PRESIDENT BARNARD DEAD

BRIEF ILLNESS OF THE AGED EDUCATOR.

A QUARTER OF A CENTURY AT THE HEAD OF COLUMBIA COLLEGE—SYMPATHY OF THE TRUSTEES.

President F. A. P. Barnard, of Columbia College, died yesterday afternoon, lacking only eight days of four score years. He passed away peacefully and without pain. His wife and the nurses were the only ones present at the time. Last Monday he became much worse, and since then he steadily grew weaker, although he evinced a remarkable degree of activity for one so ill. He was unable to lie down, and sat in his easy chair, reading or else listening to reading, the greater part of the time. The widow of General Barnard, who has been in Santa Barbara, has been sent for, and will reach the city on Wednesday. Arrangements for the funeral have not yet been made, but the funeral will be in this city and the burial will be in Sheffield, Mass.

Dr. Barnard has been seriously ill only a short time, but for nearly a year he had not been so active as formerly, and in May of last year he sent a letter to the college trustees resigning his office as president, the resignation to take effect upon the election of his successor. The trustees referred the letter to a special committee, but as no successor has yet been appointed, the resignation was not accepted. Professor Drisler was appointed acting president, and still retains that position.

Something more than a year ago Dr. and Mrs. Barnard went South for a few weeks for the benefit of the president's health. The trip did not result beneficially, and the decline in his strength dates from his return to his home. He was never idle, however, and wrote many important articles on his favorite themes during his enforced rest.

SIXTY YEARS AN EDUCATOR.

A SKETCH OF A VARIED AND SUCCESSFUL CAREER—DR. BARNARD'S INTEREST IN YOUNG MEN.

Frederick Augustus Porter Barnard, S. T. D., LL. D., L. H. D., D. C. L., the eminent mathematician, physicist and educator, and for nearly twenty-five years the honored president of Columbia College, was born on May 5, 1809, in Sheffield, Mass., when Thomas Jefferson was at the head of the Nation. He was a lineal descendant, in the seventh generation, of Francis Barnard, of Coventry, Warwickshire, England, who came to this country in 1636, settling first near Massachusetts Bay, then at Hartford, Conn., and later at Hadley, Mass. His mother was descended in the eighth generation from John Porter, of Warwickshire, who came to Massachusetts Bay in 1626; he was a descendant, in the sixteenth generation, of William de la Grande, a knight who followed William the Conqueror from Normandy into England in 1166. His son was grande porteur to Henry I (1120-1140) from which circumstance he received the name of "Porter," afterward borne by the family. Dr. Barnard's father was Robert Foster Barnard, a prominent lawyer and several times state senator from Sheffield. His mother, a woman of rare abilities, was Miss Augusta Porter, the daughter of John Porter, M. D., of Salisbury, Conn.

Dr. Barnard, in a magazine article on "How I Was Educated," published in 1886, gave an interesting sketch of his early life. When he was three years old he was sent to the village district school in Sheffield, with his sister, two years his senior, who became the wife of United States Senator Porter, of Michigan. He had the good fortune, he said, to be born in the middle of his family, General John G. Barnard, the well-known engineer, who died in 1882, being a younger brother. The miserable reading of the scholars from six to twenty years old puzzled him, for young as he was, he could read well, having "acquired the ability from the same source from which I derived almost everything else in me that is good of there is any such thing: from my mother's careful teaching." He did not like school, the one pleasing incident being the master's daily announcement that "The boys may go out to play."

A LATIN FOR A SIX-YEAR-OLD LAD.

The Rev. Dr. Orvill Dewey, who became the pastor of the Church of the Messiah in this city, opened a grammar school in the village of Sheffield the following year, and the young pupil was sent there with his sister, "to keep him out of mischief." When he reached the age of six years, his father decided that it was time for him to begin the study of the humanities, and the village clergyman was engaged to instruct him in Latin. This scheme failed, however, and one of his father's law clerks took up the task. After a struggle of a year or two the Latin grammar was mastered, committed to memory "from beginning to end, rules and exceptions, etymology, syntax and prosody, word for word, by heart." His father put Shakespeare into his hands before he was six years old, and later his mother introduced him to Cowper, Burns, Goldsmith, Scott, Byron, Addison, Burke and Robertson having previously given him the "Mother Goose Melodies," "Robinson Crusoe" and the "Pilgrim's Progress." Among the achievements of his boyhood, in the construction of mechanical contrivances, for which he had a propensity, were wind mills, water mills, fanning-mills, trip-hammers, sleds, harrows, kites and cross-bows.

At the age of nine the young scholar was sent to Saratoga Springs, to live with his maternal grandfather, and there he became a student in the Saratoga Academy. In this school he began to take an interest in Latin and read nearly all that is now required for admission to Columbia College. There he also took up the study of Greek. In Saratoga he first saw a printing office, which interested him so much that he learned to set type. He set up many pages of "The Saratoga Sentinel." This voluntary apprenticeship to the printer's trade was viewed at a distance as an important element in his education. He remained in Saratoga three years, when he went to Stockbridge, Mass., attending a school under the direction of Major Jared Curtis. At Stockbridge he acquired his first notions of physics, a subject which became the favorite pursuit of his varied studies.

A LEADER IN MATHEMATICS.

In 1824, when Dr. Barnard was fifteen years old, he was ready to enter Yale College. Before the close of the sophomore year he was the recognized leader of the class in the study of the pure mathematics and exact sciences. On September 10, 1828, he was graduated second in his class, and the next week he began a life of teaching, beginning his long and useful career at the Hartford Grammar school. At Hartford Professor Barnard met the poet Whittier and formed an intimate friendship that has continued unbroken for nearly sixty years. He wrote for "The Hartford Review," which Mr. Whittier was then editing. Both were fond of Eastern history, and in 1830, when the Quaker poet published "Mriam," a sort of Eastern poem, he showed his fondness for the friend of his youth by dedicating the volume to him. After Dr. Barnard came to New-York to live, Mr. Whittier wrote that when he knew the present president of Columbia College, "in the old days," he felt that even in the matter of literature and poetry Dr. Barnard had a far greater chance for distinction than himself. Dr. Barnard in his younger days wrote many poems, some of which were published, but the majority of them were designed only for friends. When Columbia College held its centennial celebration, in 1887, Dr. Barnard wrote "A College Slogan," which was reprinted in The Tribune.

In order to prosecute his studies in physics and the higher mathematics, Dr. Barnard learned to read French in Hartford, and the two years that he was in the grammar school there he concluded were more advantageous to him educationally than any other equal period of his life. There he wrote the first of his many books, "The School Arithmetic," which appeared in 1829, which found so much favor at Yale that it was placed on the list of books required for admission. The next year Professor Barnard published "A Treatise on Arithmetic," which was an addition to Bridge's "Conic Sections"; the Yale authorities soon made this a text-book in the college. Other institutions followed the example set by Yale, and for many years the majority of the college students in this country used this book in their study of the higher mathematics.

Two years after his graduation, and before he was twenty-one years old, Dr. Barnard returned to Yale as a tutor, but at the end of one year he resigned his tutorship to take charge of a department in the American Asylum for the Deaf and Dumb at Hartford. The cause of his sudden change in his life plans was due to the beginning of the sore affliction from which he suffered during all his life. He had a severe illness while he was in Hartford, and when he recovered from it he found that his hearing was some what affected. Deafness was hereditary and the possibility of one day becoming deaf cast a heavy shadow over his bright prospects, and he was so much depressed that he left Yale.

After being in the Hartford Asylum for a year, he accepted a higher position in the Institution for the Instruction of the Deaf and Dumb in this city. This time he remained five years in one place and then went South. While living in New-York, he practically prepared the annual reports of the institution that he was serving, then under the charge of Dr. Harvey Peet, and wrote many valuable articles on topics related to deaf mute instruction to leading periodicals, including "The North American Review." Just before leaving New-York, he published an "Analytical Grammar, with Symbolic Illustrations." Twenty-seven years later he returned to the buildings where he had taught deaf mutes to assume the presidency of Columbia College.

After studying theology for a year, in 1837 Dr. Barnard was elected Professor of Mathematics and Natural Philosophy in the University of Alabama, at Tuscaloosa. He was transferred to the chair of Chemistry and Natural History twelve years later. As an instance of his progressive spirit, may be mentioned his classrooms at this time to the young ladies who attended the Female Institute at Tuscaloosa. His views regarding the university education of women, then as now, was that a college should teach all who applied for admission, regardless of color, sex or previous condition, provided that they could pass the required examinations; the question of co-education was incidental.

For several years, while Dr. Barnard was in Tuscaloosa, he had charge of a weekly political newspaper, and for a part of the time he edited two papers. He contributed also to several scientific publications at the same time. While connected with the university he gave much time to astronomical studies and the erection of an observatory. In 1846 he was appointed by the Governor of Alabama astronomer on the part of that State to assist in determining the boundary line between Alabama and Florida. A commissioner and an astronomical adviser were appointed by each state, but as the astronomer from Florida failed to appear, Professor Barnard was employed by both States. His report to the respective Legislatures was regarded as conclusive and settled the long-pending boundary controversy.

LOYAL IN THE MIDST OF SECESSION.

During the excitement that followed the war with Mexico, when in Alabama and elsewhere in the South a strong desire for a dissolution of the States was excited by demagogues with so much violence that Union men dared not speak above a whisper in some places, Professor Barnard was invited in 1851 by the citizens of Tuscaloosa to deliver the Fourth of July oration. He accepted the invitation with the understanding that he should speak freely on the burning question of the day. He did so with a boldness and with logic which silenced the opposition, and succeeded in allaying the disunion craze for years.

Dr. Barnard in 1859 accepted an invitation to the chair of mathematics and mental philosophy in the University of Mississippi at Oxford, and succeeded in securing for that institution the benefits of a National endowment fund. Two years later, while attending a meeting of the American Association for the Advancement of Science, at Albany, he was elected president of the university, and in 1855 the title was changed to chancellor. He began at once a movement for the moral and educational reform of the university, which was in successful progress when the Rebellion broke out in 1861. The institution was soon broken up, and Chancellor Barnard resigned his office. When he wished to come North, Jefferson Davis refused him a passport, and with his wife, he was obliged to remain in Norfolk, Va., until 1862, when General Wool took the city, and they went to Washington, where they were received by President Lincoln. Dr. Barnard was soon appointed director in the Map and Chart Department of the Coast Survey, the chief business being to prepare war maps. In May, 1864, he was called to the presidency of Columbia College, and at his inauguration he received the symbols of his office from Hamilton Fish, president of the Board of Trustees.

TO BUILD UP A TRUE UNIVERSITY.

During his long residence in the South Dr. Barnard was actively engaged in promoting public education, both primary and advanced, encouraging and assisting all departments of scientific research and literary culture. His publications then and since have related chiefly to scientific questions. He contributed for many years to "The Journal of Commerce and Education," published by Dr. Henry Barnard; to "The American Journal of Science"; and also wrote many reports, essays, etc., on collegiate and university education, including a volume on "Letters on College Government," in 1856, which attracted much attention from educators, North and South. This was true also of his "Report on Collegiate Education," published the same year. "Art Culture" was also written in 1854. In 1857, as chairman of a committee of twenty appointed by the American Association for the Advancement of Science, he made an extended report, entitled "History and Methods of the United States Coast Survey." "University Education" (1856) was a pamphlet addressed to the Trustees of the University of Mississippi, and in it Chancellor Barnard discussed the practicability of building up a true University in this country. This idea was never abandoned, and toward its realization he bent all his energies during his long presidency in this city. In speaking of the young men who are pursuing post graduate studies in this country to prepare themselves to do original work in scientific or literary work he made the following statement to the Board of Trustees in a recent annual report:

For this class of students a great city like New-York offers attractions which smaller places hardly possess. Here are the headquarters of the most numerous and most important literary and scientific associations; here are the largest collections of objects of art, archaeology and natural history; here the industrial arts are most fully illustrated in all their variety; here are the greatest publishers of books; here journalism is most active, and here comes, at one time or another, every man of distinguished mark of the Old World or of the New World. Cardinal Newman has declared that a great city is so full of powerful educational influences as to make it a university in itself alone. It certainly is the most eligible residence for a university student.

In 1858 Dr. Barnard delivered the annual oration before the Society of the Yale Alumni, and in 1860 he gave an interesting course of lectures to popular audiences at the Smithsonian Institution on the "Undulatory Theory of Light." These lectures were compiled and published in 1862 as an appendix to the annual report of the institute. This mathematical and physical theory of optics was the first systematic presentation of the subject that had been published. Dr. Barnard was a member of the Astronomical Expedition in 1860 sent to Cape Chudleigh, Labrador, to observe the total eclipse of the sun. Later he was engaged in continuing the reduction of Gillies's Observations of the stars in the Southern Hemisphere, being stationed at Santiago, Chili.

ADVANCING THE INTERESTS OF SCIENCE.

Dr. Barnard was elected president of the American Association for the Advancement of Science in 1860. This office he held till 1866; two years later, in his address at Chicago, he discussed the doctrine of the materialistic school of modern physics which regards mental and physical forces as reciprocally convertible. Dr. Barnard took strong ground against this, and his admirable address was translated into German, awakening much discussion in foreign philosophical circles. In the act of Congress establishing the National Academy of Science in 1863, he was named as one of the fifty corporators, and he succeeded Agassiz as the foreign secretary. In 1865 he was made a member of the Board of Experts of the American Bureau of Mines, and in 1872 of the American Institute. He was also a member of the American Philosophical Society; an associate member of the American Academy of Arts and Sciences; corresponding member of the Royal Society of Liege, and was also connected with many other scientific and literary societies in this country and in Europe.

President Andrew Johnson, in 1867, appointed him one of the ten United States Commissioners, to take charge of the American interests at the Paris Exposition. In the following year he prepared an elaborate report on a branch of the Exposition, "Machinery and Processes of the Industrial Arts and Apparatus of the Exact Sciences." He published "Recent Progress in Science" in 1869, and two years later prepared a volume on the metric system of weights and measures, showing how it could be adapted to the use of the American people, and pointing out the many advantages to be derived from its general adoption. At the request of Professor Henry and other eminent scientists, he called a meeting of gentlemen interested in international questions, for the purpose of forming an organization to promote the unification of the various discordant national systems of weights, measures and moneys. As a result of this conference, in 1873, the American Meirological Society was formed at Columbia College, and Dr. Barnard was its president from the beginning. In addition to his many other duties he was the editor of "Johnson's Cyclopedia," to which he contributed scores of original articles and edited an equal number. He was an ardent advocate of the time standard which was adopted in 1883.

President Barnard, in 1847, married Miss Margaret McMurray, the daughter of Robert McMurray (originally of Cumberland, England). Of her helpfulness in his work, her husband wrote recently: "To the encouragement derived from her good sense, energy and sanguine temperament, I am largely indebted for whatever success may have attended me in life." Jefferson College gave him the degree of LL.D. in 1844, and four years later he received the same degree from Yale. In 1861 the University of Mississippi, of which he was then chancellor, gave him the degree of D. D., he having taken orders in the Protestant Episcopal church. The Regents of the New-York University, in 1872, honored him with the degree of L. H. D., and in 1878 Kings College, Canada, made him a Doctor of Civil Laws.

AUGUST WILLIAM VON BERNUTH.

Berlin, April 27.—Herr August William von Bernuth, a noted German politician, is dead.

GEORGE HIGGINSON.

Boston, April 27 (Special.—George Higginson died at his home on Bremen st. on Saturday. He was out on Sunday last and took cold, which developed into pneumonia. Mr. Higginson, from 1848, when, with the late John C. Lee, he formed the firm of Lee & Higginson, to his retirement in 1874, was widely known in the financial world. Mr. Higginson was born in 1804 and has held many positions of trust. He was a member of the committee having charge of the fund raised for the families of the firemen killed at the great Boston fire in 1872. He leaves four sons and one married daughter, Mrs. S. Parkman Blake.

A CELEBRATION AT THE FORREST HOME.

THE AGED ACTORS AND ACTRESSES COMMEMORATE SHAKESPEARE'S BIRTHDAY.

It has been a wise and gracious custom, ever since the establishment of the Edwin Forrest Home for Aged Actors and Actresses, to celebrate there on April 23 of each year the anniversary of the birth of Shakespeare. On Thursday last the 325th anniversary was commemorated, and a number of visitors went from this city and Philadelphia to attend the exercises, and cheer the inmates by showing that they were not entirely forgotten by the outside world, to whose pleasure they had largely ministered.

On arriving at Holmesburg Junction, a little beyond Philadelphia, of the Pennsylvania Railroad, the visitors were met by Mr. Wilson, the superintendent of the home, and enjoyed a pleasant drive through the fine country, and through some of the hundred acres of well-cultivated farming-land which surrounds and is the property of the home. After luncheon had been served, the following programme was presented for the amusement of the visitors and inmates:

Opening address—On Shakespeare.....J. B. Roberts
Quartet—"Foresters Sound the Cheerful Horn" .....Bishop
Hassler's Vocal Quartet.
Baritone solo—"Come to Me".....Denza
Armand De C. Barilli.
"Julius Caesar," Act I, Scene 2.
Brutus, Richard Penistan; Cassius, Frank Lawlor.
Soprano solo—"Faithful".....Raeckel
Madame Edouard De Castel.
Recitation—"Prayer and Potatoes"
Mrs. Rachel Cantor.
Contralto solo—"The Storm".....Hullah
Miss Emma V. McLaughlin.
Recitation—"The Actor".....Harry C. Bascombe
Tenor solo—"Come Into the Garden Maud,"
M. F. Donovan.
"Grave Diggers' Scene from 'Hamlet,'"
Richard Penistan.
Duo—"Quis Est Homo".....Rossini
Madame De Castel and Miss Emma V. McLaughlin.
Zither solo—"Serenade".....Schubert
Mr. Henry Meyers.
Trio—"Madre del Sommo Amore".....Campanna
Mme. De Castel, Miss McLaughlin and Mr. Donovan.
Quartet—"Annie Laurie," Arranged by Dudley Buck
Vocal Quartet.
Accompanist.....Miss Annie F. Schmidt
Conductor.....Simon Hassler

A. M. Palmer, who was among the guests, said while describing his visit: "It was one of the pleasantest and most interesting days I ever spent. Nothing could be more delightful than to see the comfort and cheerfulness that prevail in the Home. The number of actors that can be accommodated is only twelve, and each has a large bedroom. They take their meals together, and meet when they please in the handsome parlors and the library, which contains some 6,000 volumes collected by Forrest, and is of great value. Pictures gathered by the tragedian adorn the walls, and in the spacious hall is Ball's fine statue of Forrest as Coriolanus.

"I believe that in the earlier years of the Home the inmates were not as comfortable as they are now, when under Mr. Wilson's care; they seem to be like members of one large and happy family. Frank Lawlor, an actor who will be remembered by many of the theatre-goers of to-day, said to me: 'We feel as if we were really Forrest's heirs.' Everything is done for the inmates; they are clothed in excellent fashion; supplied with pocket money, and with railroad tickets when they wish to visit Philadelphia, and there are no unnecessary, irksome regulations. Even the hour at which they must be in at night allows of their visiting the theatres in Philadelphia. The old ladies were dressed in rich silks and satins and suggested rather a number of dowagers receiving guests than the dependents in a noble charity. Among them are Mrs. English, the mother of Lucille Western; Rachel Cantor and Mme. Michells.

"The programme was admirable throughout, but the most interesting features were those supplied in the eloquent address of J. B. Roberts, and the efforts of the old actors, Richard Penistan, Frank Lawlor, Harry Bascombe and Mrs. Rachel Cantor. Penistan is a name that is only remembered by old people, but he was in his day an excellent player. Bascombe, it may be recalled, lost both his feet from frostbite, but he gets along capitally on a pair of rubber substitutes.

"I cannot imagine an existence more free from care, or with surroundings more conducive to happiness for those who have no close family ties, than that led at the Forrest Home. Next year I intend to engage a special car and take all my company to the commemoration, and I shall also invite representatives of the principal New-York papers, as I think the general public will be pleased to learn how pleasantly some of their old favorites are spending their last years."

OLD COLONIAL AND REVOLUTIONARY ROOMS

Of all the handsome and striking decorations arranged for the Centennial, there are none, perhaps, more attractive and at the same time instructive than those of J. S. Conover & Co., No 30 West Twenty-third-st. The two front windows of the establishment have been transformed under skilful hands. The one on the left as one faces the store is called the "Old Continental" room. The ceiling is finished with oaken beams and in the wall is built an old-time brick fireplace. The bricks are blackened with smoke and there are old andirons, copper kettles, a crane and all the fire appliances of the days of the Georges. The floor, which is sanded, has in its centre a rag carpet of homely design, and the rush-bottom chairs and rock-maple table are well in keeping with the primitive lamp hanging from the ceiling, in which, as in "ye olden tymes," is a sperm wick fed by whale's oil. In this room also are an old flint-lock musket, the flint in which was once used in a gun of the old King's Guard, afterward the Boston Cadets, and a spinning wheel. Here, too, are several letters bearing the signatures of Washington, Lafayette, Baron Steuben, Patrick Henry and others. Everything in the room, with the single exception of the fireplace, which had to be reproduced, antedates the Revolution.

The room in the window to the right, "The Modern Colonial," is in striking contrast to the other one. It is remarkably beautiful, being finished in cream enamel and silver with a high wooden dado done in brocade tapestry. The touch of refinement and luxury about the whole room is heightened by the inlaid hardwood floor, the fireplace, finished in silver, before which stands a Vere Martin screen, the crystal chandeliers and the delicately constructed chairs and table, together with a beautiful quartz clock on the mantelpiece. A first glance at the attractive furnishing within the store shows that the advances made in the fitting up of mantels and fireplaces since the period represented by the second room are no less marked than those between the old colonial and the first days of the new Union. J. S. Conover & Co. invite the public to visit these attractive old rooms.

A YOUNG GIRL ANXIOUS TO KILL HERSELF.

A young woman, who was shabbily dressed and wore spectacles, hired a room in the cheap lodging house No. 207 East Forty-second-st., on Friday evening, giving her name as Elizabeth Farmer, and her age as sixteen years. Early yesterday morning a smell of escaping gas attracted attention to her room, and the door was opened. She had shut the windows and had turned on the gas, evidently with the purpose of suffocating herself. A night clerk opened the windows, shut off the gas and warned her not to renew her attempt at suicide. An hour later her room was full of gas again, and had to be ventilated. The same performance was repeated three times more, and soon after 8 a. m. she was found senseless in bed. Then a policeman was called in, but he failed to summon an ambulance, and she lay unconscious in the room for nearly two hours, while vain attempts were made to call six different physicians. She was recovering at Bellevue Hospital later in the day, but she refused to give any explanation of her conduct. A card in her pocket indicated that her mother lived at No. 2 Oak-st., Yonkers, N. Y. Another card showed that she had received treatment at an eye and ear dispensary in this city.

THE LAST OF M'CLURE'S MURDERERS CAUGHT.

Philadelphia, April 27.—Captain Linden, superintendent of the Pinkerton Detective Agency in this city, yesterday received word of the arrest at Malta, Italy, on April 18, of Guiseppe Beverino, one of the three murderers of Paymaster McClure, of the Lehigh Valley Railroad, and Stable-boss Hugh Flannigan, near Willesbarre, on October 18. Beverino was the arch-conspirator of the murder, and crushed in the head of Paymaster McClure and riddled his body with bullets. The arrest of Beverino places the last of the murderers in custody.

WHEN IS A FAINT NOT A FEINT?

From The Philadelphia Inquirer.

"How does a woman faint?" asked a lawyer after adjournment of court yesterday. "We had a young woman on the stand who declared she had seen a hundred women faint, and that they all fainted with outstretched arms. Now, how does a woman faint? I declare I don't know. I have seen the interesting phenomenon a few times, but the trouble is there's so much excitement that a man forgets to take observations. I think it would be an interesting question for the court to sift to the bottom. We would probably be deluged with contradictory testimony. In the first place, does a woman faint with outstretched arms? Are outstretched arms a sure sign of a faint? I believe it must depend a great deal upon what she faints for. Why does a woman faint, and what does she do when she faints?

"On the stage we have seen, for instance, Cecilia faint with Modus, but as I have seen it represented she held his hands tight in hers and then on his shoulders and then half way around his neck. I have seen the Mountain Maid faint. She begins very deliberately to say, 'I am fainting,' then she repeats, 'I must faint,' and finally declares she 'will just be real down sick if she doesn't faint.' Are these true reflections of feminine fainting off the stage?

"I am afraid the resources of testimony will be exhausted before giving us any rules for a genuine faint. There is such an infinite variety of phases that codification of laws of fainting is impossible. I confess I don't know when a faint is a natural phenomenon and when it is a fine art."

PROTECTING THE PUBLIC.

THE DUTY LAID UPON THE COMMITTEES.

MAYOR GRANT CALLS ATTENTION TO THE DANGER OF FIRE AND MISHAPS—ADVISING PRECAUTION.

Mayor Grant sent an important communication yesterday to Hamilton Fish, president of the committees of the Centennial celebration, urging that all possible precautions for the prevention of fires, accidents and casualties of all kinds be taken. A portion of these suggestions were made by Henry D. Purroy, president of the Board of Fire Commissioners, in a letter to the Mayor of April 26. Mr. Grant's advice to Mr. Fish is embodied in the following letter, signed by Secretary Crain:

In view of the large power vested in your committee by statute and by the permissions for the erection of structures from time to time granted, the Mayor feels it incumbent upon him to bring to your attention the dangers necessarily attendant upon the carrying out of the demonstrations arranged for by your committee, in order that you may take such steps as to you may seem wise to lessen the liability to accident and to prevent the occurrence of injury.

One danger is that the structures erected by your committee will become overcrowded, and that by reason of such overcrowding they will be unable to sustain the weight upon them, and falling will injure those on them and near them.

As your committee have had the privilege of erecting those structures, and as they will control them when erected, the Mayor invites your attention to the importance of seeing that no more are admitted to them than the structures can reasonably sustain.

Another danger, equally apparent, is the increased liability to fire arising from your erections. As officers of your sub-committees will, to a great extent, control both the civic and military parades, the Mayor desires me to direct that, in the event of fire, they cause the processions to halt, whenever requisite, for the passage of fire-engines, and that they afford all reasonable facilities to firemen to reach the scene of any conflagration.

It is not possible in a communication of this kind to describe in terms the dangers incident to the gathering of great crowds in this city, and of their participation in the various exercises and demonstrations arranged for by your committee, nor is it possible to state in terms the means which you should take to lessen the liability to accidents. The purpose of this letter is to point out to you the grave responsibility which rests upon you, and to invite your attention to the propriety of a thorough consideration and a speedy enunciation of those means which, in your judgment, you shall adopt to prevent the occurrence of injury to the public.

The following reply to Commissioner Purroy's letter referred to above was sent by Mr. Crain yesterday:

I have the honor to acknowledge on behalf of the Mayor your communication of the 26th inst., detailing at length the precautions taken by your department to prevent, so far as within your power, the occurrence of accidents on the days of the Centennial processions.

The Mayor desires me to express his satisfaction with the careful and wise course of your department and to thank you for the valuable suggestions which you have made. While the control of the structures and the management of the parades rests largely with the Centennial Committee, and the responsibility consequent upon such control is theirs, he feels that, so far as your department is concerned, every precaution will be taken to prevent the occurrence of accidents.

He has caused a letter to be addressed to the Centennial Committee, urging upon them the adoption of all requisite precautions, a copy of which he incloses for your perusal.

LABOR UNIONS TO FALL IN LINE.

OVER THIRTY ASSOCIATIONS AND FIFTEEN THOUSAND MEN TO TAKE PART.

Of the 80,000 men who will march in the industrial parade, organized labor will be represented by over thirty associations and 15,000 men. The action of the labor organizations in connection with the Centennial celebration has been exceedingly unsatisfactory to the more patriotic unions which early decided to take part. One of the reasons why the Central Labor Union has not taken official action is that internal strife has absorbed the energies of the various delegates, but another reason is that there are some unions, many members of which are socialists, who object to contributing in any degree to the Centennial celebration.

Among the unions and clubs which will take part in the parade on Wednesday are the five Bricklayers' Unions of Brooklyn, with 2,000 men in short white aprons, accompanied by bands, banners and flags and symbols of their trade; Manhattan Shipbuilders' Union, with model of yacht, escorted by 300 members; the various lodges of the Brotherhood of American Carpenters and Joiners, represented by 4,000 men, carrying the National colors; the lodges of the United Order of Carpenters and Joiners, 1,000; Operative Plasterers' Unions, 1,000 men, canes and badges; United German Pavers' Union, 60 men; Harlem Butchers' Club, of D. A. 49, 250 men, on horseback; New-York Bricklayers' Unions, 800 men; of the Operative Painters' Unions 600 men will fall in line at command; the Granite, Brownstone and Marble Cutters' Unions will make a good showing with 800 men; 400 members of International Boatmen's Union No. 1 will be present; the Theatrical Progressive Union will have 60 men in its company; Brooklyn Marble-Cutters' Union will march 100 strong; the Journeymen Fresco-Painters' Union will turn out in full force to the number of 300; Progressive Painters' Unions Nos. 3 and 6 will make a good showing with 1,200 men; International Cigarmakers' Union No. 144 has a new 250 flag, which it will guard with 900 men. The Encaustic Tile-Layers' Union will send a committee of 150 of its members, with appropriate emblems. Master Workman Sullivan, of the Piano Makers' Union, who was Grand Marshal of the last Labor Day parade, will lead 600 members of his organization.

Several other small organizations will take part and along the line of march, mixed up with the ranks, will come trucks and stages bearing symbols of various trades and organizations. There will be the cake-maker, stone-cutter, blacksmith and pianomaker; there will be boats and floats, and minute designs of many kinds, and altogether it is expected to be the greatest thing of its kind this country has ever seen. All the unions who will march decided to do so as individual organizations, no one union having any connection with any other union. Many unions belonging to the Socialistic Central Labor Federation and United German Trades not only look with disfavor on the celebration, but have actually resolved to line any member who parades.

THE ARCH AT WASHINGTON SQUARE.

Spanning Fifth-ave., from curb to curb about 100 feet north of Washington square, stands the Washington Triumphal Arch, which is built entirely of wood, and is ornamented with a frieze of garlands and wreaths of laurel in papier mache. It is painted ivory white. As far as possible for so temporary a structure, the design follows the regular type of classic art. The idea has been to carry out a type of architecture which prevailed during the colonial time. The private houses on both sides are somewhat of this order of architecture and details of both have been reproduced in the arch. The dimensions of the arch are as follows: Width of archway, 41 feet; height to spring of arch, 22 feet; height of archway, 43 feet; height to cornice, 55 feet; entire height inclusive of statue on apex, 71 feet; entire width of arch 51 feet.

A statue of General Washington, ten feet in height, stands upon a pedestal on the apex of the arch. It is of carved wood, and represents him in Continental uniform, blue dress-coat with brass buttons, buff breeches and riding-boots. At the foot of the statue is a large trophy of National flags, and from the four corners of the arch streamers of flags are extended to the cornices of the adjoining buildings.

Four large bunches of flags, arranged as trophies on the sides of the arch at its spring, contain alternating with the National flag those of the foreign nations from whom the population is mainly recruited by immigration. Upon either keystone is perched a fine stuffed specimen of the American bald-headed eagle, the larger of these birds measuring 7 feet 6 inches from tip to tip.

In an adjoining yard a dynamo has been erected temporarily. From this, wires have been carried to the arch, which at night will be brilliantly illuminated by electric lights, several hundred lights being so arranged as to bring out in glittering relief the outlines of the structure and its decorations.

THE EXCHANGES AND THE HOLIDAYS.

It was officially announced yesterday that the Stock Exchange and the Consolidated Stock and Petroleum Exchange will not be opened until 10 a. m. on Thursday next. The Oil Exchange in Pennsylvania will also be closed until that time.

No meeting of the Clearing House was held yesterday, and the associated banks and the Clearing House will be open on Monday, but closed on Tuesday and Wednesday of this week. The offices of the Fourth National, Gallatin, First National and other downtown banks express the following conclusions in regard to the effect of the holidays on the payment of notes: "Monday not being a holiday, notes falling due on that day are payable on Monday; under the Saturday half-holiday law notes falling due on Saturday and Sunday are also payable on Monday; under the law making Tuesday, April 30, a holiday, notes due on that day must be met on Monday, the 29th; under the general law notes falling due on Wednesday, May 1, are payable on Thursday."

THE BIG BRIDGE WILL BE CROWDED.

Every preparation possible has been made on the Bridge for the accommodation of the crowds which are anticipated for the Centennial days, and, in fact, for to-day, when the vessels will be getting into position in the bay. To-day and to-morrow the south carriage-way will be used by pedestrians going to New-York, and the promenade by those coming to Brooklyn, and no one will be allowed to stand and block the passage. Extra ticket-boxes have been prepared so that the crowds will not be delayed in procuring tickets. The police arrangements are believed to be ample.

The arrangement now is for the entire Bridge police to have charge of the station and promenade, and the Brooklyn police of the carriageway. On Tuesday morning the north roadway will be closed to carriages, and will be given to the military and Naval contingent and the Grand Army men for their passage to New-York. The cars will be run at close intervals during the day and well into the night, and from 1 o'clock to 5 in the morning the interval between trains will be seven and one-half minutes instead of fifteen, as usual. The entire Bridge force has expressed a willingness to work twenty-four-hour watches, if necessary, to meet the demands of travel during the Centennial.

THE CENTENNIAL BELL OF OLD TRINITY.

AN ADDITION TO THE FAMOUS CHIMES—HOW IT WAS TESTED AND HUNG.

By National flags and tri-colored bunting lavishly displayed upon its exterior, and by the decoration of historic monuments in its churchyard, Old Trinity Church will testify to the sympathetic interest its corporate guardians take in the celebration. But more far-reaching than these visible signs will be the melodies rung out from its chimes. Clear and distinct among them will be the new bell which has been purchased to add to the compass of this peal; and thereby hangs a tale, showing how in these centennial days American ingenuity can turn out a bell for almost any emergency as easily as it can build a yacht to win an international race.

Not an altogether smooth sailing to get a bell cast which should fit into its proper niche with the other nine, which, with one exception, are of English make, several of them dating back to 1707. At first negotiations were opened with the representatives of an English firm, but they came to nothing and the officers of the corporation placed their faith to the firm of Meshane & Son, the Baltimore bell-founders. The first bell they made arrived here about six weeks ago. Albert Meislahn, the campanologist of the church, for he is something more than a mere bell-ringer, was one of the men with whom the acceptance or rejection of the new bell rested, and Sexton Thomas H. Browne was another. They were qualified experts, who had lived among the chimes for years, and were familiar with every subtle gradation of their tones. They found the new bell half a tone too sharp and too brilliant in its quality for its more sluggish British companions. They suggested that it be made to sound more dull. To be on the safe side, the corporation determined to have another one made.

When the second one came, along with its reconstructed predecessor, they were placed in the churchyard alongside of the north tower and tested in the open air. The newest one was the first to be tried, and Meislahn and Browne withdrew a distance of 100 feet to observe the result. The old bells, high up in the south tower, were rung out, and when the interval to be filled by the new candidate was reached it was sharply struck by a hammer. To the horror of the two alert listeners, it sounded as weak and unmusical as a tin kettle. The once rejected bell was now their only hope. The same test was applied and when the "E flat" interval was reached its tone was listened for with many misgivings. To the great surprise of the judges, it rang out as true and clear as a tuning-fork, vibrating with a singing quality which caused its notes to flutter in the air almost twice as long as those of its companions in the tower. Next day it was hoisted to its place in the northwest corner of the belfry. Since that time it has been tested by actual use, and a few days ago the rector of the church, the Rev. Dr. Morgan Dix, concurred in their verdict. This finally settles the question and henceforth it will keep its place and be known as the Centennial bell. It will be engraved with a suitable inscription. Taken altogether, the total cost of the accepted bell will be close to $1,500.

Formerly it was possible to play in only two keys. Now with the high note of the E flat bell added to the others, namely D, E, F sharp, G, A, B, C and C sharp, it is possible to play in five keys. This will enable Campanologist Meislahn to play many airs hitherto beyond his resources. The large deep-toned D bell is three feet and seven inches in diameter, three feet and three and a half inches high, and weighs nearly 4,000 pounds. They diminish in size and weight until the new one at the top of the scale measures only two feet across and weighs but 500 pounds. The remaining bells have a history which would doubtless be interesting enough if more of it could be ascertained. There were four of them to sound in honor of George Washington in 1789, before the six which formed the original peal of 1797 were put in the tower of the church then standing. About 1840 one of this latter set was sent to St. Paul's, and two of them to St. John's, in Varick-st. This left three of the original bells on hand. To these were added six more, made by C. & G. Mears, the firm which succeeded the London makers of the original six. Afterward the 5th bell was replaced by Meneely, of Troy, and in 1849 another C bell was made by the Mears people.

TO BE AT THE PRESIDENT'S RECEPTION.

The representations to be present at the official reception to the President to-morrow at the Equitable Building are shown in the following list: Actors, Assembly of New-York, Army officers, authors, architects, artists, auctioneers, adjusters averages, advertising agents, Aldermen, bank presidents, book publishers, brewers, butchers, bankers, Chamber of Commerce, clergymen, Cotton and Coffee Exchanges, civil engineers, chairmakers, chemists, china and earthenware, clothiers, colleges, carriage manufacturers, caterers, cigar and tobacco trade, foreign consuls, descendants of distinguished French officers of the Revolution, drug and chemical trade, drygoods, expressmen, flour, furniture, fish, freight agents, Grand Army, German society, grocers, glass importers, General Society of Mechanics and Traders, historical engineers, hatters and furriers, harness, house-furnishing goods, Holland Society, iron trade, iron works, insurance brokers, inland steamer lines, Jewellers' Association, lawyers, lumber dealers, life insurance, liquor-dealers, leather trade, lead pencil manufacturers, legislators, mechanical engineers, marine insurance, metal, Naval officers, New-York Maritime Exchange, physicians and surgeons, Produce Exchange, printers, piano manufacturers, printing press manufacturers, paint trade, photographers, representatives of the society of the Cincinnati, railroads, real estate, United States senators, Southern Society of New-York, stock Exchange, savings bank, sugar refiners, steamship agents, schools, stoves and hollow ware, sail makers, silk manufacturers, ship chandlers, shoe manufacturers and dealers, trust companies, telegraph companies and theatres.

TO TAKE PART IN THE NAVAL PARADE