave the first series of lectures at the London Infirmary. The impetus was undoubtedly in part due to the Napoleonic Wars with the high battle casualties and the exposure of the troops to trachoma during the Egyptian campaign. The British army physicians became aware of the shortcomings in their training in the detection and treatment of injuries and diseases of the eye, and this deficiency was brought to the attention of the civilian physicians. As a result, the teaching program was instituted at the London Eye Infirmary, which, in fact, incidentally, also gave recognition to the specialty of ophthalmology; general surgeons began to take up the specialty which had previously been left in the hands of quacks, barbers, and the like.

During their stay in London, Delafield and Rodgers were to realize how scant had been the recognition given to ophthalmology in their own country, which accounted for the fact that ophthalmic care in America was woefully inadequate. They were determined to remedy this situation on their return.

Return of founders to America

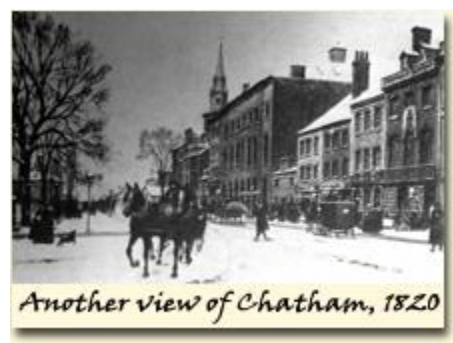
Filled with enthusiasm and energy, Delafield and Rodgers returned to New York in 1818, and they promptly set about to survey the incidence of eye disease in the city population. This study, the first of its kind, was to ascertain the incidence in the various social and economic levels of the population and the care received thereof. The young investigators were dismayed to learn that the poor received little or no care; facilities either did not exist or were totally inadequate to handle the volume of indigent ophthalmic patients. The two existing hospitals, Bellevue and New York, were far too preoccupied with diseases presumably of a more serious nature than blindness. Only a life-and-death problem entitled the poor to hospital care. As a result, the loss of labor manpower due to eye disease was climbing alarmingly. Here, then, was a glaring shortage in the city's medical services. An institution devoted to competent eye care was desperately needed; the problem was to convince the city authorities and the medical profession of this need. Delafield and Rodgers realized that sympathy for their project was not forthcoming at this time. They determined to finance their charity personally, and the success of their venture would speak for itself. The two went into private practice for two years to build up a financial reserve and to establish a reputation in ophthalmology.

First Infirmary



On August 14, 1820, two years after the birth of their dream, Delafield and Rodgers founded the first Infirmary at 45 Chatham Street, now 83 Park Row (illustration, left). They rented for the purpose two small rooms on the second floor of an old building, located diagonally across from City Hall, then considered the central location in the city (illustration, below). Public notices were placed indicating that "the primary object in establishing New York Eye and Ear Infirmary was to contribute toward the relief of the poor who, by a diseased state of one of the most important organs of the human body, are deprived of the means

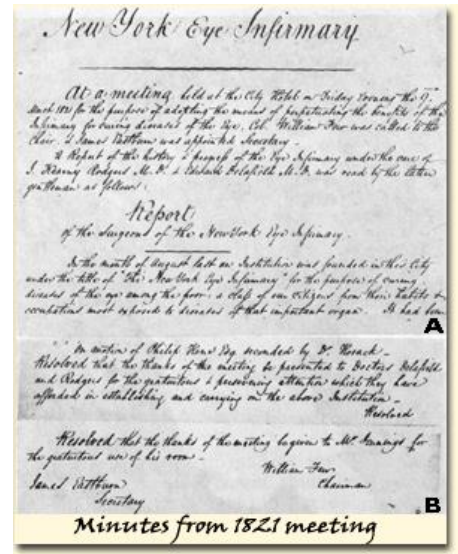
of gaining a livelihood."² All professional care and medicine were supplied free of charge. Medical students from the College of Physicians and Surgeons served in rotation as volunteer apothecaries, and the landlord of the building assumed the duties of superintendent. There were facilities for outpatients only. The posted clinic hours were 12:00 to 1:00PM on Mondays, Wednesday s, and Fridays. Before the month was over, Delafield and Rodgers knew their venture was a success. The small Infirmary was besieged with



patients. In the first seven months Delafield reported that 436 patients had been seen.² In the same report he described 3 patients, born blind, who had had vision restored by surgery. These may well have been the first cases of congenital cataract successfully operated on in America.

Call to public

The young founders, who had been bearing the cost of their charity from the start, decided that, at this time, a public appeal was in order. On the advice of Wright Post, M.D., and Samuel Borrowe, M.D., 2 of the elder statesmen in the medical community who had guided the founders from the beginning, a public meeting was held at the City Hotel on March 9, 1821 (photo, right). The chairman was Col. William Few, and the secretary was James Eastburn. In attendance were some of the most prominent citizens of the city, Philip Hone, Benjamin Strong, and David Hosack, M.D., to name only three of them. A brief background of these venerable gentlemen indicates the kind of support Delafield and Rodgers were able to muster for their young Infirmary.



Early supporters of Infirmary



William Few (1748-1828), then aged seventy-two, was one of the nation's most respected citizens (illustration, right). As a Georgian he had commanded the state militia during the Revolution. He had then been a delegate from Georgia to the Constitutional Convention, a signer of the Constitution, and 1 of the first 2 senators from Georgia. He founded the University of Georgia in 1784. Immigrating to New York in 1799, he became alderman, then president of the City Bank, and later president of the Bank for Savings. His wife was the daughter of James Nicholson who commanded the American Navy during the Revolution. Few was brother-in-law to Albert Gallatin, minister to France and then secretary of the Treasury in Jefferson's cabinet. During his early years in New York, Few lived at 221 Broadway, which he purchased from Aaron Burr, after the latter's duel with Alexander Hamilton. He later moved to 10 Park Row which is now the site of the Woolworth Building.³

Philip Hone (1780-1851) became the "gentleman mayor" of New York in 1826. He had been an insurance executive who retired from business in 1821 and devoted the rest of his life to public service and

charitable work. His independent wealth allowed him to do this. Hone⁴ became noted for his Diary which gave vivid portrayals of the life and times in New York during the years 1828 to 1851. He was a governor of New York Hospital, a trustee of Columbia College, vice-president of the New York Historical Society, founder and governor of the Union Club, and a member of the vestry of Trinity Church. He was to remain a staunch friend of New York Eye and Ear Infirmary throughout his life. ^{3,4}

Benjamin Strong (1771-1851), uncle of the famed diarist, George Templeton Strong, was also a well-known figure in New York. He was president of the New York Sugar Refining Company for twenty-two years, president of the Dry Dock Company, one of the founders of the first Bank for Savings in New York, and president of the Seamen's Savings Bank for sixteen years.³

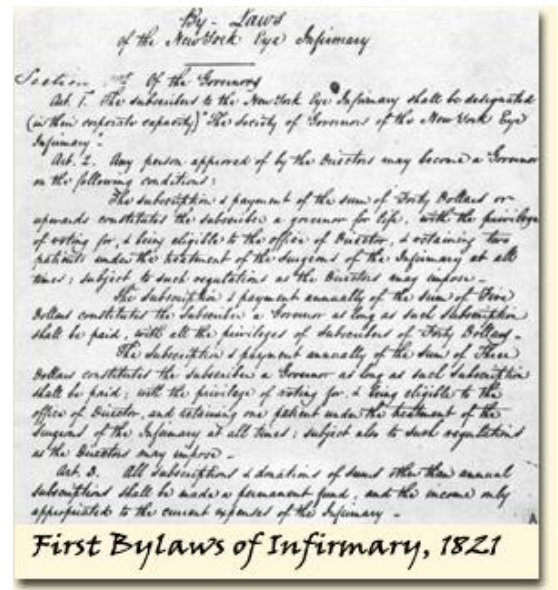
David Hosack, M.D., (1769-1835) was then America's most distinguished physician. Many of the notables on the American scene in the early nineteenth century were among his patients. It was he who attended Hamilton after the duel with Burr. A professor of medicine at the College of Physicians and Surgeons, Hosack was also the founder of Bellevue Hospital.

This group heard Delafield's report and discussed ways and means of raising funds to support the young charity.

First bylaws

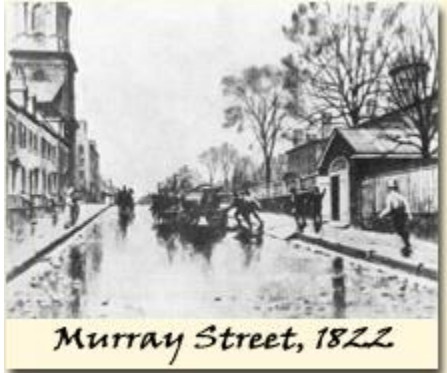
The same group met again on April 21, 1821, at which time the first bylaws and rules and regulations were formulated and adopted (photo, left). The Board of Directors were to be known as "The Society of the New York Eye Infirmary." The complete board included some of New York's first families (photo, below). Many on the board were also governors of New York Hospital, demonstrating the close linkage the early Infirmary had with that institution.*

It is interesting to note, among the articles of these bylaws, one which enables a person to become a governor of New York Eye and Ear Infirmary "by the payment of the sum of forty dollars or upwards." Among the privileges thus enjoyed was the "retaining of 2 patients under treatment of the Surgeons of New York Eye and Ear Infirmary at all times." Perhaps this was an early forerunner of the principal of endowed beds.



**Both Delafield and Rodgers kept their outside staff appointments all their lives. In addition to performing ophthalmic surgery at New York Eye and Ear Infirmary, Rodgers was general surgeon at New York Hospital where he achieved considerable fame in vascular surgery. Delafield later became Professor of Obstetrics and Diseases of Children at the College of Physicians and Surgeons, all the while remaining as surgeon at New York Eye and Ear Infirmary.*

Second Home



Soon New York Eye and Ear Infirmary outgrew its first home. The physical quarters were simply inadequate to handle the patient volume, even though the clinic hours had been extended. In 1822, larger space was found at Murray Street across from Columbia College on the corner of Broadway (illustration, left). The first full-time employee was hired to serve as apothecary and custodian of all the instruments. In addition, he was "to perform the operations of bleeding and cupping and the applications of leeches." It was in this year also that, by an act of the State legislature, on March 22, 1822, the charity was incorporated under the title of "New York Eye Infirmary." Although ears had been treated from almost the beginning, the name remained thus until 1864, when the otology department was given official recognition and the name changed legally to "New York Eye and Ear Infirmary."

Third Home

While the Murray Street site was an improvement, it was soon apparent that New York Eye and Ear Infirmary could not keep up with the ever-increasing patient load. Furthermore, a major need was inpatient facilities. Surgery was being performed in the clinics and the patients sent home. The incidence of complications was discouraging. To lose control of the patients in the immediate postoperative period meant leaving them to the mercy of home contamination. Petitions for rooms were made to the municipal government and to New York Hospital, but to no avail. In addition, New York Eye and Ear Infirmary was running into financial difficulties. Some help came from the clergy who, during sermons, made public appeals, and some of the Sunday church collections were turned over to New York Eye and Ear Infirmary.



The Board of Directors finally petitioned the State legislature. The fame of New York Eye and Ear Infirmary had already spread to Albany, because the charity had become the "Mecca" for victims of an ophthalmic epidemic in the outlying areas, especially Upstate. In addition, other eye hospitals, patterned after New York Eye and Ear Infirmary, had arisen in Boston and Philadelphia. An Act of Relief was passed on April 1, 1824, which provided New York Eye and Ear Infirmary with \$1,000 annually, and the sum was to be continued for several years. This appropriation helped New York Eye and Ear Infirmary to lease a building from New York Hospital at 139 Duane Street, still centrally located in the city (illustration, above). These quarters were more spacious; they included a kitchen and a clinic on the first floor, an outside yard where the patients could saunter, and the entire second floor. The latter was cause for great jubilation; for the first time New York Eye and Ear Infirmary could accommodate inpatients! It was a meager start, to be sure, but a start in the right direction. There were six ward beds, but, with skillful manipulation of curtains, two of these beds could be converted into "semi-private" quarters. For the few who could pay, about 35 per cent of those admitted, the basic charge was \$2.50 per week. The improvement in the surgical results was almost immediate.

Subsequent moves

New York Eye and Ear Infirmary enjoyed the Duane Street housing until 1826. Thereafter it moved many times, outgrowing each new home, and, in 1840, it moved to 47 Howard Street off Broadway, where it remained until 1845. That year the first "permanent" home was obtained at 97 Mercer Street, and New York Eye and Ear Infirmary flourished there for eleven years.*

**Permanent means that this was the first structure purchased, in contrast to previous homes, which had been rented.*

Thirteenth Street site

By the early 1850's, it was all too apparent that further expansion was necessary, so that, with the help of the State legislature, which allocated \$10,000 with the proviso that an additional \$20,000 was to be raised from outside sources, plans were made for a permanent building. The site designated was Thirteenth Street and Second Avenue. This structure was completed and dedicated on April 25, 1856 (illustration, left). Delafield himself gave the dedication address which was in the form of an eloquent and moving history of the institution, concluding with:

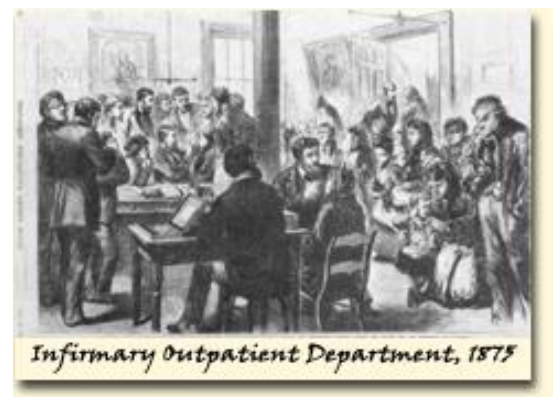
Of the two young men who thus ventured on an experiment whose success is this day remembered, one was late John Kearney Rodgers and the other now addresses you abundantly



rewarded for all the labor he has bestowed in founding and continuing this charity, by the satisfaction of meeting you in this admirable building, erected and now to be dedicated the New York Eye Infirmary.⁵ The Thirteenth Street site was to be the home of New York Eye and Ear Infirmary thereafter, the longest span of any New York Hospital, with the exception of Bellevue, in any one place. The original four-story brownstone had facilities for 40 to 50 patients on three floors, while the ground floor contained the outpatient department (illustration, right).

It was heated by two hot-air furnaces, but in addition there were more than 20 stoves, one of which was in the operating room and all of which involved great labor. There was running water on the first and second floors, but on the third and fourth floor the water had to be carried by hand. The water pipes not infrequently froze. There were one bathtub, several water closets and what were termed "earth closets for women."⁶⁻⁸

In 1873, the throat department was added, and, in 1890, the School of Ophthalmology and Otolaryngology, chartered by the State legislature, was founded. Teaching, however, had been conducted at New York Eye and Ear Infirmary from the very beginning, Delafield having given the first series of lectures in 1821. The first house surgeon was appointed in 1862. The training at that time was dual, including both ophthalmology and otology. It was not until 1896 that the services were separated.



In 1870, the fiftieth anniversary was celebrated with the same Edward Delafield, now seventy-six and partially deaf, delivering a history of the institution, enriched by his personal reminiscences of the events and personalities through the decades.

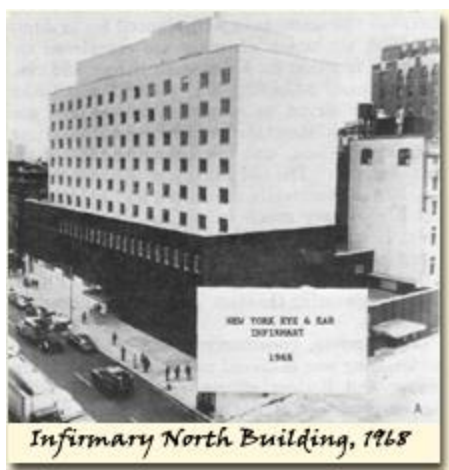
In 1890, with the help of generous benefactors, expansion was begun at the site to meet the continued demands of the patient volume. Three floors were added, additional pavilions built, and, in 1893, New York Eye and Ear Infirmary assumed the appearance which was to become so familiar to millions of patients and thousands of postgraduate students for many decades (photo, left).*

From its founding until 1903, or a period of eighty-three years, New York Eye and Ear Infirmary had never charged a clinic fee. Charity-minded private benefactors, contributions from the State legislature, and income derived from inpatients helped defray expenses, although rarely fully. In 1903, however, the financial burden became too great. After much deliberation, a fee of 25 cents was established for a clinic visit, and even this modest amount was paid by only about 40 per cent of the clinic population. In 1903,

also, the inpatient rates were raised: \$7.50 per week for ward patients (only, of course, if they could afford it!), \$15 per week for semiprivate patients, and \$25 per week for the affluent in private rooms. The 25-cent fee, incidentally, was maintained for almost half a century before the pressure of inflation brought about an increase.

Ever since its founding, New York Eye and Ear Infirmary has remained among those in the forefront of its specialty in America. Its doors have never been closed except for a brief three-month period in 1822, when a yellow fever epidemic was raging in New York. By the turn of the century, almost one million patients had been treated in its clinics; to date, the figure exceeds 8 million, or approximately the population of New York City today. Almost every state of the Union and many foreign countries are represented in New York Eye and Ear Infirmary's roster of graduates and postgraduate students, many of whom have gone on to illustrious careers. New York Eye and Ear Infirmary, being born of Moorfields in London, has in turn mothered other such institutions in America. Its luminaries were among the founders of the New York Academy of Medicine in 1847, the New York Ophthalmological Society in 1864, the American Ophthalmological Society in 18649, and the American Board of Ophthalmology in 1916.

New Infirmary



By the mid 1930's, the need for larger and more modern housing had become evident, but, before the clamor reached a crescendo, World War II supervened. The expansion plans were shelved and all but forgotten, except by one individual, Bernard Samuels, M.D., who, from 1945 until his death in 1959, used every opportunity to goad the board of directors and the board of surgeons into formulating plans for a new Infirmary.

Unfortunately, he did not live to see the fruition of his labors, but the seeds were well planted for in January, 1968, the latest Infirmary was completed and began to function on Fourteenth Street and Second Avenue, adjoining the revered institution

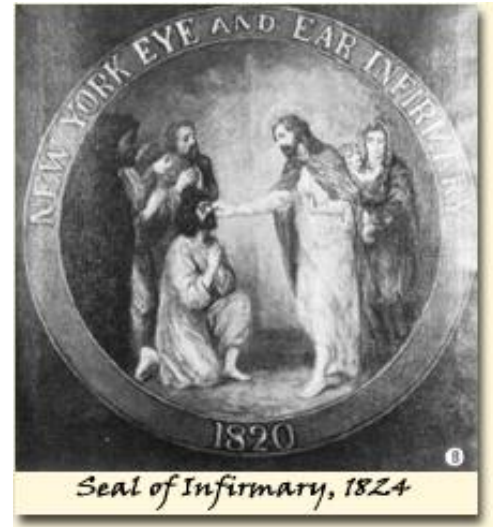
which had served so admirably since 1856 and which had withstood the tempests of nature, time, wars, depressions, and the changing face of the city (photo, above). The old Infirmary was not forsaken. It was completely renovated and modernized and is still very much in use for clinics, lecture halls, subspecialty services, library, and various departmental offices. The new (North) building is the most modern of specialty hospitals with 207 beds, 10 operating theaters, and a staff of over 150 physicians.

The planning, construction, and completion of this building was achieved mainly through the unceasing and tireless efforts of Gordon Braislin, current president of New York Eye and Ear Infirmary and a worthy

occupant of the position once held by William Few. In no small measure, he was aided by J. Swift Hanley, M.D., chairman of the board of surgeons for many years and Col. Charles E. Martin, the ablest administrator in New York Eye and Ear Infirmary's long history. Unfortunately, both have since passed on.

L'envoi

In 1970, New York Eye and Ear Infirmary celebrates its one hundred fiftieth anniversary, an occasion for which scientific greats from far and near gathered in New York City. Notable scientific programs and social festivities were held. Overlooking this throng was, perhaps, another gathering, unseen but senses, the spirits of Delafield, Rodgers, Noyes, Agnew, Bacon, Dubois, Gruening, Whiting, Dixon, Dench, Weeks, Burchell, Wheeler, Reese, Samuels, Kirby, Berens, and Hanley, among the greats of the past who, have painstakingly laid the cornerstones, inspected the newest Infirmary and murmured approvingly, "Well done!"



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