



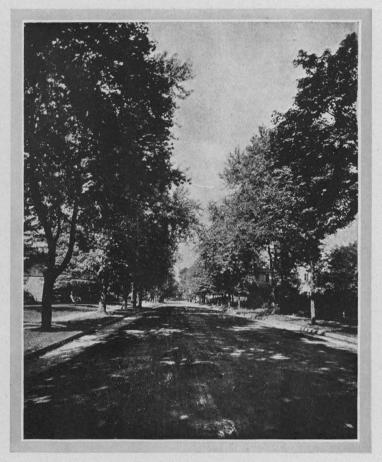
"THE MAPLE BURST INTO A FLUSH OF SCARLET FLOWERS" Photographed in color direct from nature.

PLANT a tree. The expense is small. The subsequent attention is not large. Once started the Tree helps itself as scarcely anything else of moment to us ever does. It grows while we sleep. It drinks the sunshine and compounds its own food out of the refuse gases of the air and the watery solutions of the soil. Out of these inert, inattractive, barely recognized substances by a miracle of transformation there comes forth that thing of life and beauty, which is also a thing of tangible money-value—a Tree.

-From "A Fourfold Word for Trees" by Carl Bannwart.



"THE MAPLE BURST INTO A FLUSH OF SCARLET FLOWERS" Photographed in color direct from nature.



Lincoln Avenue

Fifth Annual Report

of the

Shade Tree Commission

To the Honorable the Mayor and Common Council of the City of Newark:

Gentlemen:—The Shade Tree Commissioners have the honor herewith to submit their Annual Report for the year 1908.

Five years have passed since the Common Council ordained that the Shade Tree Act should be in force in and apply to this municipality. Looking backward over the half-decade, it may be confidently affirmed that results have demonstrated the wisdom of the Council's action. Some of the results of that action may be summarized as follows:

1. It has raised the status of the fine old street trees of Newark. Those stately growths which have come to us out of the past from the fathers, but which for so long were strangers to considerate treatment, are now the wards of a municipal department

especially created for them.

2. It has saved thousands of these older trees which would otherwise have perished through insect attack, through the carelessness or malice of men and the bitings of horses, etc., etc.

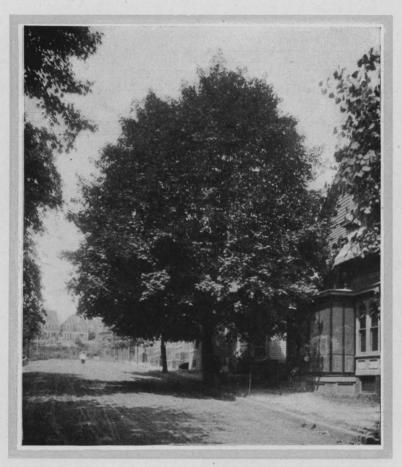


Alpine Street—Horse Chestnuts Alternating With Elms



Washington Park-Showing our Shrub Plantings

- 3. It has resulted in the setting out of nearly 11,000 young trees, 100 miles of Newark's streets having been adorned with these new plantings since the inception of your Shade Tree Commission.
- 4. It has resulted in the establishment of a City Nursery with the manifest and great advantages of such a nursery to the cause of shade trees.
- 5. It has brought the city parks under specialized care, so that these parks have put on new beauty. Washington, Lincoln, Military and other parks that might be named are a standing exhibit to passing thousands every day of what can be achieved for civic beauty by the embodiment of the Shade Tree Idea in a municipal commission.
- 6. It has secured both for street trees and for parks scientific, technical care. The importance of this cannot be over-estimated. The treatment of trees, as also of parks, is an expert profession. Expert planting, pruning, mulching, spraying, etc., are absolutely necessary, not only to the welfare and beauty, but to the very life of the trees. Take the operations of pruning and spraying for examples. When these have been left to private initiative, they have either been entirely neglected or the operation was so inexpertly performed (in many cases) as to result in the ruin of the tree.



Norway Maple, Poinier Street

7. It has made possible the educational work of your Commission, a factor of no small importance. The work of planting the streets and beautifying the parks of the city has been in itself a direct educative influence, as is obvious. But in addition to this, your Commission has sought by all available means to awaken, encourage and stimulate

an enlightened interest on the part of all citizens in trees. The Commission has taken pains, through spoken, written and printed word to impress our citizens with a "realizing sense" of the several values of trees. Almost everybody who stops to think on the subject at all recognizes at once the aesthetic value of trees; but comparatively few have been aware of their enormous sanitary value.

It is well authenticated that trees add to the healthfulness of a city. They cool and purify the air. The foliage cuts off the direct and reflected rays of the sun, evaporates large quantities of water, and exercises a marked reduction on the temperature, and this is especially so on hot days. Foliage also absorbs impure and hurtful gases and gives out oxygen so

essential to us humans. Circulation of the air, due to unequal temperature, is like-

wise promoted by trees properly pruned and arranged; while the air of basements and cellars is rendered less humid by the removal of surplus water from the surrounding soil through the medium of roots and foliage.

This appraisal of the tree

as a sanitary factor is confirmed by the following resolution of the New York County Medical Society: "Resolved, That one of the most effective means for mitigating

Belleville Elm

the intense heat ofthe summer months and dichildren minishing the death rate among the cultivation of an adequate number in the of trees streets."

So, too, another value of trees has largely been overlooked; namely, their realty value. Yet trees are indisputably a real estate asset. They are among the first things which impress a stranger in forming judgment as to whether a city is or is not a good place to live in. The courts recognize the realty value of trees; they have awarded damages ranging from fifty to four hundred dollars for the destruction of a single tree.

These facts concerning the several values of trees have been kept persistently before the attention of the people throughout the entire half-decade just ended, and your Com-

mission deems it safe to affirm that the constant iteration and reiteration of these facts has borne fruit in many minds.

It may be added that by the same media of speech, pen, and print this Department has been instrumental in imparting valuable technical instruction as to the setting out, planting, care and maintenance of trees, and the care and beautifying of lawns and parks, etc. And this has already borne visible fruit in the more scientific care bestowed by private individuals on their trees, lawns, shrubbery and other plantings.

Maples-Gould Avenue

The following is a list of the trees set out on the streets by your Commission during the half decade, showing the number of each variety planted and the grand total:

Elms 2	,816
Norway Maples 2	,703
Sugar Maples	634
Oaks 1	,036
Lindens	60
Ginkgos	198
Oriental Planes 2	,108
Poplars (Carolina)	505
Poplars (Lombardy)	93
Poplars (Bolleana)	303
White Ash	55
Acer Negundo	74
Tulips	98
Willows	14
Total	 ,697

In closing this resumé of our first five years, we desire to thank the Common Council for the courtesies it has extended throughout the half-decade, for the indulgence with which it has listened to our requests, and for the aid it has granted to our work. We desire also to express our appreciation to the press of the city for so thoroughly keeping our work and the necessity for tree culture before the public.



Maples-Eleventh Street and Gould Avenue

THE YEAR JUST ENDED

To the jurisdiction of the Shade Tree Commission is committed by statute the planting, setting out, maintenance, protection and care of shade trees in the public highways of the municipality; as also the management, maintenance, improvement, repair and control of the public parks belonging to the city. To the subjoined brief account of its stewardship during 1908 of the double responsibility thus put upon it the Commission now respectfully invites attention. And first,

AS TO PARKS.

No factor in municipal improvements plays a more important part than an adequate park area and a well-equipped park system. Indeed, a modern city is not considered to be properly equipped unless it has a sufficiency of parks. So far true is this, in fact, that parks are nowadays classed with water works, sewers, pavements, lights, police and fire protection as municipal necessities. That cities have not always had parks means no more than that cities have not always had electric lights or paid fire departments. On the one hand parks are a development of the modern art of city building; on the other, they are for Newark an ever-increasing necessity because of the ever enlarging population of the city. And be it noted that while parks are of inestimable value in making a city inviting to desirable residents, adding to value



Decayed Wood Removed

of real estate, and promoting the general prosperity, these are but small matters compared with the imperative necessity of supplying the great mass of people with well-kept park facilities to relieve the unnatural conditions of crowded cities. There is no delusion so absurd as that parks are only for the well-to-do. These need parks least of all, for they can travel; horses and motor cars carry them into the country, and they are not dependent for fine scenery upon what has been preserved for them by the city. The city must have parks—and parks well-kept—to meet the needs of

its industrial population who cannot wander far from home and to whose children "all out-doors" is no longer accessible as a park or recreation ground as was once the case. For these workers and for their children there is need of these neighborhood parks, well-kept little spots with the stamp of beauty on them, inviting to rest and enjoyment, where the elders find rest and forgetfulness of the day's cares, and where the youngsters may romp in sight of grassy lawns and springing fountains and waving trees and beds of flowers. Such spots, it goes without saying, endear the city to its citizens and make for civic patriotism. Appreciating all this, the Shade Tree Commission aimed through the year to apply itself with all diligence and judgment to the maintenance and enhancement of the beauty of Newark's parks.

We have some twenty acres of park space consisting of lawns, walks, terraces and beds of shrubbery

and flowers. These have been objects of the constant care of your Commission throughout the year. The mere work of "keeping up" these parks has been no small task. This of itself has necessitated persistent attention to such matters as mowing the grass, edging the lawns, taking out weeds, digging, watering and mulching the shrub and flower-beds, trimming and spraying the trees, painting and keeping in repair the settees and refuse cans, gathering up fragments of paper and debris, repairing and recovering the walks, re-seeding and re-sodding the



Cementing the Cavity



SHRUB BEDS-

lawns, etc., etc. Then there has been the work of subsoiling; out of our entire park area we last year subsoiled 65,340 square feet. Other park work was the planting of shrub beds, the planting of annuals and bulbs to the number of 16,100, the setting out of fifty specimen trees of varying species, manuring and general overhauling. To descend, however, to particulars, take the case of

JACKSON PARK.

This triangle is formed by the junction of Pennsylvania and Sherman Avenues, the base being skirted by Gillette Place. For a number of years Jackson Park had presented a very shabby appearance. Owing to the poor quality of soil it was impossible to get a good crop of grass, also a number of the trees were dying back faster than the new



MILITARY PARK

growth was being produced. This park was thoroughly overhauled. We excavated to a depth of two feet, removing a great quantity of cobble-stones. Seventy tons of horse manure were added to the soil and thoroughly mixed therewith. Some forty loads of top-soil were required to take the place of the stones removed. The snows as they melt and the rains now soak in, and these water supplies of Nature's giving will be retained by the soil until the roots of the grass and of the trees need them in the dry, hot weather of July and August. Consequently the grass in this park should remain green all summer without any articifiial watering. The walks in this park were relaid and preparatory steps were taken toward the setting out of shrubs and trees in the spring. The effects of thus thoroughly overhauling Jackson Park should be in evidence for the next ten years to come.



New Shelter-Central Avenue Park

WAVERLY PARK.

This small park is located at the junction of Waverly Avenue and Bergen Street. The natural soil was a red gravel of very poor quality. This was removed and the whole area was then subsoiled to a depth of two feet, which added a large amount of humus to the soil, and at the same time furnished the needed elements of nitrogen, potassium and phosphorus. Humus is partly-decayed organic matter. It makes the soil porous and sponge-like so that it does not dry out as quickly as the soil lacking humus.

Other work at Waverly Park was the relaying of the walk, the repairing of the fence, the planting of a barberry hedge and the levelling and seeding of the entire park. During the coming summer, this should be a beautiful lawn bordered with a hedge of flaming berries in the fall.

CENTRAL AVENUE PARK.

This park was developed according to plans made by landscape architect, H. A. Caparn. The uneven flag walk around the border was taken up and replaced with a wider, modern walk laid in separate sections. There was left between the edge of the walk and the curb a wide space of open ground for shrubs and trees. The park was sub-

soiled. Water-pipes were put in for drinking fountains and for hose. On the apex at the junction of Warren Street and Central Avenue, a rustic shelter was built. On a concrete foundation was erected a house of cedar finished in the natural wood, the house having open sides and being of octagon shape, twelve feet in diameter, with shingle roof, the whole structure being covered with a preserving oil. The interior is equipped with seats on six of the eight sides.

In two corners of this park circular openings were left for flower beds. The border of the park was planted with a line of shrubs, and within the park, at the center, were planted seven beds of shrubs. A list follows:



Belleville Elm

SHRUBS SET OUT IN CENTRAL AVENUE PARK.

Botanical Name.

Ligustrum Ovalifolium Ligustrum Ibota Ligustrum Amurense Ligustrum Regelianum Lonicera Morrowi Philadelphus Grandiflora Philadelphus Coronarius Spiræa Opulifolia Aurea Spiræa Van Houttei Viburnum Dentatum Viburnum Tomentosum Euonymus Europæus Cytisus Scoparius Catalpa Bungei Symphoricarpus Vulgaris Forsythia Viridissima Forsythia Intermedia Eleagnus Umbellata Hydrangea Paniculata Diercilla Floribunda Diercilla Eva Rathke Aralia Japonica Rosa Rugosa Rosa Lucida Rosa Lucida Alba Berberis Thunbergii Cornus Paniculata Deutzia Lemoine Stephanandra Flexuosa Ouercus Palustris Fraxinus Americana Ulmus Americana Sorbus Americana Sassafras Officinale Fraxinus Ornus Cratægus

Cratægus

Common Name

California Privet Japanese Privet Amoor Privet Prostrate Privet Japanese Honeysuckle Mock Orange Mock Orange Golden Leafed Spiræa Van Houttei Spiræa Arrow Wood Japanese Snowball Spindle Tree Scotch Broom Umbrella Tree Snowberry Golden Bell Golden Bell Japanese Silver Thorn Hydrangea Weigela Weigela Hercules Club Japanese Rose Wild Rose Wild Rose Japanese Barberry Dogwood Deutzia Stephanandra Pin Oak White Ash American Elm Mountain Ash Sassafras Flowering Ash Scarlet Thorn
Paul's Thorn Double White

LINCOLN PARK.

A few trees in Lincoln were subsoiled in like manner as in the case of Military elsewhere described herein. Large areas were thoroughly spaded and re-seeded. The worn edges of lawn were also re-seeded. One bed of coleus was set out; twelve pairs of squirrels were installed; of these latter we speak in another part of this report. The walks in this park also received attention.

CLINTON PARK.

The walks, consisting of very small and uneven flags, were removed and replaced by large flags. Cannas and salvias were planted.

MADISON PARK.

Madison Park was little but a heap of gravel, impossible to keep green, the rain water running off very rapidly. Sub-soiling was thoroughly done as at Jackson and Waverly Parks.

MILITARY PARK.

Portions of this park were graded and seeded. Three geranium and canna beds were bordered with salvia and coleus, respectively.

The earth walks in the center of the park were graded and re-covered with clay and screenings. This hard, arched surface will shed the rains.

Ten of the large trees were treated as follows: Ditches four feet wide



Saving a Tree Above Grade

and five feet deep were dug around these trees, fifteen feet from the trunk. The soil thus excavated was heavily mixed with fertilizer and manure and was then replaced.

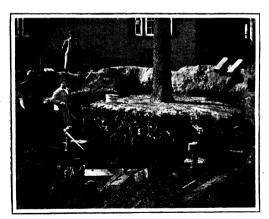
MT. PROSPECT PARK.

This was an uneven side hill. The soil was so poor and the bank so steep in spots that it was impossible to grow a good lawn. An even slope with abundance of good soil was made and the whole area re-sodded. The old flags were replaced with a walk of crushed stone. Specimen shrubs were planted along this walk.

WALLACE PARK.

The development of Wallace Park had occurred so late in the fall of 1907 that it was impracticable at that time to sow the grass seed and shrubs. In the spring of 1908 the ground was thoroughly cultivated, spaded, raked, the grass seed sown and the surface carefully rolled. Next the shrub beds were planted, two rhododendron beds being a special feature.

The walks in Wallace Park were lined with cobblestone gutters to prevent washing, and paved with



Preparing the Tree for Moving

crushed stone and clay. In the fall the lawns were manured and a fence was put up for the protection of the shrub beds. A list of the shrubs set out in this park is appended:



Moving a 15-ton Linden

SHRUBS SET OUT IN WALLACE PARK.

Botanical Name

Buxus Berberis Thunbergii Cornus Alba Siberica Aralia Spinosa Rhus Spiræa Anthony Waterer Ligustrum Amurensis Ligustrum Ibota Ilex Verticillaties Prunus Pisa Kerria Japonica Forsythia Suspense Forsythia Veridissima Corylus Avelana Atropurpurea Berberis Vulgaris Purpurea Viburnum Opulus Salix Vitellina Aurea Rhododendron Azalea Amœna Fagus Sylvatica Purpurea Catalpa Bungeii Acer Japonicum Acer Pseudo Platanus Purpurea Sorbus Americana Hibiscus Variegata

Common Name

Boxwood Barberry Red Twigged Dogwood Hercules Club Sumach Spiræa Privet Japan Privet (Black Alder) Winter Berry Persian Purple Leafed Plum Japan Corchorus Golden Bell Golden Bell Purple Filbert Purple Barberry High Bush Cranberry Golden Willow Rhododendron Dwarf Azalea Purple Leafed Beech Umbrella Catalpa Japanese Maples Purple Leafed Sycamore Maple Mountain Ash (Rose of Sharon)

OTHER PARKS.

Summing up other work done in the parks, we condense as follows: The lawns and beds of each park were covered with manure. In Washington, Milford, Union, Brientnall and Peshine, various bedding plants were set out. In Lombardy Park dead trees were removed. Buchanan Park was re-seeded, and the fence put in repair. Sussex Park was sodded. In Washington Park a new inscription was added to the Boyden Memorial.

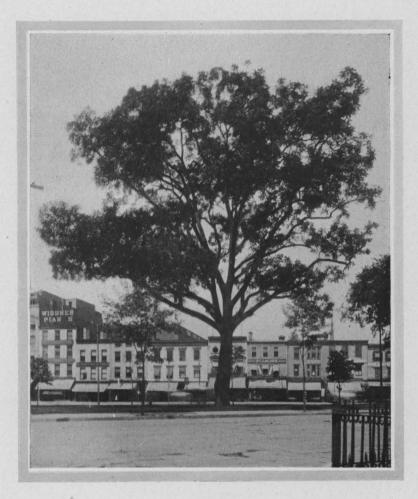
THE SQUIRRELS.

In the early part of the year, the Commission installed in Lincoln Park twelve pairs of squirrels, thus adding to the colony already there which had been presented by Mr.



W. W. Blanchard. Houses were built for these little pets and placed in the tree boughs. The newcomers proceeded to make themselves at home in their new quarters. Few of our experiments have attracted more attention. It proved a success in every way, and the squirrels became a drawing feature of that section of the city. This was shown by the gathering groups of

people who stood watching the young squirrels making their first ventures from the home tree. The bystanders were interested also in the spectacle of the older squirrels approaching those who fed them. Quickly seizing a nut, Mr. or Madam Squirrel scurried up his or her tree or scampered away to forehandedly bury the nut in the sod for future use. A sign giving directions as to feeding the squirrels was placed at the entrance of the park.



Walnut-Military Park

It had been the fear of many persons that the locality was too exposed and their predictions concerning the fate of the squirrels were unhopeful. Notwithstanding these forebodings, the little families have flourished and are proving a never-ending source of delight to children and to grown people alike.

A NEW NEIGHBORHOOD PARK NECESSARY.

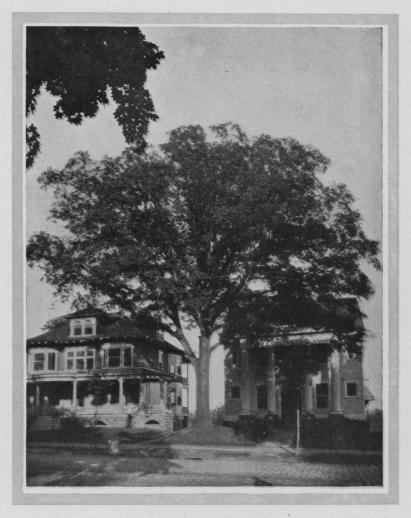
As the custodians of the city parks we are fully aware of the great use that is made of them, and are competent to estimate their value to the people of Newark.

Many of these parks are of incalculable benefit. The city will never cease to be grateful to its founders for laying apart the "Training Ground" (now Military Park) in 1669, and it will ever-more praise the subsequent act which set apart Lincoln and Washington Parks.

During the last year many requests have been made to have the triangular plot bounded by Peddie Street, Jeliff Avenue, Hawthorne Avenue and Elizabeth Avenue set apart as a neighborhood park. This triangle comprises about four acres. On the north and south of it homes are springing up rapidly. This triangle presents the only opportunity to supply this fast increasing population with a neighborhood park. At present this land is in an unsightly condition and is valued at about \$20,000. In ten years it will be surrounded by a densely populated, if not congested district.

But while a ten-year forecast vindicates the wisdom of the purachase of this land and its transformation into a park, let us not forget that every succeeding decade would enhance the value and usefulness of this hoped for park to the pent-up thousands.

In view of the railroad which runs on the Peddie Street side, it is highly probable, unless this triangle is pre-empted as a park, that coal and lumber yards and kindred business properties will be located thereon and this in the midst of a beautiful residence district. The consequent decrease in the ratables would be a serious loss to the city and to the residents of that section.



White Oak-Mt. Prospect Avenue

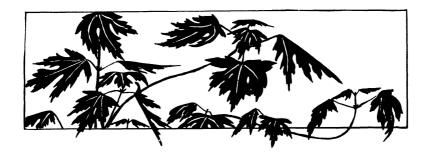
On the other hand, if the plot is bought by the City and parked, the increase in ratables will shortly repay the principal invested in its purchase. We earnestly bespeak the co-operation of your Honor and of the Common Council

in achieving this great municipal boon for that neighborhood. There is no other place in the city of Newark where for so small an expenditure so significant a result may be achieved and so great a benefit conferred upon posterity.

These neighborhood parks are the more necessary as being powerful factors in the fight against such diseases as are due to the crowded conditions of modern cities. To such spacious and inviting areas, children, invalids, over-worked mothers and toiling fathers may resort and drink in the pure air of the open, the while the "prospect pleases" and beguiles them from their cares. Such parks should be within ten minutes walk from every home. They are one of the factors that operate toward making a city wholesome and keeping it free from infection. But not only do these neighborhood centres tend to prevent disease; they tend also to prevent lawlessness. Juvenile crime in Chicago decreased fifty per cent. upon the establishment in that city of accessible places for play and recreation.

The attempted widening of Treat Alley, so long discussed and so greatly needed, shows how difficult it is to alter a congested condition once established. It is much cheaper and easier to develop the City Beautiful than to improve the City Horrible. We can secure the triangle of which we speak, a plot 1,600 feet in length, with a splendid natural perspective, which by its beauty and its greenery may be a continuous source of pleasure to the neighborhood. Shall we not pre-empt it for Newark's toiling people?





STREET WORK

Turning now to its street tree work the Commission reports that during the year it set out 2,396 young trees. The streets thus planted and the varieties set out are given on a table annexed. This makes in all a total planting of 10,697 trees, covering 100 miles of Newark's streets, since 1904, the year when the Commission was created. In view of the various activities involved in setting out a tree, it will be seen that the citizens of Newark are getting good value for their money. The activities referred to are as follows:



Showing the Rock taken out and the Soil put in

I. An excavation is dug four feet in length, four feet in breadth and three and one-half feet in depth, making a pit of fifty-six cubic feet (for Poplars a pit of twenty-seven cubic feet). From

this excavation the common street soil is removed and replaced with topsoil or is otherwise enriched.

- 2. In the trees we set out, well-developed roots, straight trunks and a minimum diameter of two inches one foot above ground are required. The heads must begin not less than seven, nor more than eight feet above ground and must have well-developed crowns and good leaders. Annually transplanted trees, free from diseases and from injurious insects, we insist on; none others are accepted.
- 3. Each tree is surrounded by a galvanized wire guard six feet high, six inches in diameter, one-half inch mesh, topped with a collar made of rubber hose to prevent chafing.



Tamping Soil around the Roots

- 4. A stake not less than two and one-half inches in diameter and nine feet long is then driven deep into the soil and to this stake the tree is attached, the tree being thus held in place until it has acquired its own firm grip upon the soil.
- 5. In a number of cases it has been necessary to cut the flagging or cement. In every such case the Commission takes pains to so finish the cut that it presents a perfectly neat appearance. This adds to the expense.
- 6. Where a tree of our planting has died we have replaced it without expense to the abutter.

Notwithstanding all these items the average assessment per tree in 1908 was only \$2.64. This covered to the abutter the cost not only of the tree itself, but also of all the other details above enumerated, and covered such cost once for all.

With the setting out of a young tree the work of the Commission with regard thereto has only just begun. We must thereafter treat the tree systematically with such varied operations as mulching, trimming, spraying, etc. In any event, this systematic care would be necessary. But furthermore in view of certain conditions detailed below the trees require constant care in other respects.

It would be futile to set out these young trees and leave them to care for themselves. The time may come when the citizen whose home they shade will give them the intelligent care they need; but that time has not yet arrived. Therefore the Commission must care for them, and as a consequence we must plan in our budget for an annual sum of maintenance averaging about thirty cents per tree.

Last year the Commission very seriously considered abandoning further plantings. The Commissioners felt that the obligations involved in replacing and otherwise maintaining its present extended plantings forbade any further extension of these obligations unless the Commission was assured of support for this purpose in the annual budget.

The systematic care given involves from six to eight annual visits by our men at various seasons of the year along

a frontage of two hundred miles of streets. It means watering the newly-set-out trees when the season requires this. It involves the varied preventive and defensive measures against insect attack. It requires cultivation of the soil around the roots ("watering with the rake") to assure the best conditions of growth. It obligates annual pruning, replacing of stakes and guards when necessary, and the re-planting of



Cutting back top after Planting

the three or four per cent. of new plantings which die annually as a result of runaways, illuminating gas and other artificial causes. All these items constitute a formidable obligation when viewed with relation to the II,000 young trees already set out, the care of which is guaranteed. The Commission earnestly solicits the Common Council to enable it for the future to sustain its guarantee as in the past.

But the Commission is not only planter and care-taker of young trees, it is the Warden of the older trees as well. Of these latter there are approximately 70,000 on two hundred and seventy-five miles of Newark's streets.

The work of maintaining and protecting these older growths is no small task. Their enemies are not a few and are multiform. To say nothing of destructive insects there are other agencies yet more destructive and more difficut to control.

As injuriously affecting both old and young trees, there are the thoughtless small boy, the runaway horse, the ruthless driver, the occasional ruffian; there are the layers of gas, sewer and water pipes and electric wire conduits; there are pavers and sidewalk layers who surreptitiously cut the roots, and builders who bruise and main the trunk; there

are over-head wires and underground gas leaks, both iluminating and sewer gas; and there are—others. No child's play to protect street trees from all these. Yet the job was undertaken, and from year to year it comes nearer and nearer to full accomplishment. Conditions are improving and will further improve if only we "keep everlastingly at it."



Flag Walk-Stifling a Tree

AID TO THE UNEMPLOYED.

The city departments which engage unskilled labor at certain seasons of the year had especial opportunity to gauge the great strain endured by the laboring class as a result of the industrial depression of last year. Many of the

unemployed were enabled to tide over the winter, on short rations it is true, but without absolute want, by reason of the small sums saved during former prosperous times. But by spring these savings had become exhausted and men



Moving a large Maple to Park

were flocking to every place that afforded any chance for employment. They came to the Shade Tree office. Skilled laborers of every kind professed themselves willing to toil at hard manual labor for \$1.60 per day. And the event proved their sincerity. To such men, unaccustomed to pick and shovel, it was feared that the work would not come easy and that they would perforce drop out. Experience demonstrated the contrary. These men, some of them past middle age and of life-long sedentary habit, stuck to pick and shovel with the pluck of heroes. They were right on the job all the time and glad of the opportunity to earn a livelihood for the wife and children or dependent parents.

The sad case of those "out of work" awakened the sympathy of the Common Council, and by a generous special appropriation, the Council enabled us to bestow timely employment among three hundred men. Immediate needs were met in this way and many were thus tided over to a time when more lucrative employment in their own trades once more opened to them.

The great need among the artisan class, by whose labors in the past have been wrought the output that made Newark famous and prosperous, awakened many of our citizens, and this awakening resulted in the formation of a free employment bureau in which members of the Commission were active.

CRYING NEED OF TREE GUARDS.

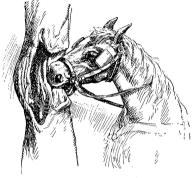
Walk along streets where trees stand near the curb and notice the effects due to one most lamentable negligence. In most cases, the trees are without guards. Bright and early the milkman comes along and jumps off with his can, leaving his horse to make a scanty breakfast by gnawing the bark of the nearest tree. Later on come the butcher and the grocer, whose horses lunch upon what was left by their



What Comes of Horse Bites

predecessor, inflicting an amount of damage limited only by the time the drivers choose to linger elsewhere. Last of all comes the doctor, whose visits, if not frequent, are proportionately long. No wonder that the bark is not only soon removed and the wood exposed; but as the horse is an animal which prefers the softer bark to the harder wood, the fresh borders of the wound are repeatedly attacked until deformities of enormous size result and the nutrition of the tree is cruelly deranged. Let the accompanying picture bear witness. Observe the deep and unsightly cavity caused by decay, an aftermath of the peeling of the bark. The wood of the tree. bared of its bark, is left exposed to the weather, to rain, dew, dirt, bacteria and what not. Of course decay sets in and the tree becomes rotted and goes on rotting deeper

and wider, and wider and deeper. In time the trunk becomes so weakened that it is no longer stout enough to hold up the heavy top of the tree. The tree then is liable to fall at any time, especially in a storm: so that it becomes a standing menace to life, limb and property.



Watch the horses. Don't let them lunch on your tree

Surely there can be no excuse for such senseless wholesale violence, especially since the remedy is so simple and so inexpensive. The public has property rights in every tree standing in a public highway; and the public has the right therefore to require that these trees be properly guarded and protected. But apart from the public rights in the matter it is for the private advantage of property-owners as well that the trees should be kept in good condition, since the attractiveness of any street as a place of residence depends largely upon the beauty of its trees. Not a few of our residence streets owe their prosperity to the arching elms and well-rounded maples, whose loss no money could replace. It would be both just and wise to have a law requiring house-owners to place proper and sufficient guards around the trunks of the trees growing by the roadside, or if it be inexpedient to place this very slight burden on private individuals, then it would be at least the duty of the municipality itself to provide guards at the public expense. To let the trees become



MONTCLAIR AVENUE MAPLES

shabby or go to utter destruction is not, we submit, a long-sighted policy for either the individual or the community.

In towns and cities the trunk of every tree, whether young or old, newly planted or in full growth, should be enclosed to a proper height in a guard. For the young trees the guard should entirely surround the trunk, and should be made of no less durable material than half-inch mesh galvanized wire, hardware grade, topped with a collar of rubber hose to prevent chafing. This would cost at retail about 35c. For the older trees a wire screen on the side of the

tree toward the roadway would suffice. This should also be of half-inch mesh galvanized wire, hardware grade. If painted the same color as the bark of the tree this screen would be practically invisible. It would cost at retail about four cents per square foot. This simple expedient would effectually protect our street trees from the teeth of the horse. Every property owner, for his own sake, should thus guard the trees abutting his tracts of realty. It costs little, achieves much and ends the havoc wrought by the horse.

PRUNING.

Following up the systematic plan, inaugurated in 1906, of pruning the street trees throughout the entire city by sections, we pruned all such trees within the district bounded

by Verona Avenue, Mt. Prospect Avenue, Second Avenue and Washington Avenue. Also when and where it was practicable we pruned several thousand trees outside of the district thus indicated. It is a matter of re-



Alleged Pruning

gret to the Shade Tree Commissioners that they cannot cover the entire city each year with their pruning operations, but with the comparative meagreness of their present equipment, that is not possible. In all about 10,000 trees were thus pruned. Annexed is a list of the streets.

Where owners applied for a permit to trim the shade trees abutting on their tracts we first inspected the trees in question; then if they were in need of trimming and if we were sure that the work would be done by competent hands we readily granted the permit requested.

Great caution is absolutely necessary in granting permits, if our shade trees are to be saved from the ruin of inexpert pruning. It is pitiful—the trees that have been "done for" forever by that very thing. The butcher who can carve meat like a dream is not, on that account, qualified to perform a surgical operation on the human form. Now a



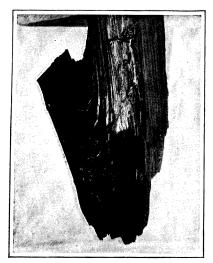
Destructive Pruning

tree is a living organism, with a physiology all its own, as truly as the human body. Yet many a man who has no other knowledge of a tree than that it is wood, and that a saw or knife or axe will cut

wood, is turned loose on a tree to perform thereon the surgical operation of pruning it. For that is what pruning is—a surgical operation.

THE CITY NURSERY.

This is a plot of ten acres at Ivy Hill, put at disposal by our the Board of Street and Water Commissioners and set apart for nursery purposes. It was laid out and stocked in 1007. During 1908 we added to the stock some 3,200 trees. These we were able to buy at a low figure by reason of purchasing in large quantities at bottom wholesale rates. While some of these trees thus put in



Same Branch split in half—Showing How Decay Undermined the Top

stock were large enough to plant, yet by placing them in the nursery and subjecting them there to certain treatments a vigorous growth of fibrous roots is induced, and this makes the trees more adaptable to successful transplanting later on in the street. Trees whose vitality is not of the best, and such as are bent and crooked, can be placed in the nursery and there induced to grow straight and gain new vigor. The city nursery will undoubtedly ensure a smaller percentage of loss on new plantings. Also it will supply a place to keep trees of equal size for replacing those initial plantings which die, and will enable us to set out trees of larger diameter than ordinary.

THE INSECT CAMPAIGN.

When the time came around we took up with zest the warfare against the insect pests that prey upon our trees. Of these the numerically worst enemy of the city's trees is

THE TUSSOCK MOTH.

This insect is distinctly a shade tree pest and directs its ravages against an almost unlimited variety of trees and shrubs. It is partial to the Linden and Horse-Chestnut. In Newark it makes for every tree except the Ailanthus, Ginkgo and Sycamore.

Second only to the Tussock Moth in its ravages upon the city's trees is the



Tussock Moth Caterpillar

ELM LEAF BEETLE.

This pest was imported from Europe about half a century ago and is now widespread throughout the country. It confines its attacks solely to the Elm. It is present in such great numbers that it frequently causes the death of large



trees by its persistent attack year after year upon the foliage.

Several other pests that feed on the foliage of trees in Newark could be mentioned, but turn now to some wood-eating insects. Take the

BORER.

This is a fatal visitor. His presence argues at the outset poor nutrition and low vitality of the tree. While the caterpillars are harmful because of their numbers, *one* borer will suffice to kill a stately young tree. His attack is strategic. He makes for the cambium layer of cells beneath the bark and tunnels around the tree horizontally. Since the ascending and descending sap flows

through the cambium layer, and since the tunnel breaks the cellular connection, the flow of sap ceases. borer is immune from wholesale mechanical methods of extermination. Each grub must be sought for individually, and often one or two days will be consumed in locating them in a large tree and ridding the tree of them. This may cost \$5.00 per tree, while a tree of like size may be cleared of ten thousand caterpillars with one dose



of spraying at a cost of thirty cents.

Tussock Moth Cocoons and Egg Masses

We have to combat several varieties of this pest, but the method of attack and the treatment are practically identical for all varieties. They are found chiefly on the silver and sugar maple, but occasionally they also attack the elm and a

few other trees. The eggs are deposited upon the bark and the young soon hatch and crawl to a convenient place and commence to bore, working first upon the smaller branches and then descending to more quarters thev increase in appetite and as They are voracious in their feeding habits, and let it be repeated that a single borer often causes the death of a young tree.



ANOTHER INSECT ENEMY IS THE SCALE.

Of this there are several varieties, and New Jersey is their stronghold. There are the cottony maple scale, the oyster-shell scale, the tulip scale, the scurfy scale, the San José scale, etc. Unchecked these all work havoc to the trees.

To the saving of our trees, then, from these various and deadly insects, we turned with fervor. We had got well under way

and, in the case of the Tussock Moth at least, were in sight of victory when, alas! lack forced a halt. The work had almost entirely discontinued, and, as a result. hundreds of splendid trees, abandoned to the scourge, were entirely denuded of their foliage. The citizens were appealed to by notices posted throughout the city, and very efficient work was done in many places by private individuals. But the Tussock Moth and his coadjutors had by that time carried their operations too far to make this work of much avail.

It was an object lesson, unfortunate as the fact was, which must have carried conviction to the citizens of Newark that a city can ill do without a Shade Tree Commission, and that such a commission should be unhampered in the matter of funds to meet such an emergency as that which arose last Spring.

THE CAMPAIGN OF EDUCATION.

Continuing its custom of former years the Commission kept up its campaign of education by means of helpful printed matter. During the year there was issued by the Commission "A Four Fold Word for Trees" by the Secre-



One Section of Shade Tree Commission at Essex County Fair

tary. This is a pam phlet of sixteen pages, illustrated with color plates of some of Newark's most be a utifully shaded streets, and discussing the aesthetic, sanitary and realty values of trees as also

their power of inspiring to civic, state and national patriotism. A leaflet entitled "Activities of the Shade Tree Commission" was also issued.

Another instructive publication widely distributed was our Arbor Day Leaflet. Of these there were two varieties, each illustrated. They were distributed among the pupils of all the schools, public, private and parochial. One variety of this leaflet consisting of eight pages was for the Grammar grades; the other variety, of four pages, was for the Primary grades. The "Four Fold Word for Trees" was also used as Arbor Day literature. Copies of this were distributed among the teachers and Senior classes of the High and Normal Schools. It may be mentioned, in passing, that



Maples-Lincoln Avenue

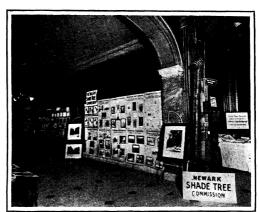
many requests come from all parts of the country for the literature of the Commission.

Arbor Day was further celebrated by the planting of trees on the grounds of various schools throughout the city. The morning of that day saw wagonloads of trees on their way to these schools. These trees were furnished by the Shade Tree Commission to every school which cared to plant them as a feature of its Arbor Day celebration. Fifty-six trees were planted in this way. The educative value of these plantings with their accompanying ceremonies is obvious.

In October the Essex County Fair furnished another occasion for educational work. Your Commission had the honor of making what was declared by many to be one of the most attractive and instructive displays of the fair. In a portion of the Manufacturer's Building set apart for the purpose, we erected a booth in which were exibited photographs of trees, plants, shrubs, flowers, shaded streets, landscapes, etc. Standard books on arboriculture and horticulture, profusely illustrated with splendid color plates, were opened to public view. These books moved many to ask questions and request explanations, and our representatives

were kept busy answering and explaining. The Shade Tree literature above referred to was also on hand for free distribution. Specimens of various costly woods were displayed. Portions of trees marred by insect enemies were exhibited and an expert was on hand to explain the operations of the destructive insects. Tanglefoot, spraying fluid and other material with which these insects are combatted were on exhibition and their uses and effects were explained. Show cases were exhibited displaying specimens in all their various stages of insect enemies of trees, such

as the Tussock Moth, the Elm Leaf Beetle, the Fall Web Worm, the Bag - Worm Moth, the Cottony Maple Scale, the Gypsy Moth, the Wood-Leopard Moth, the Brown Tail Moth, etc.:



A Section of the Trenton Exhibit

also these cases showed portions of twigs, leaves and limbs which had been riddled and otherwise destroyed by these enemies. Then there were specimens showing the deadly effects of inexpert pruning. Also there were specimens of the young trees which the Commission sets out, with specimen guards and stakes. There were tree labels; also park settees. The interest of visitors was clearly shown by the number and quality of the questions asked and by the close attention bestowed on the different displays. Many were surprised at the size, variety and quality of tree set out by the Commission at so low a cost. Tags attached to the tree guards announced that the guards (in-

valuable protectors to trees) could be obtained at from 35 cents up. For the first time many of our citizens realized the slight expense which would save their trees absolutely from destruction by horse bites. Examples of expert and of inexpert trimming were displayed. Practical demonstrations were given of the divers methods of caring for shade trees. The Commission is in receipt of a diploma granted by the Essex County Fair Association in acknowledgement of this exhibit of shade tree work

Trees Planted by the Shade Tree Commission in 1908

ELMS.

Avon Avenue 95 Baldwin Avenue 14 Alpine Street 39 Elizabeth Avenue 212 Bigelow Street 83 Hunterdon Street 91 Leslie Street 44 Madison Avenue 52 Meeker Avenue 51
NORWAY MAPLES
Bergen Street 71 Chadwick Avenue 86 Farley Avenue 23 North Second Street 87 North Third Street 66 North Sixth Street 107 North Seventh Street 50——490
ORIENTAL PLANES
Dickerson Street 94 Howard Street 98 Morris Avenue 223 New York Avenue 88 Poinier Street 51 Runyon Street 48 Stanton Street 25

OAKS.

Fabyan Place	112 48 160	
BOLLEANA POPLARS.		
Kossuth Street	23 15 50 39 77 204	
LOMBARDY POPLARS.		
Pennington Street	8585	
TULIPS.		
Hillside Avenue		
WILLOWS.		
Summer Place	1414	
Total	2,396	

Streets on Which All Trees Were Trimmed

Farley Ave.	Lyons Ave.
Osborne Terrace	Nye Ave.
Hillside Ave.	Schley St.
So. 7th St.	Warren St.
East Park St.	Pine St.
Parker St.	Summer Place
Montclair Ave.	Irving St.
Heller Parkway	Sandford Ave.
Elliott St.	Halleck St.
Winthrop St.	Summer Ave.
Elwood Place	Delavan Ave.
Wakeman Ave.	Elwood Ave.
Chester Ave.	Lincoln Ave.
Nursery St.	Carteret St.
Arlington Ave.	Verona Ave.
	Woodside Ave

FINANCIAL REPORT FOR 1908.

RECEIPTS.

Balance on hand January 1, 1908\$	256.76
By Tax Ordinance Appropriation	24,500.00
By Tax Ordinance Appropriation, supplement	5,000.00
By Special Appropriation in March	2,500.00
By Special Appropriation in May	3,000.00
By Special Appropriation in August	5,000.00
By Shade Tree Assessments 1907	623.30
By Arrears Tree Assessments 1907	863.24
By Interest	84.28
By Shade Tree Assessments 1908	5,746.28
By Receipts from sundry services	975.38
_	
\$	348,549.24
DISBURSEMENTS.	
Payroll—Planting Street Trees\$ 4,109.24	
"—Maintaining Street Trees. 6,470.48	
"—Spraying Street Trees 1,533.43	
"—Spraying Street Trees 1,533.43 "—Parks	
" —Spraying Street Trees 1,533.43 " —Parks 12,799.34 " —Office 3,993.13	528 00° 62
" —Spraying Street Trees 1,533.43 " —Parks 12,799.34 " —Office 3,993.13 ——\$	
" —Spraying Street Trees 1,533.43 " —Parks 12,799.34 " —Office 3,993.13 ——\$ Carting paid by Bill	837.25
" —Spraying Street Trees 1,533.43 " —Parks 12,799.34 " —Office 3,993.13 — — \$ Carting paid by Bill \$ Professional Services Landscape Architect \$	837.25 225.00
" —Spraying Street Trees 1,533.43 " —Parks 12,799.34 " —Office 3,993.13 ——\$ Carting paid by Bill Professional Services Landscape Architect Advertising	837.25 225.00 117.45
" —Spraying Street Trees 1,533.43 " —Parks 12,799.34 " —Office 3,993.13 ——\$ Carting paid by Bill Professional Services Landscape Architect Advertising Board of Horse	837.25 225.00 117.45 300.00
" —Spraying Street Trees. 1,533.43 " —Parks 12,799.34 " —Office 3,993.13 ———————————————————————————————————	837.25 225.00 117.45 300.00 33.00
" —Spraying Street Trees. 1,533.43 " —Parks 12,799.34 " —Office 3,993.13 ——\$ Carting paid by Bill. Professional Services Landscape Architect. Advertising Board of Horse. Shoeing and Harness Repairs. Purchase of Horse.	837.25 225.00 117.45 300.00 33.00 165.00
" —Spraying Street Trees	837.25 225.00 117.45 300.00 33.00 165.00 5,585.80
" —Spraying Street Trees	837.25 225.00 117.45 300.00 33.00 165.00 5,585.80 137.45
" —Spraying Street Trees	837.25 225.00 117.45 300.00 33.00 165.00 5,585.80

SHADE TREE COMMISSION.	45
Hose for Tree Collars	93.40
Wire	988.01
Stakes	619.01
Manure	426.50
Fertilizers	234.75
Bedding Plants and Shrubs	1,102.86
Seed	85.54
Sods	144.56
Sands	84.15
Cement	382.72
Stone	322.45
Screenings	195.00
Cinders	6.50
Cement Walk and Coping, Court House Park	236.80
Inscription Boyden Monument	55.60
Repairs to Fountains and Plumbing	88.81
Repairing Lights at Band Stand	7.43
Water	102.25
Flower Pots	7.00
Storage of Palms	5.00
Hose	37.50
Hose Attachments	4.03
12 Pairs Squirrels	40.00
Squirrel Feed	8. <i>7</i> 8
Two New Flags	79.00
Repairs to Flag	9.70
Painting Flag Staff	30.00
Insecticides	814.19
Gas	183.00
Spraying Machines, Appurtenances, Repairs	559.80
Destruction Egg-masses, etc	108.23
Ladders	20.80
Hardware	26.51
Tools	298.9 2
Tools Repaired and Sharpened	117.69
Lumber	69.73

Paints and Oils	2 44.76
Storage Rent	105.00
Printed Matter	747.92
Stationery	189.41
Postage	156.08
Photos Trees, Parks &c	44.90
Books and Periodicals	19.84
Electrotypes	22.99
Draughting Outfit	14.80
Cabinet and Equipment	21.64
Shelves for Specimen Cases	13.54
City Directory	6.00
Sundry Office Supplies	4.40
Street Car Tickets and Railroad Fares	279.64
Phones	29.40
Telegrams	6.53
Expressage and Freight	67.32
Extra Help	21.60
Felt	12.50
Cheese Cloth	9.15
Burlap	1.20
Tar Paper	4.40
Signs, County Fair Exhibit	4.85
Repairing Broken Fence	25.00
Distributing "Save the Tree" Signs	19.00
Tax on Nursery	27.04
Balance	2,427.04

^{\$48,549.24}

Of this amount \$27,976.54 was expended for the planting, maintenance and care of trees on streets, and \$18,145.66 for the development, maintenance, care and improvements of Public Grounds, Parks, etc., from January 1, 1908, to December 31, 1908.

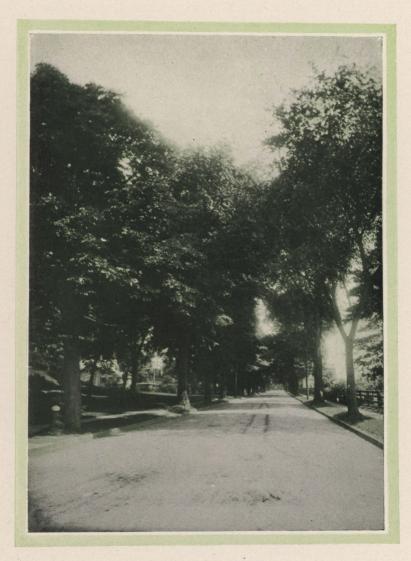
Respectfully submitted,

CHARLES G. TITSWORTH, JAMES A. BERRY, JAMES S. HIGBIE,

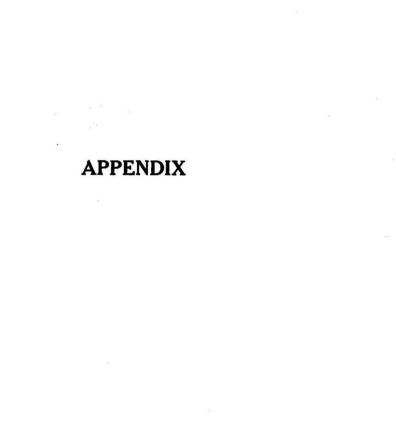
Commissioners.

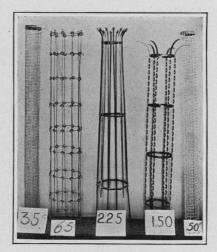
CARL BANNWART, Secretary.





NORTH FIFTH STREET





Various Tree Guards

DOANE MEMORIAL.

On Thursday, January 9, 1908, with simple but impressive ceremonies, there was unveiled in Rector Park the heroic bronze statue of the late Monsignor George H. Doane, the gift to the City of the Monsignor Doane Memorial Association. The Committee having charge of the arrangements for the unveiling consisted of former United States Senator James Smith, Jr., Chairman; Richard C. Jenkinson, John Cotton Dana, Reverend Louis Shreve Osborne, Joseph M. Byrne, James Taaffe, Rabbi Joseph Leucht, Jeremiah O'Rourke, Samuel Kalisch and James M. Reilly.

On behalf of the Memorial Association Former Senator Smith presented the statue to the City in a brief address. He closed by saying:

"The high and cherished privilege of formally presenting this statue of Monsignor George H. Doane to the City has been assigned to me, and hence I have the honor to present to you, the citizens of Newark, this beautiful work of art and commemoration."

Turning to His Honor, the Mayor, the speaker continued:

"In the fulfillment of this duty, Mayor Haussling, as the citizens of all creeds have caused this monument to be erected to perpetuate the name of one beloved of all our people, therefore in behalf of those citizens, I present to the City of Newark, through you as its honored Chief Executive, this statue in bronze of Monsignor George H. Doane.

At the conclusion of Mr. Smith's speech, Doane Gardiner, a young grand-nephew of the late Monsignor, stepped forward and pulled the cord which released the two American flags veiling the statue. As the red, white and blue ensigns

fell around the pedestal the crowd broke into applause and expressions of admiration. After the unveiling a floral wreath was placed at the base of the statue. Mayor Haussling then accepted the memorial in a brief speech, in the course of which he said:

"Coupled with his other admirable characteristics Monsignor George H. Doane was an enthusiastic Newarker. It is impossible to estimate now the extent of his influence for good in the community. This life-like statue, raised by loving hands of those who knew him well, we call his monument; the beautiful Free Library and the magnificent county park system, both of which he did so much to bring about, we speak of in a large sense as his monuments. But actually his real monuments are to be erected as a result of what he taught and urged while he was with us, for he was one of those rare types of whom it can be truthfully said that when he departed he left the spirit of his life to continue to inspire his fellow-men.

"And now, sir, on behalf of the City of Newark, I accept this statue of Monsignor George H. Doane, expressing with all the warmth of which I am capable the gratitude of our fellow citizens to those who have given us this beautiful memorial."

Other speakers were Right Reverend John J. O'Connor, Bishop of Newark; His Excellency, Governor John Franklin Fort; Reverend Louise Shreve Osborne and Reverend Rabbi Leucht. The Rabbi's final word was:

"Let me close with the hope that as in this day's ceremony all differences of religion were sunk, and Jew and Gentile asked to unite in token of respect and honor to a great and good man, so in all our future walks we will remember that, differ as we may in religion, we are one as citizens of our great republic, children of one Father in Heaven; that side by side we stand in every walk of life; that we wish to labor for bringing on the dawn of the golden age, when the sun of humanity, the sun of universal love and harmony will have risen high toward the zenith, flooding the earth in every part with his blessed rays, warming the hearts of men towards one another."

Congressman R. Wayne Parker was the orator of the day and made a stirring address, which was followed with close attention by the vast audience. Mr. Parker said in part:

"The people of Newark today dedicate a monument in memory of George Hobart Doane because he was really the friend of the people. He was all that that name implies. He thoroughly understood the meaning of the words that he that loveth God loveth his brother also. He loved his friends, loved his neighbors and fellow citizens, loved his city, loved his State, loved his country, and through a long life he ever threw out and kept alive and active those tendrils of sympathy for all men everywhere that bind mankind in one."

* * * * * * * *

"May 10th, 1861, he was mustered into the United States service as chaplain of the First Brigade of New Jersey Volunteers, and served faithfully until mustered out with them. He answered the first call of his country's need. We do not forget now that he was one of those who answered that solemn call at a time when strong hearts were most needed."

* * * * * * * *

"We recognize him as one of the builders of our great Newark. It is with men as with nations—those are best remembered who leave their monuments behind them.

"The memory of countless millions who did their part in the struggles of life has passed away. It is the builders that we remember. At the death of George H. Doane it was recalled how great a share he had in the building of the city, not only in its churches and church buildings, but in the enlargement of the post office, in the rebuilding of our police stations, in St. Michael's Hospital, in the Public Library, in the new City Hall, in the new Court House, and, most of all, in the creation of our system of public parks. It is as one of the founders of the Greater Newark that we honor him here today. It is because of the wealth of his sympathy for whatsoever would bring good to the people whom he loved. One has to wonder how he could do so much. He was simply never idle. We all knew the buggy in which he was wont to drive about our streets, stopping here and there to speak to a friend, visiting the sick, and bent on some errand of mercy or public benefit.

"It was the greatness of his character that he could so keep up his friendship with all stations and ranks in life, with all shades of belief, with all branches of learning and culture. His letters to the press were a ceaseless effort to bring others into these pleasures and sympathies, to set forth the simple life, to find pleasure in trees and flowers, the dogwood in the spring and the foliage in the fall, to get out of themselves and out of their carking cares into the country, and to bring something of the country into the town. Some of these letters have been gathered in a volume, and the subjects tell of his interests: 'Essex County Parks,' 'Dogwood Blossoms,' 'Rhododendrons' and the daffodils of the poem 'A System of Parkways,' 'Robin Redbreast.' Then his letters in re the new post office workroom. He was working for an art gallery in the Library and its proper lighting. He writes a long obituary of his friend, Sir Frederick Bramwell, or a description of a Saturday Club dinner at Boston, with Emerson, Longfellow, Agassiz, Whipple, Hoar, Sumner, Eliot, the Danas (father and son), Charles Francis Adams, etc. He discourses on books and printing as 'The Art Preservative of all Arts', and on museums and libraries of Boston, or the studios of New York. He comes back again and again to the flowers, 'all a-growin' and a-blowin'; and days in the country—'a spray of wild laurel,' 'the cardinal flower'; then carries his readers to 'the everlasting hills' of the White Mountains, and, after all his travels, finds 'East, West-Home's Best.' Loving and beloved he ended his fifty years of life among us—in his home. Nothing could break his friendship for those he loved. Differences of opinion or of creed never severed him from his kind. possessed the cheer that Schiller described in his ode to joy, whose spell binds together what the sword of custom has severed. And it was just beause he clung so closely to those he knew that he brought into the circle and family of his interest all his fellowcitizens, his country and the world. We honor this man today."

On the morning of the day set apart for the unveiling, His Honor, Mayor Haussling, had sent the following letter to City Clerk James F. Connelly:

"In connection with the presentation of a memorial statue of the late Monsignor George H. Doane to this City, and the exercises incident thereto, and as a mark of respect to the memory of our late distinguished fellow-citizen, I would request you to convey my wish to the several heads of the departments of the city government, that, as far as possible, they close their offices and suspend business from 1:30 to 3:00 o'clock this afternoon."

The Mayor's request was of course complied with; and not by the city departments only was the day observed, but by private business as well, and that universally throughout the city.

SOME DON'TS

A THING OF LIFE.

Don't think that a tree is a mere stick of timber; a tree is a living organism.

Don't forget that the treatment of this living organism

is an expert profession. Therefore,

Don't let every Tom, Dick and Harry treat your trees.

Don't think that a butcher, because he is expert at carving meat, is therefore qualified to perform a surgical operation on your body. Also,

Don't think, because a man is expert at cutting wood, that he is therefore qualified to perform the surgical operation of pruning a tree.



"My Tree!"

A CONSERVER OF LIFE.

Don't forget that an adequate number of street trees mitigates the intense heat of the summer months, and diminishes the death rate among children. Don't forget that the preceding paragraph sets forth the written declaration of the New York County Medical Society as embodied in that Society's Minutes.

Don't forget that trees purify the atmosphere. The foliage takes in carbonic acid gas, which gas is deleterious to us; and gives out oxygen, which is helpful—indeed indispensable—to us.

Don't forget that trees cool a street not only by reason of their grateful shade, but by reason also of yet another function of their foliage. So,

Don't forget that the foliage, by evaporating large quantities of water, causes a marked reduction in the surrounding temperature; and this reduction of temperature is greatest on dry, hot days when such reduction is most needed.

Don't forget, then, that the trees make for the healthfulness of a city by cooling and purifying the air. And while you note this as to the air of the streets,

Don't forget that the air of basements and cellars is rendered less humid by the removal of surplus water from the surrounding soil through the medium of roots and foliage.

A MONEY-MAKER.

Don't forget that trees are among the first things which impress a stranger in forming judgment as to whether a city is, or is not, a good place to live in.

Don't forget that long rows of well-kept trees with their stately columns, their graceful arches, their nodding, rustling plumes of green, their grateful shade and flecks of sunshine are immensely potent factors in determining the desirability of a street as a place of residence.

Don't forget that trees therefore have a tangible realestate money value. And to nail this fact, you "practical" man, Don't forget that the courts regard trees as an asset to the property on or in front of which they stand; it is matter of court record that for the destruction of just one street shade tree the destroyer was mulcted \$400.

A FEW CENTS, SIR.

Don't forget that it is a violation of law for a driver to suffer his horse to stand where the horse can injure a street tree. But,

Don't fail to remember that a wire guard, which will effectually prevent the biting of your tree by a horse, may be procured for thirty-five cents in the case of a young tree, and for an older tree at four cents a square foot.

Don't fail to remember, therefore, that it will be like biting off your nose to spite your face, if for lack of a guard you expose your tree to his Nibs, the biting horse.

A BUNCH OF ROGUES.

Don't forget that a Tussock Moth Caterpillar is a voracious little beast and that it directs its ravages against an almost unlimited variety of trees and shrubs.

Don't forget to thoroughly clear your tree of the Tussock egg-mases before hatching time. Then destroy these egg-masses by fire. Having thus cleared your tree, band the trunk with Tree Tanglefoot. This will make that particular tree secure against the Tussock Caterpillar.

Don't forget if your tree is an Elm, that it is susceptible to the Elm Leaf Beetle.

Don't forget to look for the larvae of this bettle in the crevices of the bark and upon the ground. These larvae are yellowish looking things. Sweep them up and burn them.

Don't forget that the Borer is another deadly enemy of trees and that a single borer often causes the death of a young tree.

Don't forget to look on the ground about the base of your trees. If you see saw-dust there, it is an evidence that the Borer (one or more of him) is getting in his destructive work on your tree.

Don't forget to start an immediate search for this villain. When you find a small hole in the bark, that is an entrance to the Borer's tunnel. Insert a long wire with a hook end and yank him out. His name will then be Dennis.

Don't forget that other rogue, the Scale. So small by himself as to be scarcely visible. But he never is by himself; not he. There are millions of him. He works in troops of thousands and then he is visible enough. You can tell his presence by the "scaly" surface of the bark—from which circumstance he gets his name. There are several varieties of him—all bad.

Don't forget that he works havoc and even death to the trees. The insect army of tree destroyers has a corps of "sappers and miners." The Borer is a miner; this fellow (the Scale) is a sapper. He inserts his legion tubes through the bark into the cambium layer of cells and from these cells sucks out the sap, the very life blood of the tree. A sort of Vampire, you see. Spare him not.

Don't forget to get right after him. Such contact poisons as whale oil soap, kerosene emulsion, etc., etc., will finish Mr. Scale's career. For seasons when and methods how to apply these, consult the bulletins or inquire of this office. In many cases trimming—but it must be judicious trimming—will enable the tree to overcome this enemy. The cuttings should be burned so that other trees and plants may not become infested by the crawling young.

AIR AND WATER.

Don't forget in dry weather to water your tree three times a week, using each time at least two pails of water.

Don't forget to keep the soil loose about the base of your tree, so that air and water can have free access to the roots.

Don't forget that to loosen the soil has the additional advantage of forming a mulch which conserves the moisture already in the soil.

AS TO PARKS.

Don't forget that parks are no longer considered mere luxuries, but are classed with water works, sewers, pavements, lights, police and fire protection as municipal necessities.

Don't forget that there is no delusion so absurd as that parks are only for the well-to-do.

Don't forget that parks, on the contrary, serve especially to meet the needs of the city's industrial population.

NOW THEN—HELP!

Don't forget that the cordial co-operation of Newark's citizens is necessary if the Newark Shade Tree Commission is to effect the very best for Newark's street trees and Newark's parks.

SUMMARY OF PROVISIONS OF THE NEW JER-SEY SHADE TREE STATUTES.

TURISDICTION.

The Shade Tree Commission of the City of Newark, which consists of "three freeholders who * * * serve without compensation," is invested by statute with "exclusive control and power to plant, set out, maintain, protect and care for shade trees in any of the public highways" of the City of Newark; and with "exclusive control of the public parks belonging to, or under the control of (the City of Newark) or any Department in the government thereof, with full power and authority to improve, repair, manage, maintain and control the same."

POWERS.

The Statutes confer on the Shade Tree Commission power to pass, enact, alter, amend and repeal ordinances for the protection, regulation and control of all shade trees planted or growing on the highways of the city; also for the protection, regulation and control of City Parks with the trees, flowers, shrubs, statuary and other improvements and city property therein.

The Commission is empowered to prescribe fines and penalties for the violation of its ordinances or any of them and to fix the amount of such fines and penalties.

The courts which now or hereafter shall have jurisdiction over actions for the violation of ordinances of the municipality shall have jurisdiction in actions for the violation of such ordinances as the Commission shall enact; and said ordinances shall be enforced by like proceedings and processes, and the practice for the enforcement of said ordinances shall be the same as that provided by law for the enforcement of the ordinances of the municipality.

A copy of an ordinance or ordinances of the Commission, certified to under the hand of the clerk, secretary or president of the Commission, shall be taken in any court of this State as full and legal proof of the existence of such ordinance or ordinances.

PURCHASE OF LAND FOR PARKS.

The Commission is authorized by statute to purchase lands for public parks, with the concurrence of the Finance Committee of the Common Council.

When, for any reason, the Commission cannot arrange for the purchase of certain land for park purposes, it is lawful for the City to acquire the title by condemnation, provided, that no application or proceeding shall be instituted for that purpose, except by and with the consent of the Finance Committee of the Common Council.

The Finance Committee is empowered to borrow so much money as may be necessary for the purchase and acquirement of lands for park purposes; and to issue bonds or obligations of the city therefor, bearing interest not to exceed four per cent. per annum, in an amount not to exceed \$300,000, and for a term or terms not to exceed forty years; these bonds to be exempt from taxation. The Finance Committee may dispose of such bonds or obligations at public sale, after due advertisement, but in no case for less than par.

REQUIRED TO GIVE NOTICE.

The Commission is required to give notice in one or more of the city newspapers of its intention of setting out or planting any shade trees, or changing the same, in any highway. Such notice must be given for at least two weeks prior to any meeting in which the Commission shall decide to make such improvement.

SHADE TREE ASSESSMENTS.

The Statutes require that the cost of planting and transplanting any trees in any highway, and of boxes or guards for the protection thereof, shall be borne by the real estate in front of which such trees are planted or set out, and that the cost thereof, as to each tract of real estate, shall be certified by the Shade Tree Commissioners to the Receiver of Taxes.

Upon the filing of such certificate, the amount of the cost of such improvement becomes a lien upon the lands in front of which said trees are planted or set out.

The Receiver of Taxes is required to place the assessment so made against any property in the annual tax bills rendered to owner or owners of such property, and the same shall be collectible in the same manner as the other taxes against said property are collected.

CREDITS.

All moneys collected from fines or penalties for the violation of any ordinance of the Commission, and all moneys collected for assessments made for the cost of planting and transplanting of trees, etc., shall be forthwith paid over to the proper municipal authorities and placed to the credit of the Commission, subject to be drawn upon by the Commission in manner provided by law.

Summary of Provisions of the Newark Shade Tree Ordinances

IT IS FORBIDDEN

(Except under written permit of the Shade Tree Commission)

To cut, break, climb, injure, remove or plant any street tree or any tree or plant in a city park; or to injure, misuse or remove any device placed to protect such tree or plant. To injure, misuse or remove any structure or device in or around a city park and pertaining thereto; or to have possession of any such structure or device or any part thereof.

To attach or keep attached to a tree in any public highway or city park, or to the guard or stake placed to protect such tree, a rope, wire, sign or any device.

To place or hereafter maintain about the base of a tree in any public highway or city park, stone, cement or other substance which would impede free access of water and air to the roots of such tree.

To play at any game in a city park (unless the person be under the age of fourteen years); or to place any booth, stand or other structure, or station any wagon or other vehicle in such park.

IT IS FORBIDDEN UNQUALIFIEDLY

To prevent, delay or interfere with the Shade Tree Commission or its employees in the planting, pruning, spraying or removing of a tree in any public street or city park, or in the removal of stone, cement or other substance from about the base of such tree.

To fasten a horse or other animal to any tree in any public highway or city park, or to cause a horse or other animal to stand where it can injure such tree.

To enter upon any portion of lawn or ground within a city park when notified by a sign in or a guardian of such park, or by an officer, not to do so.

To leave any paper or waste material in a city park except in the receptacles provided for such material. To offer any article for sale, display any advertising device or distribute any circulars or cards, in a city park.

To utter any profane, threatening or abusive language or loud out-cry, do any obscene or indecent act, commit any nuisance, solicit any subscription or contribution, or play any game of chance in a city park, or bring into such park any instrument of gambling or of similar use.

IT IS REQUIRED

That in the erection or repair of a building or structure the owner thereof shall place such guards around nearby street trees as shall effectually prevent injury to them.

That every wire, charged with electricity, running through a tree in any public highway or city park, shall be so fastened as not to come into contact with such tree.

VIOLATIONS

Any violation by the same person of any provision of the Shade Tree Ordinances which is repeated or continues on any day or days succeeding the first violation constitutes an additional violation for each of such succeeding days.

Every violation of the Shade Tree Ordinances is punishable by a fine of not more than fifty dollars (\$50) or by committal to the county jail, or penitentiary, for a period not exceeding three months.



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