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A HISTORY OF LINCOLN PARK, AND THE ANNUAL REPORT
OF THE COMMISSIONERS

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REPORT OF THE COMMISSIONERS

AND A

HISTORY OF LINCOLN PARK

COMPILED BY I. J. BRYAN

SECRETARY TO THE COMMISSIONERS



CHICAGO
PUBLISHED BY THE COMMISSIONERS
1899





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By THE COMMISSIONERS OF LINCOLN PARK



THE COMMISSIONERS OF LINCOLN PARK

JOSEPH E. DUNTON,

205 La Salle Street

MICHAEL SHIELDS.

13 State Street

F. H. WINSTON,

WM. PENN NIXON.

Inter Ocean Building

LLOYD J. SMITH.

145 Van Buren Street

OTTO C. SCHNEIDER. 302 North Clark Street

88 Washington Street

P. M. WOODWORTH, M. D. 1216 North Clark Street

OFFICERS

P. M. WOODWORTH, M. D., PRESIDENT

I. J. BRYAN, SECRETARY

PAUL REDIESKE, SUPERINTENDENT

JAMES McCARTNEY, ATTORNEY H. A. HAUGAN, TREASURER

STANDING COMMITTEES

FINANCE

SCHNEIDER, SHIELDS, WINSTON

MICHAEL SHIELDS. VICE-PRESIDENT

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JUDICIARY

NIXON, SCHNEIDER, WINSTON

HORTICULTURE

WINSTON, NIXON, SCHNEIDER SERVICE

DUNTON, SHIELDS, SMITH

MISCELLANEOUS MATTERS SHIELDS, SMITH, DUNTON BOULEVARDS AND SHORE PROTECTION

SMITH, WINSTON, NIXON

ZOOLOGY

DUNTON, SMITH, NIXON



COMMISSIONERS AND OFFICERS OF LINCOLN PARK

FROM 1869 TO 1899

COMMISSIONERS

EZRA B. MCCAGG JOSEPH STOCKTON JOHN B. TURNER* ANDREW NELSON JACOB REHM SAMUEL M. NICKERSON BELDEN F. CULVER WM. H. BRADLEY FRANCIS H. KALES FREDERICK H. WINSTON A. C. HESING THOS. F. WITHROW L. J. KADISH MAX HJORTSBERG* ISAAC N. ARNOLD* CHARLES CATLIN J. MCGREGOR ADAMS CHAS. B. FARWELL WM. C. GOUDY* HORATIO N. MAY*	Pate of AIFODSTHENT Feb. 9, 1869 Feb. 9, 1869 Feb. 9, 1869 Feb. 9, 1869 Feb. 1874 Feb. 1874 Nov. 1871 Nov. 1871 Nov. 1871 Nov. 1871 June 22, 1893 Feb. 1874 July, 1876 July, 1876 July, 1876 June, 1877 June 29, 1886 Feb. 13, 1883 May 17, 1884 Nov. 29, 1886	ESPHATION OF SERVICE NOV. 28, 1871 Jan. 20, 1893 Feb. 26, 1871 NOV. 28, 1871 NOV. 28, 1871 NOV. 1874 July, 1876 NOV. 1876 NOV. 1876 NOV. 1876 NOV. 1886 Feb. 1883 May 16, 1880 April, 1884 NOV. 29, 1886 April, 1884 April, 1887 April, 1897 April, 1893 Jan. 20, 1893	NAME
*Died in office.			

EXPIRATION OF SERVICE Jan. 28, 1892 Feb. 1888 Jan. 28, 1892 March, 1894 Jan. 20, 1893 May, 1894 May, 1894 Oct. 8, 1893 May, 1895 April, 1896 May 17, 1895 April 28, 1897 April 28, 1897 April 28, 1897 January, 1899

*Died in office

PRESIDENTS

DATE OF ELECTION

DATE OF ELECTION

April 1, 1887

April 1, 1889

June 16, 1897

EXPIRATION OF SERVICE

EXPIRATION OF SERVICE

April 1, 1889

May 31, 1894

April 30, 1897

Dec. 14, 1898

EXPIRATION OF SERVICE

EXPIRATION OF SERVICE

Dec. 15, 1871

Aug. 1, 1874

Dec. 31, 1881

Feb. 1887

March 30, 1883

DATE OF ELECTION

DATE OF ELECTION

NAME

NAME

A. H. BURLEY - - - July 24, 1870

E. S. TAYLOR - - - Aug. 27, 1872

O. BENSON - - - Aug. 1, 1874

E. S. TAYLOR - - - - Jan. 1, 1882

H. J. DEVRY - - - April 1, 1883

E. B. McCAGG Mar. 16, 1869 B. F. CULVER Nov. 28, 1871 F. H. WINSTON Feb. 24, 1874 JOSEPH STOCKTON Jan. 5, 1886 C. B. FARWELL Dec. 7, 1886 W. C. GOUDY Jan. 25, 1887	Nov. 28, 1871 Feb. 24, 1874 Jan. 5, 1886 Dec. 7, 1886 Jan. 25, 1887 April, 1893	ROBERT A. WALLER June 15, 1893	May, 1894 March 30, 1896 Nov. 10, 1896 Dec. 30, 1897				
	SECRE	TARIES _					
JOSEPH STOCKTON (temporary) Mar. 16, 1869 E. S. TAYLOR July 24, 1870 F. H. KALES (temporary) - Nov. 28, 1871	Expiration of Service July 24, 1870 Nov. 28, 1871 April 16, 1872	NAME DATE OF ELECTION E. S. TAYLOR - April 16, 1872 GEO. W. WEBER - April 24, 1893 I. J. BRYAN - June 16, 1897	April 24, 1893 April 28, 1897				
	TREAS	URERS					
DATE OF ELECTION	EXPIRATION OF SERVICE Feb. 26, 1871 Nov. 28, 1871 June 1, 1873 Feb. 24, 1874 April 11, 1876	DATE OF EXECTION	Expression of Service May 22, 1883 March 31, 1893 March 18, 1895 April 6, 1898				
SUPERINTENDENTS							

NAME

W. P. WALKER - - -

J. A. PETTIGREW - - -

CHAS, W. ANDREWS - -

H. C. ALEXANDER - - June 1, 1894

PAUL REDIESKE - - Jan. 18, 1899





A HISTORY OF LINCOLN PARK

, INCOLN PARK as it is to-day bears little witness on its fair and smiling face of the slow and arduous steps, through a long period of years, by which its present beauty and its present extent have been reached. The Lincoln Park of 1899, lying mainly between North Avenue and Diversey Avenue, has within those limits a water front of over a mile and a half along the shore of Lake Michigan, and an area of about three hundred acres, all of which is improved in lawns, flower parterres, trees, shrubbery, drives, walks, water surfaces, or buildings, except the narrow half-mile strip of five and one-half acres of sand beach between Fullerton and Diversey avenues. Doubtless the thousands of children who enjoy the bathing facilities the beach affords in summer would wish no improvement of this strip of sand, which may serve another valuable purpose in illustrating the difficulties under which the makers of Lincoln Park have always had to labor. Almost the entire surface of the Park was made up originally of sand dunes as barren as the bare sand of the present beach.

Including its small parks and its nine miles of boulevards, which form a part of the Lincoln Park system, there is a splendid water front of four and a half miles and an area of 400 acres. Among the boulevards are three which were constructed by the Commissioners: the Lake Shore Drive from North Avenue to Oak Street, 200 feet wide, three-quarters of a mile long, and seventeen acres in extent, opened in 1875 as a part of the Park; the North Shore Drive, from Belmont Avenue to Byron Street, a distance of nearly a mile, practically complete and used by the public; and the Ohio Street Extension of the Lake Shore Drive, from Oak Street to Indiana Street, a distance of three-quarters of a mile, which, though not yet opened to the public, is nearing completion.

Under the same control and a part of the Lincoln Park system are Union Square on Astor and Goethe streets, a block west of the Lake Shore Drive, with an area of half an acre, and Chicago Avenue Park, lying east of the city water-works property between Pearson Street and Chicago Avenue, with an area of 9.16 acres, the improvement of which as a park has but just begun.

Besides this visible part of the Lincoln Park system, it has an invisible but invaluable and not intangible asset in the ownership of all the submerged lands from the shore line to the point of navigable water along the entire lake front in the towns of North Chicago and Lake View, from the Chicago River to Devon Avenue, a distance of nine miles, with an average width of 1,200 feet. The ownership of these submerged lands, hundreds of acres in extent, has been vested by the State in the Commissioners of Lincoln Park in trust for the people of the two towns for park purposes; and after a series of legal contests with private shore-owners who insisted on their alleged rights to build piers into the lake and usurp the accretions thereby made to their land, the right of the Commissioners to all land submerged or not submerged east of the shore line as it existed when they took formal possession, according to the act of the Legislature, has been maintained by the highest court in the State.

The government of Lincoln Park is vested in a Commission appointed by the Governor and confirmed by the State Senate, which Commission has exclusive control, subject only to the State, within the boundaries of the park system, with the exception only that in cases where city streets have been surrendered to the Commissioners for park boulevards the city has usually reserved the right to alter, repair, or extend its water and sewerage systems.

Lincoln Park is supported by taxation on the two towns of North Chicago and Lake View, which comprise the Lincoln Park district, extending from the Chicago River on the south to Devon Avenue on the north, and from the North Branch of the Chicago River to the lake on the east, with Fullerton Avenue the dividing line. For the means, however, to maintain the Park, the Commissioners are dependent upon the town supervisors, who annually fix the amount to be raised by taxation from each town.

Bonds of the town of North Chicago have from time to time been issued by the Commissioners, and special assessments levied against all or part of the property in the two towns, but only by express acts of the Legislature and with the consent and assistance of the corporate elected authorities of the towns.

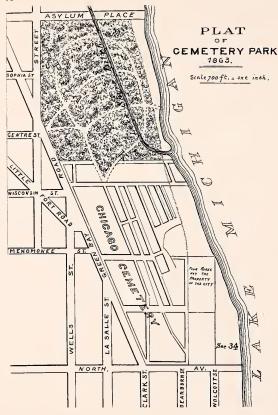
Lincoln Park is the oldest of the splendid chain of parks which, linked together by broad boulevards, surround and crown the imperial city of Chicago as with a diadem of matchless pearls, and its history is also the most unique and interesting. Its foundations were laid as far back in the past as those of Chicago itself, and a large part of its territory has always been public domain, belonging to the general government from the Revolution, and ceded by Congress to the State of Illinois in 1828 as part of the immense grant of 282,000 acres of public lands made to aid in the construction of the Illinois and Michigan Canal. On February 10, 1837, the Legislature of Illinois passed an act granting the inhabitants of the town of North Chicago the right to use a lot of canal land situated near said town for a burialground, to be paid for at a valuation to be determined whenever the State should decide to sell canal lands in the vicinity of Chicago. Under this act, the city of Chicago, which was incorporated a few months later, the charter election being held the first Tuesday in May, took possession of the land bounded by Asylum Place, now Webster Avenue, Lake Michigan, North Avenue, La Salle Avenue, North Clark Street, and Franklin Street, now North Park Avenue, except the two

pieces known later as the Farwell and Milliman tracts, and one four-acre parcel, and laid out into cemetery lots all of such land east of Clark Street to the line of State Street extended to the lake, and south of Menomonee Street produced to the lake. The title to the land was acquired by the city in 1842, by patent from the State of Illinois, for the sum of \$8,000. The Milliman tract of over twelve acres, so called from its original owner, Jacob Milliman, who bought it with a few acres more, at canal sale in 1843, for \$725, was bought by the city at administrator's sale in 1847 for \$2,500. But through a defect in the court proceedings confirming the sale, the heirs of Milliman succeeded in securing possession of the property by a decision of the State Supreme Court in 1865, and the Park Commissioners, in 1875, had to pay \$138,000 for seven acres of the tract. The four-acre parcel shown in the map on page 16 was afterward bought by the city for \$1,000.

In 1852, when the cholera epidemic was at its height, and there seemed no relief in sight for the terror-stricken city, the Common Council purchased three large tracts of land outside the city, to be used as hospital grounds and quarantine stations. One of these districts was the tract of land bounded by Diversey Avenue, Lake Michigan, Fullerton Avenue extended, and what is now the west line of Lake View Avenue. There were fifty-nine acres in the tract, for which the city paid \$8,851.50. The cholera epidemic subsided soon afterward, and little if any use was made of the property for the purposes for which it was bought, and until it became a part of Lincoln Park in 1869, it remained a barren waste of sand and swamp.

In 1855 there still remained unsold in that part of the city property north of North Avenue, which had been subdivided as a cemetery, 553 burial lots. By 1858, however, the city had grown out and around the cemetery, and protests began to be made by citizens of North Chicago and by physicians against further interments there. On March 20, 1859, the City Council passed an ordinance





directing that the sale of lots in the City Cemetery should cease after May 1, 1859. On January 10, 1860, a committee of North Chicago citizens presented a petition to the Common Council, proposing the use of the sixty-acre tract between Menomonee Street extended and Webster Avenue for park purposes, and the Council, by orders passed February 13, 1860, limited the cemetery to that part then surveyed and subdivided, prohibited burials in the north sixty acres, and reserved them to be used for a public park, or for such public purposes as the Common Council might devote them.

At that time the cemetery was still practically confined to the small corner of the tract south of Menomonee Street and west of the line of Dearborn Avenue. All of the land to the east of the cemetery and northward from it to Diversey Avenue presented the same general features. Along the lake there was a wide beach of sand, the shore line of which shifted with every storm. From the lake westward, there were alternate ridges of sand and swales of lower ground, which retained enough moisture to encourage some straggling vegetation. Poison ivy grew rank over a great part of the tract, while there were occasional clumps of willows and scrub oaks. Through the western part of the tract ran the "Lake Shore Ditch," a channel better known as the "Ten-Mile Ditch," which had been dug between 1850 and 1855 by the Cook County Drainage Commissioners to drain the lowlands near the lake from Evanston south. It emptied into the lake about opposite Center Street, and the current was so slight that it was usually full of stagnant water. It ran along the western side of the present Park; and whatever good results it may have accomplished in draining territory farther north, that part of the present Park north of Fullerton Avenue and west of the line of the Stockton Drive was little better than a swamp. East of the Stockton Drive was a sweep of sand so barren that not even poison ivy could find any nourishment there.

The first annual report of the Board of Commissioners of Public Works, issued in 1862, for the year beginning April 1, 1861, after



reciting the improvement of the cemetery proper by filling the roadways with clay and covering them with gravel, to make good carriage drives, planting trees along the roads, sodding, repairing the fence around the grounds, and erecting a small fountain at the entrance, makes the first published official reference to "the Park" lying north of the cemetery proper, which is described in terms more glowing than other contemporary reports would warrant, as "some forty acres of public grounds of diversified surface bordering on the lake, covered with a young growth of wood, and affording the city the promise of an attractive park at small expense." In this year trees were thinned out and trimmed, some work done on the grounds, and several small bridges thrown across the county ditch. The improvements must have been even less extensive in fact than in their appearance from this description, as the total expenditure for the year on cemetery and Park, and all public squares, was only \$3,005.90. In the following year the only work reported on the "forty-acre tract" was that of trimming trees, but the Board promoted its extent to fifty acres, recommended a liberal provision for laying out and improving the grounds, and urged that a regular plan be adopted for ornamenting the grounds, and for drives and walks connecting with the cemetery and connecting streets, and that an annual appropriation be made to carry it out. With the report the Board submitted a map of the ground, which is reproduced on page 16. The recommendations of the Board did not bring forth immediate fruit, for in the two following years the appropriation for the cemetery and Park and all public squares in the city was less than a thousand dollars, "hardly enough to pay the hire of a gate-keeper, and not enough to keep the cattle out of the Park."

The North Side advocates of a park kept up their efforts, however, and early in 1864 William C. Goudy, who was later and for many years to be connected with Lincoln Park in an official capacity, prepared an ordinance appropriating all the land lying between Webster Avenue and the land subdivided into cemetery lots for a public park, and

providing that the land owned by the city between Clark Street, La Salle Street and North Avenue should be sold, and the proceeds applied for the improvement of the proposed park. The Common Council passed this ordinance October 21, 1864, after striking out the provision authorizing the sale of any land, but made no appropriation for the improvement of the land thus set apart for a park, and for another year no steps were taken toward that end. In this ordinance it was declared that the public park thus set apart should be known by the name of "Lake Park." In this year the Council, by ordinance, prohibited the further sale of cemetery lots, and in 1866 burials were prohibited.

On June 5, 1865, the following resolution was passed by the Common Council of Chicago:

"WHEREAS, It appears by the records of the City of Chicago, that there are now two public parks designated by the name of Lake Park; therefore

"Resolved, That the park recently set apart from the unoccupied portion of the old cemetery grounds shall be hereafter known and designated as Lincoln Park."

The giving of this honored name to the embryo Park seemed to produce the desirable effect of unloosening the city's purse-strings, for at the same time, through the efforts of Alderman Lawrence Proudfoot, orders were passed enforcing the prohibition against burials in Lincoln Park, and appropriating \$10,000 for its improvement.

Soon afterward a plan for the improvement of the Park, prepared by Swain Nelson, landscape gardener, was adopted, and the contract for the work given to him. The plan provided for excavations for three small lakes along the line of the "Ten-Mile Ditch," the building of even smaller hills with the sand from the excavations, laying out drives and walks, planting trees, draining low land, and making lawns. The work was not begun until late in the season, and the report for the year ending March 31, 1866, gives the total expenditures as follows:



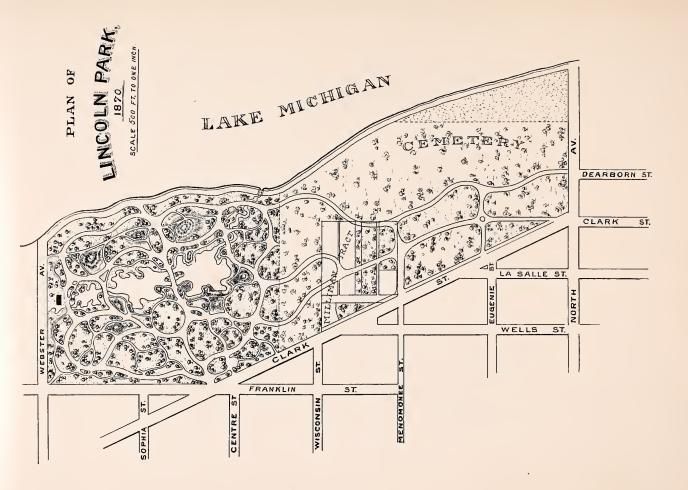
LINCOLN PARK.

Swain Nelson, on account improvements	3.704-43
Engineer	277.05
Sidewalk, 732 feet	256.20
Plan	100.00
Rodman	91.00
Advertising	69.37
Labor	28,00
Tools .	20.00
	\$4,546.05

Work was continued on those lines in the following year, and in 1867 the work on the lakes was finished, eight temporary bridges constructed, and the Park so far completed that it was a place of public resort.

While this work was progressing, the ideas of citizens of the North Side as to the kind of a park to which they were entitled grew apace, and finding the city authorities backward, they appealed to the Legislature of the State. That body had, in acts passed in 1851, 1857, and 1863, given the City of Chicago certain powers as to public parks, and by an act amending the charter of the City of Chicago, approved March 9, 1867, all of the land owned by the city north of Fullerton Avenue and east of the present west line of Lake View Avenue was added to Lincoln Park, and authority was given to acquire by purchase, gift, or condemnation a strip of land not exceeding three hundred feet in width, lying between said land and said Park. No action, however, was taken in pursuance of this authority by the city, which was content to carry on the improvements already under way. The city reports show that over \$20,000 was expended in 1868, principally for the construction of drives and walks, planting and transplanting trees, digging sewers, and building seats. A flagstaff was erected on the artificial mound west of the southernmost of the trio of small lakes, and the starry flag still floats from a staff planted in the same spot. Music-stands were erected, concerts were given "through private liberality," and a beginning was made for the present large collection of animals and birds by the donation to the city, by Mr. O. B. Green, of two pairs of swans from Central Park, New York, which were placed on the Park ponds.

But the advocates of a more extended park were not satisfied with the work being done by the city, and became convinced the only way to carry out their ideas was to secure the establishment of a Park Commission, with distinct and exclusive authority. A similar agitation was being made on the South and West Sides, and by joint action at the legislative session of 1869, acts were passed establishing the three Park Commissions. The Lincoln Park act was the first to pass, being approved February 8, 1869. It was entitled "An Act to fix the Boundaries of Lincoln Park in the City of Chicago, and provide for its Improvement," and fixed the south, west, and north boundaries of the Park as they exist to-day, and the shore of Lake Michigan at lowwater mark, "as the same now is or hereafter may be," as the boundaries of a public park, to be known as Lincoln Park, and declared that all the land included therein should be deemed to have been taken by the City of Chicago for public use and for a public park. The act provided that all said land then belonging to the city should be appropriated for the Park without any compensation to the city; that title to the rest of the land might be acquired by the city by purchase or condemnation; that the Board of Commissioners of Lincoln Park thereinafter created might purchase any of the land at fair and reasonable prices, to be determined by them and paid out of bonds or money coming to their hands, and the same be conveyed to and vest in the city; that appraisers should be appointed to fix the value of the land to be taken, and that the Circuit Court should condemn the land. For the purpose of paying for the land, the act provided that the bonds of the City of Chicago should be issued from time to time by the Mayor, Comptroller, and Clerk of said city, as required by the Board of Park Commissioners, payable in twenty



years, at the rate of seven per cent per annum. Owners of cemetery lots to be condemned by the Commissioners were ordered to remove any bodies therein within six months after condemnation, the Commissioners to have power to make such removals thereafter. The act provided that the appraisers should also, as a part of Lincoln Park, lay out a drive 200 feet wide, with the waters of Lake Michigan as its east line, from Pine Street, whose northern terminus was then at Oak Street, to the south line of the Park, and make a special assessment to pay for the land taken therefor. The act provided that Lincoln Park should be under the exclusive control and management of a Board of five Commissioners, to be named and styled "The Commissioners of Lincoln Park," and named E. B. McCagg, John B. Turner, Andrew Nelson, Joseph Stockton, and Jacob Rehm as such Commissioners, who were to hold office for five years, their successors to be appointed by the Judge of the Circuit Court of Cook County. The said Board was to have full and exclusive power to govern, manage, and direct the Park, appoint all officers necessary, except a police force, and generally to possess all the power and authority conferred on or possessed by the Common Council in respect to public squares. They were, on or before the first day of October in each year, to fix upon the amount, not exceeding \$75,000, that might be necessary for the improvement and repair of the Park and drive during the next succeeding year, and such amount was to be apportioned by the Clerk of the County Court of Cook County upon taxable property of the towns of North Chicago and Lake View, and included in the warrant for the collection of taxes. The Commissioners were directed to lay out a street north from Fullerton Avenue to Diversey, along the west line of the Park, and to make a detailed statement of their receipts and expenditures to the Common Council of said city in the month of April in every year. The Commissioners were empowered to take possession of all buildings and grounds attached thereto belonging

to the city within the limits of said Park, and rent them, use them, or sell them for the benefit of the Park.

Several amendments to the act were adopted at the same session, shortly after its passage. On March 4, 1869, the provision for a street on the west line of the Park north from Fullerton Avenue was repealed. On March 30, 1869, an amendment was adopted, providing for the purchase or condemnation of the land designated as "The Triangle" on the map on page 41, north of Fullerton Avenue and south of Diversey Avenue, between the Park and a line 500 feet east of Green Bay Road, the tract amounting to 221/2 acres. The Commissioners were also to change the direction of Franklin Street to include in Lincoln Park the small triangle between Fullerton Avenue and Franklin Street, east of the Lake Shore Ditch. The same amendment limited the amount of bonds which might be issued by the Common Council of the City of Chicago for the benefit of Lincoln Park to \$500,000. Another and important amendment, approved April 19, 1869, repealed the section conferring the taxing power upon the Commissioners, and provided that they should certify to the Supervisors of the towns of North Chicago and Lake View, on or before the first day of October in each year, the amount of money needed to pay any debt contracted by them which might fall due during the next year, and for the maintenance and government of Lincoln Park during the next succeeding year, and that the Supervisors should fix upon and determine the amount of taxes necessary for the purpose aforesaid.

The last amendment was considered advisable, on the theory that only officials elected by the people had the power to levy taxes, unless the Park Act were first submitted to the people of the two towns for adoption, and this was not done. The South and West Park acts were adopted by close votes, after bitter opposition, particularly by heavy tax-payers, and it was deemed unwise to submit the



A HISTORY OF LINCOLN PARK



Lincoln Park Act to a popular vote until after time should prove its popularity.

By this time the territory from which it was proposed to create a park, except the small tract under improvement by the city, seemed even less susceptible of such treatment than it had been in 1860.

The cemetery had extended farther east, and the bodies of a thousand Confederate soldiers, who had died in Chicago prisons, had been interred on what is now a part of the baseball grounds. There was a dead-house or morgue near North Avenue, immediately east of Dearborn Avenue, and a smallpox hospital a few hundred feet farther north. A board fence eight feet high had been built around the cemetery. West of the line of State Street extended north, which was the eastern boundary of the cemetery property, lay a narrow triangle of sand, with a base of 400 feet on North Avenue and disappearing at a point 1,500 feet north. This tract, which had for years covered about four acres. had been bought by John V. Farwell in 1866, for \$8,000. Not many years before it had sold for \$1,000. About the time of the adoption of the Park Act, Mr. Farwell built a pier running out into the lake at North Avenue, with a spur extending a few hundred feet north from its eastern end. Ground was leased on North Avenue east of State Street for commercial purposes, and an axlegrease factory and a stone-mill were soon in busy operation. Lake Michigan was still busier throwing up sand in the protected nook prepared by the pier, and the acreage increased so rapidly that by 1872 Mr. Farwell had nineteen acrcs instead of four to dispose of for park purposes. Before the erection of this pier, the shore line from North Avenue to Diversey Avenue had been a shifting line of sand, accretions slowly forming during mild weather, to be washed out into the lake again by the first severe storm. Between Webster Avenue and Fullerton Avenue the land had been leased for nurseries and market gardens, and it was not abandoned for that use until 1875, when the Commissioners took possession. North of Fullerton Avenue the city property was used for a dumping-ground. The "Ten-Mile Ditch" was, as a rule, full of stagnant water and badly in need of drainage itself, though it furnished frog-fishing in summer and skating in winter for the youth of the day. There was hardly enough fertile soil on the whole two hundred acres for twenty acres of lawn. The sand ridges shifted more or less with every wind that blew, and there was little about the site to recommend it for park purposes except the beauty of the lake.

It was the evident intent of the original act that Lincoln Park should be a city park, under the police control of the City of Chicago, and its lands bought and owned by the city, its improvement and maintenance to be a charge upon the towns of North Chicago and Lake View. The Commissioners named in the act organized March 16, following, at a meeting held at the house of E. B. McCagg, who was

A HISTORY OF LINCOLN PARK

elected president. Resolutions were passed accepting the offices of Commissioners, authorizing preliminary surveys, inviting plans for the improvement of the Park, and appointing W. C. Goudy as counsel. From that time to July 1, 1873, a period of over four years, there were two separate governments in Lincoln Park, side by side. The city continued to take care of the improved part of the Park, lying between Wisconsin Street and Webster Avenue, while the Park Commissioners, as soon as funds were secured took charge of the cemetery on the south and the unimproved city property north of Fullerton Avenue, took the steps necessary to secure the property within the Park boundaries owned by private individuals, built a drive along the lake shore, began the fight, kept up with little cessation since that date, to protect the shore line against the stress of storms and push it farther out into the lake, and in other ways began the work of building up a park from a barren waste. That work was delayed for a twelvemonth, however. While one of the first acts of the Commissioners was to secure surveys and plans for park improvements, litigation, rather than landscape gardening, was to occupy their attention for the first year. At the second meeting of the Commissioners, held April 9, 1869, their attorney was instructed to apply to the Circuit Court for the appointment of three appraisers, as provided by the Park Act, to appraise the lands to be purchased to complete the Park, and at the next meeting, held May 1, the President was authorized to make a demand on the Mayor of Chicago to issue the bonds of the city for the amount necessary



to purchase such lands. The application was made to Mayor Rice, and it is possible it might have been granted if it had not been for the sentiment apparent in other sections of the city that the North Side, in securing 165.89 acres of city property for a park, without cost, was already getting too much from the city, at the expense of other sections. The Corporation Counsel, doubtless a loyal North Sider, advised the Mayor that the law was constitutional, and that it was obligatory upon him to issue the bonds. But Mayor Rice declined to issue them on his own responsibility, and referred the matter to the Council. That body deferred action, and at once requests and demands were made by the newly organized South Park Board and West Park Board, for the issuing of bonds for their benefit to an amount equal to whatever bond issues might be made for Lincoln Park, and in addition, for further amounts equal to the sums already laid out by the city in the improvement of the original Lincoln Park, then about \$60,000. Whether or not these applications affected the decision of the Council does not appear in the newspaper records of their proceedings, but the Council passed an order directing the Mayor to refuse to issue any city bonds for the benefit of Lincoln Park, and he obeyed the order. Then the Lincoln Park Commissioners entered upon the first of numerous lawsuits in which they have been involved in sustaining or determining their rights and powers, a petition to the Supreme Court of the State for a writ of mandamus to compel the city authorities to issue the bonds. The Supreme Court, in October, refused the writ, on the ground that the Legislature had no power to compel the Ctiv of Chicago to issue bonds without its consent.

Deprived of the means of purchasing land until new legislation could be obtained, and without means to carry on improvements, the Commissioners held but one more meeting that year, on September 28, when they made the first annual estimate of the amount needed to pay debts and run the Park for the succeeding year, fixing it at

\$60,000. The estimate was certified to the Supervisors of North Chicago and Lake View, who made a levy of 5½ mills on the dollar, for each town, the tax being extended as follows: Lake View, \$3,058.53; North Chicago, \$59,088.17; total, \$62,146.70.

On February 8, 1870, John B. Turner was elected treasurer, and \$12,756.47, the first collection of taxes, was turned into the brandnew and altogether empty treasury of Lincoln Park on April 4. The first expenditure of the Commissioners was the payment of \$1,892.14 to President E. B. McCagg, May 10, 1870, for money advanced by him in the preceding year for the following objects, as shown by Lincoln Park voucher No. 1:

A. Silversparre, survey and map of Lincoln Park.	\$800	00		
A. Wolcott, survey of Milliman tract		00		
F. H. Bailey, maps of Lake Shore Drive	110	00		
Beach & Bernard, printing account of incorporation		50		
A. R. Williams, Clerk Supreme Court, for costs, case 63				
Mandamus v. Mayor		00		
Beach & Bernard, printing 250 copies of Park laws	. 32	00		
Revenue stamp		25		
Engraving bonds		00		
E. S. Salomon, extending tax levy				
Interest to McCagg on above				
			\$1,892	I

With money in their treasury, the Commissioners proceeded to business, and at their meeting of May 10, 1870, ordered the construction of a temporary road, the Lake Shore Drive, along the lake from the improved part of the Park to Diversey Avenue, provided that a right of way could be secured over the Newberry and Foster property. Such right of way was secured in July by condemnation proceedings, and work was begun at once. A clay and gravel roadway 40 feet wide was constructed from a point 600 feet south of Asylum Place northward to Diversey Avenue, at a cost of \$17,280.60. The first 600 feet of the roadway was opened to the public September 30, and it was all completed December 30. In 1871 the drive was extended



I,800 feet south, to a point near where the electric fountain now stands, at a cost of \$6,605.70, and a week later work was begun on another contract for widening the entire drive 20 feet. This was completed September 29, the total cost of the drive amounting to \$32,769.66.

Almost before the work of making the shore drive began, it became evident steps must be taken to keep the lake from washing it away. At the meeting of July 23, 1870, the Commissioners elected E. S. Taylor (who had been instrumental as a member of the Legislature in securing the passage of the Park Act) Secretary, and A. H. Burley, Superintendent. A week later the Superintendent was instructed to build a pier to preserve the shore, and on August 2 a contract was made for launching a pier 65 feet long at a point 600 feet south of Diversey Avenue. Other piers were constructed at different points along the shore, the idea being that land would form between them, both protecting the drive and enlarging the area of the Park. How the plan resulted, and what efforts were made subsequently by many different plans to protect the shore, down to the present time, is so large and complicated a subject, that it demands separate treatment.

In September, 1870, the long task of transforming the cemetery into a park was begun by tearing down the dead-house, or morgue, and the smallpox hospital, under permission of the Board of Public Works.

On October 10, 1870, the Commissioners arrived at the dignity of an office, renting a room at 63 North Clark Street for \$30 a month, and on November 4, 1870, the first order was given by the Board for planting trees in the Park, the first purchase being for the ornamentation of the Lake Shore Drive.

Early in December the fence around the old cemetery tract was removed, and part of it re-erected along the drive in front of the Foster and Newberry tracts, and along the east line of the cemetery, separating it from the Farwell tract. In this month the Board began to consider ways and means to secure a water supply for sprinkling drives and lawns, and on January 21 a contract was let for sinking the north artesian well. In June following, at a depth of 1,540 feet, a flow of 332,352 gallons daily was secured. A tank was built 20 fcet above the ground, and wooden pipes laid from it to the Lake Shore Drive to furnish water for sprinkling. For a number of years all the water used in the Park was that supplied by two artesian wells.

During the fall and winter of 1870 thousands of loads of manure were bought for enriching the sandy soil of the Park and making lawns. For many years the annual expenditure on that account was a considerable item.

On November 12 an order was passed to prohibit fast driving on the Lake Shore Drive, but it was evidently unpopular, and was rescinded two weeks later.

Commissioner John B. Turner died February 24, 1871. During his service of ten months as Treasurer, he had paid interest on the Park funds to the amount of \$912.05. The custom of obtaining interest on Park funds died with Mr. Turner, and was not resurrected until early in the term of the present Board, in July, 1897.

The Commissioners, in their first report to the Common Council, submitted in April, 1871, showed receipts to April 1 of \$59,871.74, of which \$58,595.69 was on account of the tax of 1869, and expenditures of \$44,588.05. The report says in part:

"The Commissioners, assuming no control of the Park as at present improved, but leaving its management and the expenditures of all moneys appropriated by your honorable body to the Board of Public Works, have devoted their attention to the protection of the shore, to the construction of a drive bordering the lake, and to preparing for ultimate permanent improvement the grounds embraced within the limits of the Park."

The first practical step in the life of the Commission toward the enlargement of the Park was taken by the Common Council, though apparently with no such intention. That body, in October, 1870,



passed an order authorizing the exchange of city property in another part of Chicago for lots M, N, O, D, and E, in the Milliman tract (shown in the map on page 41). The Council indicated its disposition toward the Commission, and its belief that the North Side had had its share of city property, by adopting the following order:

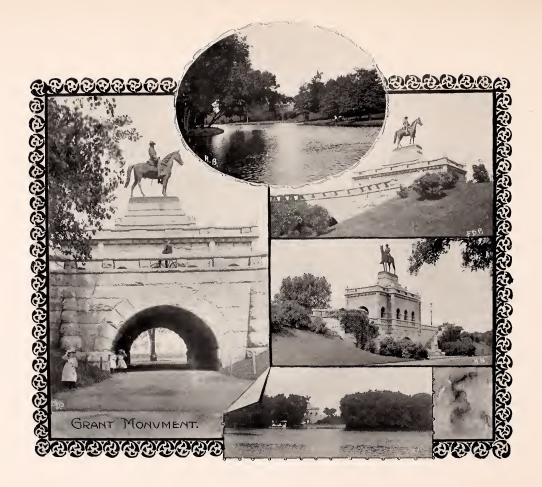
"Ordered, That the above-named tract of 5.32 acres (more or less) shall not be improved and used by the Commissioners of Lincoln Park for park purposes until they shall pay into the general fund of the City of Chicago the sum of \$60,000, to be divided as the Common Council may direct among the several parks of the South and West Divisions of the city."

This order failed of effect for some reason, as the Commissioners, a year or two later, took possession of the tract named without making any payment therefor, and all the 171.21 acres of city property passed to the control of the Park Commission without cost, except that involved in the purchase of titles for cemetery lots and the cost of removing remains to other cemeteries, amounting in all to \$19,-494.19.

Early in 1871 an opportunity was offered to secure another part of the Milliman tract at an advantageous figure, David Milliman offering lots A, C, H, and I, about 3 acres, for \$45,000. The Commissioners had no funds for such a purpose, and pending further action by the Legislature, there was no certainty that they ever would have. In order not to sacrifice the opportunity, Commissioners McCagg, Stockton, Rehm, and Turner gave their individual notes for the amount, and bought the land in trust for Lincoln Park.

With the convening of the General Assembly in 1871, steps were taken by the Commissioners and the friends of a greater Lincoln Park to secure such amendments of the original act as would provide for raising money to buy the lands within the park limits not owned by the city. On June 16, 1871, an act was passed in regard to the completion of public parks and the management thereof, which, while not referring by name to Lincoln Park, in fact referred to it solely. The

act provided that where lands within specified boundaries had been declared to be a public park or for the enlargement of a public park, and provisions were made for acquiring the title thereto by issuing bonds, but there was no valid provision of law for the issuing of said bonds, the Board of Commissioners might purchase any of said lands at fair and reasonable prices, to be determined by agreement with the owners, or that any of said lands might be condemned by the Supervisors and Assessors, corporate authorities of the towns in which the park was situated, and the Commissioners of the Park, by and with the consent in writing of said corporate authorities, were empowered to institute proceedings in a court of record to assess the damages and fix the amounts to be paid for said lands. A special assessment was to be made "by the Supervisors and Assessors, corporate authorities of the towns," on all the lands and lots within the towns benefited by the proposed park improvement, payable in twenty equal annual installments, the assessment to be confirmed in the Circuit Court. The Supervisor and Assessor of each of said towns were empowered to authorize the Park Commissioners to issue bonds for the purpose of paying for lands to be purchased or condemned, the property of the towns, the lands to be used for the Park, and the special assessment to be pledged for the redemption of the bonds, which were to bear interest at the rate of seven per cent, payable annually, and running for any time not exceeding twenty years, the time for the payment of the principal to be distributed as nearly as practicable so as to retire each year an amount equal to the amount of the special assessment collected. The act provided that the title to the lands when purchased or condemned should vest in the Park Commissioners in trust for the use of the towns; but if at any time the city in which was vested the title to the lands already appropriated for the park should reimburse the towns, principal and interest, for the cost of the lands, the title should be conveyed to and vest in the city. The act provided that the Park Commissioners might appoint and support a



police force, a right not given in the original act; that the legal proceedings for the condemnation of land for the Lake Shore Drive should be the same as those laid down for condemning land for park purposes; that in all cases where the commissioners of any park had been named in the act establishing the same, the Governor should nominate, and by and with the advice of the Senate appoint, the commissioners of such park, who should hold office for the term of five years, all vacancies to be filled in the same manner; and that the commissioners should in April of each year submit to the mayor of the city, or president of the board of trustees of the town in which the park or portion thereof might be located, a detailed statement of the amount of moneys expended on account of the park.

Before action was taken under the new law, the Commissioners made a bargain for another tract of land for park purposes without waiting for official authority. With the sanction of the Board, its President, Belden F. Culver, on May 12, 1872, after some dickering with John V. Farwell, bought from him in his own name, but in trust for the Commissioners of Lincoln Park, the tract of 19 acres of sand at the southeast corner of the Park, known as fractional section 34, township 40, range 14, etc., for \$100,000, a little over \$5,000 an acre. While the price was lower than that paid for other lands in the Park, the investment seemed not unprofitable for the devisor, as he had paid \$8,000 for the same land in 1866, when only four acres of it was above water. The remarkable increase in acreage shows the value of a well-constructed pier for making land cheaply.

On June 25, 1872, the Commissioners passed the necessary resolutions calling upon the Supervisors and Assessors of North Chicago and Lake View to issue bonds and levy a special assessment for the purchase of lands. On September 19, 1872, the Supervisors and Assessors, acting together, authorized issues of town bonds as follows: Lake View, \$48,000; North Chicago, \$348,700; total, \$396,700,—being five per cent of the tax valuations of the two towns.

They estimated the damage done to owners of real estate to be taken for the Park in the two towns thus:

North Chicago, \$862,500; Lake View, \$337,500. Total, \$1,200,000.

The million and a fifth was to be raised in the two towns by a special assessment, distributed as follows:

North Chicago, \$709,070.27; Lake View, \$490,929.73. The taxable property in North Chicago was \$6,968,349, and that in Lake View \$968,278, while the population in North Chicago in 1870 was 71,551, and that of Lake View 1,841. This made the proposed assessment for Lake View over half the total valuation of property in the town, while the land to be purchased in Lake View was 22½ acres, against 59 acres in North Chicago. The assessment was confirmed in the lower court in April, 1873, but the Supreme Court, in November, again interfered with the plans of the Commissioners by declaring the assessment invalid because the officials of the two towns had no right to act jointly, those of one town having no right to assess property in another town, and for the further reason that the assessment was apportioned inequitably.

The Commissioners were again left without means, or the immediate prospect of securing means, to buy lands for Park purposes. The conditions were discouraging, but the General Assembly was to meet again the first of the following year, and the campaign for securing the additional legislation necessary was begun at once. The owners of property within the park limits were as uneasy as the Commissioners over the uncertainties of the situation. The executors of the Newberry estate and the heirs of Dr. Foster threatened suits to regain possession of that part of their property which had been appropriated for the construction of the Lake Shore Drive, and to avoid any further litigation the Commissioners adopted resolutions especially declaring that they laid no claim of title to the land, but were using it on sufferance merely. Some of the various owners of lots in the Milliman



tract thought it necessary to assert their ownership by building fences around their lots, and in so doing they completely shut off the West Drive through the old cemetery. These fences were not removed until bargains had been made for the purchase of the property.

The General Assembly acted promptly, and on February 18, 1874, again amended the Lincoln Park Act, the principal change in the law being a provision for separate instead of joint action by the authorities of the constituent towns of the Park district in levying the assessment for the purchase of land, and for separate assessments. The Commissioners also acted promptly, and on March 14, 1875, a resolution was passed and certified to the authorities of Lake View, asking for the purchase of the "Triangle." But the opportunity for the enlargement of Lincoln Park in that direction had passed. New officials were in power, who were less friendly to the proposition to levy a heavy tax for the purchase of the land, and on March 15, 1875, a year after they had been asked to authorize the necessary special assessment and issue of bonds, they decided to refuse such consent. The Supervisor and Assessor of Lake View had been empowered by the Town Trustees to take such action in the matter as they should deem necessary for the best interests of the tax-payers in the town. The officers reported to the trustees on the above date the results of a species of referendum they had adopted to enable them to make up their minds. They had estimated the cost of the "Triangle" at \$250,012, spread an experimental assessment according to benefits, and then endeavored to notify all property owners assessed, and get their opinions on the proposed purchase. Eighty-eight owners, assessed for \$32,894, had expressed themselves in favor of the purchase, and two hundred and twenty, assessed for \$79,281, had opposed it. The owners assessed for the other three-fifths of the amount did not declare themselves, but the Assessor and Supervisor were of the opinion that the majority of them in numbers and interest were opposed to making the purchase, and therefore they had decided to

take no steps in that direction. The trustees approved the report, and at once served notice on the Commissioners of their refusal to issue bonds or levy a special assessment. While the tax on the thinly settled territory of Lake View would doubtless have been heavy, the refusal of the town officials to make the levy was unfortunate for the best interests of the Park, and therefore of the citizens of the town, for the land could not be purchased to-day for many times the sum required then, and the barrier to the growth of the Park either west or north raised by the prohibitive value of the land, a value given largely by the proximity of the Park, may never be removed. It is hardly to be denied that the entire cost of Lincoln Park, from its inception to the present day, has been more than repaid to the tax-payers of the two towns by the consequent increase in the value of property, to say nothing of the inestimable æsthetic and hygienic advantages it has provided.

A month after the adoption of the ill-fated resolution for the purchase of the "Triangle," on April 14, 1875, application was made to the Supervisor and Assessor of North Chicago for the necessary action to secure the condemnation of all lands in the Park south of Fullerton Avenue. In July a contract was made with Andrew Nelson for the purchase of lot P in the Milliman tract for \$19,980, "on condition that the contract be void if the present park law is not sustained by the Supreme Court." The Commissioners were hopeful of final success, but their experience made them cautious. In August contracts for the purchase of the land between Webster and Fullerton avenues were authorized at a price not exceeding \$18,000, on the same condition, and on October 27 judgment was rendered in the condemnation cases against the property as follows: For the Foster tract, 141/2 acres, \$287,680; for the Newberry tract, 171/2 acres, \$332,220. The court decreed that the judgment should be paid on or before November 1, 1879, but that the Commissioners might at once take possession of the property. In November consent was given by the author-



ities of North Chicago for an issue of the bonds of the town to the amount of \$900,000, and on January 2, 1875, the first sale was made, one hundred bonds of the face value of \$100,000 bringing \$91,000. The proceeds were used to take up the note which had been given for the purchase of the Farwell tract.

In March the Legislature again amended the Park Act to make the interest on the bonds payable semi-annually, instead of annually, and a new issue had to be printed.

The bonds did not find a ready sale, for the reason that the special assessment was being contested in the courts, and there was danger that it might in the end be defeated, and partly because of the provision that fifty of the bonds, the numbers to be selected by lot, should be retired every year, beginning in 1878. The bonds had almost no sale in Chicago on those accounts, nearly all of them being sent to New York. Some of the land-owners accepted bonds at 91 cents on the dollar in payment of their judgments, but others would not take them even at that price. After 664 bonds had been sold in 1875 and 1876, nearly all of them in New York, at 91 and 92 per cent, no sales were made for several years. Fifty bonds were destroyed in November, 1877, and fifty more in December, 1878, the Commissioners believing that their sale would not be necessary to take care of the land judgments. In July, 1879, the remaining 136 bonds were sold in New York at par, accrued interest, and a premium of \$8,330, a change in the money market and increasing confidence in the quality of the security offered accounting for the increased price.

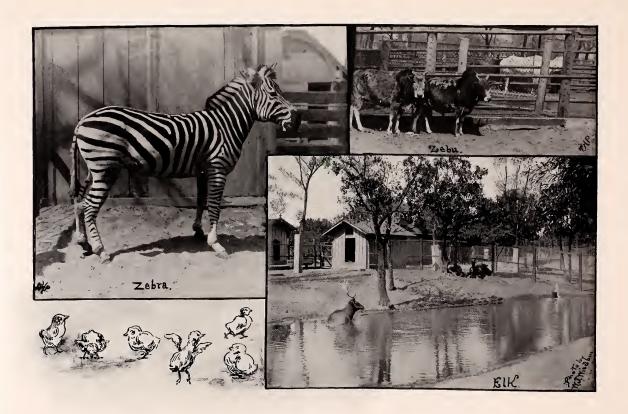
In 1875 and 1876 judgments were rendered against the various parcels in the Milliman tract, the Farwell tract, and most of the lots in the old cemetery which had been sold by the city. The special assessment for \$1,200,000 authorized by the town authorities to purchase the Park lands and retire the bonds was completed in June, 1875, on the basis of the benefits to be derived, the tax ranging from

\$12 a foot on the most desirable lands fronting the Park to 25 cents a foot on property in the southwest corner of the town.

The assessment was confirmed in the lower court in July, and the decision was finally sustained by the Supreme Court on appeal by a number of property owners, after prolonged litigation. Within a few years the judgments against the Milliman and Foster tracts were satisfied, but the final payment for the Newberry tract was not made until 1894. Arrangements for the purchase of the Jewish Cemetery tract were delayed for several years, because of inability to agree upon terms, and in 1880 the trustees of the cemetery secured permission to fence it in. It was not until October, 1882, that an offer of \$8,000 for the tract was made and accepted, and a note given for the purchase price, which was paid in 1887.

With the payment of a long-standing balance of \$25,000 due the trustees of the Newberry estate in 1894, title was secured to all lands in Lincoln Park, with the exception of some of the lots in the old city cemetery. Titles to all of these lots have not yet been obtained, and perhaps never will be. The last transaction in cemetery lands shown in the Park records is the passage of an order on May 6, 1895, for the purchase of the Peacock vault lot for \$1,000, but within the last year several applications have been made for lots in other cemeteries in exchange for lots in the old cemetery.

When, in 1866, the City Council finally determined to allow no more burials in the old city cemetery, orders were passed to provide for the purchase of lots of equal size in other cemeteries in exchange for those which had been sold in the city cemetery. The city continued this arrangement when the Commissioners took possession of the property, but to facilitate exchanges of lots and the quieting of titles of private individuals to lots in Lincoln Park, the Commissioners paid for the removal of monuments and remains, and were frequently obliged to pay additional sums to secure deeds to land which they



wished to improve without delay. Some lot-owners held back for prices which the Commissioners declined to pay, and others, having no use for their lots, were in no hurry to exchange them for others elsewhere. In recent years the demand has been so infrequent that the city has made no appropriation for the purpose, and lot-owners have been unable to arrange exchanges without delay.

There still remains in the southeastern corner of the Park a conspicuous monument of the former uses to which the land was put, the old Couch burial vault. It was found that, because of the nature of its construction, it would be impossible to remove the vault, except at great expense, and the Commissioners preferred to allow it to remain as a not uninteresting reminder of the Park's origin.

Directly across the Stockton Drive from the Couch vault lay the Peacock lot, which was not purchased until 1895, because the price demanded by the owner was considered excessive. The old stone coping around this lot was not disturbed until over twenty years after the grounds surrounding it had been improved as part of the Park. In this immediate vicinity, almost hidden in the side of an artificial ridge, is another vault, which has long been used as a storehouse for the tools of Park employés.

The special assessment for the purchase of lands in Lincoln Park did not suffice for the payment of interest on the bonds and the retirement of the issue, and appropriations were made by the North Town Supervisor in 1891, 1892, 1893, and 1894 for that purpose, the last of the bonds being redeemed and canceled in 1806.

The following statement shows the cost of the various tracts of land which were bought to make up Lincoln Park, the cost of levying the special assessment, the payments of interest, the cost of the redemption of the land-purchase bonds, the legal expenses connected with the condemnation of land, the issuing of bonds, and the spreading of the assessment, and other incidental expenses:

STATEMENT OF LAND ACCOUNT.

DISBURSEMENTS.

Purchase of Farwell tract 19.00 acres	151,740.10
	\$870,038.93
Total 58.94 acres.	
Purchase of cemetery lots, cost of removals, etc.	19,494.19
Interest on bonds	\$889,533.12
Interest on bonds Interest on deferred land payments	180,320.06
Expenses of transfers of land	897,625.10
Cost of printing four sets of bonds	\$073.00
Commissions on sale of bonds	5.031.25
Sundry expenses on account of the sale of bonds	733-44
West of according to the state of the state	7,640.69
Work of preparing assessments, printing blanks and postal-card notices, etc.	23,341.43
Legal expenses	19,290,66
Bond redemption	800,000,00
Total disbursements	\$2,637,940.70
RECEIPTS.	
From special assessments \$\text{Less loss from delinquents, double assessments,}\text{certificates of sale, etc.}\text{ctc.}\te	
-	\$1,243,312.85
From sale of bonds	
From premium on bonds	8,330,00
From accrued interest on bonds	10,831.22
Appropriated from general tax levy	760,231,22 634,396.63
Total receipts Total disbursements on land account \$3 Total receipts from bonds	\$2,637,940.70 \$760,231.22
Net cost to tax-payers in taxes and special assess- ments	1,877,709.48





It will be seen from this statement that 58.94 acres of land were purchased for \$870,038.93, an average cost of \$14,761.43 per acre. But the time of payment of this amount was extended over so long a period of years, that with the payment of interest and other necessary expenses, the total cost of the land to the tax-payers of North Chicago was \$1,858,215.29, or an average price of \$31,527.23 per acre. The remaining 171.21 acres of city property incorporated in Lincoln Park by the original act of February 9, 1869, were set aside for Park uses, with no other expense to the tax-payers of the towns of North Chicago and Lake View than the amount of the cemetery account, \$10,404.10. If it had been necessary to purchase these lands from private owners, it is extremely doubtful if Lincoln Park could ever have been organized on so large a scale,-if, indeed, the first cost of the purchase of land for park purposes so near the business center of the city would not have discouraged the tax-payers of those days from having any park at all.

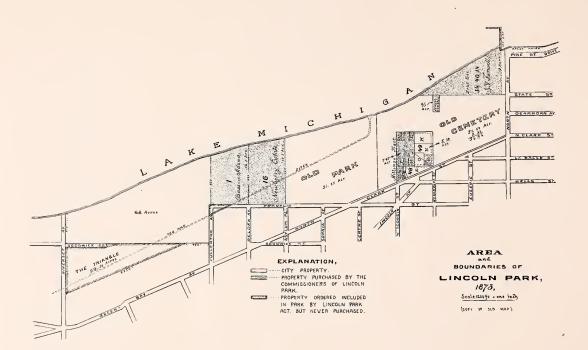
It is certain, at least, that the foundations of Lincoln Park were laid in 1837, with the grant to the town of North Chicago of state lands for cemetery purposes, and in 1852, when under pressure of the cholera panic the city bought the land north of Fullerton Avenue for quarantine and hospital grounds.

While the proceedings for the condemnation and purchase of land were under way, the Commissioners were also busily engaged in prosecuting the work of park-making in the territory under their control with all the energy their funds and credit would permit. The completion of the artesian well and the Lake Shore Drive, and the protection of the lake shore, demanded the most attention. The great change that has taken place in Chicago customs since that time is shown by the fact that in April, 1871, a part of the work on the Lake Shore Drive consisted of "watching cows." A charge of fifteen dollars for that purpose was made by the contractors, and similar charges recurred regularly during the summer months for a year or two. In

that sylvan period residents of North Chicago still kept cows, and they pastured them during the day in the woods and fields north of Diversey Avenue. As they were driven home at night the cows, attracted by the greener browsing along the new drive, chose that route homeward to the great dissatisfaction of the Commissioners and their employés. The custom continued until the retaliatory practice of impounding the cows until they were bought out of pawn compelled the owners to take better care of them.

On July 29, 1871, the work of transforming the cemetery began with the passage of an order for the payment of eight dollars each for the removal of remains to other cemeteries, where the lots had been reconveyed to the city on condition of such removal being made. Similar orders appear on the Park records in the next few years, and the work was prosecuted industriously. In November, 1875, the city authorities notified the Commissioners that no more exchanges of lots could be made that year, as the appropriation for the purpose was exhausted. Because of the destruction of all plats and surveys of the old cemetery in the great fire, the task of removing to other cemeteries the remains of those who were interred there was attended with great difficulties. It was surmounted in the best way possible, that of retaining in the employment of the Park for many years the old sexton of the city cemetery, whose familiarity with the lots and the names of their owners was so great and his memory so accurate that he was able to locate any grave with little difficulty.

Later in the year a fence was built along the north line of the Park at Diversey Avenue, and in November contracts were made for grading, filling, and seeding the space between Diversey Avenue and the drive. Many of the Park records and the first assessment roll for the construction of the Pine Street Drive from North Avenue to Oak Street were burned in the great fire, and on October 28, the first meeting held by the Commissioners after the fire, all work was ordered stopped on its account. On November 28 the new Board of Com-



missioners appointed by the Governor by virtue of the act of June 18 met, organized, and found the Park treasury at so low an ebb that it seemed to them good reason for keeping the work stopped until the April following. In April, 1872, the Commissioners found their credit good enough to secure a loan of \$10,000 for four months at eight per cent interest. In May, as a part of the bargain for the Farwell tract, they paid \$12,000 for a tug, three scows, and a dredge, and agreed to share for one year the expense of operating them in taking sand from the lake to a pier in the Chicago River and exchanging it there for clay. The clay was taken to the Park and stored in great piles, to be used as occasion demanded in the construction of roads.

In July the city was asked to police the Park more effectively, and in August, the city having failed to meet the wishes of the Board, the Lincoln Park police force was organized, with one sergeant and three officers. In May, 1873, the city ordinance limiting the speed on the Lake Shore Drive to six miles an hour was suspended for Tuesday and Friday afternoons, for the benefit of owners of fast horses, and in the same month negotiations were entered into with the city to assume the care and responsibility of the improved part of the Park.

There are indications that diplomacy played a part in the negotiations, the records showing an expenditure of \$250 on June 18 for carriages and a band of music. City officials and aldermen were driven through the Park that they might understand the scale of the undertaking, and then they were serenaded and banqueted that they might feel kindly toward it. The desired results were achieved without any apparent hitch or opposition, for on July 2 the Board of Public Works of the city made formal application to the Commissioners to be relieved from further care of the improved portion of the Park, and to transfer such care to them. On the following day the Commissioners met, and by formal resolution accepted the new responsibility and assumed the new expense from the 1st of July.

From that date the Commissioners appointed by the Governor have been the sole authority in the government of the Park.

At this time the old Park was considered a finished product of the landscape gardener's art; and the Board of Public Works in their report published in 1873 included the following statement of the work which had been done there:

"The first appropriation which was made by the city on account of this work was in the year 1865. The necessary surveys were made, and a plan for the further improvement of the Park was adopted in the fall of that year. The ground at that time was nothing but a succession of sand hills, with no vegetation whatever, except an occasional bush and a few scrub oaks upon the western portion. An old ditch had been cut through it by the Cook County Drainage Commissioners some years before, for the purpose of draining the low lands lying to the north. This ditch was filled with stagnant water a greater portion of the time.

"The sand banks were changing about from place to place by the different currents of the wind, like drifts of snow, and nothing could be done toward starting vegetation until the surface could be properly graded and covered with loam.

"In converting the grounds to use as a public park there was but little about it, excepting its location, that gave any promise of success.

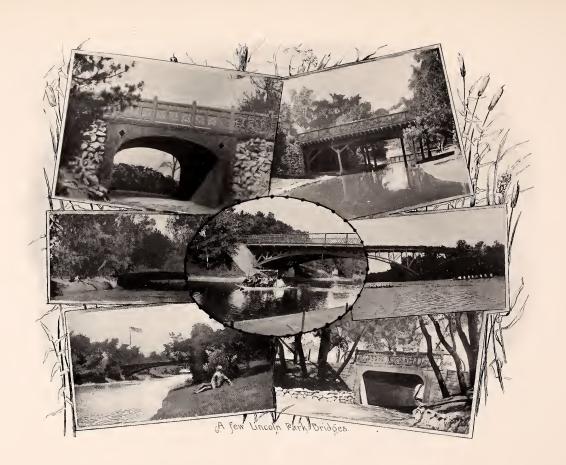
"The design adopted embraced in addition to about five miles of drives and walks, an artificial lake covering about three acres of surface and various hills and elevations.

"The material excavated from the lake was used in making the elevations. After the grade had been completed, very large quantities of loam and manure were obtained, with which the surface was covered to an average depth of fifteen inches. More portions were then sodded, and others were seeded for grass. The walks and drives are composed of a bedding of blue clay, with a surface dressing of gravel. There are four bridges crossing the artificial lake at different places. Only one of these, however, is of a permanent character. The others were only designed for temporary use, and should be replaced by something more ornamental, and more in keeping with the place.

"The surface of the ground is now well covered with an abundant growth of grass; and trees and shrubbery sufficient for ornament and shade have been set out and are doing well.

"Numerous caves, grottoes, rockeries, and drinking-fountains have been constructed at different points.

"The artificial lake, with its swans and other water-fowl, together with numerous specimens of birds and wild animals collected in the park, contributes very much to the attractions of the place.



"An abundant supply of water to keep the lake fresh and clear at all times is obtained from an artesian well which was sunk to a depth of 1,173 feet in 1870.

"In this way this barren and desolate piece of ground has been transformed into a place of rare beauty, and the multitude of people who are constantly attracted hither testify to its value as a place of public resort."

The expenditures by the city for the improvement and maintenance of Lincoln Park in the period ending July 1, 1873, for each year and the total amounts, were as follows:

1865-66		\$ 4,546.05
1866-67		
1867-68		19,759.23
1868-69		
1869-70		
1870-71		38,971.61
1871-72		
1872-73		
1873-74	· · · · · · · · · · · · · · · · · · ·	4,712.72
Total		

Few changes have been made in the arrangement of the walks, drives, and lawn spaces in the old Park since 1873. While willing to assume the expense of maintaining the improved part of the Park, the Commissioners preferred to postpone the necessity of organizing a force of workmen, and instead arranged with the contractors, Nelson & Benson, who had constructed the Lake Shore Drive and done much other work in the Park, to keep it in order, for a sum varying from \$2,000 a month in the summer to \$500 in the winter. The specifications for the work required, among other things, that drives and walks be kept in repair and sprinkled while necessary; that the lawns be weeded, mowed, and watered; that the leaves be raked up in the winter; the bridges kept in repair; and the animals and birds in the Park fed and cared for. The provision of the contract which reads most strangely to-day is one that the public should at all times have free access to some portions of the grass, designated by the captain of police, and marked "common," but that "not more than onesixth of the lawns should be opened to the public in any one day, except on Sundays and concert days," when more freedom was to be allowed. The soil was so poor, and the facilities for watering the grass, which grew sparsely in the Park, were so meager, that the only way the lawns could be preserved at all was by giving them a long rest after each short period of use. The Park was so popular by that time as a place of public resort, and so crowded on Sundays and holidays, that the lawns would be badly trampled on such days, and a week's rest be necessary to revive the grass. The contractors were to render the police department of the Park all needful assistance in preserving order and good will, by employing only "such men as are sober and orderly, and civil when spoken to by visitors." All flowers and plants that might be placed in the Park, the contract provided, should be planted, watered, and cared for in a proper manner.

No expenditure for plants or flowers is reported, however, in the annals of Lincoln Park, until June, 1874.

The first concert given under the auspices of the Commissioners was furnished by the Great Western Light Guard Band, in August, 1873. Some question had been raised as to the authority of the Commissioners to give concerts in the Park on Sundays, and they called upon their attorney for an opinion on the subject at their meeting of July 28. So many of the express provisions of the Park Act had been set aside as invalid by the courts, that the Commissioners were timorous of their right to do anything not expressly provided for in the law. The opinion of the Board's attorney, John N. Jewett, was favorable to the right of the Commissioners to furnish music for the delectation of the public on Sundays if they chose, although it was prefaced by his personal opinion that Sunday concerts were decidedly improper and undesirable. The Commissioners were guided by the legal rather than the personal opinion, and Sunday concerts have been a regular institution of Lincoln Park ever since, the Supreme Court never having been called upon to pass on the question of their legality.



In 1874 a large force of men was kept busy in digging up the poison ivy which infested part of the Park grounds, and some of it evidently escaped notice, for as late as 1884 claims for damages were brought against the Commissioners by visitors who had been poisoned by it. The city was still using the land north of Fullerton Avenue as a dumping-ground, and the Commissioners were having difficulty in obtaining possession of property already purchased for the Park. The Park police took forcible possession of the axle-grease factory on the Farwell tract in this year and tore it down, but it was not until 1875 that the stone factory was seized and razed to the ground. In 1874 Hans Balatka furnished the concerts given in the Park. One of the principal improvements of the year was the building of a plank sidewalk, twelve feet wide, on Clark Street, from North Avenue to Center Street. Instructions were given by the Commissioners that the sidewalk "should not interfere with the cemetery lots." The work of converting the cemetery from its long-accustomed use progressed so far in this year that the Commissioners made a contract for filling up the lowlands where the ball-grounds now are, and in 1875 they entered upon a more extensive scheme of improvements. The speeding track, afterward converted into a bridle-path, was laid out just west of the shore drive for its entire length; a connection drive was built from "Monument Circle," at the head of Dearborn Street, to the south end of the race-course and shore drive, and another to the head of the Pine Street Drive at North Avenue. The ''Monument Circle'' itself was to be graded for a lawn and trees. Some prophetic insight may have told the Commissioners that some day there would be a monument in that circle, but for a dozen years, until the erection of the Lincoln Monument, the name was a misnomer. At the same time the West Drive was outlined from North Avenue to the old Park, and the Stockton Drive from the north line of the old Park to Diversey Avenue. The excavation for the South Pond was undertaken simultaneously with the construction of the drives and lawns, the contractors being

required to take the sand filling used in bringing the drives and lawns to the required grade from the site of the proposed pond. Many thousands of yards of sand also were hauled from the site of the pond to make filling for the Pine Street Drive. The racc-course was built by Park workmen, the other drives by contract, and all were practically completed within that year. Clay was largely used in the construction of drives, and thousands of yards were bought and brought to the Park, the excavations from the site of the court-house and from the city water-tunnels being purchased. Possession was taken of the Newberry tract in November, 1875, but the nursery on the Foster tract was allowed to remain for two years longer before any improvements were begun in that part of the Park. The banks of the new lake were ready for grading in July, 1876, and in December work was begun on the grading and improvement of the Mall, the long promenade which, stretching from the "Monument Circle" to the South Pond, flanked on either side by smooth sward, spreading elms, and rustic baskets of flowers, is now one of the most beautiful parts of Lincoln Park.

The increase of lawn surface in 1876 through the improvements of the previous year, the added surface of drives for sprinkling, with the decrease in the flow of the artesian wells caused by the digging of other wells for commercial purposes west of the Park, compelled the securing of other sources of water supply. In February, 1877, work was begun laying water mains from Diversey Avenue as far south as the west concourse, opposite Wisconsin Street, and in May the Park was supplied with water for sprinkling purposes from the Chicago and Lake View pumping plants. In 1877 the Commissioners decided that a new drive was necessary to divert some of the increasing travel on the Lake Shore Drive, and the Ridge Road was constructed on the slight elevation west of the drive, from a point near the southeastern corner of the South Pond to Webster Avenue. In the following year it was continued to Fullerton Avenue, where it branched east and



west to connect with the Stockton and the, Lake Shore Drives. Because of the wide sweep to the east which the road takes to surround the animal-house and yards, this part of it has been called the Ramble Drive.

The construction of the Fullerton Avenue conduit in this year furnished an opportunity for the purchase of large quantities of clay on reasonable terms, and the first published report of the Commissioners, issued in April, 1879, recited the fact that 100,000 yards of clay and 50,000 yards of black soil had been purchased up to that time for the construction of drives and lawns, while 75 acres of the Park were still unimproved.

The Humane Society decided in 1877 that where so much pleasure was furnished for man there should be more provision for the comfort of beasts, and presented to the Park a circular watering-basin for horses, surmounted by a handsome stone fountain. A foundation was built for the fountain by the Commissioners at the meeting of the shore drive and the connection drive from the Dearborn Street entrance, opposite Wisconsin Street. The fountain was formally presented, with simple but interesting ceremonies, on September 13.

Skating on the Park ponds, an amusement which had been encouraged since 1874, had become so popular by 1878, and the facilities for lighting the Park at night were so meager, that locomotive headlights were rented every season, and distributed around the banks of the ponds to light the way for the skaters.

The year 1878 was notable in Park annals also for the fact that Professor ''Johnny'' Hand then began to discourse classical music with his band, a custom he has already continued for over twenty years. In this year, too, the use of the North Avenue pier was granted to the Floating Hospital Association, and a pavilion was erected on the pier by the Commissioners, and maintained by them for years for the benefit of sick babies and their mothers, who were brought there from the hot and crowded city in a steamboat chartered

by the association. The institution was continued, doing countless good, until 1886, when plans for the enlargement of the Park by the reclamation of land from the lake compelled the removal of the pier. Since then the sanitarium erected on the Fullerton Avenue pier in 1889 by the Fresh Air Fund has proven a worthy successor of the Floating Hospital.

The first fire in Lincoln Park after the Chicago fire occurred on the night of January 20, 1879, when the small frame building near the present site of the animal-house, which had been erected in 1873 as a tool-house and police station, was burned, from some unknown cause, at a total loss of \$800. The tool-house was re-erected on Fullerton Avenue, on the west boundary of the Park, adjoining the barn built by the Park contractors in 1872, after the destruction of an older barn on the same site, which had been the last building on the North Side to burn in the great fire. The barn had been bought from the contractors in 1877, at the same time with the purchase from them of the old pavilion and boat-house, and the cottage in the Park opposite Center Street, which had been used as a residence successively by the contractors who laid out the old Park and by the Superintendent of Lincoln Park, up to that time. The building was used for Park offices, and after the fire of 1879, as a police station, until it was torn down in 1893 to make room for the Academy of Sciences.

A fountain, presented by Perry H. Smith in 1879, was located west of the floral garden.

On July 15, 1879, "led horses" and "bicycles" were linked together by the Commissioners in a single resolution as joint foes to the peace of mind and safety of body necessary to the pursuit of happiness in a public park, and ruthlessly excluded from all Park drives. The Commissioners were conservative, and bicycle riders were then a small and comparatively uninfluential set, neither clamorous for good roads nor wont to sway elections. The most they asked was to be let alone. But a stray and adventurous rider of one of the old-fashioned



high bicycles had eluded the vigilance of Park police and got as far inside the Park as the animal-yards, frightened a horse, and caused a runaway. After that the mild requests of the wheelmen for recognition only resulted in the passage of other ordinances, on May 4, 1880, and October 4, 1881, prohibiting bicycles in the Park. On October 25, 1881, a petition in favor of bicycles was firmly and forcibly placed on file. But the wheelmen continued to call attention respectfully to the facts that horses were becoming civilized and accustomed to wheels, and that in other cities restrictions were being removed, and bicycles given all the rights of express-wagons and other vehicles. On May 25, 1882, the order prohibiting bicycles was suspended for the three days of the wheelmen's convention, May 29, 30, and 31. This was the entering wedge, and by their insidious behavior and the docility of horses in the Park the bicycles increased their footing. On July 27 the ordinance was suspended for thirty days, and was a dead letter after that, except between sunset and sunrise. A complaint in 1884 that a bicycle had frightened a horse received scant consideration, but it was not until 1886 that the great boon of being allowed to ride in the Park of nights was gained by the wheelmen. Now the Park drives are thronged with bicycles at all hours, bicycle-paths are constructed as an essential part of every new boulevard, and even the bridle-paths may be converted into bicycle-paths at any day. Times have changed, and the view of the north artesian well as the Mecca of thirsty riders and of a constantly altering crowd of visitors gives some idea of the change.

In 1880 the Commissioners adopted a plan for the improvement of the part of the Park east of the Lake Shore Drive, and the widening of the drive to sixty feet, in the fond but fruitless belief that the new breakwater then being constructed on the "Netherlands" plan would prevent the erosion of the drive.

The constantly increasing cost of purchasing a sufficient water supply from the city and from the town of Lake View turned the

attention of the Commissioners to the idea of constructing water-works of their own, and plans and estimates were secured. The idea was abandoned for the time being, and as a temporary expedient the old artesian wells, one of which had stopped running, were cleaned out and repaired. In this year the Commissioners began to consider the matter of improving that part of the Park north of Fullerton Avenue, and the question of including a small lake in the plan was decided affirmatively on February 8, 1881, by a petition from a number of influential citizens from Lake View, asking that if any improvement be made, a lake be provided for as well as lawns. The petition was granted, and when the North Pond was completed, the name of Commissioner Stockton, who had been especially insistent upon its construction, was given to the pond. At this time but little attention had been paid to the north end of the Park, except in the matter of maintaining the shore drive and the narrow strips of lawn and trees on either side of it. A large number of forest trees had been planted in 1871 in the tract west of the Stockton Drive, now used as a picnicground; but the land was low and marshy, the "Ten-Mile Ditch" had not yet been filled in, and as late as 1882 complaints were made to the Commissioners of the stagnant water in this channel. In the next few years the work of excavating for the pond was steadily pushed, and sand was sold to the value of thousands of dollars, while enough remained for the construction of Mount Prospect, overlooking the pond, the shore drive, and Lake Michigan. Much of the rich soil along the old ditch was taken for the construction of lawns on either side of the pond, and replaced with greater quantities of sand filling from the pond. Water was turned into the pond in 1884, and boats were placed upon it the last week in June. A driveway and bridle-path were afterward laid out, surrounding and ascending Mount Prospect, with a concourse for carriages upon its summit, but as every rainstorm washed deep gullies down the driveways they were finally abandoned and sodded over.



In 1881 the English section of Socialists asked leave to hold public meetings in the Park, to which petition the Commissioners promptly responded by passing an order strictly prohibiting public meetings for any object whatever in the Park.

In 1882 the Commissioners decided to extend the shore drive from its southern terminus at the Humane Society Fountain to the Pine Street Drive at North Avenue, across the old Farwell tract. No improvement of the shore in this section of the Park had been attempted up to that time, because of its importance as a convenient depot for supplies of gravel, which was constantly being needed for the repair of the drives, and of sand for filling. After its completion the drive was continued to connect with the Ridge Road, and the South Connection Drive from the "Monument Circle" to the Pine Street Drive was reconstructed. In this year the Commissioners decided upon building the South Pond Refectory, but first applied to their attorney for an opinion on the question whether or not the fire ordinance of the city was binding within the limits of the Park and debarred them from the right to erect frame buildings. The opinion was favorable to the rights of the Commissioners in the matter, and in February contracts were awarded for the construction of the building. On its completion, at the cost of \$14,611.33, the Commissioners bought the boats, which up to that time had been operated by the Park Superintendent without payment for the privilege. Since then a considerable revenue has been derived from letting boats, the returns amounting in the World's Fair year to over \$14,000.

In 1882 the Commissioners finally decided upon the erection of a water-pumping plant, to secure an independent supply from the lake for Park purposes. A small plant was built and furnished with machinery, at the cost of a little over \$4,000, and on July 10, 1883, the works were started with a capacity of 720,000 gallons every twenty-four hours. While this greatly increased the facilities for caring for lawns, the Commissioners continued to use city water, the

Park supply being insufficient for all purposes. The records indicate, however, that they became more careless thereafter in the payment of water rates, for in 1885 the Superintendent of the City Water Department, with total disregard of the finer feelings of the authorities of the co-ordinate municipality, made repeated demands for the payment of said rates, and repeated threats that the water would be shut off if they were not paid.

In 1883, also, the Commissioners decided that the day for coal-oil lamps and locomotive headlights in the Park had passed, and rented an electric-light plant and twenty-five lamps, which were installed in October. In the following year the plant was purchased, and twenty-five more lamps erected. In this year, also, the old Jewish cemetery, which had just been purchased, was graded and improved, trees were planted along the shore drive on the Farwell tract, and eight acres of sand and gravel in that tract were covered with good soil and seeded for a lawn.

In 1884 the ''Alarm Group,'' the first of the many statues which adorn the Park, was presented by Mr. M. A. Ryerson, and unveiled with interesting ceremonies. The precedent became contagious, and later in the year a proposition was made to the Commissioners for the erection of a memorial to Thomas Paine. For some reason not evident in the records of the Park the project was never carried out. A statue of Schiller was offcred to the Park this year, though it was not formally presented until May 8, 1886, and work was begun on the foundations for the Lincoln Monument.

A carriage entrance was constructed this year from the corner of Clark Street and North Avenue to the "Monument Circle," and in 1885 the broad granolithic walk on Clark Street along the entire Park front from North Avenue to Center Street was laid, and still remains in satisfactory evidence of the thoroughness of the work.

In 1886 the present south artesian well was dug a few yards away from the old well sunk by the city in 1870, which had been lost several times, after the provoking habit of artesian wells, and had finally



caved in and become useless. The improvement of the part of the Park in Lake View was continued, and three acres of new lawn added. This gain was not enough, however, to offset the loss in the south end of the Park which resulted from several severe storms in the winter of 1885-86, in which Lake Michigan ran riot, washing away several hundred feet of the new shore drive north of North Avenue and flooding the ball-grounds. This destruction of the shore threatened the land accumulations of years, including the greater part of the Farwell tract purchase, and convinced the Commissioners, and the authorities of North Chicago as well, that there should be no more temporizing with Lake Michigan. It was determined to erect an impregnable protection against the lake; and to justify the great expenditure of money which would be necessary, the Commissioners planned to construct a breakwater far enough out in the lake to add many valuable acres to the Park domain. The work of constructing the sea-wall along the Pine Strect Drive as far north as Burton Place was begun in this year, and at the same time the plan was adopted by which from Burton Place the breakwater was built curving out into the lake, and extended in time to Fullerton Avenue, reclaiming the sixty odd acres on which the present paved beach, parapet, outer drive, lagoon, and spreading lawn have been constructed, the outer line of the breakwater being an average distance of over 500 feet east of the original shore drive. The first plan for the improvement did not include the lagoon, which was decided upon in 1889, partly to meet the wishes of boating enthusiasts, who advanced strong arguments in favor of a straightaway protected course for rowing races and for a yacht harbor, and partly to reduce the expense and expedite the completion of the improvement. The dredging of the lagoon provided a great amount of filling for the construction of the lawns and drive on either side of it, which could not have been dredged from the lake without great danger of weakening the breakwater.

On June 14, 1887, an act was passed by the Legislature, and

approved, authorizing the issue of bonds for \$300,000 for the erection of a breakwater or sea-wall along the shore of the lake to prevent the waste of land, and on July 19, with the consent of the authorities of North Chicago, the Commissioners ordered the issue of bonds of the town to the amount of \$300,000 for the purpose of shore protection, the bonds to bear date of October 1, 1887, and run for twenty years at five per cent interest, each bond to have the face value of \$1,000. During the year seventy of the bonds were disposed of. The issue was insufficient to complete the work, and in May, 1891, an additional bond issue of \$200,000 was authorized. With the means thus provided the improvement was completed in 1893, at the cost of about \$540,000, or an average price of \$9,000 per acre for the land reclaimed from the lake.

In 1887, after the construction of several thousand feet of temporary breakwater along the shore drive, that part of the roadbed which was washed away in 1886 was replaced, and a bridle-path constructed along the west line of the drive, from the concourse at the Humane Society fountain to North Avenue. The fountain in the floral garden, the gift of Eli Bates, was completed in this year, and on October 22 the Lincoln Monument, from the same donor, was unveiled with impressive ceremonies. New pumping-works were built, with increased capacity, to meet the ever-increasing needs of the Park lawns, and the Fullerton Avenue conduit was tapped in the following year, with the permission of the city, to furnish the supply.

In 1889 the work of reconstructing the Park drives was begun. The unfitness of gravel drives on clay foundation for Park uses had long been evident, and in the course of a few years the old material was entirely removed, the clay being put to a better use as a foundation for new lawns. The new drives were made of slag, surfaced with macadam or fine gravel, and as far as means would permit they were given a facing of crushed granite. The use of granite nearly



doubles the cost of a roadway, but with the great and constantly increasing travel through the Park it furnishes the only satisfactory drive in all kinds of weather, and one of the greatest needs of Lincoln Park in 1899 is that of a granite coating for all its main traveled drives.

In 1890 the electric fountain, offered the preceding year by C. T. Yerkes, was erected, and additional room provided for sight-seers by the removal and destruction of the Humane Society fountain, which had stood for twelve years in the concourse near by. As a recompense for its loss, a new fountain and watering-trough, the gift of Commissioner Horatio N. May, had been erected in 1889 in the concourse of the West Drive, near the South Pond. In this year Lake View Avenue was opened along the west line of the Park from Fullerton Avenue to Roslyn Place, and the stable, shops, and sheds which had stood for many years in that corner of the Park were removed. In the next few years eleven acres of new lawns were constructed in this part of the Park, while the Park horses were kept in rented stables until in 1894 the basement of the propagating houses was arranged for a barn.

In 1893 the construction of the high bridge over the lagoon was undertaken, and completed in the following year, furnishing not only a passageway from the beach drive to the inner drive, but also the means of healthful exercise to all who might climb its numerous steps, and a splendid point of observation from which to view the Park.

In 1894 the Commissioners tried the experiment of purchasing for use on the ponds a few of the electric launches which plied on the lagoons in Jackson Park during the Fair the year before. The principal improvement of this year was the construction of the Academy of Sciences building. Friendly relations had been established with the trustees of this institution as far back as April 2, 1878, when the Commissioners granted a request from them for the bodies of all animals in the Park collection at their death, in order that they might

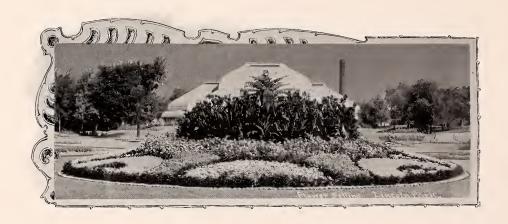
be mounted for exhibition in the Academy and their usefulness not be wholly lost. In 1884 the first effort was made to secure the erection of a home for the Academy in the Park. After conferences between the Commissioners and the trustees, a bill was drawn up and submitted to the Legislature in the following year to set apart grounds for a museum of natural history in the Park. The bill was not passed, and the matter dropped until 1891, when proposals were again made by the trustees of the Academy, looking toward the construction of a building in the Park, and on January 10, 1893, an agreement was entered into under which the present home of the Academy of Sciences was located in Lincoln Park, under authority of an act of the Legislature passed in the following June, at the cost of \$100,000, of which \$75,000 was contributed by Matthew Laslin, and the remainder by the Commissioners, in return for the perpetual use of a small part of the building for Park offices. Under this agreement, the Commissioners maintain the building and contribute annually to the running expenses of the Academy. The construction of the building had involved the closing of the driveway into the Park at Center Street, which was replaced with a foot-walk, and the destruction of the old frame building near the entrance, which had been occupied in turn since 1870 as the residence of the contractor and superintendent, and as the headquarters of the superintendent, engineering force, and police force. The Academy was opened October 1, 1894, and soon afterward the down-town offices of the Commissioners, which had been maintained since 1870, were given up, and the headquarters of the Commissioners and their office force established in the new building.

In 1895 the Commissioners began two improvements of great practical value in the construction of a new water-pumping and electric-lighting station. The water mains were extended to all parts of the Park, and the capacity of the pumps increased to 5,000,000 gallons daily. The electric-lighting plant, which had until that time been located in the basement of the propagating houses, was also enlarged,



and the service extended, until now there are 244 lamps in use in the Park, all the cables being underground.

Early in 1895 a small sum was appropriated for bath-houses on the beach north of Fullerton Avenue, and the beach was first opened to the use of the public in that year. In 1896 the driveway for carriages at the corner of North Avenue and Clark Street to the Lincoln Monument was closed and sodded over, leaving only a foot-walk. The north pavilion and boat-house was built at the upper end of the North Pond in 1896, and a light iron fence constructed around a large part of the lagoon as a protection for children. In 1897 the lagoon fence was completed, bicycle-paths in the north end of the Park constructed, and the north artesian well, which had run dry in 1895, was cleaned out and deepened until a new flow was secured.







SHORE PROTECTION

Lake Michigan has always been one of the chief beauties of Lincoln Park, and free access to its shore a great and increasing attraction. But the lake has also always been one of the chief sources of expense and mental worry to the Park Commissioners from the time when, in the summer of 1870, they began the construction of the Lake Shore Drive near the water's edge. They were obliged at the same time to take measures to prevent the lake from washing over the drive and carrying its material into deep water. Scores of different methods of protecting the shore line were adopted from time to time, in the belief that at last the force of the waves had been rendered harmless. Numerous engineers have been employed, both as consulting experts and in charge of construction work. United States army engineers stationed at Chicago and other lake ports have been advised with, and as a rule the best talent available has been secured. Countless suggestions have been offered to the Board by inventors and contractors, all of them to be carefully weighed, and many of them tried, and still for years the storms of each winter would give the lie to the confident hopes of the preceding summer when the lake was calm and the various forms of shore protection were under construction.

In the Park's early history the Commissioners were hampered by lack of funds and the necessity of doing work cheaply or not at all,—a condition which still obtains,—but the storms of Lake Michigan are not cheap affairs, to be cheaply dealt with, as costly experience has told. Her waves dash against the beach like enormous trip-hammers, with a force of 250 pounds to the square inch, and only the most substantial work will resist them. Even yet the success which has been attained is only partial. The experience of years and the expenditure of over a million dollars have shown that the only way to withstand



the lake is to build a protection which extends below its sand bed until it is firmly anchored in the clay, is so perfectly sand and water tight that the filling behind it cannot be carried away, and is so strong as to stand immovable against the tremendous power of the waves.

The first idea carried out in the work of shore protection was to construct piers at right angles with the shore, with the hope of not only protecting the shore line, but causing accretions. At the first meeting after the appointment of the first Superintendent of the Park, July 30, 1870, that official was ordered to build a pier to preserve the shore, and to consult, as to its erection and character of construction, with the engineer of the Illinois Central Railroad Company, which had already had considerable experience both in protecting a shore line and in extending it into the lake. The Superintendent recommended the construction of a pier of timber and stone 600 feet south of Diversey Street; and on August 2 a contract was made for a pier 65 feet long, to be filled with 30 cords of stone. The pier was built of stout wooden boxes 12 feet square and 6 feet high, securely bolted together to the required length. It was towed from the place of its construction to the proposed location off the Lake Shore Drive, one end anchored to the shore, and then filled with rubble stone, at a total cost of \$17 per foot, or \$1,105 for the entire contract, which was completed August 11. Piles were driven alongside the pier to keep it in place, and traces of the piles are still visible, though the pier long since sank out of sight. It sank from its weight through the yielding sand, and in a comparatively short time the waves washed over it unimpeded. This was not to be discovered until later, however, and in the next three years ten more box piers were built along the shore, at distances of several hundred feet apart, from the first pier to a point about opposite Wisconsin Street. They differed in construction from the first pier in being weighted with sand instead of stone, and as the figures of the shore protection account grew larger and more imposing, a lighter and cheaper method of construction was

adopted. In the later piers it was considered sufficient to have every alternate chamber filled with sand, the outer chambers decked with two-inch plank, and the pier deep enough to stand three feet above the water, costing six or seven dollars a foot. The pier at Center Street, long used as a steamboat landing, and the pier at Webster Avenue were 150 feet long, decked over, and furnished with seats. Before the last pier was built in 1874, the older ones would have burrowed out of sight in the sand if the Commissioners had not made contracts frequently to raise them and refill them. It was also found that when the lake made land on one side of a pier it usually cut out as much more on the other side.

While the Commissioners were depending in part on pier construction of this kind, they were also trying other methods. One of the earliest and simplest was to collect brush in great quantities, and pile it on the shore in the face of advancing waves. Afterward stones were piled on the brush, and as they were tossed about like feathers in a gale, a new scheme of brush protection was invented. Acres of willow marshes along the Desplaines River and other near-by points were robbed of their bushes, which were tied in bundles 6 inches thick and 4 or 5 feet long, and stakes driven through them into the yielding sand, after which they were pinned down. This experiment was first tried north from the first pier to Diversey Street, making a solid floor of brush from 15 to 20 feet above the water-line into the water. For a time, in mild weather, the brush seemed effective, and the Superintendent made glowing predictions while extending it along the shore between piers. But the first severe storm of winter gave the brush protection a harder test than it could stand, ripping up the bundles as if they were so much paper, and leaving them floating harmlessly and uselessly on the water. Boxes with a wide base, narrowing toward the top, were stretched along the shore between the piers and filled with sand, ranging in price from 65 cents to \$2.25 a foot, according to the size and the strength of material used. Some



of these were put in during the winter of 1870, and some other schemes were experimented with, of which no records remain. In their first annual report to the City Council, made in April, 1871, the Commissioners refer in the following terms to their efforts to protect the shore:

"Various plans have been tested with reasonable success, and the Commissioners believe that with the experience of the past season the work can be prosecuted during the coming summer so as to afford a secure and permanent protection to the Park proper from the further encroachment of the lake."

Little reason for this official hope was to develop, but during the following year or two, thousands of bundles of brush were used, and the construction of piers and sand-boxes was continued. The boxes, like the piers, gradually sank through the sand till out of sight, unless they were first smashed in pieces by the waves. While storms were raging, the Park employés frequently improved upon Mrs. Partington's example by putting loose brush and bark along the shore, and the Superintendent's diary occasionally recorded the fact that such protection was effectual.

Another form of protection was to lay oak slabs along the shore and weight them down with stone, but any storm was likely to hurl both stone and lumber clear across the drive. In 1873 a more substantial form of protection was adopted for the line of the Pine Street Drive from North Avenue to Oak Street, a breakwater constructed as follows: A close row of piling on the outside driven to the clay; five feet inside of this a row of piles four feet apart, to which rows of horizontal plank sheeting were nailed from a few feet below the water line to the grade of the proposed drive; the two rows of piling anchored together by tie rods, and the space between filled with stone and brush. Over 900 feet of this breakwater was constructed in this year at \$19 a foot, and in 1874 the remaining 3,000 feet was built for \$13.73 a foot. While this breakwater was an improvement on the character of the shore protection in the Park proper, and stood without sinking out of sight or being broken by storms until the construc-

tion of the sea wall in 1886, it had one fatal defect. It was neither water-tight nor sand-tight, and the lake washed through and washed back again, carrying out the filling inside the breakwater almost as fast as it could be put in, in spite of all expedients which could be adopted.

In 1873 and 1874 the Commissioners still relied on the use of boxes in the Park proper, although the temporary character of such a protection was fully recognized. In May, 1874, a damage of over \$1,000 to the Shore Drive by storms was reported. More boxes were the specific prescribed, but in July bids were secured for the construction of a breakwater 700 feet out from the shore, running the entire length of the Park. Notice of the plan was given to the city authorities, who raised the objection that the city sewerage system might be interfered with; and partly for fear of litigation and partly because of the expense of the undertaking, the plan was abandoned. Later in the year, bids were asked for driving a single row of piles along the shore which would be guaranteed to keep the drive from washing, but nothing came of the plan. In 1875 breakwaters of slabs were constructed at an average cost of two dollars a foot, and in 1876 a hundred feet of shore protection was built on a plan just adopted at Jackson Park; but as storms beat with greater force on Lincoln Park than on Jackson Park, which is protected by the government breakwater, that example was not found a safe one to follow.

From July to September, 1876, seven piers were repaired and raised, leaving three more to repair. Old boxes were repaired and filled, 1,480 feet of new boxes were made, and great quantities of stone filling and brush used in shore protection, and the Shore Drive was narrowed to fifty feet; yet in the following April it was reported that "at present the entire line of the Lake Shore Drive is in ruins, and unsafe and unsightly, and every storm increases the work of devastation."

At this time over \$40,000 had been expended in temporary make-



-Orchids Adiantium-

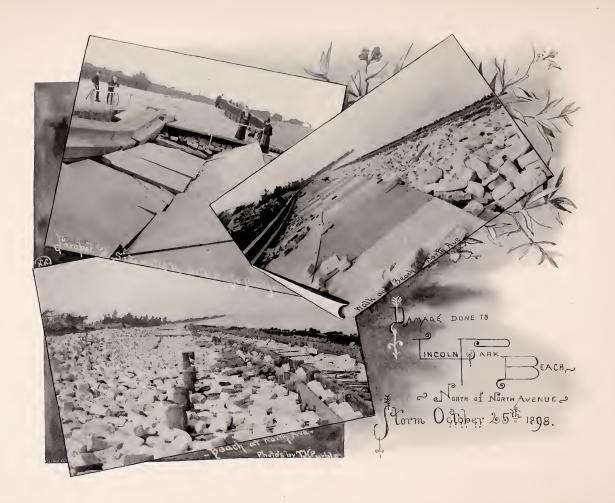
Begonia Rex

shifts, and the Commissioners decided to start over again. An engineer was employed to report on the question of shore protection, and he examined twenty-six different suggestions or plans which had been previously submitted to the Board, besides investigating the systems of shore protection on the Fox River, on Lake Michigan at Milwaukee, and on the Atlantic Ocean at Plymouth and Provincetown. The first result of his inquiry was, that at the meeting of April 24, 1877, the Commissioners finally decided by formal resolution to use no more boxes for shore protection. The engineer in his report discussed the devices submitted to him, which ranged in price from \$1.80 to \$32 a running foot, dividing them into classes. There were plans for solid crib-work sunk along the shore, for pile piers filled with brush and stone, brush or fascine mattresses weighted with stone, after the system in use on the dikes of Holland, sheet piling driven edge to edge, and many others. One suggestion advanced by the engineer was to obtain roots of sea-grass, growing in the sand of the Atlantic coast, where it was a great protection to the shore, and plant them here. But the Commissioners, for their first experiment, adopted a plan for a breakwater of piling, brush, and stone, 350 feet long, which was put in between the second and third piers south of Diversey Avenue. Its remains are still visible, and are shown on the Park map, page 98. The piles were driven three feet apart, mattresses of brush closely woven together were laid between the piles and fastened to them, and then they were weighted down with stone. The piles still stand, but the brush and stone, though the breakwater was several times refilled, long ago sank out of sight under the sand, to effectually prove the inutility of that class of protection.

Soon after this the Commissioners became impressed with the belief that the system of shore protection which had worked so well in the Netherlands could not but succeed on Lake Michigan, and entered into contracts for the construction of a breakwater, or dike, of brush and stone. While the plan was under discussion, a specimen

section of the breakwater was built, and a committee of citizens protested against its use, on the ground that it could afford no permanent protection, and proposed the building of an outer breakwater 700 or 800 feet from the shore. The Commissioners rejected the plan for an outer breakwater, a good likeness of the one the Board had advanced in 1874, because of the alleged question of their right to expend money at such a distance from the shore, or to control the breakwater after building it, because there was no way of raising money for it, and because it would detract from the beauty of the Park. To clinch the matter, they adopted a resolution dcclaring the Netherlands plan the best yet known. In March, 1878, the first contract for such a breakwater, on the following plan, was entered into. Thick mattresses of brush were laid in tiers, 26 feet wide at the bottom, 12 feet wide on top, in shallow water, 175 feet east of the line of the drive, and heavily weighted down with stone. Work was begun at a point near the third pier, and continued south during that and the three following seasons for a distance of about 6,000 feet, at a cost of nearly \$60,000. While considerable sums were spent for filling in west of the breakwater, the south end of this protection had hardly been completed when the northern and older sections began to disintegrate. When the water was low the brush rotted, and in heavy storms the sand was sucked out from under the brush and stone, which constantly sank lower, until in a short time the waves rushed over the break and the filling behind it was taken out. Of all systems of shore protection in Lincoln Park, the Holland plan was probably the most valueless and least permanent in comparison with its cost. While undoubtedly a success in the Netherlands, it was constructed there on a firm foundation of clay, not on the treacherous and shifting sand.

In 1885 the remains of the brush and stone breakwater were totally inadequate for the protection of the drive, which was cut away to some extent almost its entire length by very heavy storms. A sec-



tion several hundred feet long in that part of the drive along the old Farewell tract was washed completely away, and a small lake formed in the ball-grounds. At this time a contractor who drove piling near the shore to construct a settling basin for the water-pumping plant went through the remains of three different systems of shore protection,—the Holland brush mattresses and riprap, the boxes, which were "of triangular section, filled with gravel, and resting on the bottom of the lake," and one other which was indescribable.

In 1886 the advice of Government engineers and the best engineering talent available was sought, with the result that after long consideration two elaborate schemes of shore protection were adopted. The first to be carried out was the construction of the sea-wall along the Pine Street Drive, from Burton Place to Bellevue Place, a distance of 2,890 feet. After the plan, first proposed by General Fitz-Simons, had been thoroughly considered and revised by United States Engineer Major Handbury, it was adopted, and the construction was begun in May, 1886. The two rows of piles in the old breakwater, which were rotting where exposed to air, were cut off a few inches below the surface of the water, the tops were decked with heavy planking, and massive concrete blocks weighing fifteen tons each were made and set on top of it. It was believed that this construction was as solid as the hills and would stand forever, but within two years the piling showed signs of weakening under the heavy load, and thousands of tons of stone were dumped outside to strengthen it. For some years the sea-wall stood and added to the beauty of the splendid drive; and it might to-day be comparatively firm and unvielding as it was at the time of its erection twelve years ago, if it had not been for the unforeseen calamity of a fall of a foot or more in the level of the lake. The result was, that the top of the piling was again exposed to the air and began to rot, and in the severe storms of October, 1898, a section of the wall gave way.

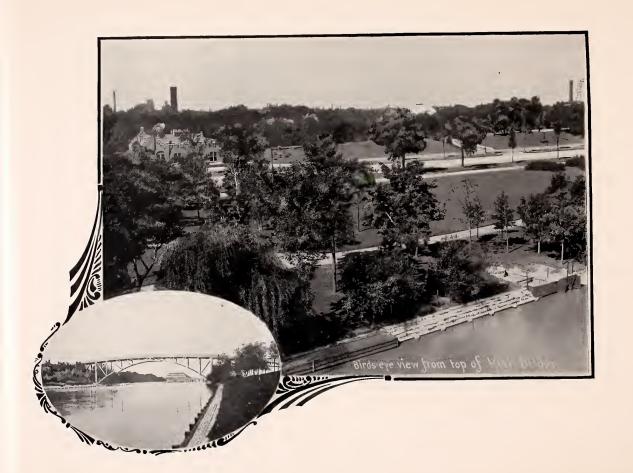
The idea of building a breakwater which would be a permanent

protection, and constructing it so far out in the lake that a large addition could be made to the area of the Park, was formed at this time; but it was necessary first to make some temporary protection for the drive, and in November, 1886, 1,000 feet of "A" breakwater was ordered, where needed, north of North Avenue. This breakwater consisted of a close row of plank sheeting driven into the bed of the lake in a slanting direction, fastened at the top to beams running transversely, and braced by occasional posts leaning in the other direction. In the following year this protection was extended north of Fullerton Avenue, where some 1,500 feet of it still stands, though less than half of it is now exposed to the action of the lake. The highest cost was \$2.90 per running foot. It was first invented and used in Lincoln Park, and served its purpose admirably.

A still more elaborate protection than the sea-wall was the construction of the breakwater from North Avenue to Fullerton Avenue, with its paved beach, parapet, driveway, lagoon, and lawn improvement, which added sixty acres to the area of Lincoln Park.

Preliminary to this improvement, and at the same time that work on the sea-wall was begun from Bellevue Place northward, the Commissioners decided upon a permanent breakwater in front of the Park, an average distance of 300 feet from the shore. From Burton Place, which was to be the northern terminus of the sea-wall, 901 feet of high breakwater was constructed on a line curving lakeward to North Avenue, consisting of a double row of 25-foot piles, 6 feet apart, 6 feet above low-water mark, and filled in between with bark and stone. From the line of North Avenue extended into the lake 300 feet to meet the high breakwater, a low breakwater of similar construction, but with the piles cut off near the water's edge, was constructed along a line parallel with the shore, 1,000 feet being completed this season.

In 1887, 2,000 more feet of piling was driven, but not completed. In the following year a large part of this breakwater was seriously damaged by storms, and had to be rebuilt. Although carefully con-



structed in accordance with the plans, it was found that the breakwater was not sand-tight, and would not hold the filling behind it. More thorough work was needed, and the Wakefield sheeting was adopted and driven, throughout the rest of the breakwater, against the landward side of the piling. This sheeting consists of three rows of heavy planks, driven into the clay as closely together as possible, and so as to break joints. Where it is properly driven, and is not exposed to the air, it is believed by many competent engineers that it will remain for years as a complete protection against the lake. With the filling behind the breakwater protected in this manner from being washed through it, it was only necessary to prevent the lake from washing out filling over the breakwater, and this was done by laying a sloping paved beach of granite blocks from the outer row of piling to a line 48 fect back from and 7 feet 6 inches higher than the top of the piling. Laid in water-tight cement, and with the Wakefield sheeting properly driven, as the part of the work from the inlet 2,000 feet north of North Avenue to Fullerton Avenue was done, this protection has so far proved permanent. The breakwater has stood firm against the shock of the waves, and retained the filling, while tons upon tons of water, which have been hurled upon the paved beach by winter storms, have rolled harmlessly back.

From North Avenue to the inlet, which part of the work was constructed before the adoption of the Wakefield sheeting, there has been a more or less continual filtering of the sand filling under the paved beach out through the breakwater, with the result that a force of the waves pounding on the paved beach would break it down completely. Several times since the beach was constructed, extensive repairs have been necessary, and last fall the beach was destroyed again, hardly two paving-stones in its entire extent remaining together. Last summer work was begun on the only lines which offered a practical and permanent solution of the difficulty, that of dredging out the stone riprap, which had in previous years been deposited along the break-

water to increase its strength, and driving down new piling, protected by Wakefield sheeting. When this work is completed, the filling under the paved beach and the paved beach can be restored, with reasonable assurance that the next storm will not destroy the work.

This combined paved beach and breakwater, which for three-fifths of its extent has proved an effectual protection against the lake, was constructed under the plans and superintendence of Major William L. Marshall, a government engineer of high standing, stationed in Chicago. The same protection was adopted along the Ohio Street Extension of the Lake Shore Drive, while on the North Shore Drive a breakwater protected by Wakefield sheeting, but without the paved beach, was constructed.

One of the numerous suggestions made in past years for the protection of the shore, which the Commissioners did not see fit to follow out, was to plant willow trees along the water-line. In the recent troubles caused by the weakening of the sea-wall, it became evident that fertility of resource and invention was not lost, for many unique propositions were made for the preservation of the sea-wall and paved beach. One of the most notable was the suggestion that in time of storm oil should be spread on the lake along the threatened structures, that the waves might be calmed and cease from mischief.

One experiment tried by the Commissioners many years ago was the purchase of an abandoned scow, which was towed near the shorc line and anchored. It long since sank from view in the sand, like many other early forms of protection, and was encountered during the driving of piles for the present breakwater near North Avenue.

In 1894 the pier at the foot of Fullerton Avenue, where the Sanitarium stood, was extended 480 feet into the lake, to a point opposite the end of the paved beach work, to form a protection for the lagoon and a more secluded harbor for yachts; while from the extremity of

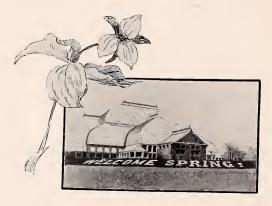


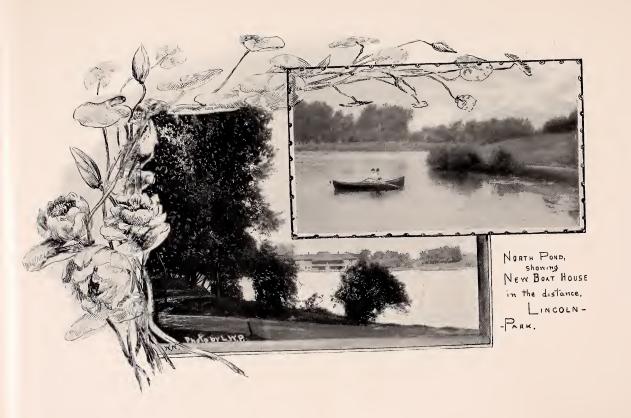
this pier a breakwater was built at right angles to it, extending 170 feet north. In the pocket formed by this protection the waves washed up sand rapidly, and the two acres of sand beach had accumulated by the following year for the benefit of bathers. The Commissioners in the following year called for bids for the extension of the breakwater to Diversey Boulevard, at a point 1,200 feet east of the present shore line there, with the object of reclaiming forty more acres of land, and extending the lagoon until a mile course could be secured; but funds for the enterprise could not be obtained, and the project had to be abandoned for the time.

In 1897 the land east of Lake View Avenue south of Belmont Avenue was washed away by the lake, until the line of the boulevard was threatened, and 175 feet of piling and sheeting were driven on the line of the drive. In the following year this protection had to be extended 143 feet farther south, where it met a row of sheet piling put in years before by private land-owners.

Following is a summary of the cost of shore protection along the Park front, to which are added the cost of improving reclaimed land and of protecting the shore line of Park boulevards:

Breakwater	
Breakwater \$224,787.54 Dredging and filling 1256,973.15 Granite paving-blocks 50,81.70 Stone 50,81.70	
Granite paying blocks	
Stone 50,581,10	
Stone 50,581.10 Cement 50,819.10	
Lumber 0,342.25 Labor and sundry supplies 6,855.44	
Labor and sundry supplies 6,855.44 113,971.24	
113,9/1.24	
Filling and improving reclaimed land west of paved beach-	\$602,832.98
	108,430.04
Breakwater on North Shore Drive	169,538.82
Oak Street breakwater	124,965.96
Belmont Avenue breekwater	6,170.00
Belmont Avenue breakwater	3,844.45
Interest on shore protection bonds	201,625.00
Total	





LAKE SHORE DRIVE

The Lake Shore Drive from North Avenue to Oak Street, for years called the "Pine Street Drive," was provided for in the original Park Act, which gave the Commissioners authority to construct a boulevard 200 feet wide from the Park to Pine Street, which then extended as far north as Oak Street only. The Park Act and subsequent amendments authorized a special assessment on property benefited for the purchase of a right of way, and provided that the land to be taken should be appraised in the same manner as the land to be purchased for Park purposes. At the second meeting of the Commissioners an order was passed for the appraisal of the land and the preparation of an assessment roll, but the lack of funds compelled delay, the first assessment roll was destroyed in the great fire, and a new one had to be made. The first assessment was defeated in the courts, and although an assessment for \$100,000 was finally confirmed, the money did not begin to come into the Park treasury until 1875. By this time the improvement was well under way. The act provided that the shore line of Lake Michigan should be the east line of the drive, but as that line was exceedingly crooked, some variations were necessary; and with a view to securing the right of way more cheaply, the drive was laid out through water for its entire extent, except for a few feet at Oak Street. At North Avenue the east line of the drive was 300 feet east of the shore line. The first deeds for the right of way were secured in August, 1873; the construction of the breakwater which marked the east line of the drive was begun the same month, and 900 feet had been completed, when, on March 7, 1874, an order was passed for the construction of the drive, and the assessment for the purchase of the right of way, for which assessment the authority of the north town officials was given on March 28. By the time the assessment roll had been confirmed the breakwater was completed

north to North Avenue, and the west 60 feet of the drive had been filled in for a roadway. Over 140,000 cubic yards of filling was required for this narrow roadway, and the amount required to complete the filling to the breakwater was estimated at over 400,000 yards. Large quantities of filling were dredged from the bed of the lake outside the breakwater, and thrown over it; but much of the filling for the original roadway was taken from the north end of the cemetery tract, where the South Pond had been marked out, and some of it from the excavation for the new court-house building at Clark and Washington streets. During 1875 trees were planted on either side of the roadway, and the roadway itself completed on November 8, 1875. Two days earlier, however, on Saturday, November 6, without waiting for the finishing touches, the drive was formally opened and dedicated to the use of the public, with interesting ceremony. City officials, Park Commissioners, and other prominent citizens rode in a dozen carriages from the offices of the Commissioners, in the Ashland Block, to the beginning of the new drive at Oak Street, and on along the new boulevard into the Park, and to the refectory, which stood near the site of the present refectory opposite Center Street, where a banquet was spread for the enjoyment of the prominent citizens, and speeches were made, F. H. Winston, President of the Commissioners, presiding. An account of the proceedings in the Tribune of the following day declared that the drive appeared to excellent advantage:

"Large bodies of workmen were engaged planting trees on the flanks of the boulevard, and everything around the drive and Lincoln Park presented an artistic and animated appearance."

In the following year the spaces between the roadway and the breakwater were filled and planted with grass and trees; but the work



of making and preserving a lawn was carried on at disadvantage for some years, because of the almost constant loss of filling back of the breakwater, by its washing out from the action of the lake. The breakwater itself had been refilled in 1874 with stone and fascines, made necessary by the settling of the original filling. In 1875 estimates showed that 18,000 yards, dredged and thrown over the breakwater the year before, had been sucked out by the lake. The Commissioners had not only to protect and refill the drive along its entire extent, from year to year, but on several occasions were obliged to extend the protection south from Oak Street, because the lake had a habit of washing around the end of the breakwater and sweeping over Pine Street, south of Oak Street, and washing it away. In 1875 the breakwater was extended to Walton Place, and a box pier erected there.

The construction of the drive and breakwater left large ponds of stagnant water west of it, and in 1877 vigorous protests were made by the Citizens' Union against the "nuisance" between North Avenue and Oak Street. Measurements and soundings, taken in that year by the Park engineer, show that over seven acres of land between North Avenue and Schiller Street was covered with 7,600,000 gallons, and that 40,000 yards of filling was required. There was another pond two acres in extent, between Schiller and Division streets, and another two and one-half acres in extent between Division and Oak streets, the water in all of them being in places over six feet deep. In spite of the protests, the ponds remained until 1882, before they were filled up by their owners; and in that year there was a serious break in the pilling north of Oak Street, the result of dredging sand too near the breakwater, and several hundred feet of the drive itself were under water.

After the construction of the sea-wall, from 1886 to 1888, the drive was refilled to grade from the breakwater to its west line, a large amount of filling being necessary. A wooden sidewalk was constructed inside the sea-wall for its entire extent, and the rest of the new-made land improved in lawns. The piling under the sea-wall

had been lined with great quantities of cedar bark, held in place by thousands of tons of stone, and it was believed no more filling would be lost, but the result sadly disappointed such hopeful anticipations.

Of the first cost of the improvement only \$90,000 was borne by the property owners benefited, and of this assessment two-thirds was used for the purchase of the right of way through the lake. In 1884 the property owners along the drive paid a voluntary assessment amounting to \$16,000 to defray the cost of laying a stone sidewalk ten feet wide along the west line of the drive, laying out a grass plat east of the sidewalk, and moving the roadway twenty feet farther east. With these exceptions, the entire cost of the drive and its maintenance to the present day has been borne by the tax-payers of North Chicago.

Attempts were made by the Commissioners in 1896 and 1897 to levy an assessment on property fronting the drive for the reconstruction of the pavement. But many of the property owners, in surrendering their riparian rights and deeding land for the right of way of the drive, had stipulated that it should be maintained forever without cost to them, and because of their bitter opposition the attempt to levy the assessment was defeated.

Of the total disbursements for the construction and maintenance of the drive to date, \$418,640.57, the sum of \$89,818.85 was realized from the special assessment for the right of way, \$16,963 paid by the property owners as a voluntary contribution for certain improvements, and the rest, \$311,858.72, was appropriated from the general fund. Following is a summary of the disbursements:

			 	CIII.
Original breakwater Supplies for breakwater repairs High breakwater Burron Place				\$59,182.4
High breakwater Pour	11 2	151 -		9,110.0
Labor and sundry supplies				74,312.22

\$418,640.57



ANIMAL DEPARTMENT

The zoölogical collection of Lincoln Park is one of its most venerable institutions, dating from the summer of 1868, when two pairs of swans from Central Park, New York, were placed on one of the small ponds, where they and their progeny thrived

and multiplied for years. In the following year, according to the report of the Board of Public Works, numerous rare and interesting animals were donated to the Park, and on July 1, 1873, when the care of the improved part of Lincoln Park was transferred from the city to the Commissioners, an inventory of the assets of the department showed the following animals and birds:

2	Buffaloes.
8	Peacocks.
2	China geese.
4	Guinea pigs.
2	Prairie dogs
3	Foxes.

13 Swans. 6 Wild geese. 1 Bear.

2 Squirrels. 1 Catamount. 4 Eagles.

Up to that time the records had shown no expenditure for the purchase of animals, and under the rule of the Commissioners it was many years before any considerable amount was paid for additions. Donations of greater or less value were frequently made, and all that devolved upon the Park was to pay the freight or express charges when the gifts came from a distance. The first item of this character was the payment of \$9.85 on March 4, 1874, the freight charge on an elk. The first animal bought for the Park was a bear cub, which entered the collection on June 1, 1874, in exchange for \$10.

2 Elks.

12 Ducks. 3 Wolves.

5 Deer.

2 Rabbits.

2 Turtle-doves.

In 1874 a number of animals from a traveling circus were loaned to the Park for their care, including the first lion that ever took up its residence in Lincoln Park; and the second purchase of animals made by the Commissioners was that of a part of this collection, in March 1877, when two bears, two peafowl, a kangaroo, a condor, and a goat were bought for \$275.

While constantly indebted to the owners of pet animals for additions to their collection, the Commissioners

were not always the recipients of gifts, for from their surplus stock of birds, swans, wild geese, and ducks were frequently given to other parks and public institutions in Chicago and elsewhere, the first such donation recorded being that of a pair of swans and a pair of geese given to the West Chicago Park Commissioners for "Central," now Garfield Park, in 1874. In 1875 the city offered to present the animal collection in Union Park, including some wolves and eagles, to Lincoln Park, but the gift was declined because of lack of accommodations.

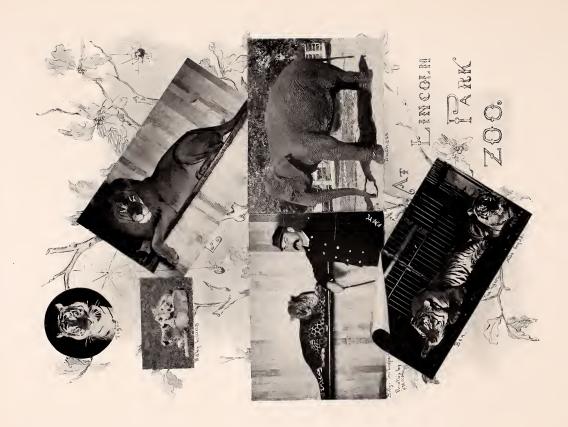
In 1877 the deer-paddock was enlarged to include the southern half of the present floral garden; and in that year the Superintendent recommended the improvement of the animal quarters, and reported that a

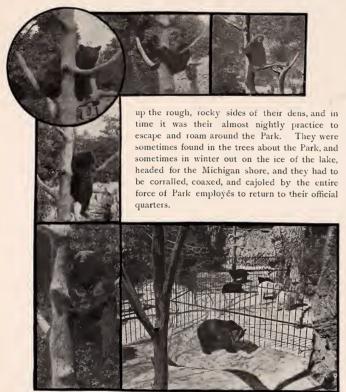
society could be formed to take care of the animals, put up buildings, and increase the collection for the privilege of charging a small admission fee, to be divided with the Commissioners. In 1878 a definite proposal of that kind was made by the owners of a collection of tropical animals valued at \$18,000, but the Commissioners laid down the rule, which has always been adhered to, that whatever the animal collection in Lincoln Park might be, it should always be free to the public.

In 1878 some fears were entertained that the wooden cage in which the only bear in the collection was imprisoned was too insecure for safety, and the construction of the bearpits was begun in November, and practically completed in the following spring, according to the belief of the architect. The bear was then turned into its new quarters, and in no long

time other bears were there to keep him company; but it was soon found that the chief and original object of the construction of the pits—security—had not been obtained. The bears became expert at climbing







One of them struck out for the business center, and was getting along nicely until, in clambering over a ridge at the south end of the Mall, it fell through the top of an old cemetery vault, and was kept a prisoner there until its recapture. Another, a grizzly, wandered down the Pine Street Drive, and took refuge from pursuers in a tall elm tree near Oak Street. A Park policeman, who had brought up the rear of the chase, was stationed at the foot of the tree to keep the bear from coming down until the next morning, and there is a tradition, though it cannot be verified, that he resigned his position on the spot. There is no record or recollection of any damage to persons or to property, except to the flower-beds, from these excursions; but in 1880 it was thought best to curb the roving inclinations of the bears by fastening curved iron bars near the top of the dens, and since then the bears have been kept securely at home. In 1879, 1880, and 1881 the wolf and fox dens, prairie-dog pit, coon cage, otter pit, squirrel cages, sparrow cages, and sea-lion pits were constructed, and room for a considerable increase in the animal collection thereby provided.

From the first of this period investments in animals became more frequent, one of the most important purchases being that of a pair of sea-lions in December, 1879. The propagation of sea-lions being a new enterprise, one of the Commissioners and the Superintendent were sent on a mission to Cincinnati to secure the necessary instructions.

In October, 1881, a number of citizens exercised the right of petition to express their approval and appreciation of the exhibition of wild animals and birds in the Park, and their regret at hearing that some of the animals had been sold and removed, and they requested that no more sales be made, but that the stock be increased, and particularly that two African lions, then in the Park as a loan exhibit, be purchased. In 1882 the buffaloes tired of captivity and died, and another pair were imported from the Western plains to take their places. Two years later the buffalo collection was enlarged by the



first buffalo ever born in the Park, and also, as was confidently claimed at the time, the first buffalo ever born in captivity. In 1884 a pair of polar bears were purchased, and they still live to testify their appreciation of the healthful climate of Chicago. In the following year the West Park Commissioners decided to go out of the animal business, and a bear and some eagles were brought from Union Park. It was not until 1888 that the South Park Commissioners retired from competition and donated their collection to Lincoln Park.

In 1880 the deer were crowded out of their paddock in the floral garden, and part of the space now occupied by the buffalo and elk herds was enclosed and divided between them. In 1884 increases in the

herds made it necessary to enlarge their quarters, and a small wooden house was built for the buffalo.

In 1887, with the construction of the new brick pumping station, the old frame building was moved into the buffalo-yard to provide larger quarters for the growing herd, and the old buffalo-house assigned to the elks.

In 1888 a fine royal Bengal tiger was left with the Park by a showman for its keeping. There was no room or safe place for it in the animal-house, and winter quarters were provided for it in an annex to the greenhouse. This necessity called attention anew to the increase in the size of the animal collection, and in its value as a public attraction, and in 1889 the brick and stone animal-house still in use as the winter quarters for tropical animals, was constructed. The old animal-house, which had dated from 1870, being reduced from its proud estate, was sold, and has since served as a bathing pavilion north of Diversey Boulevard.

In this year also a pair of tigers, a camel, a llama, a lion, an elephant, a zebu, an ibex, a bear, and a pair of leopards were bought from Barnum & Bailey for \$3,000.

For several years it was customary when taking the elephant "Duchess" from the animal-house to her summer quarters, near the buffalo-yard, to drive her with a free rein, with the assistance of an elephant-hook. On one occasion, in 1891, however, the "Duchess" took

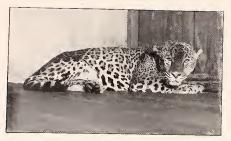


a fancy for a longer excursion, and started on a jaunt westward through and over the channel, across the flower-beds, to the serious damage thereof, and through and over fences, yards, and buildings. A summer-house on North Park Avenue was carried away on her shoulders, the gate of a near-by brewery torn from its hinges, and other expensive pranks committed before the "Duchess" at last allowed herself to be caught with a rope and lassoed to a telegraph pole until her good nature returned. She was finally restored to her quarters in the Park, and ever since she has been led to and fro on her short and infrequent rambles by a stout iron cable securely fastened around one of her ponderous feet.

Another purchase in 1889 was that of a cargo of eighteen sea-lions, which were imported from the Pacific Coast, and installed in a large pit, which was being prepared for their reception. The iron fence surrounding it was not finished, and some of the lions broke out. Two of them waddled across the Park, across Clark Street, and into a restaurant, where they occasioned much excitement, the employés taking to the tables in undisguised alarm. These and others, which were content to roam about the Park, were driven back to their pond, but one which had sniffed Lake Michigan made straight for it and plunged in. It was heard of later off the Milwaukee coast, but never came back to Lincoln Park. Its departure, the sale of some of the cargo, and the deaths within a year or two of the rest, caused great delight to the residents of North Park Avenue, fronting the Park, whose interest in natural history had not been strong enough to make them submit amiably to being kept awake at nights. In 1890 they had submitted a petition for the removal of the sea-lions, wolves, and foxes, and the petition was subsequently granted as far as the sea-lions were concerned, in the manner stated.

No further important purchases of animals were made, except that of a buffalo bull, for \$500, in 1891, to replace "Bill," the old buffalo that died that year, until in 1896 a Bengal tiger, a pair of hyenas,





thirteen monkeys, and some birds were purchased for \$2,-000. This was the first time the monkey family had been represented in the Park collection, and an

enclosed glass cage specially ventilated was constructed for them in the animal-house. During this year the buffalo herd was depleted by the sale of two buffaloes and ten cows for \$3,500.

In 1894 the question of building a much larger animal-house, combined with an aquarium, was considered by the Commissioners, and plans for a structure whose estimated cost was \$75,000 were adopted. The price proved to be prohibitive, however, and the purchase of the plans was as far as the investment went. In 1895 the eagle-cage was erected, and no further extensions were made in the department until those recorded in the report of the year just closed.

In view of the number of dangerous animals in the collection, and

the fact that for a number of years the tropical animals were moved from their summer to their winter quarters and back again every spring and fall in a small wooden cage, the care of the collection has been singularly free from accidents. In 1891 a workman was gored in the hand by a deer, which was killed in being driven from its victim. In 1893 a man was bitten by a wolf which had jumped out of its den, but was recaptured. In 1897 a hyena broke out of its den, and was responsible for many cases of fright, but for no injury, until it was killed some time later near Altenheim.

The total amount paid for animals during the entire period ending March 31, 1899, was \$17,019.80, while \$8,656.82 was realized by the sale of surplus stock. The following is a summary of the expenditures of the department:

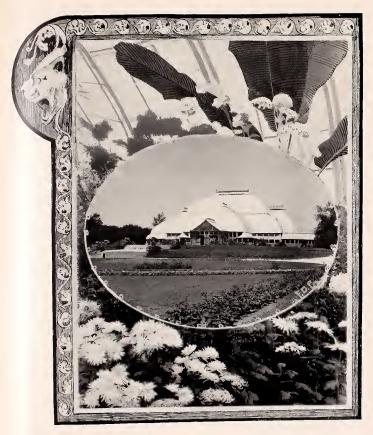
Animals .. \$17,019.80 Buildings

and enclosures- 45,508.10 Feed - - - 64,739,84

Labor and supplies 79,657.67

\$206,929.41





FLORAL DEPARTMENT

No provision was ever made by the city during its control of the old Park for the planting of flowers. The problem of raising grass on the sandy soil of the original Lincoln Park was sufficiently difficult without the introduction of any purely decorative feature. The first expenditure ever made for floral decoration in Lincoln Park was authorized in lune, 1874, by the appropriation of \$100 for the purchase of flowers and plants. On October 27 the first gardener was appointed, and in November \$500 was appropriated to build and stock a greenhouse. This modest prototype of the splendid conservatories of to-day was built in an out-of-the-way and unimproved section of the Park, near the present site of the engine-house, and was little more than a few hot-beds made of window-sashes. In the two years following small flower-beds were planted in different parts of the Park and along the Pine Street Drive; but in 1877 the Commissioners concluded that a more striking effect could be obtained by massing the flowerbeds together. The plan offered the additional advantage of making it easier for the limited police force to protect the flowers from souvenir collectors. The northern half of the grounds now devoted to the floral garden was set apart for that purpose in 1877, and four greenhouses sixty feet long were built just south of the site of the present palm-house. So great was the popularity of the floral garden, that in the following year extensions were built to the greenhouses, and in October a large quantity of bulbs were imported from Holland. A few months later the head gardener went to Washington and secured a number of choice plants from

the Smithsonian Institution. In 1879 a considerable extension was built to the greenhouses for the exhibition of palms and other tropical plants. The growth of the collection of flowers and plants, and the evident interest of the public in the outdoor decorations, made frequent extensions to the greenhouses necessary. In 1879 over 100,000 plants were set out in the Park, and in 1881 the deer-paddock, which occupied the southern half of the flower-garden, extending west to the Stockton Drive, was added to the space devoted to floral display. In this year several greenhouses were blown down in a severe storm. In 1889 an unused ravine was transformed into a lily-pond, artificially heated for the growth of exotic water-lilies, and so popular was the innovation that in the following year two more lily-ponds were constructed north of the Ramble Drive. The fame of the rich growth of tropical lilies in these ponds has spread far beyond the limits of Chicago, and in 1897 a request came to the Commissioners from the financial adviser of the Khedive of Egypt for seeds of the Lincoln Park lilies, some of which had been imported from Egypt. By 1889 the floral department had grown to such proportions, and the old

greenhouses with their rambling additions were so poorly fitted for the display of the floral life of the Park and the convenience of visitors, that the Commissioners determined upon extensive improvements. Plans were prepared for the construction of the present palmhouse, conservatories, fernery, and propagating house, and work was begun on the propagating house at once. It was finished in 1890, the palm-house was completed in 1892, and the fernery in 1895, the total cost of their construction being over \$100,000. Stocked with rare plants, and constantly supplied with flowers blooming in their season, they form a continual attraction for hosts of admiring visitors. A quarter of a million plants are needed annually for outdoor decoration in the Park; the extensive propagating houses built in 1890 are already insufficient to supply the demand, and their reconstruction and enlargement are now under way.

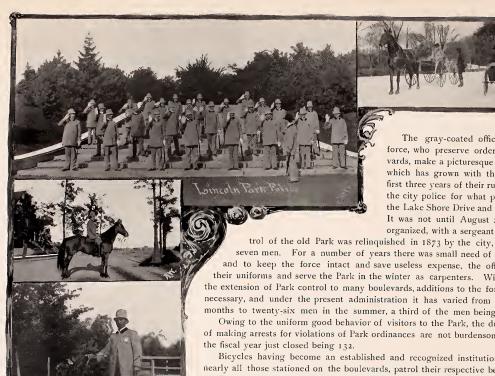
Carl J. Stromback, the head gardener, who was first employed in Lincoln Park in 1870, has had entire charge of the floral department for many years. The total expenditures in the department to March 31, 1899, were \$372,445.88.



Gila Moneter

Lincoln Park Zoo





POLICE DEPARTMENT

The gray-coated officers of the Lincoln Park police force, who preserve order in the Park and on the boulevards, make a picturesque as well as a necessary institution, which has grown with the growth of the Park. For the first three years of their rule, the Commissioners relied upon the city police for what protection might be necessary on the Lake Shore Drive and elsewhere outside of the old Park. It was not until August 2, 1872, that the Park force was organized, with a sergeant and three officers. When con-

trol of the old Park was relinquished in 1873 by the city, the Park force was increased to seven men. For a number of years there was small need of policemen in the winter months, and to keep the force intact and save useless expense, the officers were allowed to lay aside their uniforms and serve the Park in the winter as carpenters. With the growth of the Park and the extension of Park control to many boulevards, additions to the force have from time to time been necessary, and under the present administration it has varied from twenty-three men in the winter months to twenty-six men in the summer, a third of the men being stationed on the boulevards.

Owing to the uniform good behavior of visitors to the Park, the duties of the officers in the matter of making arrests for violations of Park ordinances are not burdensome, the total number of arrests in

Bicycles having become an established and recognized institution, half of the officers, including nearly all those stationed on the boulevards, patrol their respective beats on wheels.

The Park police are under the immediate supervision of Captain Richard DeShon, who entered the service in August, 1873, and has been in the department continuously since that time, except for one period of four years. Among the important duties of the members of the force are those of assisting visitors to the Park to find their various destinations, protecting flowers, birds, and squirrels from the assaults of small boys, regulating the speed of bicycles on the boulevards and drives, and looking after the interests of lost babies.

The total expenditures charged to the account of the police department have been \$343,266.60.



OHIO STREET EXTENSION

This improvement, involving the reclamation of two hundred acres of land from the lake for the benefit of private owners, in return for the construction of a boulevard for Lincoln Park, was first suggested on April 27, 1886, when H. I. Sheldon, representing Ogden, Sheldon & Co., large owners of property on the lake shore south of Chicago Avenue, proposed to the Commissioners the extension of the Lake Shore Drive south of Pearson Street. The proposition was filed at the time, but negotiations were renewed at intervals during the succeeding years, and in 1888 and 1889 frequent conferences were held by the Commissioners with the shore owners, with the result that united action was determined upon to secure from the Legislature the passage of a bill which would enable the Commissioners to construct a boulevard from Oak Street to Ohio Street, on a line one thousand feet more or less from the existing shore line, on money to be furnished by the shore owners, in return for which the latter were to be allowed to fill in the intervening space and receive deeds to the reclaimed land from the Commissioners, giving in return quitclaim deeds for their riparian rights. Such a bill was passed June 4, 1889, on the same day that the law under which the North Shore Drive was built was enacted, and contracts were entered into on June 22, 1891, between the shore owners and the Commissioners, under which the land has all been filled in, a breakwater constructed from Indiana Street to Oak Street, and a large part of the work of constructing the boulevard completed. The boulevard, which is 202 feet wide, is completed from Ohio Street to Delaware Place, except for the top dressing of the macadam roadway and of the bicycle-path. The improvement includes a granite-paved beach 48 feet in width, similar to that constructed north of North Avenue, a parapet and broad stone sidewalk 25 feet wide, a 27-foot bicycle-path, a 50-foot roadway, a 15-foot

bridle-path, and broad stretches of lawn, with double rows of elm trees on either side of the roadway. The shore owners agreed under their contract to construct the breakwater under supervision of the Commissioners, fill the boulevard to within one foot of grade, and pay to the Commissioners \$100 a front foot, amounting to \$360,000 for the completion of the improvement. The contracts called for the boulevarding of Ohio Street from Pine Street to the new drive, the extension of the boulevard on the lake shore from Ohio Street to Indiana Street having been an afterthought. The Park Commissioners agreed to construct a breakwater from the northern terminus of the new work in a curved line to the old Lake Shore Drive at Bellevue Place, a distance of 1,400 feet; fill in and improve as a park the space between the breakwater and Oak Street extended, about 5 acres; continue the paved beach, drive, sidewalk, and other improvements of the boulevard along the breakwater; fill in and improve as a park the space between the city waterworks property and the new boulevard, called Chicago Avenue Park; and pay one-half of the cost of improving Oak Street, Chicago Avenue, and Pearson Street where they front on Park property. The estimated cost of this improvement, which will add to Lincoln Park about fifteen acres of land, is \$185,000. No means were provided in the contract by which the Commissioners could secure funds for carrying on the work except from general taxation, but because of a deviation in the line of the breakwater from that adopted as the route of the drive by the Commissioners, said deviation increasing the extent of the land reclaimed, the shore owners who profited by the enlargement have been required by decree of court to pay \$25,000 to the Commissioners for the construction of the breakwater north of Oak Street.

The contracts contemplated the prompt payment of the voluntary



assessments of the shore owners, and the completion of the boulevards and the park north of Oak Street by May 1, 1893; but the time was extended by tacit agreement because of numerous lawsuits, and the work of constructing the boulevard was not begun until the summer of 1896. The Attorney-General of the State had instituted suit to declare the law under which the extension was made invalid and unconstitutional, abrogate the contracts between the Commissioners and shore owners, and restore the reclaimed land to its original condition as a part of the harbor of Chicago. Suit was also begun in May, 1894, by the Chicago Title and Trust Company, the assignee of various shore owners, to compel the specific performance of the contracts between the Commissioners and such owners, and the City of Chicago laid claim to the land east of its property. The Commissioners filed answers denying the rights of the various petitioners to the relief prayed, and filed a cross-bill, upon which the court found that the shore owners should give compensation to the Commissioners for the extra land reclaimed, construed the contracts as not forbidding a special assessment upon the newly made land for the maintenance of the boulevard, and declared the title to the block of reclaimed land east of the waterworks to be in the Park Commissioners for the purposes of a public park. The opinion of the Attorney-General and the bill of the Chicago Title and Trust Company were dismissed, but appeals were taken by the Attorney-General and the City of Chicago, as the result of which the legality of the contracts and the rights of the Commissioners as laid down in the decision were confirmed by

the Supreme Court. Among other litigation in connection with the Ohio Street Extension improvement, the Commissioners or shore owners have had to contest the claims of the picturesque George W. Streeter to more or less of the reclaimed lands by virtue of squatter rights alleged to have been acquired through the agency of a scow wrecked on the beach. More serious efforts to get possession of the property were made in 1896, when it was found that the United States Land Commissioner was having the land occupied by the boulevard and other made lands surveyed, under a claim that they were subject to entry by persons holding land scrip of the United States, and that there was danger that patents would be issued. In November the attorney of the Commissioners appeared before the Land Commissioner at Washington to argue against an attempt to locate McKee scrip on land east of the government survey line of 1821, which was, roughly stated, about two hundred feet cast of North State Street.

Commissioner Lamoreaux authorized the holders of the scrip to locate on the lands in question, but his decision was afterward revoked by the Secretary of the Interior. The holders of the scrip have brought suit in the United States Circuit Court in Chicago to enforce their alleged rights to take possession of these lands under the decision of the Land Commissioner, in spite of its subsequent revocation, and this suit is now pending. The Commissioners are still engaged also in contesting the suit of Major William L. Marshall for royal-ties on the combined beach and breakwater used on the improvement.



NORTH SHORE DRIVE

Early in 1874 the owners of the shore lands north of the Park sought to obtain the construction of a drive along the lake, and held frequent meetings to decide upon the route. In 1875 the Commissioners lent their encouragement to the idea by passing orders and resolutions calling upon the proper officials of the town of Lake View to secure the condemnation of land for a drive from the north boundary of the Park to the north line of Devon Avenue, a distance of five miles. The Lake View authorities took the necessary action on January 4, 1876, but the ambitious scheme was defeated by the opposition of the majority of the property owners. The plan lay dormant until ten years later. In August, 1886, it was revived on a more modest scale by some of the owners of the shore lands between Belmont Avenue and Byron Street, who petitioned the Commissioners for the construction of a drive along the lake between those points. Lake View Avenue had not then been opened from George Street to Belmont Avenue, and the Commissioners declined to consider the proposition until it should be opened and a continuous drive made possible. This street was opened and accepted by the Commissioners as a boulevard on July 3, 1888; and on February 5, 1889, a petition from the property owners, proposing a route and plan for the North Shore Drive, was presented, and an order for the improvement and for authority from the town of Lake View to condemn land was passed. It was found that the law authorizing the construction of boulevards was inadequate; and on July 4, 1889, the Legislature passed an act under which it was possible to condemn the land for the proposed drive, and levy a special assessment on property to be benefited to raise funds for its construction. On July 30 a new route for the drive was adopted, and on April 26, 1890, still another change of route was proposed, and a new order for the construction of the drive was

adopted. Authority for the improvement was granted by the town officers of Lake View, on a petition of the owners of the majority of the frontage of the proposed drive, and the special assessment was confirmed, although some of the property owners took the case to the Supreme Court, and one is still contesting. The assessment was based on the estimate of the Park engineer that the drive would cost \$332,503.15. Nearly all of this sum has been paid in, and the work completed, except for the construction of a sidewalk on the west line of the drive.

The North Shore Drive is 125 feet wide, and the improvement includes a breakwater along the entire front, from Belmont Avenue to Byron Street, a plank sidewalk 20 feet wide, directly west of the breakwater, with a parapet of wooden benches, a bicycle-path 20 feet wide, a 10-foot bridle-path, a grass plat, with row of trees, 8 feet wide, a 45-foot roadway, another parkway 10 feet wide, with a row of trees and a 12-foot sidewalk. This improvement, except for the west sidewalk, was all completed in 1896 but the bicycle-path from Cornelia Street to Grace Street, which was finished in 1897.

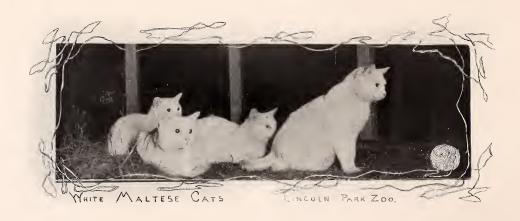
The violent storms of October, 1898, which damaged the shore protection along the entire Park front, destroyed the wooden parapet from Belmont Avenue to Cornelia Street, and washed out the top dressing of the bicycle-path, the force of the waves being so great that pieces of the wooden benches were hurled a distance of fifty to one hundred feet across the driveway. The repairs necessary to replace the parapet, seats, and bicycle-path are estimated to be less than \$3,000; but the fact that the sand filling under the plank sidewalk, next the breakwater, has sunk in many places, gives rise to the fear that the breakwater is weakening.

The riparian rights were secured from the shore owners along the

drive for some 1,500 or 2,000 feet, but many owners refused to surrender said rights, and in March, 1894, one of them, George H. Rozet, began the construction of a pier opposite Cornelia Street, at right angles to the breakwater and attached to it, for the purpose of forming land. On March 19 the contractor was arrested for trespass, after some thirty feet of pier had been completed, and that night, under advice of the attorney of the Board, and under direction of the Superintendent, the pier was blown up with dynamite and entirely destroyed. The Commissioners were victorious in the litigation resulting from this action, and there have been no subsequent attempts by the property owners to acquire building lots east of the Drive.

Following is a summary of the expenditures to date on the construction of the drive:

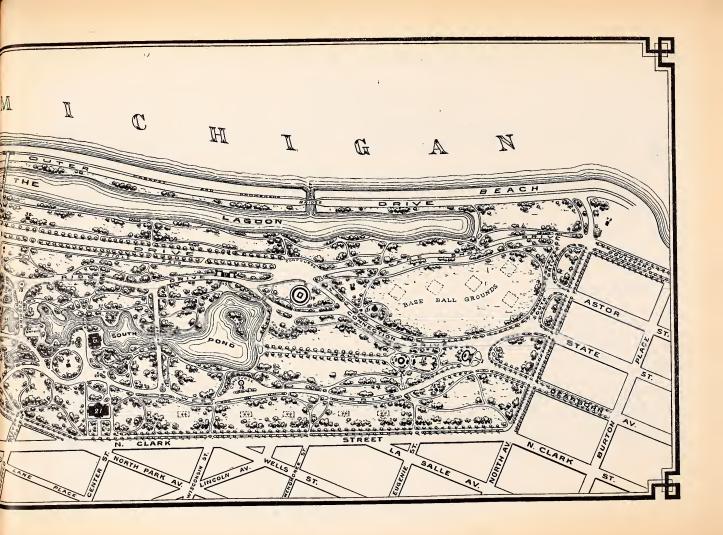
Right of way Legal expenses Breakwater Filling Construction	124,965.96 51,004.80	\$332,119.41
RECEIPTS.		
Net proceeds of special assessment Additional payments by property owners Appropriated from General Fund in 1894, to repair damage		
to breakwater by storms	1,790.66	\$332,119.41



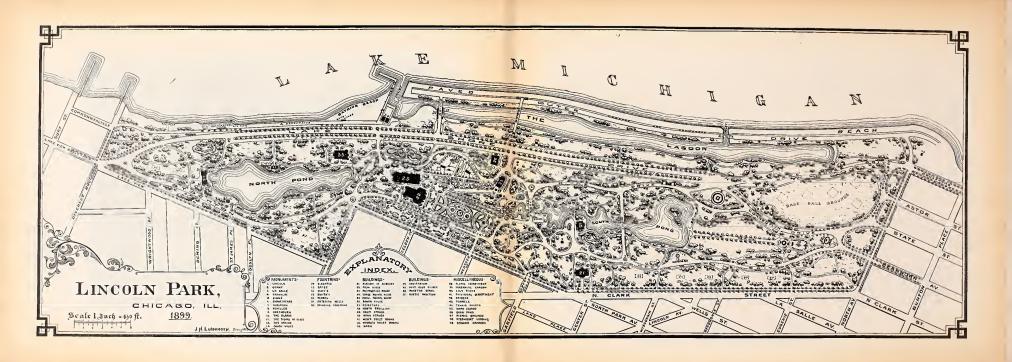














BOULEVARDS

An important part of the Lincoln Park system are its boulevards. Authority for the construction of driveways leading to the Park was given in the act of 1871, but it was not until April 9, 1879, that the Legislature passed an act giving to Boards of Park Commissioners the power to take and control any street connecting with a park or with any park boulevard, on the consent of the owners of the majority of the frontage of lands on such streets, and the consent of the corporate authorities having control of it. The first street accepted by the Commissioners of Lincoln Park as a boulevard under this act was that part of Lake View Avenue from the north line of Lincoln Park at Diversey Street to George Street, beyond which it was not then opened. Its control was surrendered by the town of Lake View by an ordinance approved February 20, 1882, and accepted by the Commissioners March 7, following. On March 5, 1888, control of that part of Lake View Avenue from George Street to Belmont Avenue was offered to the Commissioners by the City Council of Lake View, and accepted on July 30.

The second acquisition of a ready-made boulevard was made on May 17, 1884, when that part of Pine Street between the south line of Pearson Street and the north line of Oak Street was accepted from the City Council, and its name changed to Lincoln Park Boulevard. Proceedings were at once begun by the Commissioners to widen the boulevard fifty feet on the east side, and the consent of the authorities of North Chicago for a special assessment for that purpose was secured, but the opposition of the property owners who were to be assessed defeated the project. Frequently in the following years the attempt to widen Pine Street was repeated, only to be abandoned again; and efforts were also made to extend the Lake Shore Drive from Oak Street to Pearson Street, at a distance of 400 feet east of Pine Street.

This project also had to be abandoned, but in 1892 proceedings for special assessments for the condemnation of a strip of land 50 feet wide along the east line of the boulevard, and for the paving of the street, was successfully instituted, and the work was completed in 1896.

Pine Street, from Ohio Street to Chicago Avenue, was tendered as a boulevard by a city ordinance on January 4, 1897, and was accepted by the Commissioners March 9, 1897, making a continuous boulevard from Ohio Street to North Avenue, except for the block between Chicago Avenue and Pearson Street, through the city waterworks property, which is still controlled by the city, but was paved by the Commissioners in 1895.

North Avenue from Clark Street to the Lake Shore Drive was surrendered by the city by ordinance of September 28, 1885, and accepted by the Commissioners January 5, 1886.

North Park Avenue from Clark Street to Fullerton Avenue became a Park boulevard August 18, 1886.

As early as February, 1881, conferences had been held by the Commissioners with the West Chicago Park Commissioners, to arrange, if possible, for a boulevard connection between Humboldt and Lincoln parks. Nothing practical came of the negotiations, and the first small step toward securing such a connecting boulevard was taken on June 7, 1887, when that part of Diversey avenue between Clark Street and Lake Michigan was accepted as a boulevard by virtue of an ordinance passed by the City Council of Lake View on May 2. On September 21, 1891, the City Council passed an ordinance, surrendering control of Diversey Avenue from Clark Street to the river, and the Commissioners voted to accept it on condition that the city should first pave and improve it, a condition that was not fulfilled. On July

14, 1895, a new ordinance was passed by the city, tendering the street to the Commissioners, who rejected it on March 18, because of the impossibility, under existing laws, of collecting enough money to maintain the street in proper style. On April 1 they accepted the street, "with the understanding that no money is in sight to improve and maintain the same."

On July 6, 1891, that part of Fullerton Avenue from the east line of Clark Street to North Park Avenue was tendered to the Commissioners as a boulcvard by the City Council, and its control was accepted by an order entered of record on July 14.

That section of Fullerton Avenue between Clark Street and Orchard Street was accepted as a boulevard March 27, 1893.

That part of Byron Street between the lake and Sheffield Avenue, and Sheffield Avenue from Byron Street to North Fifty-ninth Street, were offered to the Commissioners by the city, through an ordinance passed January 11, 1892, which gave the name of Sheridan Road to the two streets. The ordinance was not accepted at that time, and its control was offered again by a new ordinance passed by the City Council May 3, 1893, and on July 26 of that year it was accepted by the Commissioners. On May 6, 1895, the Commissioners gave the name of Sheridan Road to the continuous boulevard running from Diversey Avenue to North 59th Street, made up of parts of Lake View Avenue, the North Shore Drive, Byron Street, and Sheffield Avenue.

On October 21, 1895, Dearborn Avenue, from Burton Place to North Avenue, was accepted as a boulevard, its control having first been tendered to the Commissioners by order of the City Council.

Garfield Avenue, from North Clark Street to North Park Avenue, was accepted as a boulevard December 7, 1896, by virtue of a city ordinance passed November 28. Those parts of Webster Avenue and

Belden Avenue between Clark Street and North Park Avenue had been turned over to the Commissioners by the City Council, by ordinance passed at the same time, but their control has not yet been accepted.

By the act of April 9, 1879, Park Commissioners were authorized to levy taxes or special assessments for the improvement of streets which might be accepted as boulevards, but not for their subsequent repair. The act was amended June 27, 1885, so as to allow assessments for subsequent repairs for boulevards, but it was again amended by act of June 16, 1887, so as to prohibit such assessments. When Pine Street from Oak Street to Pearson Street was accepted as a boulevard, in 1884, Commissioner Stockton voted for the acceptance on condition that the property owners maintain the boulevard. The condition was not enforced, and it was not until the acceptance of Diversey Boulevard from Clark Street to the lake, in 1887, that a preliminary agreement was made with the property owners on the boulevard that they should pay a certain amount annually for its maintenance. Subsequently boulevards were accepted without such provisions, but since 1895 it has been a condition precedent for the acceptance of any city streets as boulevards, Dearborn Avenue, Pine Street, south of Chicago Avenue, and Garfield Avenue coming into the Lincoln Park system on such terms.

The cost of maintaining boulevards is considerable when they are policed, kept in repair, cleaned, and sprinkled; and the Commissioners have felt that such charges should be met by the property owners on the boulevards, rather than by the tax-payers of the entire park district.

The crection of buildings on all park boulevards is controlled by a building ordinance, adopted by the Commissioners on April 1, 1805.



SUBMERGED LANDS

Control of the submerged land along the Park front was sought by the Commissioners for years before the Legislature was willing to grant it. The idea that the submerged lands of Lake Michigan belonged to the people of the State, and not to the shore owners, to the extent of their ability, by artificial means, to reclaim said land, was of slow growth. If laws enacted by the Legislature in 1893 and 1895 had been placed on the statute books thirty years earlier, nearly \$200,000, which had to be paid for the made land in the Farwell tract and for the right-of-way for the Pine Street Drive, would have been saved to the tax-payers of the Lincoln Park district. The necessity of having the ownership or control of submerged lands along the Park front was first impressed upon the Commissioners by the operations of sand dredgers, who were accustomed to come close into shore where the water was shallowest. The effect was to weaken the breakwater structures along the shore; and in 1885 a resolution was adopted, calling upon the Governor and the Attorney-General of the State to prevent dredging near the shore. Action was taken by the Attorney-General, in response to the request; but the Legislature, in the same year, refused to pass a bill which had been prepared, granting to the Commissioners control of the bed of the lake from Diversey Avenue to Oak Street to a point 1,200 feet from the shore. After that the sand dredgers were undisturbed until June 4, 1889, when an act was passed, giving to the Commissioners of Lincoln Park all the right, title, and interest of the State in the bed of Lake Michigan for a distance of fifty feet east of any breakwater protecting the driveway, and gave police control over the waters of the lake for 250 feet east of such breakwater, providing that sand could only be taken therefrom by their permission.

A much more sweeping act was passed on June 17, 1893, provid-

ing for the enlargement of Lincoln Park by reclaiming submerged lands along the entire lake front in the district under the control of the Commissioners, the riparian rights of shore owners to be purchased by agreement or by condemnation. On June 15, 1895, another act was passed and approved, granting to the Commissioners of Lincoln Park the power to reclaim submerged lands under public waters of the State to the point of navigable water, by the simple process of adopting a plan locating a boulevard or driveway over and upon the bed of such public waters, its outer line to be the limit of the lands to be reclaimed, and its termini to be within the territory taxable for the maintenance of the Park. The title for all the submerged lands covered by such plan was vested in the Park Commissioners in feesimple for Park purposes, and the act provided for the raising of money to carry out such improvement by the issue of town bonds and special assessments upon property benefited.

Under these acts, the submerged lands from Diversey Avenue to Belmont Avenue, and from Byron Avenue to Devon Avenue, in the town of Lake View, were claimed for Park purposes to an average distance of 1,200 feet east of the shore line, and an ordinance passed against the encroachments on the lake by the shore owners. Various petitions were submitted to the town authorities of Lake View for the issue of bonds and the levying of special assessments to carry out such enlargement of the Park, but owing to the great cost of such an improvement, the necessary consent of the town authorities was not given.

The Commissioners, however, have vindicated their title to all submerged lands included in the plans adopted by them, and in numerous lawsuits have prevented the shore owners from building piers to increase their holdings by artificial means.

MONUMENTS

There are in Lincoln Park many notable monuments and statues, and some beautiful fountains, nearly all of which have been the gifts of private individuals, whose benefactions to the public, for some occult reason, have always taken the one form or the other.

Perhaps the most imposing is the Grant Monument, the great equestrian statue in enduring bronze of the glorious chieftain, mounted upon a massive granite foundation and pedestal, which stands just west of the old Lake Shore Drive, in a commanding position, overlooking the lake on one side and the Park on the other. Soon after the death of General Grant, in 1885, a popular subscription was started to secure funds for the erection of a monument to the dead leader in Lincoln Park, and nearly 100,000 people aided in the enterprise. The following year the foundation and pedestal were erected. On the 7th of October, 1891, the statue, the work of L. T. Rebisso, and the largest ever cast in the country, was unveiled in the presence of the greatest congregation of people that had ever gathered in the city up to that time. The demonstration was sufficiently imposing to measure the devotion paid by the people to the name of Grant. The ceremonies were held under the auspices of the Army of the Tennessee, which was holding its annual reunion at the time. The procession was marshaled by Major-General Nelson A. Miles, and Mrs. Grant and many distinguished people in civil and military life were present.

For many reasons even more entitled to first place in any mention of the statues of Lincoln Park, is the Lincoln Monument, which stands near the southern line of the Park, facing the broad driveway from Dearborn Avenue Boulevard. The statue, a colossal figure in bronze, standing in an attitude of meditation, advanced a step before a great bronze chair, is the work of Augustus St. Gaudens, and is considered by





connoisseurs the finest specimen of portrait sculpture in America. It stands on a granite pedestal four feet in height, in the center of a broad stone platform, approached in front by a low flight of granite steps, and surrounded on the other sides by a granite bench and balustrade. The statue is the posthumous gift of Eli Bates, who, at his death in June, 1881, left \$40,000 with which to erect a fitting memorial to the great emancipator in the Park which bears his name. It was

unveiled with impressive ceremonies on October 22, 1887.

The first of all statues in the Park is "The Alarm," a bronze group of four figures, an Indian, wife, child, and dog, each alert at some approaching danger, the work of John J. Boyle, and the gift of Martin Ryerson, which was unveiled in 1884.

The Schiller Monument, a bronze figure of heroic size, cast in the original mold of the well-known statue of the great poet and dramatist at Marbach, in Würtemberg, his birthplace, was given by Chicago citizens of German descent, and unveiled on May 8, 1886.

One of the most striking of all the beautiful statues that grace the drives and lawns of the Park is that of Robert Cavelier de La Salle, the work of Count Jacques de La Laing, and the gift of Lambert Tree, which was unveiled October 12, 1889. The bronze statue of the great botanist Linné, a gigantic figure fifteen feet in height, mounted on a massive granite pedestal, and surrounded by four allegorical figures representing the seasons, is the gift of Chicago citizens of Swedish nativity, and was unveiled May 23, 1891.

An artistic statue of Shakespeare, presented to Lincoln Park by Samuel Johnston, and located in the perennial garden, was unveiled on April 23, 1894.

In 1895 the statue of Benjamin Franklin was tendered to the Commissioners by Joseph Medill, through the Old-Time Printers' Association. The gift was accepted, a suitable site selected for the statue on the lawn south of the enginc-house, overlooking the Lake Shore Drive, and it was unveiled on June 6, 1896.

In 1894 the Hans Christian Andersen Memorial Association was formed by Danish citizens, not only of Chicago, but of the entire country, for the purpose of raising funds to erect a monument in Lincoln Park to the memory of the kindly teller of stories which have delighted children of all lands. The statue, a bronze figure of the writer, seated, with the swan of "The Ugly Duckling" by his side, was

unveiled on September 26, 1896. Johannes Gelert was the sculptor.

The statue of the "Signal of Peace," an Indian messenger, mounted, bearing a flag of truce, the work of John J. Boyle, was presented to the Commissioners by Lambert Tree, and was also unveiled in 1806.

In 1897 a bronze bust of Beethoven, the work of Johannes Gelert, was presented to Lincoln Park by Carl Wolfsohn.





NOTES

In May, 1891, a boat-landing was constructed at the foot of Fullerton Avenue, at a cost of \$3,557.98.

The speeding-track, east of the Shore Drive from Fullerton Avenue to Diversey Avenue, was constructed in 1895.

On July 4, 1897, a swimming contest was given in the lagoon, under the auspices and management of the National Swimming Association.

The swings as a Park institution, operated for the benefit of visitors for a merely nominal fee, hardly sufficient to pay for the services of the necessary attendant, date from 1876.

In 1882 the owners of the Couch vault presented a petition to the Commissioners that better care be taken of the vault and the grounds immediately surrounding, offering to pay for the same.

The first application on record for the privilege of keeping ponycarts and phaëtons in the Park, to rent to visitors, was made in 1883. It was denied, and it was not until 1892 that a lease was first made for this privilege.

The maps of Lincoln Park published in this report were all drawn by J. H. Lindrooth, still a member of the Park engineering force, and two of them are reproductions of maps originally drawn by him in 1870 and 1873. He has been employed in the Park almost continuously since 1869.

In 1875, among all their other activities, the Commissioners found time and occasion to order the printing of two hundred signs instructing visitors to "keep off the grass." Out of compliment to the large German population of the North Side, half of the signs were done in German, the other half in English.

On November 16, 1880, the Commissioners considered the matter of planting a hedge along the west boundary of the Park, and ordered a plan and estimate of the cost. It was decided later that there would be some disadvantages in screening the Park from the view of the public traveling alongside it, and the plan was abandoned.

For a number of years memorial services have been held at the Lincoln Monument on Decoration Day by Lyon Post No. 9, G. A. R., which has also decorated the monument. The Grant Monument has been decorated nearly every year by Ulysses S. Grant Post No. 28, and services held by the members at the base of the monument.

In 1876 the old "Tunnel Drive," which had been built in 1870 by the city, from the head of Dearborn Avenue, through the cemetery and the old Park, to a point near the lake shore, was abandoned, and the materials used in the construction of the race-course. In after years the race-course was set apart for the use of horsemen as a bridle-path.

In 1887 there were negotiations between the Commissioners and the trustees of the Newberry Library, looking toward the erection of a permanent home for the library in the Park. An act authorizing the erection of buildings for the use of the library in the Park was passed by the Legislature on June 16, but a site was afterward chosen for it elsewhere.

In the year 1892 the artesian-well service was extended to drinking-fountains in various parts of the Park, thirteen being supplied from the south well alone. The water of the north artesian well has long been famous near and far for supposed medicinal qualities, and has hundreds of regular patrons who send their jugs daily to the well to be refilled, while one or two wagon routes have been maintained for years to supply the daily wants of patrons.





A HISTORY OF LINCOLN PARK

Few people know that a folding bridge of the bascule type was erected in Lincoln Park in 1892. It is the bridge across the inlet from the lake to the lagoon on the outer drive, 2,000 feet north of North Avenue.

The inlet was intended to permit the entrance of yach's to the lagoon, but it was so narrow that the entrance was not safe except in the mildest of weather, and the folding bridge has seldom been unfolded.

In March, 1874, the Commissioners achieved the doubtful honor of giving one of the first orders, if not the first, for English sparrows to be delivered in Chicago, and on March 24, thirty-seven pairs of the interesting birds were received from New York, at a cost of \$1.50 per pair, and turned loose in the defenseless Park. There has always been more or less difficulty in keeping animals and birds in the Park collection, but there has never been any difficulty in preserving the flock of sparrows. They have multiplied and increased.

In 1873 a bathing-house was established just south of the North Avenue pier, and operated there for years; while in 1874 the Commissioners, in response to a plea from the City Board of Health for free bathing facilities, offered to set apart space on the beach for bathing, and maintain the beach and bath-houses if the city would erect the latter. The Board of Health returned thanks for the offer, but nothing more ever came of it, and it was not until 1895 that the free bathing beach was opened north of Fullerton Avenue.

In July, 1874, a suggestion was made to the Commissioners to set apart a lake or small stream to be devoted to the propagation of brook or speckled trout. The plan was not deemed feasible, and was not adopted. The next effort on the part of piscatorialists to obtain a footing in Lincoln Park came eighteen years later, on March 20, 1892, in the form of a request from the Chicago Fly Casting Club for the privilege of practicing fly casting in the Park. This was considered an insidious attempt on the peace and happiness of the gold-fish in the Park ponds, and was sternly refused.

In 1891 fifty breeding gold-fish were secured from the United States Fish Commission and placed in the ponds. Their progeny in the South ponds filled thirty barrels when the water was drawn off in 1897 for the double purpose of cleaning the bottom of mud and destroying the carp which were eating all the gold-fish spawn. The German carp, like the English sparrow, has lost its prestige in Lincoln Park, although when the first carp were presented in 1886 by N. K. Fairbank, the Commissioners were highly pleased, and adopted a vote of thanks to their generous fellow-townsman.

One of the most notable events in the early history of Lincoln Park was the opening or inauguration of the parade grounds, now prin-

cipally devoted to base-ball and foot-ball, on June 23,1877, by a review of the First Regiment by the Governor of the State and other officials. The regiment marched up Dearborn Av-



A HISTORY OF LINCOLN PARK

enue to the Park, and was reviewed by the Governor at its entrance. It was estimated that the crowd gathered in the Park to witness the parade was between 15,000 and 20,000 people. The grounds, which had but recently been completed, were appropriated for the use of local militia regiments, for some years were devoted chiefly to that purpose, and are still so used occasionally. In 1898 a regiment, formed to take part in the war with Spain—but never given an opportunity to do so—drilled nightly on the grounds. Drills and reviews of the city police force have also frequently been held there.

In 1881 the first of several petitions which have been made from time to time for the opening of a driveway into the Park from La Salle Avenue was presented to the Commissioners, but on an adverse report from the Superintendent it was placed on file as "impracticable and inadvisable." The attack was renewed in succeeding years, until on August 28, 1893, the Commissioners ordered the opening of La Salle Avenue into the Park. But in the next two weeks they were so bombarded with remonstrances, petitions, and complaints against any interference with the broad half-mile esplanade from North Avenue to Center Street, and the beautiful unbroken stretch of lawn beside it, that on September 12 the order was reconsidered. On June 11, 1894, petitions for and against the opening of La Salle Avenue were again presented, and in 1897 and 1898 the fight was renewed, each time to end in the failure of the project.

The old boat-house on the South Pond, which was torn down at the time the present refectory was built in 1882, had been erected prior to 1869, not by the city, but by the contractors who laid out the Park grounds. They were allowed to erect a building at their own expense for the convenience of visitors, and as long as the pavilion remained no charge was made for the privilege of operating boats for hire and furnishing refreshments. The boat-house was constructed in the semblance of a grotto on its main side, with a roof garden over the first



floor, on which grass and shrubbery flourished. The top of the pavilion was used as a band-stand for all concerts given in the early years of the Park. In 1869 the "Ten-Mile Ditch," which ran through the ponds, gave free access to the lake, and the contractors had considerable trouble with renters of their boats, who would row out into the lake and fail to return. On this account the mouth of the ditch was barricaded.

All possible encouragement has always been extended by the Commissioners to the exercise of sports and games in the Park. Skating races have been held on the ponds since there were ponds to skate on. A number of boat clubs have their home on the lagoon, where regattas are held annually. Bicycle races have been permitted within proper limits on drives and boulevards. Diamonds for baseball and foot-ball, and courts for lawn tennis, have been marked out for the free use of the public, and even croquet has had its untiring devotees. When the practice of setting apart any part of the Park for games was first begun, it aroused some opposition on the part of those who claimed that as Lincoln Park was a public park it was illegal to give special privileges, no matter how temporary they might be, to any one. One of the first tennis games ever played in the Park was broken up by a positive tax-payer, who asserted his equal right to the use of that particular part of the Park by sitting down in the middle of the court and refusing to move until placed under arrest by a Park officer. The protesting citizen did not carry his case to the Supreme Court, and the right of the Commissioners to encourage sports and games was not long contested.

There is hardly a tree standing in Lincoln Park to-day which has not been bought and planted there by the city of Chicago or by the Commissioners. Many of the old scrub oaks, which were scattered over the ground before it was converted into a Park, remained for some years, and a few still remain, but most of them died or were grubbed out to make way for more ornamental shade trees long ago. One of the first cares of the Commissioners in the early history of the Park was that of planting hardy and graceful trees in attractive groups, and in 1870 they filed a protest with the Board of Public Works against the inartistic manner in which the trees in the old Park were being trimmed by the city.

The elms which line the Lake Shore Drive from Diversey Boulevard to the electric fountain were bought in 1870 and 1871. The splendid trees which shade the picnic-grounds were planted at the same time. To buy young trees and wait for them to grow seemed too long a process, and a great number of forest trees, all over a foot in diameter, were bought and brought to the Park at large expense in these years. Nearly 20,000 trees, 10,000 evergreens, and 15,000 shrubs of various kinds have been bought at different times for the ornamentation of the Park. Following is a list of the trees which have been planted, as far as their names are shown in the Park records:

Elms, 4,816; maples, 2,180; ash, 882; acacia, 600; birch, 541; willows, 429; linden, 345; thorns, 165; chestnut, 101; larch, 110; catalpas, 50; dogwood, 50; sycamores, 44; cottonwood, 7; oaks, 3; unclassified, 9,621; total, 19,944. The total expenditure for the purchase of trees for the Park alone, exclusive of boulevards, has been \$48,301.80.



AREAS OF PARK AND BOULEVARDS

The following tables, prepared by A. A. Babcock, the park engineer, give details of the areas of Lincoln Park, the small parks, and the boulevards under the control of the Commissioners, the length of drives and walks and boulevards, and other information of that character:

Character.			
Lincoln Park-			
Grass Plats	162.841		
Grass Plats along Lake Shore Boulevard	12,000		
Total Lawn Surface		174,850	
Walks (not concrete)	21.745	, ,	
Concrete Walks	2.031		
Concrete Walks along Lake Shore Boulevard	0.003		
Parapet and Promenade	2.743		
Rustic Steps	0.202		
Total Walks.		27.624	
Drives	35.756		
Roadway, Lake Shore Boulevard	4.063		
Speeding-Track	2.020		
Bridle-Path	4.207		
Bridle-Path along Lake Shore Boulevard	1.083		
Bridges	0.737		
Total Drives		47.875	
Paved Beach	6.487	., ,,	
Revetment	0.888		
Sand Beach	5.127		
Total Beach		12.502	
Buildings, Shelters, etc.		2.793	
Cages, Animal Pits, etc.		0.391	
Fountains and Monuments		0.685	
Boat Landings		0.424	
North Pond	9.571		
South Pond	9.270		
Lagoon	20.124		
Aqua Regia Pond	140.		
North Lily Pond	.485		
South Lily Pond	101.		
Other Water Surfaces	1.336		
Total Water Surface		40.028	
Total		4920	308,072
hicago Avenue Park			
Jnion Square			9.160
Il Boulevards			0.462
			91.433
Total acreage, Lincoln Park system			400.127
			409.12/

BO	HT.	EV A	RI	21

NAME .	From	ть То	LENGTH IN FEET	WIDTH IN FEET	ACRES
North Ave. Boul. Dearborn Ave. Boul. Garfield Ave. Boul.	Oak St. Pine St. North Ave. North Ave. Clark St. N. Park Ave. Lake Michigan Diversey Ave. Belmont	Clark St.—Burton Pl.—Clark St.—Fullerton Ave. Orchard St.—Chicago River—Belmont Ave.—Grace	1,670 1,179 3,600 3,933 1,382 651 159 2,375 2,695 12,440 2,585 4,680 11,340	66 112 202 200 66 80 66 66 66 66 66 80 125 80	2.530 3.139 16.700 18.078† 2.094 .651 .159 2.375 4.083 18.848 4.747 13.429 20.826
Construction.		0			

The following measurements are for the various improvements lying wholly within Lincoln Park, or in other words, between North Avenue Boulevard and Diversey Avenue Boulevard, and for the Lake Shore Boulevard from Oak Street to North Avenue:

Lake Shore Boulevard, Oak Street to North Avenue Lake Shore Drive Outer Beach Drive Stockton Drive West Drive Connection Drive Ridge Road Ramble Drive South Drive Other Drives Speeding-Track Bridle-Path, Oak Street to North Avenue	9,037 feet 5,075 feet 4,362 feet 4,362 feet 1,275 feet 3,150 feet 1,655 feet 4,836 feet 2,750 feet 7,827 feet	
Total drives		niles
W II / A	12.933 miles	

Brought forward Parapet Promenade Annual Department Walks Clark Street Broad Walk Lake Shore Boulevard Walk	5,400 feet - 1,650 feet - 2,980 feet	12.933 miles	10.374 miles
Total Concrete Walks.	- 13,963 feet	2.640 miles	15.573 miles
Total length of Drives and Walks			25.947 miles

There is a total length of 33,291 feet (6.307 miles) of concrete curb and gutter now in use.

Within the boundaries of Lincoln Park there are several systems of underground work, of which the following figures give the approximate lengths of the various sizes of pipes, etc., and their valuation:

SEWERS

1,322 Lineal Feet 20 inch Brick Sewer at \$1.50	\$1,983.00
2,200 Lineal Feet	1,320.00
5,565 Lineal Feet 12-inch Pipe Sewer at .45	2.554.25
15,700 Lineal Feet 9-inch Pipe Sewer at .30-	4,710.00
22,201 Lineal Feet. 6-inch Pipe Sewer at .20.	- 4,458.20
77 Lineal Feet 4 inch Pipe Sewer at .15	11.5
47,155 Lineal Feet, total length of Sewers, or 8.931 miles	- \$15,037.00
600 Catch Basinsat \$15.00-	9,000.00
75 Manholes at 20.00	
	\$25,537.00

WATER PIPES

525 3,257 9,271 10,331 7,382 2,304 48,307 24,718 839	Lineal	Feet Feet Feet Feet Feet Feet Feet Feet		16-inch 10-inch 8 inch 6-inch 4-inch 3-inch 2-inch	Water Water Water Water Water Water Water Water Water Water	Pipe at Pipe at Pipe at Pipe at Pipe at Pipe at Pipe at Pipe at	1.25 - 1.00 - .80 - .60 - .50 - .40 - .30 - .20 -	14,492.10
109,909	Lineal	Feet, total	length	of Water	Pipes, o	or 20.816	miles	842,850.30
30	Hydrai	its				at \$	30.00	900.00
785	Street	Pipe Valves Washers or	Hose (Connectio	ns	at	2.00	900.00
		ıe						

ELECTRIC-LIGHT CONDUIT

17,952 Lineal Feet of 2 inch Conduit with two Cables.	
Total Value about	\$20,000.00



LINCOLN PARK TAXES

The following table shows the amount of the estimates made annually by the Commissioners of Lincoln Park of the money needed for the maintenance and improvement of the Park for the ensuing year; the appropriations made in each year by the supervisors of the two towns of North Chicago and Lake View, as extended upon the tax warrant; the total amount of the levies for each year and the total net collections of the warrant of each year, the sums lost in process of collection and the costs of extending and collecting the tax having been deducted from the amount of the warrant before the collections as given in the table include \$4,613,287.87, the amount received from the tax warrants for 1870 to 1898 inclusive, and \$25,000, advance collections on the tax warrant for 1899, which is now in the hands of the County Collector. The final payments on this warrant will not be made before December, 1899.

	,	> > -			
YEAR.	ESTIMATE OF COMMISSIONERS,	LEVY BY SU- PERVISOR OF NORTH CHICAGO.	LEVY BY SU- PERVISOR OF LAKE VIEW.	TOTAL LEVIES.	TOTAL NET
1870	\$60,000.00	\$59,088.16	\$3,058.53	\$62,146.60	
1871	65,000.00	62,110.43	3,852.05	65,962.48	\$58,527.71
1872	75,000.00	65,434.17	7,033.98	72,468.15	61,905.15
1873	79,442.19	69,758.03	9,684.16	79,442.10	68,500.02
1874	85,000.00	70,421,24	15,825.59	86,246.83	76,308.07
1875	92,000.00	79,261.00	12,584.23	91,845.23	79,266.32
1876	125,000.00	97,905.53	13,000.00	110,905.53	85,258.13
1877	75,000.00	75,413.82	9,957.45	85,371.27	105,584.43 81,880.44
1878 .	75,000.00	75,000.00	0,500.00	84,500.00	01,000.11
1879	85,000.00	90,240.00	14.954.63	105,104.63	79,987.71
1880	115,000.00	108,170.00	13,349.67	121,528.67	99,232.04
1881	115,000.00	104,012.14	10,110.00	115,362.13	116,117.10
1882	130,000 00	100,102.00	7,492.46	107,594.46	111,268.71
1883	150,000.00	129,000.00	5,724.25	134,721.25	
1884	170,000.00	149,973.67	5,537.69	155,511.36	130,571.14
1885	160,000.00	145,615 60	8,080.71	153,696.31	152,444.87
1886 .	170,000.00	152,448.30	8,207.36	160,655.66	150,596.00
1887	180,000.00	160,164.33	8,114.90	168,279.23	157,140.72
1888	00,000,081	160,212.28	8,050.80	168,263.08	165,289 24
1889	190,000.00	170,247.85	8,123.58	178,371.43	173,362.30
1890	220,000.00	179,574.74	19,489.87	199,064.61	194,497.20
1891	260,000.00	224,047.10	24,443.02	248,491.11	244,819.03
1892	357,000.00	275,700.34	25,168.47	300,868.81	292,768.95
1893	300,000.00	270,737.73	27,748.05	298,485.78	288,881.60
1894	378,500.00	304,502.24	30,344.92	334.847.16	323,222.38
1895	380,548.00	267,090.45	40,356.07	307,446.52	297.529.06
1896	418,030.00	248,662.78	45,689.25	294,292.03	284,180.18
1897	- 289,000.00	204,499.91	37,282.80	241,782.71	229,573,82
1898	396,000.00	189,288.01	55,866.96	245,154.07	234,473.83
1899	396,000.00	194,008.32	50,582.96	244,620.02	*25.000.00
				- 17,020.02	~5.000.00

Totals \$5,780,520.19 \$4,483,539.26 \$539,555.40 \$5,023,123.30 \$4,638,282.87

GENERAL FINANCIAL STATEMENT OF THE COMMISSIONERS OF LINCOLN PARK TO MARCH 31, 1899

			15

General Park tax, collected Special assessment for land purchase Net proceeds land purchase bonds Accrued interest land purchase bonds	\$749,400.00	4,638,282.87 1,243,312.85 760,231.22
Pine Street Drive assessment	\$89,818.85 16,963.00	106,781.85
Shore protection bonds	\$500,000.00 20,789.75 5,113.53	525,903.28
Lincoln Park Boulevard assessment North Shore Drive assessment Ohio Street Extension. Oak Street Breakwater Cobb's sidewalk assessment. Rent of boats. Rent of refectories. Sale of sand. Rent of swings Labor and teaming Pier privileges. Interest on bank balances Phaêton privileges. Sale and rent of electric launches Rent of steam roller Sale of animals. Sale of ice. Rent of axle-grease factory North Avenue Boulevard Diversey Avenue Boulevard, east Fullerton Avenue Boulevard, south Dearborn Avenue Boulevard, south Dearborn Avenue Boulevard, south Dearborn Avenue Boulevard Lake View Avenue Boulevard Lake View Avenue Boulevard Sheridan Road	\$8,008.85 2,649.35 493.30 1,186.81 1,751.01 1,648.52 200,40 16.65	
Deposits on permits		20,293.61

Total - \$8,304,263.46

DISBURSEMENTS

Land purchase account	717,305.04 8:	2,637,940.70
Shore protection	\$602,832.98 201,625.00	804,457.98
Beach improvement Oak Street Breakwater Belmont Avenue Breakwater Pine Street Drive Lincoln Park Boulevard improvement North Shore Drive Ohio Street Extension Cobb's sidewalk Administration Police department Floral department Animal department Water supply, estimated		108,430.94 6,170.00 3,844.45 118,610.57 96,450.79 332,119.41 1196,70 261,606.08 372,445.88 206,925.41
Lagoon bridge	\$17,761.83 15,776.41 19,914.11	53,452.35
Academy of Sciences, construction Academy of Sciences, maintenance	\$24,301.11 27,498.74	51,799.85
Monuments Artesian wells Sewers New barn Boats Electric launches	\$49,727.76 10,178.41	28,106.91 19,299.66 29,428.51 24,025.97 59,906.17
New barn Boats Electric launches South Refectory, construction North Payllion, construction Chicago Avenue Park Interest on loans Swings General improvement and maintenance of Park Sheridan Road, maintenance Lake View Avenue Bonlevard, maintenance	\$12,361.93 2,727.95	14,611.33 18.447.95 10,517.49 16,669.93 6,356.14 1,559,495.67
North Avenue Boulevard, maintenance and improvement— Lincoln Park Boulevard, north, maintenance— Lincoln Park Boulevard, south, maintenance— North Park Avenue Boulevard, maintenance— Diversey Avenue Boulevard, east, maintenance— Diversey Avenue Boulevard, west, maintenance— Fullerton Avenue Boulevard, west, maintenance— Fullerton Avenue Boulevard, east, maintenance— Dearborn Avenue Boulevard, maintenance—	7,259.88 2,938.43 6,927.68 4,096.48 617.15 1,970.20 1,307.87 1,418.15	53,430.75
Cash balance, March 31, 1899		192,182.54
Total		\$8,304,263.46







OFFICE OF THE COMMISSIONERS OF LINCOLN PARK, LINCOLN PARK.

CHICAGO, March 31, 1899.

To The Honorable, The Mayor of the City of Chicago. Sir,—In compliance with Section 18 of the Act of June 16, 1871 (amendatory of the act of the General Assembly of the State of Illinois of February 8, 1869, under which this Board was organized), the Commissioners of Lincoln Park submit herewith their annual report for the fiscal year ending March 31, 1899.

P. M. WOODWORTH,
President.

Attest:

I. J. Bryan, Secretary.



PRESIDENT'S REPORT

Сисадо, April 1, 1899.

TO THE COMMISSIONERS OF LINCOLN PARK.

Gentlemen,-The members of this Board, and the tax-payers of the towns of North Chicago and Lake View, have joint cause for congratulation in the fact that in the last fiscal year, with a total revenue from the tax levy smaller than previous boards have devoted to the ordinary running expenses of the Park, such expenses have been cut down to a lower notch than they have reached in years, thereby saving over \$60,000 for permanent improvements of various kinds, for all of which there was some pressing need. In the year just passed, as in the year preceding it, the most difficult problem this Board has had to face was that of determining how to achieve the best results with an appropriation much too small for the manifest and crying necessities of Lincoln Park. In order to render available for needed improvements the largest possible share of the Park revenues, the ordinary charges for maintenance were reduced in every feasible manner in each department, and by close and careful economy they were cut down to \$127,909.33, a saving of \$12,270 from the year before, and of \$63,500 from the year preceding that. A larger proportion of the funds of the Park have been devoted to permanent betterments than has been the case in any recent year. Much important work had to be postponed or neglected because of the lack of funds, but that which seemed the most essential was accomplished, and care was taken this year, as last, not to exceed the actual revenue. For the second time in years the new year is begun with a credit balance instead of a large deficit. This result has not been accomplished without great difficulty, the natural tendency being to borrow from the future to make repairs and improvements which are vitally needed, but for

which there are no funds. The rule was laid down, however, and rigidly adhered to, to keep the expenditures well within the revenues. That the Commissioners should feel a more direct responsibility and keep in close touch with Park affairs, no expenditures are made except on requisitions approved by the several committees having different departments of the Park in charge, and ordered by the Board. In the same way all bills for supplies must be indorsed by the head of each department and by the Superintendent, and be scrutinized and approved by the proper committee before final action by the President, Auditor, and Secretary. This system was inaugurated August 4, 1897, when new rules were adopted by the Commissioners for their government, and its workings have been very satisfactory. For comparison, there is appended here a table of the tax levies of half a dozen years past, the expenditure in each year for Park maintenance, and the financial condition of the Park at the end of each year.

YEAR.	TAX LEVY.	MAINTENANCE EXPENDITURES.	DEFICIT AT END OF YEAR.	BALANCE AT END OF YEAR.
1893-1 1894-5 1805-6 1806-7 1897-8	334,847.16 307,499.22 294,292.03 241,782.71	\$158,126.02 185,672.50 168,878.80 191,422.65 140,180.04 127,999.33	\$84,564.60 31,680.15 44.541.10 50,601.97	\$196.63 24,603.45

Attention was called, in the last annual report, to the danger of serious damage being done by the lake, to the paved beach along the Park front and the sea-wall south of Burton Place, and to the necessity of additional protection to enable them to withstand the force of the severe lake storms. This necessity was strikingly emphasized last fall by a series of violent storms which toppled over a section of the sea-wall at Schiller Street, undermined the rest of the structure.

and ripped up the paved beach north of North Avenue for a distance of 1,000 feet. A year ago it was estimated that the sea-wall and paved beach could be protected by driving down sheeting along the entire extent, at an expense of approximately \$60,000. A much larger amount will now be necessary to repair the destruction caused

by the storms of last year, and to permanently protect the work. A beginning was made in this direction last summer, when a contract was awarded for 1,000 fect of extra piling and sheeting along the paved beach from North Avenue north, but this protection was not completed when continued bad weather made it advisable to stop the work. There is available for the work of shore protection the proceeds of the sale of bonds of the town of North Chicago of the face value of \$40,000, authorized by the Legislature in 1891, which were sold last summer at a premium of \$6,600. Unless a further issue of bonds is authorized, it will be necessary to appropriate a large sum from the general fund of the Park the coming year to protect the lake front against more extensive damage by storms.

During the year a number of important improvements have been designed and executed. Many of them, at a comparatively small cost, have greatly enhanced the beauty of the Park, or greatly increased the comfort and convenience of visitors, besides facilitating the work of employés. The principal item of expenditure in the improvement account was the construction of a new barn. This building, which is located near the Lake Shore Drive north of Fullerton Avenue, is of unpretentious architectural design, but large enough for the accommodation of seventy horses, and for all wagons, carts,

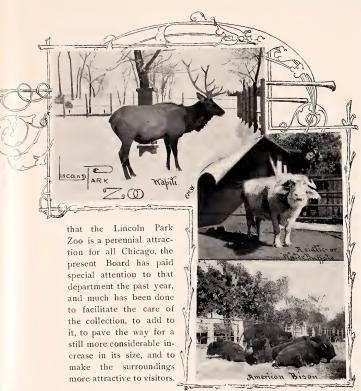
sprinklers, etc., besides furnishing ample quarters for the paint-shop, carpenter-shop, blacksmith-shop, and the general storeroom. Its construction was forced by the absolute necessities of two departments. For several years the horses had been stabled in the basement under the flower propagating houses, where they were subject to an un-

healthy degree of heat, both in summer and winter; while the constant and excessive dampness caused by the leakage through a rotten wooden floor of the water thrown on the flowers in the plant propagating houses above was equally injurious to the health of horses and employés, and the appearance of all vehicles, harnesses, and tools which had been stored there. To have made the floor water-tight would have entailed an expenditure of at least \$8,000; and as that would have removed but one of many vital objections to the continued use of such quarters as a stable, the building of a suitable barn seemed to be the most economical solution of the problem.

The collection of animals in Lincoln Park, the only one in the city of Chicago, has for thirty years been a chief attraction for a large majority of visitors. For several years little

attention has been paid to it; and while the natural increase kept up the size of the collection, the quarters in which the animals were kept were allowed to fall into decay. Outside of the brick structure, built in 1889, the animal-houses were mere wooden sheds, unsightly and impossible to keep clean. The buffalo herd, which might long ago have been by far the finest in the country, had been depleted by wholesale exchanges, and by sales at figures which now seem ridiculously below the real value of the animals. Recognizing the fact





Heretofore all tropical animals had been kept in the main animalhouse in the winter, and in detached and more open cages at some distance away during the summer. Twice a year it was necessary to drive the lions, tigers, leopards, jaguars, and hyenas into a movable cage, and transport them back and forth. There was always danger of injuries to the employés engaged in the work, and injuries to the animals were not infrequent. To obviate the necessity for these transportations, to provide the animals with roomier quarters, and to give the public better opportunity to see and admire them, an improve ment of great value has been carried out at an expense only trifling in comparison with the benefits derived. In place of the detached cages in the center of the animal-house, larger and more substantial cages were built last year along the south wall of the building, and summer cages have just been constructed along the outside of the south wall, with doorways connecting them with the winter cages. During the summer the tropical animals will have the use of both sets of cages, while in cold weather the doors will be closed and the animals will be kept in the warm house. The remodeling of the interior of the animalhouse cost \$3,544.17. The work necessary to complete the summer cages and connections, now practically finished, will cost about \$3,000.

A small animal-house of pleasing architectural design has been constructed, at a cost of \$5,153.14, just south of the deer-paddock, with winter and summer cages for small animals and birds, and with a large dry basement for storing vegetables and other perishable supplies for the big animal boarding-house of Lincoln Park. Before this improvement was carried out, most of these animals were kept in out-of-the-way places, and there was a constant loss because of the entire lack of a suitable storehouse.

The new animal-house and the alterations of the older and larger structure embody some of the most advanced and successful ideas in the care of wild animals, a thorough inspection of the systems followed in the zoological collections of Cincinnati, Pittsburg, Philadelphia, and New York having been made early last summer by the Superintendent and myself. The best features of all were combined in the plans adopted by you.

Neat and substantial wire fences were built about the buffalo-park and deer-paddock, and around the duck-pond, at a cost of \$1,127.40; and a new summer shelter was built for the elephant "Duchess," the favorite of all children and many adults.

The houses for the gold and silver pheasants and other birds of gorgeous plumage, which are among the most admired members of the bird family in the Park, have long been an eyesore, and besides are unfitted for a proper display of the feathered beauties, or for their safe-keeping, and the construction of three handsome pheasant-houses is under way.

When the wooden sheds now used for the buffalo, elk, and deer have been replaced by more substantial and less unsightly structures,—an improvement which should be carried out in the near future,—the entire collection of animals and birds will be properly and permanently housed for some time to come, though the capacity of the buildings to care for additional increases will be almost reached. It would be fortunate if more space were available for the buffalo-paddock, and if it becomes possible to enlarge the Park by filling in the lake north of Fullerton Avenue, arrangements to increase the paddock can easily be made. The buffalo herd in Lincoln Park is probably the largest and finest in the country, and as the race is practically extinct in its wild state, I would recommend that no buffalo cows be sold, but that the herd be carefully guarded and increased.

The improvements in the animal department had progressed so far last December, that authority was given for the expenditure of \$5,000 for the purchase of new animals. Much time and attention has since been given, with the view of securing such animals as would add the most to the attractiveness of the zoölogical collection, and of securing them on the most reasonable terms. The first purchase made

under this authority was that of a lion, a tigress, a yak, a European fallow deer, and a pair of zebus. An order has also been given for the importation, from Europe, of camels, kangaroos, ostriches, black leopards, and other animals.

There are many animals which would add greatly to the interest of the Park collection, and to its value as a living lesson for students of natural history, but their cost is prohibitive under the present financial conditions. I hope the time will come when some public-spirited citizen, anxious to devote his wealth to the benefit of the people, will make the discovery that in no way could he provide more pleasure and instruction for a greater number of people than by presenting a large sum to Lincoln Park for the purchase of animals and the construction of new and improved buildings. The present animal-house, with all the improvements of the past year, is hardly large enough for the present needs; and if the collection is to be increased by the addition of some of the many rare and expensive animals not now represented, a much larger building will be needed, as well as a larger fund for the purchase of new animals, than the Commissioners now have or are likely to have at their command for some years.

In April the old wooden bridge across the South Pond channel was replaced by a substantial bridge of iron and stone, and the road, which had been closed to the public throughout 1897, was reopened.

Late in the year a private telephone system, connecting the Park office, barn, greenhouse, animal-house, new animal-house, and power-house, was put in, at a cost of \$521.25, thereby effecting a saving of much valuable time in the transmission of orders and reports.

Much work which was deemed of the utmost importance to the proper maintenance of the Park had to be postponed because of lack of funds. In the propagating of flowers and plants, Lincoln Park, which has long held a proud position in the lead of all other Chicago parks, has been badly handicapped by the unscientific plan on which its greenhouses were constructed, and because of their inadequacy in



size. The combination of horticulture and horse-stabling was as unfortunate for the flowers as it was for the horses. The fumes of ammoni 1 from the basement stable were injurious to all the vegetation above them. This trouble has been removed by the construction of the new barn. There is still, however, one very serious defect in the arrangement of the greenhouses, in that, instead of being built on the ground, they are raised a number of feet above the ground, on a wooden floor. Many beautiful and rare varieties of plants cannot be cultivated under such conditions. They are too far away from Mother Earth; and until the greenhouses are taken down from their stilts and put on the ground, where they belong, the skilled gardeners of Lincoln Park will be at a serious disadvantage. The greenhouse roofs are built of wood and glass; the wood is rotting, and unless new and modern greenhouses of iron and glass are soon constructed, continual and vexatious repairs will be necessary. Plans have already been drawn for the reconstruction of the greenhouses, and the addition of a few more houses at an approximate cost of \$24,000, and it is hoped that the work will be completed early in the coming year.

Orders have also been given by the Board for the construction of toilet-rooms at the base-ball grounds, to replace the present structure.

Attention was called in the last annual report of the Commissioners to the poor condition of nearly all the driveways in the Park. As all who drive over them or ride over them on bicycles are well aware, they are rough and uneven, the granite top dressing having almost entirely disappeared. To put them in good condition, an expenditure of at least \$50,000 will be necessary. No money was available for such work during the last two years, and the present prospect is that these badly needed repairs will have to be postponed over another summer.

You have already decided to use no more cinders in the construc-

tion of walks in the Park, and as soon as possible all the cinder walks should be replaced by cement walks.

I desire again to carnestly recommend that steps be taken as soon as possible to increase the capacity of the electric-lighting plant, so that all boulevards controlled exclusively by the Park can be lighted from the Park plant. At present that part of the Sheridan Road known as the North Shore Drive, from Belmont Avenue to Grace Street, is lighted by private contract, a a cost of \$1,500 per annum; and when the Ohio Street Extension of the Lake Shore Drive is completed, you will be compelled to provide for the lighting of that boulevard as well. The cost of a new dynamo, the necessary increase in boiler capacity, and the necessary lamps and wires would not be great, and the interest on such an investment would be far less than the present and prospective annual charges for lights furnished by private corporations. There would be a yearly saving of \$1,000 and upward.

I am not in favor of the acceptance of any more city streets as boulevards, except where the owners of the abutting property expressly guarantee the payment of whatever sums it may be necessary to expend for their proper maintenance. Where contracts have not been made with the abutting property owners for the maintenance of Park boulevards, all moneys expended for their care must be taken from the general fund raised by taxation on all property in the towns of North Chicago and Lake View,—a system which is unfair to the tax-payers who do not derive direct benefits therefrom. Under such an agreement, Garfield Avenue, from Clark Street to North Park Avenue, was accepted as a boulevard December 7, 1898, the City Council having passed an ordinance tendering the street to the Commissioner's of Lincoln Park on November 28.

With the rapid growth of population in North Chicago, and particularly in Lake View, has come a serious demand for the enlargement of Lincoln Park, which is now hardly large enough for



lioness and Cube all born at lineals lark Too.

A HISTORY OF LINCOLN PARK



the growing population for which it furnishes the only convenient place of public recreation. The increase in the value of land on three sides of the Park makes additions to it in any landward direction impossible, except at an expense which would be practically prohibitive. The only alternative is that of wresting land from the When the paved

beach was constructed from North Avenue to Fullerton Avenue, and over sixty acres added to the Park, it was in contemplation to extend the breakwater and beach to Diversey Avenue. If this were done, some thirty-seven acres would be added to the Park domain, and the lagoon could be extended a half-mile farther, making the finest land-locked boating-course for mile races in the country. A harbor for yachts could be provided, and the acreage of the Park in Lake View almost doubled. The expense would be inconsiderable in comparison with the vast benefits to be derived from the improvement.

The soil of Lincoln Park is thin and poor, and constantly growing poorer. The original sand dunes upon which the Park was laid out were covered with good soil to a varying depth, seldom more than a few inches, and more and more of this good soil is constantly washed down through the loose sand, and lost. The soil is so poor, in fact, in most of the older portions of the Park, that it is more and more a matter of surprise that it should be possible to keep up the lawns at

all; and last summer the grass was only kept green by sprinkling it night and day during the several weeks of dry weather. The engines and pumps at the waterworks were run to their full capacity every hour of the twenty-four, pumping 5,000,000 gallons of water daily; and in that way it was possible to keep the grass in fairly good condition. The time will come soon when even such extraordinary efforts will not avail, and it will be absolutely necessary to remove the sod and renew the lawns with good soil, preferably a layer of clay, and over that one of black soil, the clay being necessary to prevent the fertile soil from filtering through the sand. It will be impracticable to treat more than a small part of the Park in this manner in any one year, and it is important that the work should be begun at once if funds can be set apart for it. The expense will be great, but the only result of longer delay will be to add to the cost of what must inevitably be done.

Considerable work was done last year on the construction of the Ohio Street Extension of the Lake Shore Drive, but it is still far from completion. I am strongly in favor of stopping this work altogether until the entire amount due from the property owners under their contract with a former Board has been paid in. The contracts originally called for the payment of the assessments in full in 1892. The time was extended several times, but in 1896 payment in full was demanded, and some of the owners made their final payments. Others are still in arrears. The early completion of the drive would entail an expense on the Park out of proportion to the benefits to be derived from it until there is some connection between the boulevard systems of the North and South sides. No provision was made in the contract with the shore owners, who will profit most by the construction of the drive, for its maintenance by them; and as the charge on the general fund of the Park for the care of the boulevard will be considerable, it would be unwise to proceed with the work until the property owners have fulfilled their part of the contract by making their final payments. A fund of \$25,000 will be secured from the shore owners for



the construction of a break-water 1,400 feet long from the sea-wall at Bellevue Place to the new work at Oak Street; but the expense of filling the space from Oak Street to the breakwater, and improving it as a park, with a continuation of the paved beach, drive, parapet, bicycle-path, walks, etc., connecting the old and the new shore drives, will all have to be borne from the general fund. It will be impossible to set any-

thing apart for that purpose during the coming year from the reduced revenues of the Park.

Another contract made by a former Board, which entails considerable expense upon Lincoln Park, is that which was entered into with the Academy of Sciences. A contribution of \$25,000 was made toward the construction of the building, and a heavy burden was laid on Lincoln Park for all time by the pledge of the payment of \$6,000 of \$7,000 annually for the heating, lighting, and cleaning of the building, and the payment of the salaries of officers and employés of the institution.

The refectory and phaëton concessions of the Park were let last year for periods of three years, the phaëton concession bringing a much larger revenue than before, and the lease of the refectories a somewhat smaller return, owing indirectly to the fact that the patronage of the boats in the Park has fallen off in recent years, presumably because of the vast increase in the use of bicycles.

There is great cause for congratulation on the part of all lovers of Lincoln Park in the final adjudication by the Supreme Court of Illinois of the question of the relative rights of Lincoln Park, and of private owners of property along the shore of Lake Michigan, over the submerged lands from the shore line to the point of navigable water. The Supreme Court has affirmed the constitutionality of the act, which in effect vests the title of all such submerged lands along the entire lake front, from the Chicago River to Devon Avenue, the northeast boundary of the town of Lake View, in the Commissioners of Lincoln Park for the benefit of the Park. Shore owners are debarred from building piers to increase their holdings, and the Commissioners are empowered to fill in the lake to the point of navigable water for the extension of Lincoln Park. The time will come when this right will be a priceless heritage for the children of a greater, more densely populated Chicago.

One of the most important duties which will demand your attention in the coming year is that of pushing the improvement of Diversey Avenue Boulevard from Clark Street to the river. This is the only possible connection with the Park and boulevard system of the West Side, which has already been completed to the river. There have been legal obstacles in the way of securing the confirmation of an assessment for the improvement of the boulevard, which is now in an almost impassable condition, but many of them have been smoothed away. There are still some legal questions which may give trouble, but the matter is being pushed in the courts, and it is important that nothing should be left undone which may aid in securing the speediest possible consummation of this much-needed improvement.

The determination of this Board to keep intact all moneys derived by taxation from the town of North Chicago, for a sinking fund for the retirement of shore protection bonds, has been faithfully maintained, and the fund now amounts to over \$43,000, which is drawing interest at $2\frac{1}{2}$ per cent. There are outstanding bonds of this kind to the amount of \$500,000, of which \$300,000 will fall due in 1907, \$160,000 in 1911, and \$40,000 in 1918. The Supervisor of the North



will be a deficit of over \$100,000 in the sinking fund when the bonds fall due. This will then have to be made up by an extraordinarily large levy, unless the annual levy is increased from this time sufficiently to make up the deficit. The charges for interest on shore protection bonds will be \$25,000 annually, from now on to the retirement of the first issue.

I hope that the Board will consider well the improvements to be made in the coming year, and not make any expenditures in excess of the amount of our appropriation.

Last summer the park foremen, the employes of the animal department, the drivers of sprinkling-wagons, and the workmen employed on the drives and boulevards were put in uniforms, greatly to the improvement of their appearance.

I wish to call attention to the very efficient services of Mr. I. J. Bryan, not only as our Secretary, but in compiling the history of Lincoln Park from the beginning up to the present time. It has never been undertaken before, and I consider it very valuable. Admirers of Lincoln Park will be much interested in its early history.

I wish also to call attention to the report of the floral department, prepared by our head gardener, Mr. C. J. Stromback, who has been in our Park for the last twenty years. This is the first time that a complete botanical catalogue of the plants and trees in Lincoln Park has been printed. It will prove valuable to all who are interested in that line of work.

The present Board, as an official body and as individuals, suffered a serious loss in the death of their colleague, Commissioner Horatio N. May, September 30, 1898.

P. M. Woodworth, President.

ATTORNEY'S REPORT

Chicago, April 1, 1899.

TO THE COMMISSIONERS OF LINCOLN PARK.

Gentlemen,—I have the honor to submit the following report of the business of public importance transacted in the law department of Lincoln Park since April 1, 1898:

The objections filed by L. W. Yaggy and Parker R. Mason, to the assessment for the improvement of the North Shore Drive, have been overruled by the court, and the assessment confirmed.

This will produce some \$5,000 toward covering expenditures made in the completion of the driveways.

The assessments made for boulevarding Fullerton Avenue between Clark Street and Orchard Street, and for curbing and guttering Sheridan Road between Evanston Avenue and Ainslie Street, and between Winona Avenue and Foster Avenue, have also been confirmed by the court, and the money for these improvements will probably be available at once and the improvements made.

There has been much difficulty in settling the legal status of Diversey Street between Clark Street and the North Branch of the Chicago River, because of uncertainties arising concerning the legality of granting ordinances, repealing ordinances, and defective street grants, and because of factional opposition of some few property owners along the street. But now many of these difficulties have been happily adjusted, most of the assessment for the improvement confirmed, the first installment of the assessment in process of collection, and we may reasonably expect that before the present summer season ends, we will have a beautiful boulevard completed, extending from Lake Michigan to the North Branch of the Chicago River, and there connecting with another boulevard, uniting all the West Side parks.—

Humboldt, Garfield, and Douglas,—and thence to Washington and Jackson parks, semicircling the city, and completing the chain of Parks with a boulevard over twenty miles in length. The credit for accomplishing this great work is due to the urgent requests and persistent solicitations of Governor Tanner, the continuous attention given the subject by the Board of Commissioners of Lincoln Park, and the tireless perseverance of a committee of Diversey Street property owners headed by Mr. Henry Winter.

In the suit of the Chicago Lumber Co. vs. The Town of Cicero, decided by the Supreme Court of Illinois, October 24, 1898, and reported in the 176 Ill., page 9, an important question of interest to parks in regulating boulevards and driveways was decided.

It was claimed in that case that no municipality or other authority had power to determine what kinds or classes of teams should be permitted to use boulevards or driveways, or had power to exclude one kind of teaming and permit another kind; that all driveways were for the use of all the people of the State, and not for one class of people. But this contention was not sustained by the Supreme Court, which held that there is nothing unreasonable in excluding traffic teams from a street designated and intended to be a pleasure driveway. Such a driveway, the court said, must be constructed and paved in a particular manner, and if heavy teaming is allowed, injury would result, and frequent repairing would be necessary.

Neither can it be said that pleasure and recreation are not as much for the good of the people as business and traffic. This decision practically places all boulevards and driveways taken and improved by Lincoln Park under the sole and exclusive control of the Park authorities, so far as their use is concerned.

But the most important suit in all respects is that of Revell vs. The People, decided by the Supreme Court of Illinois, in a decision filed December 21, 1898. This was a suit brought by the Attorney-General in the name of the People against Alexander H. Revell, charging that he, being the owner of a lot fronting on Lake Michigan, constructed two piers of timber and stone, 130 to 200 feet in length, out into the lake, at right angles to the shore, upon the submerged

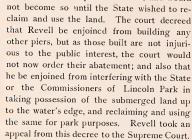
land opposite his lot, which structures, it was claimed, were an irreparable injury to the State, and a purpresture, and should be abated or seized for the benefit of the State. An injunction was asked for enjoining him from building piers in the bed of Lake Michigan, and from doing any work on the piers then built, from filling in any of the bed or encroaching on the water of the lake.

Revell answered, claiming that his only purpose in building the piers was to protect his land from erosion or waste; that prior to its construction there had been violent erosion, and his land was threatened with further waste; that his piers were not an interfer-

ence with navigation; and that the people had no interest in them or right to their removal. He further alleged that the suit was not brought in the interest of the people, but by the Commissioners of Lincoln Park, who are interested in obtaining a decision as to the rights of shore owners whose lands they may desire to condemn and acquire, and that therefore the suit is not brought in good faith.

Afterward Revell filed a supplemental answer, alleging that since the filing of his former answer the Commissioners of Lincoln Park had adopted a plan for the enlargement of Lincoln Park, and the location of a boulevard over the bed of the lake about 1,200 feet east of the shore line of his lot, for the purpose of reclaiming the submerged land for Park purposes.

The case was heard before Judge Gibbons of the Cook County Circuit Court, and the court found that the piers were trespasses upon the submerged lands of Lake Michigan, and were purprestures; but that they were built for the protection of defendant's land from erosion, and were not detrimental to the public interest, and would



The Supreme Court held that there was no evidence that the suit was not brought in good faith; that the evidence showed that

Revell caused one pier to be built at Barry Avenue in the fall of 1890, 220 feet long, 20 feet on land and 200 feet in the water, and one at George Street not quite so long, both perpendicular to the shore; that the title to the land covered by the waters of our large lakes was in the State for the use of the public, and that the erection of structures of any kind upon the land under the waters of the lake within the boundaries of the State, without a grant or other authority from the State, was a trespass and purpresture.

That although the act complained of might not be injurious, and might not be a public nuisance, still it was an unlawful act of







such character as to authorize a court of equity to interfere and abate it.

Upon the question of the riparian rights of the shore owner, the court held that there are only two common-law riparian rights which the shore owner has, and which cannot be taken from him without due compensation: one is, where land gradually and

imperceptibly encroaches upon the water, the accretion or added land belongs to the shore owner; and the other is the right to pass to and from the lake within the width of his premises as they border on the lake.

The claim that the shore owner is without protection if he cannot erect piers or other structures, to prevent his land from erosion and waste, is answered by the court, saying: "A shore owner may, no doubt, erect on his own land such structures as may be necessary to protect his land from erosion, provided such structures do not interfere with navigation, but he has no right to intrude upon the lands of the State unless authorized by the State." And further: "It may be conceded that under the doctrine of protection a shore owner may erect structures on his own land for protection against erosion, but, as we understand the law, he has no right to enter upon the lands of the State and erect thereon such structures, and when he undertakes

to do so, he is a trespasser. The State, holding the submerged lands of the lake in trust for the people of the State, would be false to its trust should it permit shore owners to encroach on the public domain and gradually appropriate such property to their own use. Here, in the erection of the structures complained of in the information, there has been a clear violation of the law, and no reason occurs to us why the structures should not be abated on the application of the people.

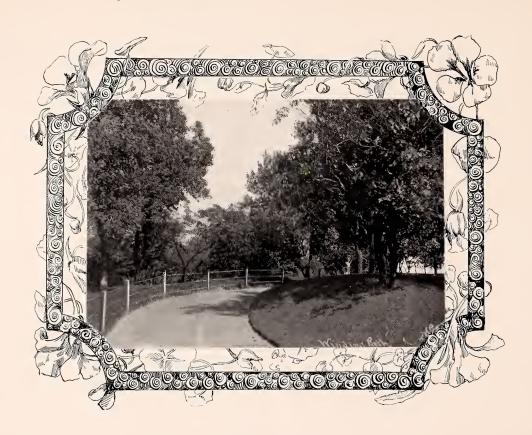
"The decree in this case was in favor of the complainants, but after a careful consideration of the whole record we do not think it goes far enough. We think the cross-errors of appellees are well assigned."

These cross-errors were, that the decree of the Circuit Court should have ordered the immediate abatement or removal of the piers.

The substance of this decision is, that the person who owns a lot or piece of land reaching to the shore of Lake Michigan has a right to build a wall or other protection on his own land, to protect his land

from waste by the waves of the lake. His land only extends to the shore line. This line was definitely established by the Supreme Court in its decision in the case of Seaman vs. Smith, 24 Ill. 521. In that case it was decided that the shore line of Lake Michigan is the line at which the water usually stands unaffected by storms or other disturbing causes. Later, in the case of School Trustees vs. Schroll, 120 Ill. 509, the Supreme Court





said that an owner of land along a natural lake or pond owns only to the water's edge.

Consequently the owner of land bordering on Lake Michigan can build any protection he may deem proper, up to the line where the water of the lake usually stands when unaffected by storms or other disturbing causes; that is, where the land and the water meet when the water is perfectly still. But to place any obstruction on or under the water beyond that point is a trespass, whether it does any injury or not, unless it is done with the consent of the State or its grantee.

The shore line, or line where the land and the water meet when at rest, is the line made by natural causes; that is, the line of the meeting of the land and the water before any artificial erection of any kind was placed in or on either the land or the water that could directly or indirectly add to the land. Consequently any land made by the erection of a pier, breakwater, or obstruction of any kind would not belong to the shore owner, but to the State or its grantee. The erection of a pier by a shore owner on submerged land being a trespass, the shore owner could not profit by his trespass.

By an act of the Illinois Legislature, approved June 15, 1895, authority was given the Commissioners of Lincoln Park to enlarge the Park by reclaining submerged land under the waters of Lake Michigan, and to do so by simply preparing and adopting a plan for such enlargement, therein locating a boulevard or driveway over the bed of the waters, the termini of such boulevard to be within the towns of North Chicago or Lake View, and granting the Commissioners power to extend the improvement into the lake as far as they saw fit, so as not to interfere with navigation on the lake. It was also provided in this law that the fee-simple title in the submerged land between the outer line of the plan adopted and the shore line should vest absolutely in the Park Commissioners for Park purposes the moment the plan was adopted.

Under this law the Commissioners may assume sole control and invest themselves with the fee title to all the submerged land from the mouth of the Chicago River to the north line of the town of Lake View, and from the shore line out to navigable water, which is presumed to be now about twelve feet in depth in Lake Michigan. A large portion of the submerged land between these points has already been taken by the Commissioners under this law, and in consequence thereof, whenever an obstruction has been placed, or may hereafter be placed, outside of the shore line it will be a trespass upon the land of Lincoln Park instead of the land of the State.

In the law of 1895, however, there is a restriction upon the power of the Commissioners in taking possession of such submerged land.

Section 2 of that act provides that the riparian rights of the shore owners adjoining such submerged lands must be obtained by the Commissioners from the shore owners by contract or condemnation. This, however, need not be done until the Commissioners are ready to improve the submerged lands.

The title to the submerged land vests in the Commissioners instantly upon the preparation and adoption of the plan of improvement, but no riparian right of the shore owner is interfered with until an attempt is made to carry out the plan by actually making improvements.

The riparian rights that the shore owner has, and which must be secured by the Commissioners before work is begun to improve the submerged land, under the decision in the Revell case, are two:

First.—The right to accretions, as it is called, which is earth or other matter thrown against or upon the land of the shore owner, and which becomes attached thereto and is made a part thereof, either by the imperceptible and gradual action of the water, or by the gradual recession of the water from the shore line.

Additions made to the shore owner's land in either of these ways

become the property of the shore owner, and are called one of his riparian rights.

Second.—The right to pass to and from the waters of the lake, within the width of his premises as they front on the lake, is the only other riparian right he has.

These rights of the shore owner may be valuable or not, according

to the circumstances of his location. It is believed that between the mouth of the Chicago River and the north line of Lake View, the right to accretions is practically valueless, for the reason that if all the piers and other artificial constructions for accumulating sand and earthy matter were removed, the whole shore line would be washed back by the waves of the lake, and erosion or destruction of land would result instead of accretions being added. Evidence of competent engineers has been taken, showing that the waves on Lake Michigan along this shore line often, during storms, strike the shore with a force equal to six thousand pounds to

the square foot, and average twenty feet in height.

Evidence of old citizens is also on record, showing that large additions have been made to the lands along a portion of this shore, but only since piers and breakwaters have been built, which caught the sand and held it against the wind and waves. But land made in this way belongs, not to the shore owner, but to the State or its grantee, and no land made by any artificial obstruction belongs to the shore owner.

The second riparian right, access to the water, can be in no way interfered with, but rather facilitated, if the submerged land is improved by being made into a park, with walks, drives, and the like. Access to the water of the lake means access to the navigable water, not to the shallow, useless water of the lake. Access to the shallow waters could be of no value unless prepared and used for bathing

purposes, and even this right could not be held against the State or its grantee, when the land used for a bathing ground was required for other purposes.

Consequently, riparian rights along this shore are practically valueless, and there should be no difficulty in obtaining them by contract or condemnation when needed, without much if any expense. And in fact, every shore owner would surely be benefited instead of injured, if the now valueless shallow water and useless submerged land adjoining his property were made into a beautiful park, with its trees, walks, shrubs, flowers, drives, miniature lakes, and other attractions; while hun-

dreds of acres of rich land would be added to the city and State that is now utterly worthless for any purpose. Again, if this submerged land was transformed into a park, as is contemplated by the law of 1895, a park eight miles in length, with an average width of nearly one-fourth of a mile, would fringe the whole North Side of the city. On the outer edge would be a solid wall protecting the land against the storms of the-lake, with a wide boulevard on its top, with





its carriage road, its equestrian path, its bicycle-track, and pedestrian walks, lighted by electricity at night, and made beautiful by the sunlit waters of the lake by day. Eventually this would be met by a similar extension from the South Side parks, with a Brooklyn Bridge over the Chicago River, and thus a continuous boulevard would be created, connecting all the Chicago parks in a continuous chain of the most beautiful scenery fifteen miles along the lake shore, and twenty miles around the city through the western parks to the lake again.

There are several cases yet pending in the courts, involving the same questions as those decided in the Revell case, except that in each of the pending cases the submerged land had been taken by the Commissioners under the law of 1895, and the suits are in the name of the Commissioners instead of the State. These are the cases of Gordon vs. The Commissioners, now pending in the Supreme Court, and Gunning vs. The Commissioners and Cobb vs. The Commissioners, now pending in the Superior Court, and the Commissioners vs. Cochran, pending in the Circuit Court.

There is also pending in the United States Circuit Court the case of Sayre vs. Benner et al., being the famous McKee scrip case, claiming all the accreted land along the lake shore front from the Chicago River to Oak Street. Since the decision of the Secretary of the Interior holding that the location of this scrip upon the land claimed was illegal, there seems to be little disposition to press this case, as that decision will be hard to overcome.

The case of Marshall vs. The Commissioners is also pending in the United States Circuit Court, and is now being prepared for trial by taking evidence before a Master of the Court. This is the claim of Major Marshall, United States engineer, for some \$16,000 royalty for use of his patented breakwater and beach along the shore line known as the Ohio Street Extension. The claim of Major Marshall is being contested by the attorneys of the Park on several grounds. One is, that Major Marshall, when he patented the supposed improve-

ment, was the paid engineer of the Park, and whatever he invented during such employment should belong to the Park. Another defense is, that his supposed invention had been used for a long time prior to the granting of his patent.

Another is, that similar methods of shore protection had been patented by others prior to the date of his patent. There are several other matters of defense that are believed by us to be sufficient to defeat his claim, not upon any technical ground, but because we believe that whatever he learned about shore protection was obtained at the cost of Lincoln Park, and the Park should have the benefit of his services, and not be compelled to pay for them again.

There are a number of other suits pending in the Superior and Circuit Courts, for collection of money due the Park, and other matters of no public interest, that I have omitted to mention to avoid unnecessary prolixity.

The Commissioners have been successful in all suits brought by them and against them that have been tried.

They are, however, very seriously embarrassed in procuring the means necessary to maintain and improve the Park as it should be done, because of the fact that they are compelled each year to ask the supervisors of the towns of Lake View and North Chicago for the money necessary for such maintenance and improvement, and sometimes these supervisors are very illiberal in providing for such improvements. If the Commissioners were empowered by law to assess and collect a certain amount of money each year, or to assess and collect such an amount as would be necessary to make the required improvements, a system of improvements could be projected and gradually completed, that would be uniform, and made much more symmetrical than under the present system. As the law is now, the Commissioners are compelled to wait until November each year to learn how much money the town supervisors will allow them, and then plan to make the most necessary improvements that the money



provided will make, if any money is left after making the necessary repairs or improvements already begun. Every year the walks and drives should be repaired, parts of the buildings repainted, new buildings erected to meet increased demands, new places for amusement and recreation provided, new trees planted, new soil provided to cover the sand beds which compose the subsoil of the principal part of the

Park, and hundreds of other necessary repairs and improvements which must be made to maintain the reputation Lincoln Park has gained by reason of the devotion to its success exhibited by its Commissioners.

Respectfully submitted.

James McCartney, Attorney.



SUPERINTENDENT'S REPORT

To The Commissioners of Lincoln Park.

Gentlemen,—Not having served as your Superintendent for the entire year, I have, with the assistance of your efficient Assistant Superintendent, Mr. Alexander MacKay, and the heads of different departments, the honor to briefly report herewith the labor performed in the Park and on the boulevards from April 1, 1898, to March 31, 1890.

LAWNS

Work was started on the lawns in the month of April, 1898, by spreading thirty-two tons of fertilizer, and with continuous watering day and night, the same were kept in a fair condition during the entire season, but they will soon give out unless the soil is enriched.

TREES

Trees have been bought and transplanted, and old trees grubbed out as follows:

TREES PURCHASED

April, 1898.—59 10-inch elms on the Ohio Street extension of the Lake Shore Drive, 21 6-inch elms on Chicago Avenue, 13 6-inch elms on Pearson Street, 22 6-inch catalpas on Chicago Avenue, 10 6-inch catalpas on Pearson Street, planted on the line of Chicago Avenue Park, 4 6-inch catalpas in Chicago Avenue Park, 4

TRANSPLANTED

April, 1898.—150 trees in various parts of Park, principally at North Pavilion. One hundred shrubs from nursery in Park.

January, 1899.—2 10-inch elms on Dearborn Avenue, 4 10-inch elms on Lake View Avenue between Belmont and Diversey avenues,

8 10-inch elms on Lake Shore Drive between Diversey Avenue and Grant Monument, 3 maples near north lily pond, 2 lindens near north lily pond, 1 ash near north lily pond, 1 catalpa near north lily pond, 6 elms on lawn of North Avenue, 3 catalpas near Academy of Sciences, 1 linden near Academy of Sciences, 1 elm near Academy of Sciences.

February, 1899.—6 10-inch elms on Stockton Drive in place of 8 large willows grubbed out, 4 lindens, 2 maples, 1 elm, 1 birch, transplanted to conform with plan for new cages at animal-house, 1 elm, 1 catalpa planted north of propagating house, 2 10-inch elms planted between Lincoln Monument and Lake Shore Drive, 10 old trees grubbed out north of Fullerton Avenue, 8 old trees grubbed out between Academy and Webster Avenue.

March, 1899.—5 elms, 4 ash, 1 linden, 2 catalpas, 1 cherry, 1 Norway maple, 1 ailantus transplanted to replace trees cut down and grubbed out west of swings, 6 elms, 4 ash, 1 linden, 2 maples, 3 ashleaf maples, 8 shrubs transplanted in front of cages of animal-house, 75 old trees cut down and grubbed out.

During the months of January and February, 1899, the following trees were taken out in various places in the Park, from groups which were planted too thickly, and transplanted in Chicago Avenue Park: 16 elms, 15 lindens, 10 ash, 7 maples, 5 catalpas, 5 cottonwoods, 3 ailantus, 2 Norway maples.

In addition to the tree and shrub planting, considerable work has been done in this department in tearing out old vines and shrubs, and cutting dead wood from the trees in various parts of the Park. By constant watering, our trees are kept in very good condition, but the trees, like the lawns, need richer soil. They should be strengthened



sidewalk, and 1,060 lineal feet of granite-paved beach 48 feet wide have been constructed on this improvement. Over 400 feet of the new beach was torn out by the storm of October 25 last, but it was replaced at a cost of \$5,200.

1,018 lineal feet of 21-foot-wide concrete sidewalk, 897 lineal feet of 12-foot-wide concrete

was replaced at a cost of \$5,200.

The following new work was done on the water and sewer systems:



900 feet of 6-inch water main, 6 fire-plugs, 900 feet of 2-inch iron pipe for sprinkler system and 17 street washers, 1,200 feet of 12-inch sewer-pipe, 800 feet of 9-inch sewer-pipe, 8 manholes, and 32 catch-basins.

SEWERS AND WATER-PIPES

Sewers and water mains have been laid in the Park as follows:

550 feet of 12-inch sewer, 300 feet of 6-inch sewer, and 5 manholes, for proposed new toilet-rooms at the base-ball grounds.

300 feet of 12-inch sewer-pipe, 700 feet of 6-inch sewer-pipe, 2 manholes, and 10 catch-basins, for new barn.

200 feet of 6-inch sewer-pipe, 150 feet of 9-inch sewer-pipe, and 4 catch-basins, for new animal-house.

120 feet of 9-inch sewer, 244 feet of 6-inch sewer, and 8 catch-basins, at new summer cages of animal-house.

60 feet of 12-inch sewer for sea-lion pit.

300 feet of 2-inch water-pipe for new barn.

156 feet of 1-inch water-pipe and 3 street-washers at animal-house. 50 feet of 1-inch water-pipe at new animal-house.

120 feet of 1-inch water-pipe and 1 street-washer for pheasant-cages.

550 feet of 1½-inch water-pipe and 1 street-washer for horticultural department.

300 feet of 3-inch water-pipe, 80 feet of 2-inch water-pipe, and 100 feet of 1-inch water-pipe, for Bates Fountain.

PAINTING

During the past year there have been painted and lettered: II double sprinklers, 2 single sprinklers, 12 carts, I express-wagon, I buggy, 2 schooner-wagons, 4 dirt-wagons, I two-horse roller, I one-horse roller, 3 hand-rollers, 3 push-carts, I plumber's cart, I mowing-machine cart, 10 street-barrows, 6 mortar-barrows, 6 stone-barrows,

31 mowing-machines, 92 waste-paper baskets, 89 boats, 2 swan boats, 22 cupboards in new barn for teamsters, 300 grass-signs, 120 stand-pipes for sprinkling system, 200 settees, 150 stationary benches.

Both refectories were calcimined, and considerable painting done. The Commissioners' and Superintendent's rooms were decorated. All tunnels and bridges and railings were repaired and sanded.

BRIDGES

One new iron bridge with asphaltum and concrete roadway was constructed by contract over the old channel east of the South Pond, which was filled in in 1897, but the abutments of concrete were erected by Park labor.

The timber frame and plank walk at the bridge over the channel at the animal-house were constructed by Park labor.

The foot-bridge at the refectory was rebuilt, and considerable repairing on tunnels and other bridges done this year.

ELECTRIC-LIGHT SYSTEM

A great deal of trouble was experienced with our electric light system during the past winter, much of which was due to the improper laying of conduits. Ducts should invariably have been laid so as to drain thoroughly to hand-holes. Where no hand-hole exists between two poles, the pipe should be laid to slant to a central point between the poles, and a hole drilled in the bottom of the pipe to allow for drainage. Under this hole a piece of small sewer-pipe or other suitable material should be placed, so that the water will have a few inches of drop before reaching the earth, and to insure against filling up in case the ground is frozen all around.

Wherever trouble is due to ice forming in the ducts, a new cable should never be drawn in until the conduit has been relaid, as the trouble will only be again repeated the following winter. A great deal of work has been done by our chief electrician, Mr. Harold



Almert, during the last two months, to insure, as far as possible, against any water getting into the conduit, by overhauling all the electric-light poles in the Park, straightening and tightening same, and

sealing up the holes at the top of the pole where the cables lead down, and by repairing hangers in such a way that they will not cut the cable by swinging to and fro as heretofore.

The arc lights demand the greater portion of our chief electrician's time and attention. He found upon taking charge that all the lamps were burning at too high a voltage; whether this was caused by his predecessor or the trimmers is hard to say, but in his judgment he thinks the latter, as they have been in the habit of changing the adjustment of the lamps if it did not suit them, thinking it did no harm. This practice has been stopped, and the consumption of current for each lamp has been reduced by fifty watts, still giving exactly the same amount of light. This means a continual saving, when all lamps are burning, of 12,500 watts, or equal to 16.7 horse-power; 150 lamps have been completely overhauled and replaced on the line. Each and every lamp is taken apart and thoroughly cleaned. It is then put together and painted, the defective parts replaced by new ones,

after which it is placed on the test-rack and carefully adjusted by a volt meter, its behavior being carefully watched for several hours before marking it O. K.

The paper cable, although of very high insulation resistance when in good condition and well protected, is mechanically weak, and is

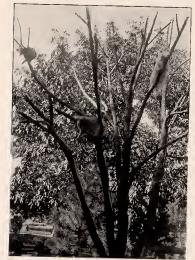
not very well fitted for this particular installation. As soon as a hole the size of a pinhead appears, the paper absorbs the surrounding moisture, and in a few hours a considerable portion of the cable is

ruined. Though rubber cable is higher in price, I think it will be cheaper in the end, as it will retain its insulating properties, even though the lead covering may be parted.

In a great many cases I think the trouble with our lights was the faulty laying of these cables. It seems that they were stretched to such an extent that the lead covering was parted and flattened in a great many places. We have relaid 4,000 feet of cable, and laid 2,500 feet of new rubber cable. The conduit for this was relaid, and the new cable laid in a thorough and workmanlike manner, and I do not believe that we will experience any more trouble or grounds on this portion of our system.

During the last winter there were twelve cases of cable trouble, as follows: Circuit A, O, K, circuit B 6 grounds, circuit C 3 grounds, circuit D 1 ground, circuit E 1 ground, circuit F 1 ground. All of these have been overcome and repaired, so that the system at present is in a good running condition.

The arc light dynamos are in a very good condition, although taxed to their utmost capacity, and if any more lights are to be added in the near future, it will be necessary to purchase another arc dynamo. Our incandescent dynamo is overtaxed 50 per cent, and should be replaced by a larger one. All transformers on the incandescent system are working from 15 to 92





per cent overload, which makes it uneconomical work; but a great deal of this will be remedied as soon as our electrician can get at them. He is now working upon the more important system of arc lights.

GAMES

During the season the following permits for games were issued: Lawn tennis, 1,201; base-ball, 217; foot-ball, 35; total, 1,453.

The following is a list of the days of skating during the winter of 1898-99: November, 1898, 3 days; December, 1898, 31 days; January, 1899, 27 days; February, 1899, 15 days; total, 76 days.

GENERAL WORK

An entire new fence was constructed around the animalyards, and 975 feet of concrete curbing underneath same was laid by Park employés.

All sprinkling-wagons, carts, boats, mowing-machines, and barrows have been thoroughly overhauled by our carpenters, wagon-makers, and blacksmiths.

Considerable manure has been hauled to various parts of the Park, as follows: To the Ohio Street Extension in August, 1898, 117 cubic yards; in May, 1898, from the new barn site to the North Shore Drive, 700 cubic yards.

Sharp sand was taken from the beach and hauled to the Ohio Street Extension, as follows: In May, 1898, 93 yards; June, 1898, 192 yards; July, 1898, 222 yards; August, 1898, 153 yards; September, 1898, 638 yards; October, 1898, 100 yards; total, 1,398 yards. And 35 yards were hauled to the new beach at North Avenue.

Fifty-two loads of slag were hauled to the new barn for roads, and whenever we had teams idle during the winter, we had them hauling cinders for Chicago Avenue Park walks. The new barn has been constructed and completed during the fiscal year, giving us ample room for our horses and storage of feed, together with shelter for our sprinklers, carts, and wagons, also a new carpenter, blacksmith, and plumbing shop, and storage-room.

Many plans, details, and specifications have been drawn during the year, by your efficient civil engineer, A. A. Babcock, the principal ones being:

 The plans and details for new men's toilet-room at the ballgrounds, part of the work, mainly sewerage, for the building having already been completed.

2. Plans and details for three new pheasant cages and yards, nearly completed.

3. Plans and details for the new propagating house, the erection of which will be started as soon as the plants can be removed from the old building.

4. Plans for a new animal-shelter house.

5. Plans and details for the outside cages at the animal-house, work on which is practically completed.

Soundings taken, and plans of same drawn for the beach work under construction. Sketches for the protection of the sea-wall, and a good many approximate estimates of different plans and improvements drawn up for consideration.

I wish to call the attention of the Commissioners to the fact that these buildings are being erected by Park labor as much as possible, as it is my firm belief that this method is giving us a better class of work at less expense than if let out on contract.

Our artesian-well water supply is in danger of giving out again, and I believe that some other method should be used to supply the different wells in the Park with drinking water. I would suggest that you erect a steel tank above the well near the power-house, of a capacity of about 65,000 gallons of water, place a small air compressor in the engine-room, connect same with pipe to the well, and thus force the water into the tank very easily. From the tank lead a four-inch supply pipe down to connect with different pipes now leading up to this well. This would insure a good supply of drinking water for the public, and would in the end be cheaper than the method now used in distributing this water.

This is, in brief, as I find the conditions in the Park; and I deem it my duty to call the attention of the Commissioners to the facts as they are, so that steps may be taken to remedy existing evils as soon as possible.

Respectfully submitted.

PAUL REDIESKE, Superintendent.

ZOÖLOGICAL REPORT

birds, and reptiles in Lincoln together with a list of the a Park in the year closing Mar	erewith an inventory of the Park, with their ages and oth animals and birds presented to ch 31, 1899. Respectfully submitted. Cyrus DeVry,	animals, er details, o Lincoln	Deer Deer Leuropean fallow deer Goats Aoudad Yak Pair zebus Zebra Zebra Zebra Zebra	sex. Femal Male Male Femal Male Male Male Male Male Male Male Femal Male Male Male Male Male Male	3 le	year year year mos year year
Lion	sex.	334 years 5 years 234 years 235 years 12 years 2 years 8 years 11 years 6 years 2 years	1 Russian grizzly bear	Femal Male 2 Flying foxes. 5 Prairie dogs. 2 Opossums. 10 Rabbits. 20 Guinea pigs. 1 Swift fox. 1 Honey bear, REPTILES 3 Gila monsters.	e	year
3 Young pumas. 1 Lynx. 2 Wild cats. 5 White Maltese cats. 1 Elephant. 1 Buffalo. 1 Buffalo. 2 Buffalo. 2 Buffaloes. 4 Buffaloes. 3 Buffaloes. 1 Buffaloes. 1 Buffaloes. 1 Buffaloes.	Female Bull Bull Bull Bulls Cows Cows Cows Male Male	31 years 10 years 3 years 2 years 1 year 11 years 3 years 2 years 4 years	15 Eagles. 11 Owls. 4 Chicken hawks. 2 Turkey buzzards. 7 Crows. 1 White crow. 4 Magpies. 2 European swans. 2 American swans. 11 Wild ducks. 0 Wild geese. 3 Wood ducks. Mallard ducks.	2 Call ducks. 2 Sea gulls. 3 Blue herons. 1 Night heron. 1 German stork. 2 Sand-hill cranes. 3 Pelicans. 30 Ring doves. 1 Dog quail. 14 Golden pheasants. 7 English pheasants. 4 Silver pheasants. 1 Hybrid pheasant. 20 Peacocks.	5 Peahens, 2 Turkeys. 20 English banta chickens 3 Red macaws. 1 Green macaw. 4 Cockatoos. 11 Parrots. 7 Parrakeets. 1 Starling. 1 Bluejay. 18 Canaries. 2 Robins.	

ANIMALS AND BIRDS PRESENTED TO LINCOLN PARK	1808.
1898.	Aug. 5. 1 Lynx Mr. Schrolls 201 E. North av.
April 8. 1 Raccoon R. A. Harris 432 Clybourn av.	Aug 7 Colden and W. H. V.
April 11. 1 Golden eagle Ald. John Powers 79 McAlister pl.	Aug. 7. I Golden eagle Wm. H. Kihn 247 Illinois st.
April 11. 2 Wolves F. Obermaier 84 Clark st,	Aug. 9. 1 Alligator Clara Brinkman 585 La Salle av.
April 11. 9 Canary birds Mrs. Camp Portage, Wis.	Aug. 9. I Young opossum P. O. Ward 233½ Chestnut st.
April 11. 2 Squirrels Raymond Perry 343 E. 53d st.	Aug. 11. 2 Squirrels
April 17. I Wild duck City	Aug. 30 I Parrot H. Brueggestradt 226 S. Clark st.
April 17. I Hen hawk J. H. Carr 27 Troy st,	Aug. 30. I Guinea pig Mrs. M. Shields Dearborn av.
April 25. I Squirrel Percival Keith 4603 Langley av.	Aug. 31. 1 Hen hawk Hans Henkin 188 Fifth av.
April 26. I Alligator Fred B, Hildreth 133 E, Vanburen st.	Aug. 31. 2 Hen hawks E. Erickson 239 Oak st.
April 27. I Parrot Mrs. Schroeder 502 Wells st.	Sept. 1. I Magpie Miss Becker 205 E. Division st.
May 10. I Quail C. Dreier 553 Clybourn av.	Sept. 5. I Raccoon Ira Storms 400 Sedgwick st.
May 12. 8 Pigeons	Sept. 7. I Rattlesnake H. S. Pepon 2443 N. Hermitage av.
May 12. 3 Canary birds Mrs. Vantasel 550 School st.	Sept. 9. 2 Hen hawks O. Wagner Fairmont, Minn.
May 12. 1 Hawk	Sept. 9. 1 Porcupine Geo. Schmall 316 North av.
May 17. I White owl Kelley Bros Cylinder, Iowa	Sept. 12. I Parrot and canary
May 21. I Squirrel Mrs. Wise 385 Dearborn av.	bird Mrs. Webber 309 Orchard st.
May 25. I Young male door. W. C. Callander 385 Dearborn av.	Sept. 19. I Canary bird Herman Zeitz 1137 Lincoln av.
May 25. I Young male deer W. C. Galloway 156 Dearborn av.	Sept. 25. I Parrot Mrs. E. Palmer Sheldon av.
June 4. 1 Young male deer Chester Simons 370 Fulton av.	Sept. 29. I Quail P. W. Kline 511 Garfield av
June 9. I Young male deer Wm. Ganschow 666 Warren av.	Oct. I. I Pair rabbits Miss Irwin 2566 N. Ashland av.
June 9. I Magpie Fred McNally N. Park av.	Oct. 15. I Guinea hen J. F. Scheeck 1806 Dearborn av.
June 12. 1 Canary bird W. Patteson 268 Chestnut st.	Nov. 2. 35 White mice J. J. Klinehart 86 Fremont st.
June 14. I Owl Anton Bashart 110 Webster av.	Dec. 3. I Screech owl Capt. Seegn 087 Herndon st.
June 14. 3 Crows H. Buscher 592 N. Wells st.	Dec. 7. I Opossum Nels Duckels Jacksonville, III
June 23. i Parrot Mrs. Bartling 381 Center st.	Dec. 17. I Green macaw Mrs. Henning 622 La Salle av.
June 23. I Golden eagle E. Kraneman 565 Lincoln av.	0
July 8. 1 Ring-tail monkey E. E. Clark Danville, Ill.	1899.
July 12. 2 Ring doves Chas. Fries 94 Cass st.	Jan. 5. 1 Golden eagle Mayor Carter Harrison
July 13. I Hawk G. Ayers 3052 Indiana av.	Jan. 10. 2 Parrots Dr. P. M. Woodworth 1246 N. Clark st.
July 13. 1 Fox H. J. Holthoefer 4858 Indiana av.	Jan. 12. I Red bird Mrs. Ellis 520 N. Normal Parkway
July 14. 2 Squirrels Fred Hildreth 133 E. Vanburen st.	Jan. 17. I Civet cat
July 14. I Badger Chas. Hoagen Paulina, Iowa	Jan. 19. 1 Red fox 72 Bryant av.
July 22. I White raccoon Dr. Wm. Doepp 73 Grant pl.	Jan. 20. 1 Gray squirrel W. F. Newberry 4415 Ellis av.
July 25. I Western bluejay Miss Jessie Jaquish 283 Irving av.	Jan. 27. 2 Hen hawks C. R. Sandquist 33 E. Chicago av.
July 29. 1 Mink Jacob Soffirth 786 N. Halsted st.	Feb. 14. t Red fox H. Freeman 876 Grand av.
July 29. I Parrakeet M. D. Williams 1651 W. Monroe st.	Feb. 17. I Owl Central Police Station
Aug. I. I Parrot Mrs. G. Grummett 105 Emerson av.	Feb. 20. 1 Opossum J. Paulsen 225 Dearborn av.
Aug. I. I Fox T. D. Dunn City	Mar. 9. 1 Raccoon Stewart & Gust Rockford, Ill.
Aug. 3. 1 Young coyote Ben Birch 1520 Diversey av.	Mar. 20. 2 Alligators Wm. Mangler N. Park av.
, , , , , , , , , , , , , , , , , , ,	Will. Mangier 2 N. Park av.

GARDENER'S REPORT

CHICAGO, April 1, 1899.

To The Commissioners of Lin-

COLN PARK.

TREES, SHRUBS, AND WOODY VINES



(American Cowslip.)

Gentlemen,-I present herewith an enumeration of the plants, vines, shrubs, and trees in Lincoln Park, embracing 1,427 species, which represent 116 natural orders. The names are grouped according to habit of growth and general character. Each group is arranged alphabetically, in itself, by the names of the genera. This was considered better for the present purpose than a strictly botanical classification. In cases where plants have common or popular names they are given, where space permits the original home of the plant is added, and also the month of blooming of species having showy flowers.

Respectfully submitted.

C. J. STROMBACK, Head Gardener.

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom ng of species wit showy flowers
Abies excelsa	Norway Spruce	showy howers.
Acer dasycarpum	Silver Maple	
Acer dasycarpum Weirii		
Acer dasycarpum laciniata		
Acer platanoides		
Acer platanoides Reichenbachii	Reichenbach's Norway Maple.	
Acer platanoides Schwedlerii		
Acer Palmatum	Palmate Japanese Maple	
Acer Polymorphum	Japan Maple	
Acer pseudo-platanus	Sycamore Maple	Mav
Acer rubrum		
Acer Saccharinum	Sugar Maple	'
Aesculus flava	Sweet Buckeye	May
Aesculus glabra	Ohio Buckeye	May
Aesculus Hippocastanum	Horse Chestnut	May
Aesculus Hippocastanum Memmin-		
gerii		
Aesculus Lyonii		
Ailanthus glandulosa		
Alnus glutinosa		
Amelanchier Canadensis		
Ampelopsis Veitchii		
Ampelopsis tricuspidate Royalii		
Ampelopsis quinquefolia		
Amygdalus nana		
Amygdalus Persica		
Aralia Spinosa	Angelica Tree	- August
Arctostaphylos uva-ursi		
Aristolochia sipho		
Berberis Thunbergii		
Berberis vulgaris		
Berberis vulgaris var. purpurea	Purple Barberry	May

A HISTORY OF LINCOLN PARK

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT. Month of blooming of species with showy flowers.
Betula alba laciniata pendula	Weeping White Birch
Betula lutea	
Betula papyrifera	Canoe Birch
Betula populifolia	
Betula Youngii	Young's Birch
Betula lenta	Sweet Black Birch





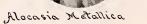
Buddleia curviflora	Buddleia	Augus
Calycanthus floridus	Carolina Allspice	Iune
Carpinus Americana	Blue Beech	,
Caragana Siberica	Siberian Pea	Mav
Caragana arborescens	Siberian Pea Tree	May
Catalpa speciosa	Indian Bean	lune
Catalpa bignonioides	Lilac-leaved Catalpa	June
Catalpa Kaempferii	Japanese Catalpa	Iune
Catalpa Bungei (nana)	Chinese Catalpa	,
Carya alba	Shell-bark Hickory	
Celastrus scandens	Staff-tree. Bittersweet	Luna
Celtis occidentalis	Hackberry	June

•		
GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom ing of species wit showy flowers
Cephalanthus occidentalis	Button Bush	August
Cercidophyllum Japonicum	Katsura	
Cercis Canadensis	Judas-Tree	May
Chionanthus Virginica	Fringe Tree	Inne
Clematis paniculata	Iapanese Virgin Bower	August
Clematis Jackmanii	Hybrid Virgin Bower -	Angust
Clematis Mme. Edward Andree	Hybrid Virgin Bower	August
Clematis Virginiana	- Virgin's Bower	Angust
Clematis Viorna	Leather Flower	Inly
Clethra alnifolia	Sweet Penner Bush	August
Cornus alba (stolonifera)	Red Osier Dogwood	Inne
Cornus alternifolia	Blue Dogwood	Inne
Cornus mascula	- Cornelian Cherry	April
Cornus sericea	Silky Cornell	Lune
Cornus stricta	Stiff Cornell	May
Cornus paniculata	- Panicled Cornell	Inne
Corylus Avellana	Filbert	June
Corylus Avellana aurea	Golden Hazel	
Corylus purpurea	Pumle Hazel	
Crataegus coccinea	- American White Thorn	Lune
Crataegus crus-galli	Cock-spur Thorn	Inne
Crataegus oxycantha	English Hawthorn	Inne
Cupressus Lawsoniana	Oregon Cypress	June
Deutzia crenata flora plena	Double Doutrin	Lung
Dimorphanthus Mandshuricus	A ralia	Julie
Elaegnus longipes	Oleaster Silver Thorn	Inter
Euonymus alata	Winged Weekee	July
Euonymus Americana	Strawbarry Duch	
Euonymus Americana obovata	Trailing Strawborry De-1	
Euonymus elata	Freet Spindle Tree	
Euonymus atropurpurea	Burning Buch	
Exochorda grandiflora	Poor! Duck	N1
Fagus sylvatica heterophylla	Cut loaved Peach	May
Fagus sylvatica neterophylia	Purel Perel	
Fraxinus Americana	White Ad	
Fravious Americana	- White Ash	
Frazinus excelsior	English Ash	
Fraxinus excelsior aurea	Golden English Ash	
Fraxinus sambucifolia		
Forsythia suspensa		
Forsythia viridissima	Golden Bell	May

GENERA AND SPECIES.	english names and habitat. ing	fonth of bloom- of species with showy flowers.
Forsythia virid, variegata		
Gaultheria procumbens		
Gleditschia triacanthos		July
Gymnocladus Canadensis		
Halesia tetraptera		
Hibiscus Syriacus		
Hibiscus Syr. variegata		
Hippophae rhamnoides		
Hydrangea paniculata		
Juglans cinerea		
Juglans nigra		
Juniperus Hibernica		
Juniperus Virginiana		
Juniperus communis	Common Juniper	
Juniperus Sinensis	Chinese Juniper	
Juniperus Sabina procumbens	Trailing Juniper	
Juniperus Sabina Vera		
Juniperus Sin. aurea		
Kerria Japonica variegata		May
Koelreuteria paniculata	Varnish Tree	•
Laburnum Adami.	Golden Chain	
Larix Americana	American Larch	
Ligustrum ovalifolium	California Privet	
Ligustrum vulgare	Privet, Prim	July
Liquidambar styraciflua	Sweet Gum	
Liriodendron tulipifera		
Lonicera orientalis	Honeysuckle	May
Lonicera parviflora	Woodbine	May
Lonicera Philomelæ	Philomela Honeysuckle	May
Lonicera Tartarica	Tartarian Honeysuckle	May
Lonicera Tar, grandiflora	Large flowered Tar. Honeysuckle	May
Lonicera Xylosteum		
Lycium vulgare		
Magnolia Soulangeana		May
Mahonia aquifolium		
Menispermum Canadense		
Mespilus acuminata		
Morus Tartarica		May
Morus Japonica		
Morus alba	White Mulberry	

GENERA AND SPECIES.	ÉNGLISH NAMES AND HABITAT, IN	Month of bloon g of species wit showy flowers
Negundo aceroides		
Neviusia Alabamansis	Neviusia	
Ostrya Virginica	Hop Hornbeam, Iron Wood	
Paulownia imperialis	Empress Tree	_
Phellodendron Amurense	Chinese Cork Tree-	_
Philadelphus coronaria	Mock Orange	_ Iune







Dragdena Amabilis. Muranta Sanderiana Peperomia Saundersii.

	,
Philadelphus cor, aurea	Golden-leaved Dwarf June
Philadelphus grandiflora	Large flowered Mock Orange June
Philadelphus Gordoniana	Late Mock Orange June
Philadelphus Zeyheri	Dwarf Mock Orange June
Physocarpus opulifolius	Nine-bark June
Physocarpus opu, aurea	Golden Spiraea June
Picea Alcoquiana	Alcock's Fir
Picea balsamea	Balsam Fir
Picea Nordmanniana	Nordmann's Fir
Picea pungens	Blue Spruce

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloor ing of species wi showy flowers
Pinus Austriaca	Black Pine	anowy nowers
Pinus Banksiana	Northern Scrub Pine	
Pinus Mughus nana	Knee Pine	
Pinus Strobus	White Pine	





Cattleya Trianae Degoma Densiftora

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Pinus sylvestris	Scotch Pine	
Platanus orientalis	Common Plane Tree	
Platanus occidentalis	Button Wood, Sycamore	
Populus angulata	Cotton Wood	
Populus monilifera	Necklace Poplar	
Populus Van Geerti	Golden Poplar	
Populus Graeca	Athenian Poplar	
	•	

GENERA AND SPECIES.		Month of bloom- g of species with
Populus alba Pallan	Abele, silver leaf	showy flowers.
r opurus ama boneana	. Pyramidal silver leaf	
i opurus anatata	Lombardy Poplar	
ropulus Candicans.	Balm of Cilond Bonton	
r runus Armeniaca	Apricot	A
riunus rissardi	. Purple Plum	
runus timoba	Double Flowering Plum	3.5
1 tunus padus	Rird Cherry	3.6
runus punnia	. Sand Cherry	A.T.
riunus puni, pendula	Weening Sand Charry	3.5 -
i iunus rennsvivanica	Wild Red Charry	3.5
runus sciolina	Wild Black Cherry	3.5 -
Tiunus viiginiana	Choke Cherry	3.4
Trunus Cerasus	Common Cherry	31
riunus Cerasus serrulata	Double White Chinese Charry	Mari
Frunus Cer. Sinensis fi. pl.	Double Flowering Charge	M
rtelea trifoliata	Hon Tree	T
Ptelea trif. aurea	Golden Wafer Ash	- June
Pyrus Malus	Apple Tree	- June
Pyrus Malus floribunda	Dwarf Flowering Apple	May
Pyrus (Sorbus) Americana	American Mountain Ach	May
Pyrus (Sorbus) aucuparia pend.	Weeping Mountain Ash	- May
Pyrus spectabilis (sinensis)	Chinese Apple	May
Pyrus (Cydonia) Japonica Maulea	Japan Quince	- May
Pyrus (Cydonia) Japonica	Fire-thorn	May
Pyrus arbutifolia	Choke Berry	. May
Pyrus coronaria	American Crab Apple	Man
Pyrus coronaria floreplena	Double Crab Apple	May
Pyrus fennica (pinnatifida)	Oak-leaved Mountain Ash	May
Quercus alba	White Oak	June
Quercus bicolor	Swamp White Ook	
Quercus cerris	English Turkey Oak	
Quercus coccinea	Scarlet Oak	
Quercus imbricaria		
Quercus macrocarpa		
Quercus robur	English Oak	
Quercus robur Concordia	Golden-leaved Fuglish Oak	
Quercus rubra	Red Oak	
Quercus palustris	Pin Oak	
Quereus parustris	I iii Oak	

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloor ng of species with showy flowers
Quercus tinctoria	Quercitron, Black Oak	
Retinospora filifera	Japan Cypress	
Retinospora squarrosa	(Chamæcyparis)	
Retinospora obtusa	(Chamæcyparis)	
Retinospora plumosa	(Chamæcyparis)	
Rhamnus Cathartica'	Buck Thorn	
Rhodotypus Kerrioides	White Kerria	June
Rhus Cotinus		
Rhus Canadensis (aromatica)		_ May
Rhus typhina		
Rhus Osbeckii semialata	Javan Sumach	
Ribes Oxycanthoides	Wild Gooseberry	
Ribes aureum	Buffalo Currant	May
Robinia pseudacacia	Black Locust	June
Rosa rubiginosa		
Rosa Wichuriana		
Rosa "Crimson Rambler"		
Rosa rubrifolia	Purple-leaved Rose	June
Rosa rugosa	Russian Rose	- August
Rubus Crataegifolia	Haw-leaved Blackberry	
Salisburia adiantifolia	Maiden Hair Tree	
Salix alba	White Willow	
Salix Babylonica	Weeping Willow	
Salix Caprea	Goat Willow	
Salix fragilis	Crack Willow	
Salix Japonica	Japanese Willow	
Salix nigra	Black Willow	
Salix purpurea	Purple Willow	
Salix rosmarinifolia	Rosemary-leaved Willow	
Salix Sieboldiana	Siebold's Willow	
Salix vitellina	Golden Sallow	
Sambucus Canadensis	Elder	- June
Sambucus Can, aurea	Golden Elder	June
Sassafras officinalis	Sassafras	- May
Solanum Dulcamara	Bittersweet	- August
Spiraea Aruncus	Goat's-beard	July
Spiraea Billardi		July
Spiraea Bumalda		July
Spiraea Bum. Anthony Waterer		
Spiraea Reevesii fl. pl.		

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom- ig of species with showy flowers.
Spiraea canescens		- July
Spiraea sorbifolia	Siberia	- July
Spiraea Thunbergii	Japan	- May
Spiraea Van Houtei		- May
Spiraea ulmifolia		
Symphoricarpos racemosa		





AZALEA INDICA

ANTHURIUM ANDREANUM.

Symphoricarpos vulgaris	Coral Berry	July
Syringa alba	White Lilac	May
Syringa Japonica	Japan Lilac	June
Syringa Persica	Persian Lilac	May
Syringa Josikæa	Hungarian Lilac	June
Syringa vulgaris	Common Lilac	May
Staphylea pinnata	Bladder-nut	June
Tamarix Africana	African Tamarisk	June
Tamarix Gallica	French Tamarisk	June
Tecoma radicans	Trumpet Creeper	Augus
Thuya occidentalis	Arbor Vitæ	

A HISTORY OF LINCOLN PARK

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT. Month of blooming of species with showy flowers.
Thuya occidentalis aurea	Golden Arbor Vitae
Tilia Americana	Basswood May
Ima argentea (Europæa)	Silver-leaved Linden
Tilia Europæa	Linden
Tilia heterophylla	American White Basswood
Tsuga Canadensis	Hemlock Spruce





Ulmus alata	Winged Elm
Cinius Americana	White Elm
Omius campestris	English Flm
omius camp, monumentalis	Monumental Elm
Ulmus montana	Week Di
Ulmus montana mandal	wych Elm
Ulmus montana pendula	Weeping Wych Elm
Cinius racemosa	Rock Flm
Omitus strictit	Cornish Flm
Viburnum lantana	Rough-leaved Viburnum May
Vihurnum lentago	Rough leaved Viburnum May
Vibumum 1	Sheep Berry May
riodinam opulus	Cranherry Tree
routhum opulus sterilis	Gillelder Rose Snowball 31
Viburnum plicatum	Chinese Vibrania
Viburnum plicatum auroum	June
Viburnum plicatum aureum	apanese Viburnum June
roumani prunifonum	Black Haw May

Vitis æstivalis	Summer Grape	
Weigela rosea Xanthoxylum Americana Yucca filamentosa	(Diervilla)	- June

HARDY HERBACEOUS PLANTS

HARDY	HERBACEOUS PLANTS
Achillea millefolium	Yarrow June
rgimona Eupatoria	A crim on
Anemone Apennina	Appennine Wind-flower September
Anemone Japonica	Japanese Wind-flower September
Auemone Hepatica acutiloba	May May
Aquilegia Canadensis	Wild Columbine May
Aquilegia Coerulea	Rocky Mountains June
Aquilegia lutea	June
Aquilegia vulgaris	England June
Aquilegia Skinneri	Guatemala June
riquitegia William's Hybrid	
requiregia grandinora alba	Rocky Mountains
Armeria vulgaris	"Thrift" August
Artemisia absinthum	Wormwood August
	Worldwood August

GENERA AND SPECIES.		Month of bloom- g of species with showy flowers.
Artemisia ludoviciana		
Artemisia annua		
Artemisia biennis		
Artemisia Canadensis	Sea Wormwood	- August
Asclepias incarnata		
Asclepias tuberosa	Butterfly weed	- August
Asparagus officinalis	Garden asparagus	July
Aster alpinus		
Aster Amellus		
Aster cordifolius		
Aster corymbosus		- July
Aster dumosus		
Aster laevis		
Aster linariifolius (Ionactis)	Double-bristled Aster	September
Aster grandiflorus		
Aster multiflorus	Many Flowered Aster	- September
Aster Novae-Angliae	New England Aster	. August
Aster Novae-Angliae alba		
Aster Novae-Angliae rosea		
Aster novi belgii		September
Aster oblongifolius		August
Aster polyphyllus		
Aster prenanthoides		- September
Aster puniceus		
Aster sagittifolius		
Aster sericeus		
Aster spectabilis		
Aster surculosus		- August
Aster tenuifolius		 September
Aster trinervis		
Aster Townshendii		
Aster turbinellus		
Aster ptarmicoides		
Aster umbellatus		- August
Argemone platyceras		
Alsine Michauxii		
Actaea alba		
Anemonella thalictroides		
Antennaria plantaginifolia		
Arisaema triphyllum	Indian Turnip	- May

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom- ing of species with showy flowers.
Arisaema Dracontium	Green Dragon	Iune
Asarum Canadense	 Wild Ginger	May
Alisma plantago		
Adiantum pedatum		
Asplenium Filix-foemina		



Belamcanda sinensis Bellis perennis Bocconia cordata Boltonia latisquama	Daisy Tree Celandine Boltonia	June August September
Botrychium ternatum		
Botrychium ternatum dissectum		
Brunella vulgaris	Self-heal	July
Barbarea vulgaris	Winter cress	June

A HISTORY OF LINCOLN PARK

Bidens frondosa Stick-tight Dicentra Canadensis. Squirrel Corn. May Bidens bipinata. Spanish Needles Dipinata Spanish Needles Digitalis purpurea Fox Glove August Buphthalmum grandinforum Ox-eye August Dioscorea villosa. Wild Yam. August Caltha patustris Marsh Marigold May Dipsacus sylvestris Wild Teasel. August Callineo involucrata Glade Mallow August Dedecatheon Meadia Shooting Star. May Campanula Americana Bell-dower August Doronicum Clusi. Leopard's Bone June Campanula Americana Bell-dower August Doronicum Clusi. Leopard's Bone June Campanula persicafolia Peach-leaved Bellhower August Dryopteris spinulosum intermed. Evergreen Shield Fern. Chiomodoxas luciliae Glory of-the-Snow May Dryopteris spinulosum intermed. Evergreen Shield Fern. Clavional Virginica Spring Beauty May Desmodium Canadense Tick-trefoil September Clavional Virginica Spring Beauty May Desmodium Canadense Tick-trefoil September Ocroepsis Janaciolata autumnale Meadow saffron September Desmodium penduliforum (Lespedera bicolor) August Cofebicium autumnale Meadow saffron September Desmodium penduliforum (Lespedera bicolor) August Corcopsis Janaciolata augustifolia June Echinops Sphaerocephalus August Carambe cordifolia Sea Kale. June Echinops fitto Globe Thistle. August Canalophyllum thalictroides Blue Cohosh May Erigeron Philadelphicus Daisy Flea Bane June Cassia marilandica. Wild Senna August Erigeron Philadelphicus Daisy Flea Bane June Chrysanthemum leucanthemum White Weed August Euglaia Japonica Convolvulus arvensis August Euglaia Japonica Delatina Eryngo. August Convolvulus arvensis August Euglaia Japonica Echinops Sphaerocephalus Boneset August Convolvulus arvensis August Euglain Japonica Delatina Boneset August Convolvulus arvensis August Euglaia Japonica Echinops Phuramum Jephanian Lily Graphorum Penduliforum Dog-tooth Violet, white May Convolvulus arvensis Bindweed August Euglaia Japonica Delatina Boneset August Euglaia Japonica Delatina Banker Form August Euglaia Japonica Delatina Banker Form August Delphinium bicolor Larkspur June Fun	GENERA AND SPECIES.		Month of bloom- ing of species with showy flowers,	GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom- ing of species with showy flowers.
Bidens biphinata Spanish Needles Digitalis parpurea Fox Glove August Buphthalmum grandinorum Ox-eye August Dioscorea villosa Wild Yam Caltha palustris Marsh Marigold May Dioscorea villosa Wild Yam Caltha palustris Glade Mallow August Dodecatheon Meadia Shooting Star May Camassia Fraseri Wild Hyacinth June Dolichos Japonica Kudzu Vine Campanula Americana Bell-flower August Doronicum Clusii. Leopard's Bone June Campanula persicafolia Peach-leaved Bellidower August Dictammus fraxinella Fraxinella Gas Plant August Camapanula yan Houtei August Dictammus fraxinella Fraxinella Gas Plant August Cicuta maculata Beaver-poison Desmodium Clusii. Leopard's Bone June Campanula van Houtei Posmodium Grandia Proporteris simulata Evergreen Shield Fern Desmodium Clusii. Leopard's Bone June Clavia maculata Beaver-poison Desmodium Clusii Peraxinella Gas Plant August Cicuta maculata Beaver-poison Desmodium Clusii Leopard's Bone June Clavia maculata Beaver-poison Desmodium Clusii Leopard's Bone June Clavia May Dropteris simulata Evergreen Shield Fern Clavia May Desmodium Illinoense, Gray Calvia May Desmodium Illinoense, Gray August Corcopsis Janceolata Julia Desmodium Illinoense, Gray Corcopsis Janceolata augustifolia June Echinops fitro Giobe Thistle August Corcopsis Janceolata augustifolia June Echinops fitro Giobe Thistle August Corcopsis Janceolata augustifolia Sea Kale June Echinops Shaerocephalus Daisy Flea Bane June Caulophyllum thalictoides Blue cohosh May Erigeron Spiciosus (Stenactis) July Cynoglossum officinale Hound's Troque Erigeno August Erigeron Spiciosus (Stenactis) July Cynoglossum officinale August Erigeno Philiadelphicus Daisy Flea Bane June Caulophyllum thalictoides Blue cohosh August Erigeron Spiciosus (Stenactis) July Cynoglossum officinale August Eupatorium aparatoides White Snake-root August Convolvalus arvensis August Eupatorium aparatoides White Snake-roo	Bidens frondosa	Stick-tight		Dicentra Canadensis	Squirrel Corn	May
Buphthalmum grandiforum Ox-eye				Digitalis purpurea	Fox Glove	August
Calliha palustris Marsh Marigol May Dipsacus sylvestris Wild Teasel August Callihoe involucrata Glade Mallow August Dodecatheon Meadia Shooting Star May Camassia Fraseri Wild Hyacinth June Dolichos Japonica Kudru Vine August Doronicum Clusii. Leopard's Bone June Campanula persicafolia Peach-leaved Bellilower August Dictamsus fraxinella. Fraxinella Gas Plant August Dictamsus fraxinella. Peach-leaved Bellilower August Dictamsus fraxinella. Fraxinella Gas Plant August Dictamsus fraxinella. Peach-leaved Bellilower August Dictamsus fraxinella. Fraxinella Gas Plant August Dictamsus fraxinella. Peach-leaved Bellilower August Dictamsus fraxinella. Fraxinella Gas Plant August Dictamsus fraxinella. Peach-leaved Bellilower August Dictamsus fraxinella. Praxinella Gas Plant August Dictamsus fraxinella Gas Plant August Dictamsus fraxinella Gas Plant August Desmodium Illinoense, Gray Desmodium Illinoense				Dioscorea villosa	Wild Yam	
Callishoe involucrata Glade Mallow August Dodecatheon Meadia Shooting Star May Camassia Fraseri Wild Hyacinth June Dolichos Japonica Kudzu Vine Campanula Americana Bell-flower August Doronicum Clusii Leopard's Bone June Campanula persicafolia Peach-leaved Belliflower August Dictamusu fraxinella Fraxinella Gas Plant August Campanula Persicafolia Peach-leaved Belliflower August Dictamusu fraxinella Fraxinella Gas Plant August Campanula Van Houtei August Dryopteris spinulosum intermed. Evergreen Shield Fern. Chionodoxas lucillae Glory of-the-Snow May Dryopteris spinulosum intermed. Evergreen Shield Fern. Clayotia Virginica Spring Beauty Dryopteris spinulosum intermed. Evergreen Shield Fern. Clayotia Virginica Spring Beauty Dryopteris spinulosum intermed. Evergreen Shield Fern. Clayotia Virginica Spring Beauty Dryopteris spinulosum intermed. Evergreen Shield Fern. Clayotia Virginica Spring Beauty Dryopteris spinulosum intermed. Evergreen Shield Fern. Clayotia Virginica Spring Beauty Dryopteris spinulosum intermed. Evergreen Shield Fern. Clayotia Virginica Spring Beauty Dryopteris spinulosum intermed. Evergreen Shield Fern. Clayotia Virginica Spring Beauty Dryopteris spinulosum intermed. Evergreen Shield Fern. Clayotia Virginica Spring Beauty Dryopteris spinulosum intermed. Echinopa Spring Beauty Dryopteris spinulosum intermed. Echinopa Spring Beauty Dryopteris spinulosum intermed. Echinopa Fundition and Evergreen Spring Beauty Dryopteris spinulosum intermed. Evergre						
Campanula Americana Bell-dower August Doronicum (Cusii Leopard's Bone June Campanula persicafolia Peach-leaved Bellidower August Dictamus fraxinella Fraxinella Gas Plant August Oronicum (Campanula Van Houte' Demonstrate of Praxinella Gas Plant August Oronicum (Campanula Van Houte' Demonstrate of Proporties simulata Dryopteris simulata Tick-trefoil September Claytonia Virginica Spring Beauty May Dryopteris simulata Tick-trefoil September Claytonia Virginica Spring Beauty May Desmodium (Canadense Tick-trefoil August Coroposis grandiflora Tick seed July Dactylis glomerata Orchard Grass Coroposis lanceolata angustifolia June Echinops fitro Giobe Thistle August Canadosis Coroposis lanceolata angustifolia June Echinops Sphaerocephalus August Canadosis Mild Sena August Erigeron annuus Desmodium pendildiorum (Lespedeza bicolor) August Cambandia Mild Sena August Erigeron annuus Desmodium pendildiorum (Lespedeza bicolor) August Canadosis Individual Mild Sena August Echinops fitro Giobe Thistle August Canadosis Mild Sena August Erigeron annuus Daimatian Eryngo August Crambe cordifolia Sea Kale June Erigeron annuus Daimatian Eryngo August Eryngium anthystimum Dalmatian Eryngo August Chrysanthemum lecanthenum White Weed August Eulalia Japonica. Chrysanthemum maximum August Eulalia Japonica Eulalia Zebrina Zebra Grass Convolvulus Septem Bindweed August Eulalia Japonica Destructiona Mild Sena August Eulalia Japonica Destructiona Mild Sena August Eulalia Japonica Destructiona Mild Sena August Eulalia Japonica Destructiona Destruc	Callirhoe involucrata	Glade Mallow	August	Dodecatheon Meadia	Shooting Star	May
Campanula Americana Bell-flower August Campanula persicafolia Peach-leaved Bellflower August Dictamus framiella. Franciella Gas Plant. August Campanula Van Houtei August Dryopteris simulata Franciella Gas Peach-leaved Bellflower. August Dryopteris simulata Franciella Gas Peach-leaved Bellflower. August Dryopteris simulata Franciella Gas Peach-leaved Bellflower. August Oroscopia autumnale Beaver-poison Desmodium Canadense Tick-trefoil September Claytonia Virginica. Spring Beauty May Dryopteris simulata Tick-trefoil September Claytonia Virginica. Spring Beauty Desmodium Endendium (Lespedeza bicolor) August Coreopsis grandiflora Cick-seed July Desmodium penduliflorum (Lespedeza bicolor) August Coreopsis grandiflora Groepsis lanceolata augustifolia Iune Echinops Sphaerocephalus Orchard Grass Coreopsis lanceolata augustifolia Sea Kale June Erigeron annuus. June Caulophyllum thalictroides Blue cohosh May Erigeron Philadelphicus Daisy Flea Bane June Caulophyllum thalictroides Blue cohosh May Erigeron Philadelphicus Daisy Flea Bane June Chrysanthemum leucanthenum White Weed August Eryngium amethystinum Dalmatian Eryngo August Chrysanthemum leucanthenum White Weed August Eulalia Japonica. Eryngium amethystinum Dalmatian Eryngo August Convolvulus arvensis August Eulalia gracillima Zebrina Zebra Grass Convolvulus arvensis August Eupatorium augractoides White Snake-root August Convolvulus arvensis August Eupatorium augractoides White Snake-root August Convolvulus arvensis Shepherd's Purse Eleusine Indica Dog Stali Grass July Grass Luce Eupatorium purpureum Joe Pye Weed August Convolvulus arvensis Shepherd's Purse Eleusine Indica Dog Stali Grass July Chrystopteris fragilis Bladder Fern Franciel Gaillardia Lawenciana Blanket Flower August Delphinium formosum June Funka subcordata Plantain Lily August Delphinium formosum June Funka subcordata Plantain Lawenciana Blanket Flower August Delphinium hybrids July Gallum Graezans Bedstraw Delphinium hybrids July Gallum Graezans Bedstraw Blanks Flower August Delphinium hybrids Feathe	Camassia Fraseri	Wild Hyacinth	June			
Campanula persicafolia Peach-leaved Bellifower: August Campanula Van Houtet August Propoteris simulata Dryopteris simulata Evergreen Shield Fern Chionodoxas lucillae Glory of-the-Snow May Dryopteris simulata Evergreen Shield Fern Chionodoxas lucillae Glory of-the-Snow May Dryopteris simulata Evergreen Shield Fern Posmodium Canadense Tick-trefoil September Claytonia Virginica Spring Beauty May Desmodium Canadense Tick-trefoil August Colchicum autumnale Meadow saffron September Desmodium penduliflorum (Lespedeza bicolor) August Coreopsis grandiflora Tick seed July Dacty is glomerata Orchard Grass Coreopsis lanceolata June Echinops ritro Globe Thistle August Coreopsis lanceolata augustifoila Sea Kale June Echinops Sphaerocephalus June Caulophyllum thalictroides Blue cohosh May Erigeron Philadelphicus Dalsy Flea Bane June Caulophyllum thalictroides Blue cohosh May Erigeron Philadelphicus Dalsy Flea Bane June Coreopsis samilandica Wild Senna August Erigeron Seciosus (Stenactis) July Cynoglossum officinale Hound's Tongue Eryngium amethystinum Dalmatian Eryngo August Chrysanthemum leucanthemum White Weed August Eulalia Japonica Centaurea macrocephala August Eulalia gracillima Convolvulus Sepium Bindweed August Eulalia gracillima Goneset August Convolvulus Sepium Mouse-ear Chick-weed Eupatorium ageratoides White Snake-root August Convolvulus arvensis Lenchanter's Nightshade Enchanter's N	Campanula Americana	Bell-flower	August	Doronicum Clusii	Leopard's Bone	Iune
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Delphinium formosum June Funkia undulata August Delphinium elatum Bee Larkspur June Gaillardia Lawrenciana Blanket Flower August Delphinium hybrids June Gaillardia Templeana August Delphinium Sinensis Chinese Larkspur July Galium Circaezans Bedstraw Dianthus barbatus Sweet William July Galium triforum Sweet Bedstraw Dianthus plumarius Scoticus Feather Pink August Geranium maculatum Wild Cranesbill May Dicentra cucularia Dutchman's Breeches May Geranium platypetalum June	Delphinium bicolor	Larkspur	June			
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Dianthus barbatus Sweet William July Galium triforum Sweet Bedstraw Dianthus plumarius Scoticus Feather Pink August Geranium maculatum Wild Cranesbill May Dicentra cucularia Dutchman's Breeches May Geranium platypetalum June	Delphinium hybrids		Iune	Gaillardia Templeana		August
Dianthus barbatus Sweet William July Galium triforum Sweet Bedstraw Dianthus plumarius Scoticus Feather Pink August Geranium maculatum Wild Cranesbill May Dicentra cucularia Dutchman's Breeches May Geranium platypetalum June	Delphinium Sinensis	Chinese Larkspur	July			
Dianthus plumarius Scoticus Feather Pink August Geranium maculatum Wild Cranesbill May Dicentra cucularia Dutchman's Breeches May Geranium platypetalum June	Dianthus barbatus	Sweet William	July	Galium triflorum	Sweet Bedstraw	
Dicentra cucularia						
	Dicentra cucularia	Dutchman's Breeches	May	Geranium platypetalum		

	4	Ionth of bloom
GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT. ing	of species with showy flowers.
Geum atrococcineum		
Geum grandiflorum		
Goodyera pubescens		
Gypsophila paniculata	Chalk-plant	August
Gypsophila perfoliata		
Gerardia quercifolia		
Gentiana Andrewsii	Closed Gentian	September
Gentiana Tibetica		
Hemerocallis flava	Yellow Day-lily	July
Hemerocallis fulva	Tawny Day-lily	July
Hemerocallis fulva fl, pl,	Kwanso Day-lily	July
Hemerocallis Sieboldii		June
Hemerocallis Thunbergii		
Helianthus decapetalus	Wild Sunflower	August
Helianthus doronicoides		August
Helianthus grosse-serratus		
Helianthus multiflorus	Dwarf double Sunflower	August
Helianthus orgyalis		September
Helianthus microcephalus		August
Helianthus rigidus		August
Helenium autumnale	Sneeze Weed	September
Helenium autumnale grandiflorum		August
Helenium grandicephalum striatum		
Heliopsis laevis		
Heracleum eminens		
Heuchera sanguinea	Scarlet Alum-root	August
Hibiscus Californica		
Hibiscus militaris	Halbert-leaved Rose Mallow	August
Humulus lupulus		
Humulus lupulus Jap. varieg		
Hyacinthus candicans		
Hydrophyllum Virginicum		
Hydrophyllum appendiculatum	Hairy Water Leaf	June
Hypericum maculatum		
Hypericum Moserianum		
Heleochloa Schenoides		
Iberis corraefolia		
Inula Helenium		
Iris Germanica		
Iris Japonica		June

	GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom- ing of species with showy flowers.
Iris	Sibirica		June
Iris	Kaempferi		July
Iris	Tondel		June



Anthurium Andreanum Mosaicum.

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Isatis tinctoria	Woad	July
Lamium amplexicaule	Dead-nettle	August
Lamium purpureum		August
Lathyrus latifolius	Perennial Sweet Pea	August
Lepachys pinnata		
Liatris cylindracea	Button-Snakeroot	August

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom ing of species with showy flowers.	GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom- ing of species with showy flowers.
Liatris pycnostachya			Lepidium Virginicum-		
Liatris spicata			Malva rotundifolia		
	Brown's Lily		Melilotus alhus		
	White Lily		Melilotus officinalis	Sweet clover	July
Lilium Carniolicum			Mentha Canadensis	- Wild Mint	June
Lilium Croceum	Orange Lily	August	Mentha Viridis	Spearmint	July
Lilium Dalmaticum			Mertensia Virginica		
Lilium Hansonii		August	Mitella diphylla	Bishop's Cap	May
Lilium lanceolatum roseum			Monarda didyma	Oswego Tea	July
Lilium lanceolatum album		August	Monarda fistulosa	- Wild Bergamot	August
Lilium lancifolium punctatum-	Spotted Lily		Montbretia Crocosmia flora	Tritonia	August
Lilium longiflorum	Trumpet Lily	August	Myosotis palustris	Forget-me-not	
Lilium Michauxianum			Mollugo verticillata	Carpet Weed	August
Lilium Pardalinum Roerlii			Marruhium vulgare	- Horehound	
Lilium punctatum			Mentzelia ornata	Mentzelia	September
Lilium rubrum		August	Mitchella repens	Partridge Berry	June
Lilium Schrymakersii		August	Narcissus Jonquilla		
Lilium superbum	Wood Lily	July	Narcissus poeticus	Poet's Narcissus	May
Lilium tigrinum	Tiger Lily	August	Narcissus pseudo-narcissus	Daffodil	May
Lilium tigrinum fl. pl.		August	Narcissus tazetta-polyanthos	- Polyanthus Narcissus	May
Lilium tigrinum splendens		August	Nasturtium montanum		
Lilium Thunbergianum (Venustum)			Nasturtium palustre	Marsh Cress	July
Lilium Van Houtei			Nepeta Glechoma	Ground Ivy	August
Lilium Umbellatum, gr. flr,		August	Oenothera biennis		
Lilium Umbellatum Davuricum			Oenothera rosea		August
erectum			Oenothera Missouriensis		
Lilium Umbellatum incomparabilis		August	Oenothera Youngii.	Young's Evening Primrose	August
Lobelia Cardinalis			Oenothera spectabilis		
Lobelia syphilitica			Onopordon acanthium		
Lobelia syphilitica rosea			Onoclea sensibilis		
Lychnis Chalcedonica	London Pride	August	Opuntia Missouriensis	Prickly Pear	August
Lychnis Chalcedonica alba			Origanum vulgare		
Lychnis Haageana			Osmorhiza brevistylis		
Lychnis plenissima			Osmorhiza longistylis		
Lycopus sinuata			Pachysandra terminalis		
Lycopus Virginicus			Pæonia Chinensis		
Lophanthus Nepetoides			Pæonia officinalis		
Lithospermum arvense	Corn Gromwell		Pæonia Tenuifolia		
Laportea Canadensis			Papaver orientale		
Lavatera Cachemirica			Pentstemon barbatus		

		Month of bloo
GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT. i	Month of bloo ng of species w showy flower
Pentstemon digitalis		
Pentstemon laevigatus		
Pentstemon pubescens		
Phlox decussata varieties		
Phlox divaricata	Wood Phlox	- May
Phlox divaricata alba	White Wood Phlox	May
Phlox bifida		
Phlox pilosa		
Phlox subulata		
Phlox hybrids		
Physostegia Virginiana	False Dragon's-head	July
Platycodon Japonicum	Double Platycodon	- August
Platycodon grandiflorum	Chinese Bell-flower	- August
Platycodon Mariesii	Dwarf Bell-flower	- August
Podophyllum peltatum	May-apple	_ May
Polemonum reptans	American Greek Valerian	June
Potentilla Norvegica	Cinquefoil	
Potentilla Canadensis	"Five-fingers"	-
Potentilla Pyrenaica	Pyrenean Cinquefoil	
Potentilla Anserina		
Primula vulgaris	Common Primrose	_ July
Primula veris	Polyanthus	
Pycnanthemum lanceolatum	Mountain Mint	- August
Pyrethrum roseum	Rosy Pyrethrum	_ August
Pyrethrum uliginosum	Giant Daisy	- Septembe
Phytolacca decandra	Pigeon Berry, Poke Root	- Septembe
Phryma leptostachya	Lopseed	- August
Petalostemon violaceus	Prairie Clover	- August
Prenanthes racemosa		
Prenanthes alba	White Lettuce	- Septembe
Plantago lanceolata		
Plantago major	Plantain	July
Pedicularis Canadensis	Wood Betony	May
Phragmites communis	Reed	
Polygala polygama		
Pyrola rotundifolia		
Polygonatum biflorum	Smaller Solomon's Seal	- May
Polygonum Sachalinense		
Polygonum Hartwrightii		
Pteris aquilina		



ANTHURIUM CRYSTALLINUM

		Month of bloom-
GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom- ing of species with showy flowers
Rudbeckia fulgida	"Black-eyed Susan"	
	Cone-flower	
Rudbeckia laciniata		
Rudbeckia laciniata flore plena		
Rudbeckia speciosa		
Rudbeckia subtomentosa		
Rumex acetosella	Sheep-sorrel	June
Rumex crispus		
Rumex Patientia	- Patience Dock	August
Ruta graveolens	Garden Rue	August
Ranunculus repens		
Ranunculus abortivus		
Scilla Sibirica		
Scilla hyacinthoides	Hyacinth Squill	June
Scrophularia nodosa Marilandica	- Figwort	July
Scrophularia aquatica	- Brookside Figwort	August
Scutellaria parvula	Tuberous Skullcap	August
Scutellaria galericulata	Helmet Skullcap	August
Sedum spectabile	Showy Stone-crop-	August
Sedum acre	Wall Pepper	August
Silphium integrifolium	Smaller Rosin Weed	August
Silphium laciniatum	Compass Plant	August
Silphium terebinthinaceum		
Silphium perfoliatum	Cup Plant	August
Sium cicutafolium	Water Parsnip	August
Smilax rotundifolia	- Cat Brier	
Smilax peduncularis		
Smilax herbacea	Carrion Flower	
Solidago Canadensis	Golden Rod	August
Solidago speciosa		September
Solidago caesia		
Solidago gigantea		
Solidago lanceolata		August
Solidago latifolia		September
Solidago Ohioensis		September
Solidago patula	Swamp Golden Rod	August
Solidago nemoralis		
Solidago Riddelli		September
Solidago rigida		
Solidago rugosa		

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom og of species wit showy flowers
Solidago serotina		- August
Solidago tenuifolia		- September
Solidago ulmifolia		
Spiraea filipendula		
Spiraea Japonica		
Spiraea palmata		
Spiraea ulmaria		
Stachys palustris	Swamp Hedge Nettle	- August
Steironema ciliata	Fringed Loosestrife	July
Sisyrinchium angustifolium	Blue-eyed Grass	May
Smilacina racemosa	False Spikenard	- May
Smilacina stellata		
Saxifraga Pennsylvanica		
Sanicula Marilandica		
Sparganium eurycarpum	Bur-reed	
Sagittaria variabilis	Arrow-head	August
Scirpus lacustris	Great Bulrush	
Scirpus Tabernaemontani zebrina	Banded Rush	
Scabiosa Caucasica	Scabionus	
Sanguinaria Canadensis		
Tanacetum balsamita	Costmary	August
Tanacetum vulgare	Tansy	August
Thalictrum cornuti	Meadow Rue	- June
Thalictrum dioicum	Smaller Meadow Rue	_ June
Tradescantia Virginica	Spider Wort	_ June
Tricyrtis hirta	Japanese Toad-lily	- August
Trillium grandiflorum		
Trillium cernuum	Nodding Wake-robin	- May
Trillium recurvatum	Purple Birthroot	May
Tritoma uvaria	Torch Lily, Red Hot Poker	August
Trollius Europaeus	Globe Flower	- May
Trollius Japonicus	Japan Globe Flower	May
Teucrium Scorodonium	Germander, France	August
Tephrosia Virginiana	Goat's Rue, Catgut	August
Typha latifolia	Cat-tail	
Uvularia perfoliata		
Uvularia grandiflora		
Verbascum phlomoides		
Veronica serpyllifolia		
Viola canina	Dog Violet	June

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT. ing	fonth of bloom of species wit showy flowers
Viola cucullata	Common Blue Violet	May
Viola pedata	Bird-foot Violet	June
Viola pubescens	Downy Yellow Violet	May
Viola rotundifolia	Round-leaved Violet	May
Viola odorata	Russian Sweet Violet	June
Zygadenus glaucus		August
Zizia aurea	Meadow Parsnip	May

SELF-SEEDING ANNUALS AND SPONTANEOUS PLANTS

SEEF-SEEDING AMMONES	S AND STONIANEOUS IL	ANIS
Acnida tuberculata	Water Hemp	September
Adlumia cirrhosa		
Anagallis arv. carnea	Poor Man's Weather-glass	August
Antennaria plantaginifolia	Mouse-ear Plantain	-
Atriplex hastatum		
Amaranthus speciosus	Amaranth	
Amaranthus retroflexus	Pigweed	
Amaranthus albus	Tumble Weed	
Amaranthus blitoides	Creeping Amaranth	
Ambrosia trifida	Great Ragweed	
Ambrosia artemisiæfolia	Bitter Weed	
Antirrhinum major (Red)	Snap-dragon	August
Arctium lappa		
Abutilon Avicennae	Velvet-leaf	August
Acalypha Virginica	Three-seeded Mercury	
Aster angustus	Blind aster	
Borago officinalis	Borrage	August
Browalia elata	Browalia	August
Brachycome iberidifolia	Swan River Daisy	July
Brassica nigra	Black Mustard	June
Commelina coelestis		
Commelina "lentenola"		August
Cuphea viscosissima		
Cuphea Roeziii	Roezl's Cuphea	August
Cuphea ignea	Cigar plant	May
Cuscuta arvensis		
Celosia plumosa		
Cakile Americana		
Chrysanthemum segetum		July
Cenchrus tribuloides	Bur-grass	

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom ng of species wit showy flowers
Centaurea cyanus	Blue Bottle	- August
Campanula Medium Calyc	Canterbury Bell	August
Clarkia elegans	Clarkia	August
Calendula officinalis		
Cannabis sativa		





ANTHERICUM VITTATUM VARIEGATUM.

Chenopodium album Chenopodium glaucum Chenopodium hybridum Chenopodium urbicum	Oak-leaved Goose Foot	
Draba verna		
Datura Tatula		igust
Delphinium ajacis	Rocket-Larkspur Au	igust
Echinocystis lobata	Wild Balsam-Apple Au	igust
Ellisia nyctelea	Jur	ne
Erodium cicutarium	Stork-bill, Pin-clover Jui	ne
Euphorbia peplus	Spurge Au	igust
Euphorbia maculata	Spotted Spurge Au	igust

GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom- ing of species with showy flowers.	GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of blooding of species with shows flower
Erechtites lueracifolia	Fire-weed	August	Stellaria Meadia	Chick-weed	
Erigeron Canadensis	Horse-weed			One Seeded Cucumber	
Eichhornia crassipes	Water Hyacinth	August	Silene Armeria	Sweet William Catchfly	August
Fumaria officinalis	Fumitory	July	Silene antirrhina	- Sleepy Catchfly	Iune
Fragaria Virginiana	Strawberry	May	Silene noctiflora	Night-flowering Catchfly	July
Gypsophila muralis	Small Chalk Plant	August	Solanum nigrum	Nightshade	July
Galinsoga parviflorum	South America	August		Hedge Mustard	
Grindelia squarrosa		August	Saponaria officinalis	"Bouncing Bet"	August
Gazania splendens	- Cape Treasure Flower .	August		Spring Sow Thistle	
Godetia gloriosa		August		Scarlet Sage	
Geranium Carolinianum	Carolina Crane's bill	June		Linden-leaved Sage	
Helianthus annuus	Sunflower	August		Mariana Thistle	
Hunnemania fumariafolia	- Mexico	September		Goat-beard	
Impatiens fulva	Iewel-weed	July		White Clover	
Impatiens Balsamina	Touch-me:not	August	Trifolium pratense	Red Clover	June
Lactuca scariola				Alsike	
Leonurus cardiaca	Motherwort	August		Dandelion	
Malva sylvestris	"Fall Roses"	August		Pansy	
Maruta cotula	May-weed	July			
Malvastrum liminense	Lima Mallow	August		White Vervain	
Mimulus ringens				Blue Vervain	
Nicotiana affinis	Long-flowered Tobacco	Iuly		Cockle Bur	
Nicotiana Tabacum					
Nierembergia gracilis			HAPDY AO	UATICS AND BOG PLANT	101
Oenothera Skinneri			HARDI AQ	UATICS AND BUG PLANT	٥
Polygonum dumetorum			Nelumbium roseum	Lotus	August
Polygonum persicaria					
Polygonum aviculare					
Polygonum hydropiper				White Water Lily	
Pilea pumila					
Perilla Nankinensis					
Pentstemon campanulatus				ella	
Phlox Drummondii					
Pennisetum longistylum					
Portulacca grandıflora					
Portulacca oleracea					
Poa annua					
Rudbeckia bicolor				Spatter Dock	
Ricinus communis				Huntsman's Cup	
			ran Fastana		,

TENDER AQUATICS

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GENERA AND SPECIES.	ENGLISH NAMES AND HABITAT.	Month of bloom- ing of species with showy flowers.
Cyperus alternifolius	Umbrella Plant	
Cyperus Papyrus	Egyptian Paper Reed	
Limnocharis Humboldtii	Water Poppy	
Myriophyllum Proserpinacoides	Parrot's Feather	
Nymphæa dentata		
Nymphæa Devoniensis		
Nymphæa Zanzibarensis		
Nymphæa Zanzibarensis azurea		
Nymphæa rubra		
Nymphæa scutifolia		
Sagittaria Montevidensis	Giant Arrowhead	
Thalia dealbata		
Victoria Regia		

FERNS (EXOTIC).

Acrostichum flagelliferum Acrostichum tenuifolium Adiantum bellum Adiantum Capillus-Veneris Adiantum concinnum Adiantum cuneatum Adiantum Farleyense Adiantum Fergusonii Adiantum formosum Adiantum formosum Adiantum gracillimum Adiantum macrophyllum Adiantum princeps Adiantum pubescens Adiantum tinctum Adiantum tinctum Adiantum trapeziforme Alsophila australis Angiopteris evecta Aspidium aculeatum Aspidium angulare	South Africa Bermuda Maidenhair Fern Tropical America Brazil Barbadoes Ceylon Australia Hybrid Tropical America New Grenada Tropics, Old World Tropical America West Indies Australian Tree Fern Tropics, Asia Shield Fern (Hardy) Soft Shield Fern
	Soft Shield Fern New South Wales

Aspidium falcatum (Cyrtomium)	Holly Fern
Aspidium lepidocaulon	Japan
Aspidium Tsus-Simense	Tsus-Sima Japan
Aspidium lepidum	Brazil
Asplenium Australasicum	Spleenwort
Asplenium bulbiferum	New Zealand
Asplenium esculentum	India
Acrlenium Fabianum (bulbiferum)	





Asplenium lucidum	New Zealand
Asplenium Nidus	Bird's nest Fern
Asplenium viviparum	Plant-bearing Spleenwort
Blechnum Braziliense	Brazilian
Blechnum australe	South Africa
Blechnum occidentale	West Indies
Cibotium regale	"Chignon" Fern
Cyathea dealbata	
Davallia affinis	
Davallia canariensis	Hare's Foot Fern
Davallia dubia	Australia
Davallia Fijiensis plumosa	

Davallia hirta cristata	North India	Pteris palmata	Tropical America
Davallia Mooreana (pallida)	- Borneo	Pteris quadriaurita	
Davallia platyphylla	- East Indies	Pteris serrulata	Chinese Brake
Davallia scabra	Ceylon	Pteris serrulata cristata	
Davallia tenuifolia (stricta)	Tropical Asia	Pteris serrulata tenuifolia	
Dicksonia antartica	Tasmanian Tree Fern	Pteris pungens	West Indies
Dicksonia cicutaria	- West Indies	Pteris tremula	
Dicksonia Schiedeii	Mexico	Pteris tremula Smithiana	
Didymochlaena lunulata	- Tropical America	Pteris tremula Hybrid	
Gymnogramme argyrophylla (Peruviana)	Silver Fern	Pteris triplicata	
Gymnogramme chrysophylla (calomelanos	Gold Fern	Scolopendrium vulgare	
Gymnogramme Peruviana (calomelanos)	Tropics	Woodwardia orientalis	
Lomaria gibba	New Caledonia		
Lomaria princeps		PALMS	
Nephrodium macrourum	Buckler Fern	TALMS	
Nephrodium molle	- Tropics	Areca lutescens	Mauritius Palm
Nephrodium molle grandiceps	Crested Buckler Fern	Arenga saccharifera	Molucca Sugar Palm
Nephrolepis Bostoniensis	Boston Sword Fern	Attalea excelsa	Brazil
Nephrolepis Collingerii	-	Carludovica palmata	Panama Hat Palm
Nephrolepis davatloides furcans		Caryota Blancae	
Nephrolepis Duffii		Caryota sobolifera	
Nephrolepis exaltata	Sword Fern	Caryota urens	Fish Tail Palm
Nephrolepis pectinata-		Chamaedorea elegans	Mexico
Nephrolepis Philipinensis		Chamaedorea Martiana	Chipias
Nephrolepis rufescens tripinnatifida		Chamaerops humilis	Dwarf Palm
Nephrolepis tuberosa	Tropical America	Chamaerops elegans	
Onychium Japonicum	Japan, China	Cocos australis	Cocoanut Tree
Platycerium alcicorne		Cocos plumosa	
Polypodium aureum		Cocos Romanzoffiana	Brazil
Polypodium distans		Cocos Weddelliana	
Polypodium fraxinifolium		Corypha australis	Fan Palm, Australia
Polypodium Korthalsii		Curculigo recurvata	
Polypodium lingua (heteractis)		Didymosperma porphyrocarpon	Java
Polypodium repens		Geonoma Verschaffeltii	
Polypodium subauriculatum (Goniophlebium)		Hyophorbe Verschaffeltii	Mascarene Islands
Polypodium superficiale			
Pteris argyrea (quadriaurita		Jubæa spectabilis	
Pteris Cretica		Latania Borbonica	
Pteris Cretica albo-lineata		Licuala horrida	
Pteris flabellata			
Pteris longifolia		Ptychosperma Cunninghamii	
Pteris nobilis		Ptychosperma Alexandræ	
			~

Ptychosperma McArthurii	New Guinea
Phœnix dactylifera	Date Palm
Phœnix tenuis	Slender Date Palm
Phœnix rupicola	India
Phœnix reclinata	Southeast Africa
Pritchardia grandis	New Britain
Pritchardia Pacifica	Pacific Islands
Rhopalostylis Bauerii	Norfolk Island
Rhapis flabelliformis	Ground Rattan Cane
Rhapis humilis	Japan
Sabal palmetto	Cabbage Palmetto, S. U. S.
Sabal Adansonii	Dwarf Palmetto
Sabal cerulescens	Bluish Palmetto
Trachycarpus excelsus	China
Washingtonia filifera	Southern California

ORCHIDS.

Ærides Fieldingii. Burlingtonia fragrans Cattleya amethystina Cattleya Bowringiana	Brazil .
Cattleya bicolor Cattleya crispa Cattleya gigas Cattleya guttata Cattleya lahiata Cattleya intermedia Cattleya Mossiæ Cattleya Mossiæ	Brazil Tropical America Brazil Brazil Brazil South America
Cattleya Perrinii Cattleya Percivaliana Cattleya Schilleriana Cattleya Skinnerii Cattleya Skinnerii Cattleya Trianæ Cattleya Velutina Cypripedium Almum Cypripedium Arthurianum	Brazil Guatemala Cordilleras, S. Am. Brazil
Cypripedium Boxallii Cypripedium Calurum Cypripedium Crossianum Cypripedium Charlesworthii	



PHAJUS GRANDIFOLIUS (Nun's Hood).

Cypripedium Dominianuni		Miltonia Spectabilis	Brazil
Cypripedium Chamberlainianum		Odontoglossum citrosmum -	Guatemala
Cypripedium grande		Odontoglossum grande	Guatemala
Cypripedium Harrisianum	. Hybrid	Oncidium ampliatum	
Cypripedium hirsutissimum		Oncidium citrinum	Central America
Cypripedium Haynaldianum	Philippines	Oncidium concolor	
Cypripedium insigne	Nepaul	Oncidium (Pap.) Kramerianum	Central America
Cypripedium Leanum lutescens		Oncidium ornithorynchium	
Cypripedium Leanum longiflorum		Oncidium sarcodes	
Cypripedium leucorhodum		Oncidium splendidum	
Cypripedium Pitcherianum		Oncidium varicosum	
Cypripedium Roezlii	New Grenada	Phajus grandifolius	
Cypripedium Schrædere		Saccolabium Blumei	
Cypripedium Spicerianum		Sobralia macrantha	
Cypripedium Villosum	India	Sophronites grandiflora	
Cœlogyne Cristata		Stanhopea oculata	
Chysis bractescens		Stanhopea Tigrina	
Chysis aurea maculata		Trichopilia tortilis	
Dendrobium moschatum		Vanda suavis	
Dendrobium nobile		Vanda tricolor	
Dendrobium speciosum		,	Jara
Dendrobium thyrsiflorum		MISCELLANEOUS PLANTS IN CON-	SERVATORIES
Dendrobium Wardianum		MISCELLANEOUS TEANTS IN CON-	SERVATORIES
Dendrochilum glumaceum		Acalypha marginata	Fiji Islands
Epidendrum cochleatum		Acalypha tricolor	New Hebrides
Epidendrum fragrans		Acalypha Wilkesiana mar,	
Epidendrum nemorale		Acalypha Sandersii	
Gongora maculata		Adenocalymna comosa	
Gongora nigrita		Aloe variegata varieties	
Lælia anceps		Ananassa sativa	
Lælia autumnalis		Ananassa sativa variegata	Brazil
Lælia cinnabarina		Agapanthus umbellatus	
Lælia Davana		Aralia Chabrierii	
Lælia flava		Aralia filicifolia	
Lælia majalis -		Aralia pentaphylla	
Lælia Perrinii-		Aralia Sieboldii	
Lælia tenehrosa		Aralia Kerchoveana	
Lælia purpurata		Araucaria Bidwilli	
Lycaste aromatica		Araucaria excelsa	
Lycaste Deppei		Acacia lophantha (Albizzia)	New Holland
Lycaste Skinnerii		Allamanda grandiflora	
Miltonia Clowesii		Allamanda Schottii	
	27.027	A THOMAS OF THE STATE OF THE ST	

Anthurium acaule	Chinese Bellflower Brazil West Indies Columbia
Anthurium Ferrierense	Ferrieres
Anthurium grande	
Anthurium Hookerii	Tropical America
Anthurium Laucheanum	
Anthurium magnificum	Cundinamarca
Anthurium Ottomanum	D . D
Anthurium regale	East Peru
Anthurium Scherzerianum	Eleminas Elemen
Anthurium Veitchianum	
Anthurium Waroqueanum	
Anthurium Andreanum	
Aspidistra elatior	
Aspidistra elatior variegata	Japan
Astrapæa Wallichii	Madagascar
Aphelandra nitens	
Agave Americana	South America
Agave picta	
Agave Victoria	Mexico
Aglaonema commutatum	
Aglaonema pictum	Borneo
Aglaonema Roebelinii	
Arum Dioscorides	
Alocasia odorata	
Alocasia macrorhiza	
Alocasia metallica	
Alocasia Thibautiana	
Alocasia Veitchii	Borneo
Alocasia zebrina	Philippings
Anhalonium prismaticum	1 mubbutes
Anona Cherimola	Peru
Anthericum vittatum varieg.	
Aristolochia labiosa	
Aristolochia gigas Sturtevantii	Guatemala
Aristolochia ornithocephala	



Asparagus plumosa	South Afric
Asparagus Sprengerii	
Azalea Indica	India
Bambusa arundinacea	India
Beaucarnea stricta	Mexico
Beaucarnea recurvata	Mexico
Begonia varieties	
Bignonia latifolia	Cayenne



CATTLEYA TRIANÆ.

Biota Orientalis	Japan
Bertolonia vittata	Brazil
Bertolonia Van Houtei	
Billbergia Saundersii	Brazil
Bougainvillea glabra Sandersii	South America
Bougainvillea spectabilis	
Boussingaultia basselloides	Madeira Vine
Caladium marmoratum	Guayaquıl
Caladium varieties	
Carica papaya	Papaw Tree, Tropics
Calathea Leitzei	Brazil
Calathea Vanden Heckei	Brazil

Calathea ornata	Columbia
Calathea ornata rosea lineata	
Calathea princeps	
Calathea Wallisii	
Calathea zebrina	Brazil
Centradenia rosea	
Cereus Peruvianus Monstrosus	Tropical America
Cereus Grandiflorus	West Indies
Cyrtodeira metallica (fulgida)	New Grenada
Cordyline Braziliensis	
Cordyline Colocoma	
Cordyline indivisa	New Zealand
Cordyline Veitchii	
Cordyline spectabilis	
Chloranthus officinalis	Tropics
Cissus discolor	
Clerodendron Balfourii	Calabar
Calceolaria crenatiflora varieties	Chili
Curmeria Wallisii	Columbia
Crinum amabile	Sumatra
Cinnamonium Cassia	Cinnamon
Cobæa scandens	
Citrus decumana	Shaddock, Polynesia
Codiæum Andreanuni	
Codiæum aureum	
Codiæum Comte de Germain	
Codiæum D' Israelii	Polynesia
Codiæum Elegans	•
Codiæum Evansianum	Polynesia
Codiæum Fordii	
Codiæum Hanburyanum	
Codiæum interruptum	Polynesia
Codiæum longifolium	
Codiæum spirale	South Sea Islands
Codiæum trilobum	Polynesia
Codiæum undulatuni	Polynesia
Codiæum Veitchii	
Codiæum Prince of Wales	
Codiæum Weissmanii	Polynesia
Codiæum Williamsii	
Coffea arabica	Coffee, S.W. Abyssinia
Cyclamen Persicum	
*	

Cytissus Andreanum	Normandy
Cytissus Canariensis	Canary Islands Broom
Cycas revoluta	Japan Sago Palm
Cycas circinalis	East Indics
Cineraria cruenta hybrida varieties	Canary Islands
Cryptomeria Japonica	Japan Cedar
Camelia Japonica	
Dioscorea bulbifera	Yam
Dracæna Amboynensis	Amboyna
Dracæna amabilis	
Dracæna Baptista	
Dracæna Braziliensis	
Dracæna congesta	Moreton Bay
Dracæna Cantrellii	•
Dracæna colossus	
Dracæna Draco	Dragon Tree, Canary Islands
Dracæna ensifolia	
Dracæna Fraserii	
Dracæna fragrans	Tropical Africa
Dracæna Guilfoylei	Australia
Dracæna Gladstonei	_
Dracæna gloriosa	
Dracæna Godseffiana	
Dracæna Goldiana	
Dracæna Haageana	
Dracæna frag. Lindenii	
Dracæna frag. Massangeana	
Dracæna marginata	
Dracæna Neo-Caledonia	
Dracæna reginæ	
Dracæna recurva	
Dracæna Rossii	
Dracæna Schuldii	
Dracæna Sanderiana	
Dracæna terminalis (cordyline)	South Sea Islands
Dracæna voluta	
Dracæna Youngii	
Dichorisandra musaica	Maynas
Dieffenbachia Bausei	
Dieffenbachia Bowmanii	Brazil
Dieffenbachia Carderii	Columbia
Dieffenbachia gigantea	Brazil

Dieffenbachia memori corsii	
Dieffenbachia nobilis	Brazil
Dieffenbachia velutina	Columbia
Dioon edule	Mexico
Epipremnum mirabile	Fiji Tonga Plant
Echinopsis Millerii	



Cineraria Cruenta Hybrida.

Euonymus variegata	Nepaul
Echinocactus Lopothilli	
Eriobotrya Japonica	Loquat, Japanese Medlar
Erica stricta, Heath	S.W. Europe
Elettaria cardamomum	"Cardamons"
Encephalartos Altenstemii	Cape of Good Hope
Eranthemum pulchellum	East India
Eranthemum tricolor	Polynesia
Eucharis Amazonica	New Grenada
Euphorbia splendens	Isle of Bourbon

Euphorbia grandicornis		Lantana delicatissima	
Euphorbia candelabra		Laurus nobilis	Common Laurel
Fittonia argyroneura	Peru	Lopezia racemosa	Spider Flower, Mexico
Fittonia Verschaffeltii		Musa Cavendishii	Banana
Ficus Bausei		Musa paradisiaca	
Ficus Cooperii	Australia	Musa sapientum	
Ficus elastica	India Rubber Tree	Musa Sumatrana	
Ficus minima	Japan	Myrtus communis	
Ficus miniata		Macrozamia cylindracea	Australia
Ficus macrophylla	New South Wales	Manettia bicolor.	Organ Mts., Brazil
Ficus nitida		Monstera deliciosa	
Ficus Parcellii	Polynesia	Maranta angustifolia	Trinidad
Ficus Quercifolia		Maranta arundinacea	
Ficus radicans		Maranta Chimboracensis	Ecuador
Figus repens	China	Maranta Kerchoveana	
Ficus rubiginosa	New South Wales	Maranta Makoyana	Tropical America
Ficus Roxburghii	Silhet	Maranta Legrelliana	
Ficus stipulata	Japan	Nephthytis picturata	Congo
Fourcroya Selloa	Mexico	Nephthytis Liberica	
Freesia refracta alba	Cape of Good Hope	Nephthytis triphylla	
Grevillea robusta	Silk Oak	Nepenthes McFaddenii	Pitcher Plant, Trop. Asia
Habrothamnus elegans	Mexico	Nepenthes Amesiana	•
Hibiscus Rosea-Sinensis	Tropics	Nepenthes phyllamphora paluda	Borñeo
Heliotropum Peruvianum	Peru	Nepenthes distillatoria	
Hedychium flavescens		Nepenthes Dominiana	
Heliconia aureo-striata		Nepenthes Dominiana Major	
Hedera helix	English Ivy	Nepenthes Domini	
Hedera arborescens		Nepenthes intermedia	
Hoffmannia Ghiesbrechtii	South America	Nepenthes Morgania	
Isolepis gracilis (scirpus)		Nepenthes Sandersii	
lpomœa setosa		Nepenthes Trindlevii	
Imantophyllum Gardenii		Nepenthes Williamsii	
Impatiens Sultana		Opuntia species	
Jacaranda mimosæfolia	Brazil	Osmanthus fragrans	China
Justicea carnea	Rio Janeiro	Panax Victoria	
Justicea flava		Pandanus utilis	
Justicea velutina		Pandanus Javanicus	Chandelier Tree
Jatropha podagrica	Brazil	Pandanus Veitchii	
Kalosanthes coccinea		Pandanus Javan. Varieg.	
Kaempferia rotunda		Pandanus Amaryllifolius	
Linaria Cymbalaria	Kenilworth Ivy	Panicum plicatum niveo-vit,	Panic Grass
Ligularia Kaempferi aureo-maculata		Panicum sulcatum	

Passiflora cœrulea	South America
Passiflora Descaineana	
Philodendron cannæfolium	Brazil
Philodendron cannæfolium Philodendron cuspidatum - Philodendron selloum - Philodendron sell	
Philodendron selloum	
Philodendron Andreanum	Columbia
Philodendron Gloriosum -	
Philodendron verrucosum	Ecuador
Pelargonium grandiflorum varieties	Cape of Good Hope
Philodendron verrucosum Pelargonium grandifiorum varieties Peperomia metallica. Peperomia peltæformis	Pepper Elder
Peperomia peltæformis	Brazil
Peperomia Saundersii	Brazil
Piper nigrum	Black Pepper, East Indies
Pitcairnea Andreana	
Phyllotænium Lindenii	
Pimenta acris	Allspice Tree
Pittosporum Tobira	
Pittosporum Tobira variegatum	
	Cruel Plant
Pothos aurea	
Pothos argyrea	
Pothos celatocaulis	
Phrynium variegatum	Singapore
Phormium tenax	New Zealand Flax
Phormium tenax, foleis varieg.	* **
	India
Peristrophe angustifolia varieg.	
Primula Sinensis	
Plumbago Capensis Primula grandiflora (vulgaris)	Cape of Good Hope
Poinsettia pulcherrima	Europe
Primula obconica	
Ruellia macrantba	
Reineckea carnea	China
Rhododendron Ponticum varieties	
Sanchezia nobilis	
Selaginella arborea	
Selaginella cæsia	
Selaginella viticulosa	
Selaginella Wildenovii	
Saccharum officinarum	
Stigmaphyllon ciliatum	
ougmaphynon chiatum	Goiden vine, Diazn

Solanum Seafortheanum azureum	West Indies
Solanum Wendlandi magnificum	Costa Rica
Saxifraga sarmentosa	Beefsteak Saxifrage
Sapindus Saponaria	Soap Berry
Sciadopitys verticillata	Umbrella Pine, Japan



Primula Obconica.

Strelitzia Reginæ	South Africa
Sterculia platanifolia	China
Spathophyllum Wallisii	New Grenada
Smilax salicifolia varieg.	South America
Spathophyllum cannæfolium	Brazil
Sanseviera Zeylanica	Bowstring Hemp
Stapelia hirsuta	South Africa

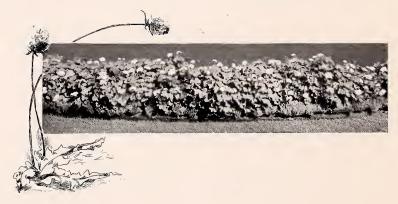
Chrysanthemum carinatum

Barbary

T-1	East Indian Base Base	Character the same for the same	
Tabernamontana coronaria fl. pl		Chrysanthemum frutescens	Marguerite
Thunbergia laurifolia		Cuphea ignea	Mexico Cigar Plant
Tillandsia angustifolia		Coleus Pine Apple Beauty	
Tillandsia Lindenii		Coleus Tesselata	
Tillandsia utriculata		Coleus Parquet	
	Shanghai	Crocus vernus, varieties, (10,000 plants)	
Taxus baccata	Yew Tree	Celosia cristata	
Taxus Hibernica		Celosia "Glasgow Prize"	
	Japan Yew	Celosia Thompson's Superb	
Veltheimia viridifolia		Caladium esculentum (Colocasia)	
Viburnum laurestinus		Canna Indica, varieties	
Vibumum faurestinus	Laurestinus	Canna Alph. Bouvier	
		Canna Brilliant	
PERFECTION DE LUIS	~	Canna Chicago	
BEDDING PLANT	S	Canna Chas, Henderson	
Francisco de consensado de diferente		Canna Duke of Marlborough	
From 225,000 to 230,000 bedding pla	•	Canna Egandale	
flower-beds and vases. The following are the	ne species and varieties:	Canna Florence Vaughan	
Abutilon Savitzii	Brazil	Canna Flamingo	
Abutilon Souv. de Bonn	Diazii	Canna J. C. Cabos	
Acalypha Macafeeana		Canna Mme. Crozy	
Acalypha obovata	Polynesia	Canna Philadelphia	
Achyranthes Lindenii		Canna P. J. Berckman	
Achyranthes metallica		Canna Queen Charlotte	
Ageratum conyzoides		Canna Souvenir Antoine Crozy	
Ageratum conyzoides, Cope's Pet		Canna Stella Kanst	
Alternanthera paronychoides		Canna Triumph	
Alternanthera latifolia		Dianthus chinensis Heddewigii	
Alternanthera rosea		Dianthus caryophyllus, varieties	Carnation, Clove Pink
Alternanthera versicolor		Dianthus, single annual varieties	
Althea rosea, varieties		Dianthus Crimson Belle	
Aster Victoria, improved varieties		Dianthus Eastern Queen	
Begonia Erfurtii		Echeveria secunda glauca, varieties	"Hen and Chickens"
Begonia Schmidtii	moist tropical regions	Echeveria gibbiflora metallica	
Begonia Vernonia, double		Gomphrena globosa	
Begonia Vernonia, crimson and gold		Gladiolus, varieties	
Bellis perennis -	Daisy	Hyacinthus orientalis, (2,000 used)	
Browallia speciosa major		Hyacinthus orientalis albulus.	
Cacalia articulata	. 0.0	Leucophyta Brownii	
Cineraria maritima candidissima	Dusty Miller	Lobelia Paxtoniana	
Clarific martina canadassina		Lobella 1 axtonana	

Lophospermum scandens

Maurandia Barclayana		Pelargonium graveolens	Rose Geranium
Matricaria inodora fl. pl	Double Chamomile	Petunia violacea and varieties	
Mathiola annua, varieties	Ten-Week-Stock	Pilogyne (Zehneria) Suavis	South Africa
Mignonette Machet		Phlox Drummondii, varieties	
Mesembryanthemum cordifolium variegatum-	Heart-leaved Fig Marigold	Pyrethrum aureum (Chrysanthemum)	Golden Feverfew
Othonna crassifolia	Ragwort, Cape, So. Africa	Pyrethrum Parthenium (Chrysanthemum	Feverfew, Europe
Pelargonium inquians, varieties	Bedding Geraniums	Ricinus Communis, varieties, Palma Christi	Tropical Africa
Pelargonium Mrs. Parker		Thymus Serpyllum vulg. argentea.	Lemon Thyme, S. Europe
Pelargonium Bruanti		Torenia Fournieri	Cochin China
Pelargonium Beaute de Poitevine		Torenia var. Princess of Montenegro	
Pelargonium Mrs. E. G. Hill		Tropæolum majus, varieties	Great Indian Cress
Pelargonium La Favorite		Tulipa Gesneriana, varieties, (30,000 Plants)	Common Tulip, Levant
Pelargonium Mad, Mollen		Vinca major variegata	Band Plant
Pelargonium Rev, Mr. Atkinson		Vinca rosea oculata	
Pelargonium Mad. Solleroi		Vinca rosea	
Pelargonium Harrison		Vinca rosea alba	
Pelargonium Le Contable		Verbena Venosa	Brazil
Pelargonium peltatum	Ivy Geranium	Viola tricolor maxima hybrida, varieties	Pansy, Heart's Ease
Pelargonium Capitatum	Rose Geranium	Zinnia elegans varieties	"Youth and Old Age," Mexico



SECRETARY'S REPORT

Снісадо, March 31, 1899.

TO THE COMMISSIONERS OF LINCOLN PARK.

Gentlemen,—I herewith submit a detailed report of receipts and expenditures for Lincoln Park during the fiscal year from April 1, 1898, to March 31, 1899, and financial statements of general and special funds.

Very respectfully,

I. J. BRYAN, Secretary.

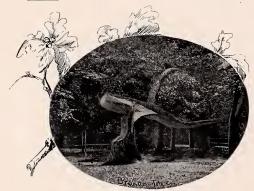
'RECEIPTS

RECEII 15			
Balauce of cash in Treasurer's hands			\$112,724.43
Tax levy of 1897		\$205,942.57	. ,
On account of tax levy of 1898		25,000.00	
From interest on bank balances		4,372.10	
From boats		4,564.40	
From swings		450.00	
From phætons		1,133.33	
From permit fees		56.00	
From rent of refectories		5,225.00	
From rent of pier		126.00	
From rent of bicycle racks		26.77	
From rent of steam roller		718.25	
Sale of animals—			
16 rabbits, 25c	\$4.00		
4 white kittens, S10	40.00		
2 great Dane dogs, \$10	20.00		
2 lion cubs	250.00		
4 ducks	1.20	315.20	
From barn account—			
Sale of horses	\$187.50		
Sale of harness	18.16		
Board of horse	13.50	219.16	
Dourd of Horse	13,30	219.10	
Labor and material—			
Ohio Street extension	\$1,784.26		
Chicago Star C. & D. Co.	33.00		
Sand	1,364.40		
Manure	228.30		
Trees -	15.00		
Teaming	1,355.10		
Electric launches	284.00		
Oldboats	5.00		
Old junk	51.52		
Forward	\$5,120.58	\$248,148.87	\$112,724.43

Brought forward Old lawn mowers Old lead cable Old uniforms (police) Artesian water Copy of minutes Street repairs Refectory repairs Sundries Sale of protection bonds Ohio Street Extension Oak Street breakwater From Boulevard, maintenance account— Fullerton Avenue Boulevard. Lincoln Park Boulevard Dearborn Boulevard Diversey Boulevard Credit to Ohio Street improvement	24.00 35.50 40.00 5.00 1.50 3.80 14.19 260.51	\$248,148.87 5,505.08 46,671.20 66,481.00 14,327.00 3,303.39 25,18	\$112,724.43
Deposits on badges and permits		249.00	384,710.72
Total receipts from all sources			\$497,435.15
DISBURSEMENT			- 1,711.00
Unpaid vouchers April 1, 1868 Park Maintenance expenses Coupon interest Ohio Street Extension Oak Street breakwater Shore protection Belmont Avenue breakwater North Shore Drive improvement Diversey Avenue, west, assessment Fine Street improvement Fullerton Avenue, west, assessment Sheridan Road Diversey Avenue, west, assessment Lake Shore Drive, maintenance Sheridan Road Diversey Avenue, east Fullerton Avenue, east Fullerton Avenue, east Fullerton Avenue, west North Park Avenue North Avenue Dearborn Avenue Boulevard Lincoln Park Boulevard Chicago Avenue Park Park engagement Forward	\$1,278.90 3.577.40 479.80 131.10 86,555 198.70 333.85 561.05	\$18,710.17 127,009.33 24,109.00 65,033.78 6.179.00 8,603.62 11,411.52 22,09.14 157,05 200,000 50.15 38.45 8,529.40 5,786.22 53.50 8269,048.03	8497.435.15

Brought forward	\$269,948.03 \$497,435.15	STATEMENT OF SPECIAL FUNDS	
PARK IMPROVEMENTS		OHIO STREET EXTENSION	
Bridge No. 4 \$2,016,40 New barn 24,025,07 New animal house 5,221,60 Old animal house, alterations 7,517,35 North Pavilion 10800		Cash balance, April 1, 1898 \$40,754.39 Received from property owners 65,506.18 Disbursements \$65,903.78 Cash balance, March 31, 1899 41,326.79	
New horse fountain 53.35 New elephant shelter 248.62 New telephone 548.09 New fences 1,227.40 New propagating houses 332.45 New propagating houses 366.60 New animal shelter and yards 10.40 New animals 2,004.46 Disbursements for previous year \$18,710.17 Total disbursements for current year 295,701.01		NORTH SHORE DRIVE	\$2,294.41 2,294.41 \$14,327.00
DUE SPECIAL FUNDS For advance taxes for 1899 collected. For Ohio Street Extension For Oak Street breakwater Cobb's assessment. Dearborn Boulevard.	41,326.79 8,157.00 1,180.30	Received from sale of bonds \$40,000.00 Received from premium on bonds \$6,600.00	\$46,671.20 46,671.20
Shore protection fund Sinking fund Permits and badges Coupon interest Surplus in general fund	38,067.58 43,708.23 501.25 450.00 \$158,420.52	The total bonded indebtedness of Lincoln Park, March; was \$500,000, in bonds of the town of North Chicago, as fol \$300,000 Lincoln Park Shore Protection Bonds, issued October 1, 1887; October 1, 1907, bearing 5 per cent interest, payable semi-October 1 and April 1, at the State Bank of Chicago. A Sinking the payment of the bonds at maturity is provided for by annue	llows: , maturing nnually on z Fund for
FINANCIAL STATEMENT Due general and special funds Vouchers unpaid, March 31, 1899 CASH ON HAND Balance from Treasurer's statement, March 31, 1899 Checks drawn, but not presented	\$183,023,97 9,156,57 \$192,180.54 \$199,286,78 7,732,35	but no provision is made for retiring any part of the issue prior to sifo,000 Lincoln Park Shore Protection Bonds, issued August 1, 1891, m twenty years, bearing 5 per cent interest, payable semi-annuall ruary 1 and August 1, at the State Bank of Chicago, other conditions as those of first issue. \$40,000 Lincoln Park Shore Protection Bonds, issued July 1, 1808, m twenty years, hearing 5 per cent interest, payable semi-annually of 1 and July 1, at the State Bank of Chicago, other conditions sam of first issue. SINKING FUND ACCOUNT Cash balance, April 1, 1808.	naturing in all on Feb- tions same in atturing in on January ne as those
Balance in Treasurer's hands Balance in Cashier's hands	\$191,554.43 626.11 \$192,180.54	Received from tax levy \$21,276.67 Received from interest on balances 769.88 22,046.55	

STATEMENT OF TAX LEVY FOR 1898 Total tax levy	Brought forward From North Chicago, for maintenance and improvement of Park: Appropriated by Supervisor. Excess of levy. 2,345.34	\$44,901.67
Total collections	Amount of tax warrant. Amount uncollected County Clerk's fees for extending tax \$4,10,40,40,40,40,40,40,40,40,40,40,40,40,40	135,485.75
County Clerk's fees for extending tax	Amount of tax warrant, \$55,866.96 Amount uncollected \$305.46 County Clerk's fees for extending tax 730.40 Town Collector's commissions for collecting 378.18 County Collector's commissions for collecting 378.18 \$36,651.55 at 1 per cent 366.51 1.780.55	54,086.41 \$234.473.83



SUMMARY OF ALL EXPENDITURES

April 1, 1898, to March 31, 1899

PARK MAINTENANCE ACCOUNTS ADMINISTRATION	Brought forward \$5,163.12 \$2,828.85 \$32,847.00 Fuel 110.68
Salaries, pay roll . Supplies . Supplies . Salaries, pay roll . Supplies . Salaries . Sa	Insurance 380,55 Buggy 200,00
Stationery. 77.13 Bonds of employes 70.00 Engineering supplies 58.94 Court costs and legal expenses 15.60 Decorating office 148.14	### FLORAL DEPARTMENT WAGES
Typewriter and supplies 118.45 Telephone service 176.05 Postage 128.00 Street car tickets 70.00 Sundry expenses 348.25 2,459.69 811,7.	11050
POLICE Salaries, pay roll	Flower pots. 73.55 Wire netting, Palm House 150.40 Repairs to heating plant 80.70 Sundries 300.33 6,641.58 15,013.68
Bicycle repairs \$247.45 Stars and clubs 44.85 Buggy for Captain 125.00 Fuel 55.25 Sundries 46.26 518.81 21,12	
STABLES WAGES WAGES S2,071.15 Wagon repairs 754.85 Harness repairs SUPPLIES S3,704.72 Horseshoeing Medicine S4,59 S4,928.85	Fertilizing
Forward \$5,613.12 \$2,828.85 \$32,8.	47.00 Forward \$11,008.40 \$58,008.28

A HISTORY OF LINCOLN PARK

Brought forward		\$11,008.4	\$58,008.28	Brought forward		\$75,232.41
Hose	SUPPLIES	\$mm6.00		DRIVES		- 7 37-3
Frinklers Sprinklers Lawn mowers and tools Grass seed Paints for baskets Lumber for fence repairs		\$776.00 33.20 228.20 38.92 11.40 79.87		WAGES Cleaning Repairing Sprinkling Kepairing and painting tools	- 127.75 778.70	.20
Wire for fence repairs		44-33	0 12,245.50	SUPPLIES Stone and gravel for repairs	\$617.76	
	TREES			Brooms and brushes	23.50 641	.26 \$3,273.46
Foremen	WAGES	\$121/10		SPRINKLING-WAGON R	EPAIRS	
Wiring trees Watering trees Trimming trees				Pay roll	\$427	.60
Carting brush		50.10 10.15		Hose	\$126.33	
Weeding nursery Planting Carting trees and soil		13.50 901.10 349.60		Paints	149.70	.01 718.61
	SUPPLIES	102.55 \$2,344.6	0	STEAM-ROLLER SER	VICE	
Black soil	SUPPLIES	\$249.20		WAGES		
Tar Tools			0 2,634.90	Pay roll SUPPLIES Fuel Sundries for repairs	\$22.15	
	WALKS			ANIMAL DEPARTME		.14 112.89
P	WAGES	260.00				
Foremen Cleaning (in Park). Sweeping Clark Street walk. Repairing. Edging Sprinkling		\$69.25 688.70 250.60 350.85 486.40		WAGES Attendants Night watchman Repairs Cleaning	360,00 202,45	
Clearing snow		56.25 235.70		MeatSupplies		
Repairing tools and signs Repairing tunnels		5.10 32.95 \$2,276.4	0	Bread Fish Milk	323.75	
Slag	SUPPLIES	\$22.50		Hay Oats		
Lumber and paint for benches Sundries		\$22.50 37.58 7.25 67.3	3 2,343.73	Oats Corn Wheat	79 · 77	
Forward			\$75,232.41	Forward	\$5,096.39 \$4,960	0.20 \$79,337.37

Brought forward	\$5,096.39	84,960.20	\$79.337.37	Brought forward		ş	97,342.12
Bran	- 4.10			LIGHT			,,,,,
Bird seed	18.10			LIGITI			
Carrots				WAGES			
	46.00			Operating plant and lights	S5.058.75		
				Machinery repairs	172 50		
Oniona	27.63			Cleaning	28 75	6 160 00	
Onions	7.15			Cicaning	20./5	50,100.00	
Rice	1.60			SUPPLIES			
Apples	31.75			Coal	\$2.005.78		
Bananas	14.55			Arc-light carbons	120,00		
Nuts	23.00			Arc-light globes			
Eggs	- 3.27			Electric supplies	236.58		
Salt	2,00			Machinery repairs			
Pepper							
т сррси	1.40			Expert opinion conduit contract			
Total food	- \$5,362.58			Engine oil'-			
	3.0			Boiler compound			
Investigating animal-houses	187.41			Building repairs	8.18		
Disinfectants	- I35,00			Packing	27.72		
Hose	- 83.83			Waste	35.70		
Building and cage repairs				Polish			
Medicine	60.05			Tools			
Coal				Sundries		2 729 42	9,688.92
Hardware	07.04			Sungries	/5.11	3,528.92	9,000,92
Daniel Albanie				ACADEMY OF SCH	TATORO .		
Brooms and brushes	- 50.30			ACADEMY OF SCII	ENCES		
Ice	19.74			WAGES			
Signs				Academy officials	\$2,520.00		
Soap	I5.75			Engineer and janitor service			
Sundries	147.30	6,200.04	11,250.24	Building repairs	12.25	\$4,613.35	
				Danding repairs	33.33	54,013.33	
				SUPPLIES			
WA	TER			Fuel	S163.31		
				Sundries	107.08	571.20	5,184.64
WA	GES			Dullatics		3/11.29	3,104,04
Operating power plant	\$3,107.05			TOILET-ROOM	IS		
Repairing machinery	201.10						
Repairing water mains	for 7f			WAGES			
Cleaning	391./5	52 022 80		Attendants			
Creating	29.00	33,932.00		Repairs	356.35	\$3,276.35	
				SUPPLIES			
SUPI	PLIES				0		
Coal	S2,095.74			Plumbing			
Machinery repairs	183.24			Coal			
Boiler compound				Building repairs			
Engine oil				Sundries	40.13	160.84	3,437.19
Water-pipe and fittings							
Packing.	20,06			SWINGS			
Waste				WAGES			
				Repairs		\$20.40	
Polish						529.40	
Tools				SUPPLIES			
Building repairs				Lumber			
Sundries	21.10	2,821.71	6,754.51	Sundries	2.65	18.69	48.09
Forward			\$97,342.12	Forward		S	115,700.96

A HISTORY OF LINCOLN PARK

Brought forward			s	15,700.96	Brought forward S119.671.27	
	WELLS AND FOUNTAIN	S			SKATING	
	WAGES				WAGES	
Pipe and fittings Cups and chains	SUPPLIES	24.19	\$6.95 50.70	57.65	Cleaning ice. \$1,163,70 Building shelter 37,90 Temporary floors South Refectory 21,75 Temporary floors North Pavilion 36,00 Repairing ice-scrapers 56,55 Attendants 69,50	
Repairs	SEWERS WAGES SUPPLIES		\$248.10		Supplies S21,50 Lumber shelter S21,50 Lumber, temporary floor, South Refectory 16,00 Coal shelter 2,63 Sundries 9,07 49,20 1,431,60	
Cement		\$11-15 17.65 2.00	30,80	278.90	GAMES WAGES WAGES S172.95 Erecting foot-ball goal-posts. 4.90 \$177.85	
Repairs	SHORE PROTECTION WAGES ELECTRIC FOUNTAIN WAGES			51.95	SUPPLIES S22.60 Marking cart 4.50 Application blanks 5.50 Record slips 4.50 Sundries 2.07 30.17 217.02	
Operating fountain	SUPPLIES		\$258.15 6.00	264.15	BATHING BEACH WAGES Attendant S110,00	
	BOATS WAGES				MUSIC	
Cleaning pond surfaces Carting	SUPPLIES	543.35	\$2,987.45		Supplies S1,310.00 Sundries S1,310.00 1,10 1,311.10 1,342.70	,
Nails, screws, etc., repairs Paint Painting tools Oars Awning for swan boat		51.43 108.64 11.45 31.85			SOUTH REFECTORY WAGES S63.65	
Sundries		42.18	330.21	3,317.66	Sundries 2.84 452.84 516.49)
Forward			s	19,671.27	Forward	j.

Brought forward			\$1	23,297.33	LAKE SHORE PROTECTION	ACCOU:	NTS	
	H PAVILION Wages				' PAVED BEACH PROTECT	TON		
Repairing doors				.75	Pay roll		\$212,40	
Repairs s	T BRIDGE WAGES UPPLIES	2	\$28.80		Printing bonds Granite paving blocks Breakwater contract Engineer	5,074.50 2,930.37 250.00		
		\$41,00 ,38	41.38	70.18	Sundries	86.35	8,391,22	88,603.62
	ON BRIDGE WAGES				OAK STREET BREAKWA	ΓER		6,170.00
	UPPLIES		\$46.75		BELMONT AVENUE BREAK	WATER		
Nails '		\$84,00 1.70	85.70	1 32.45	Pay roll. WAGES		80.75	
	WAGES			3.30	Breakwater contract SUPPLIES Advertising	\$1,396.80 14.40	1,411.20	1,411.95
	OGE NO. 4				Coupon interest BOND ACCOUNT			24.100.00
Repairs	WAGES ERAL WORK			7.85	Total wages Total supplies			
Assistant superintendent		500.80			PARK IMPROVEMENT ACC	COUNTS	S	
Expressman Storekeeper	5	29.85			NEW BARN WAGES			
Carpenters Blacksmiths Painters Teaming and labor		69.20 39.35	.062.00		Engineer Excavating Grading	641.75 269.45		
s	UPPLIES		,,,-		Sewers		\$1,659.85	
Lumber Tools Paint Coal Kerosene Bicycle repairs Nails Iron		569.18 78.52 89.54 50.25 46.12 14.50 16.35 14.88 19.35			Masonry contract Carpentry contract Roofing contract Asphalt floor contract Electrical fittings Painting	4,437.00 3,175.00 3,360.00 180.17 500.00		
Soap Sundries		12.95 22.93	434-57	4,397.47	Steam fitting Plumbing Iron work	337.00		
Total wages park maintenance Total supplies park maintenance			,187.20 ,722.13 \$1	27,909.33	Sundries Forward	433.12		\$24,025.97

Brought forward		;	\$24,025.97	Brought forward			s	39,986.78
ANIMAL-HOUSE ALTERAT	TIONS				PHEASANT-CAGES			
Engineer WAGES Labor		\$831.50		EngineerLabor	WAGES	\$29.85 198.50	\$228.35	
SUPPLIES	25 255 00			Sundries	SUPPLIES		438.25	666.60
Iron work Steam fitting Cement Brick	147.47 145.20 127.50			Pay roll	ELEPHANT SHELTER wages		\$153.80	
Cut-stone work Lumber Sundries	375 00 376.33 159.35	6,685.85	7,517.35	Sundries .	SUPPLIES		94.82	248.62
NEW ANIMAL-HOUSE				Pay roll	ANIMAL YARDS AND SHEI WAGES	LTER		10.10
Pay roll Supplies		\$295.20		Tuy ton	SOUTH CHANNEL BRIDG	GE		10.40
Contract	228.50	4,926.40	5,221.60		SUPPLIES	\$166.80	\$482.50	
ANIMAL PURCHASES		\$600.00		Iron work		876.00 491.10	1,533.90	2,016.40
1 Lion 1 Zebra 1 Pair zebus		500.00 500.00 100.00		Pay roll	NEW TELEPHONE WAGES		\$21.35	
1 Yak 1 Fallow deer 1 Honey bear		85.00 60.00 20.00 20.00			SUPPLIES	\$498.40 28.34	526.74	548.00
Pair swans		60.00 25.00 18.00		n .	NEW PROPAGATING HOU WAGES			
Sundry small animals and express charges		106.46	2,094.46	Moving trees, etc		\$92.35 297.05	\$389.40	
NEW FENCES (Animal paddock and duck po	ond.)			Sundries	SUPPLIES		3.05	392.46
Pay roll		\$199.65		Dave well	BASE-BALL TOILET-HOU WAGES	SE	C176 02	
Wire fences Stone	\$918.75	927.75	1,127.40	Ť	SUPPLIES		\$176.90 155.55	332.45
Forward			\$39,986.78	Forward				844,201.80

*				·	
Brought forward	,		844,201.80	Brought forward	\$3,577.40
	NORTH PAVILION SUPPLIES			LAKE SHORE DRIVE	13/3/7-1-
Cement (old bill)	LAGOON FENCE		108.00	Sprinkling \$231 Cleaning 1,047	
Painting	SUPPLIES		100,00	LINCOLN PARK BOULEVARD, SOUTH	
	HORSE FOUNTAIN			Police S507.50	
D -11	WAGES			Sprinkling	
Pay roll	SUPPLIES	\$18.35		Cleaning 275.15 Labor and superintendence 147.20 \$1,026	75
Trough		35.00	53-35		-/3
Total wages		\$4,467.25		Teaming SUPPLIES S62.30	
Total supplies		39,995.90	\$44,463.15		.30 1,101.05
PARK	CONSTRUCTION ACCOU	NTS		FULLERTON AVENUE, WEST	
C	HICAGO AVENUE PARK			WAGES	
Tooming	WAGES .			Police \$490.00 Sprinkling	
				Cleaning 166.45	
Watchman	352	.45 \$3,699.10		Labor and superintendence 125.55 \$826	.60
~ "	SUPPLIES			SUPPLIES	
				Teaming 38	.95 865.55
Trees	532	.50		FULLERTON AVENUE, EAST	
	52	.66 2,087.12	5,786.22	WAGES	
	PARK ENLARGEMENT			Sprinkling S21	
Pav roll	WAGES	10.00		Cleaning 109	.50 131.10
•	SUPPLIES			DIVERSEY AVENUE, EAST	
Court costs		43.50	53.50	Sprinkling WAGES Sprinkling S122.00	
			. 0	Cleaning S122.00	
Total supplies		. 2,130.62	\$5,839.72	Labor and superintendence 41.55 \$378	.85
BOULEVAL	RD MAINTENANCE ACC	COUNTS		SUPPLIES	
	SHERIDAN ROAD			Teaming	
	WAGES			Legal expense II.00 100	.95 479.80
				DEARBORN AVENUE BOULEVARD	
THE R. P. L. L. L.	SUPPLIES	_		WAGES	
	\$1,100			Police \$210.00	
Sundries	31	.40 1,511.40	\$3,577.40	Sprinkling 81.25 Labor, cleaning and superintendence 177.40 \$468	.65
Forward			\$3,577.40	Forward	.65 \$7,433.80

188		,							
m 1.6 .1				\$168.65	\$7,433.80	Brought forward		\$1,216.55 \$	65,933.78
Brought forward				*	-77100		SUPPLIES		
		SUPPLIES	851.40			Soil	\$35	4.50	
Teaming						Manure		5.00	
Lamps			11.00	92,10	561.05	Trees	49	5.00 5.06	
Black soil						Grass seed		5.90	
,	NODTH	AVENUE BOULE	VARD			Legal expense		0.40 1,077.86	2,294.41
	MOKIII	WAGES				Sundries		- 1,0//100	-1-94-4-
		WAGES	\$50.65			LINCOLN DAE	K BOULEVARD IMPRO	VEMENT	
			182.60	\$242.25		LINCOLN 1710	SUPPLIES		
Creaming						Legal expense			200.00
		SUPPLIES			0	Legal expense			
Crushed stone				93.60	335.85	DIVERSEV	AVENUE, WEST, ASSESS	SMENT	
		ARK AVENUE BO	III EVADI	n.		DIVERSEL	WAGES		
NOI	RTH PA	IRK AVENUE BO	ULEVAN			Engineer.		75.50	
		WAGES		26-6-		Labor			
Sprinkling -				\$62.60 136.10		Laborati			
Cleaning				130.10	190 70		SUPPLIES	80.00	157.05
Total wages				\$6,617.80		Legal expense			157.05
Total supplies				1,911.60	\$8,529.40	DILL EDWON	AUDNIE WEST ASSE	SSMENT	
Total supplies						FULLERION	AVENUE, WEST, ASSE	DOMELINI	
nou P	TIDD	CONSTRUCTION	LACCOL	INTS			SUPPLIES	\$20.00	
BOULEVARD CONSTRUCTION ACCOUN						Court costs Typewriting		20.00	
	OHIO	STREET EXTEN	SION			Destal nations	and the second s	4.50	
		WAGES		- 0.0		Transcripts of rolls		5.00	
Pay rolls				\$19,898.30		Sundries		,65	50.15
		SUPPLIES							
Dredging sand Paving blocks Cement			\$17,331.25 8,082.24			SHERI	DAN ROAD ASSESSME	NT	
Paving blocks			6,257.03				SUPPLIES		
Cement	lavor.		2,816.80			Court costs		\$10.00	
Crushed stone for road Legal expenses			2,019.51			Typewriting		20.00 5.60	
Rubble stone			1,918.41			Postal notices-		2.85	
Teaming			1,391.40			Sundries			
Water pipe and fittings	S		1,364.05			Total wages		\$21,191.90	
Sharp sand for cement	t_					Total supplies		47,481.94	\$68,673.84
Trees			700.73			Total supplies			
Black soil			342,61				RECAPITULATION		
Lumber							ante	:	\$127,909.33
Curbing			167.07			Total park maintenance accou Total lake shore protection ac	into	\$16,185.57	
Sundries			955.63	16,035-48	8 \$65,933.78	Total interest on bonds		24,100.00	40,285.57
Danario									44,463.15
	N(ORTH SHORE DRI	VE			Total park improvement acco	unts		5,839 72
		WAGES				Total park construction account Total boulevard maintenance	accounts		8,529.40
Teaming			\$312.30	0		Total boulevard maintenance Total boulevard construction	accounts		68 673.84
Labor and superintend	dence-		904.2	\$ \$1,216.5	5				\$295,701.01
					5 \$65,933.78	Total disbursements			3295,/01.01
Forward				,=====	5 . 5.7557				

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