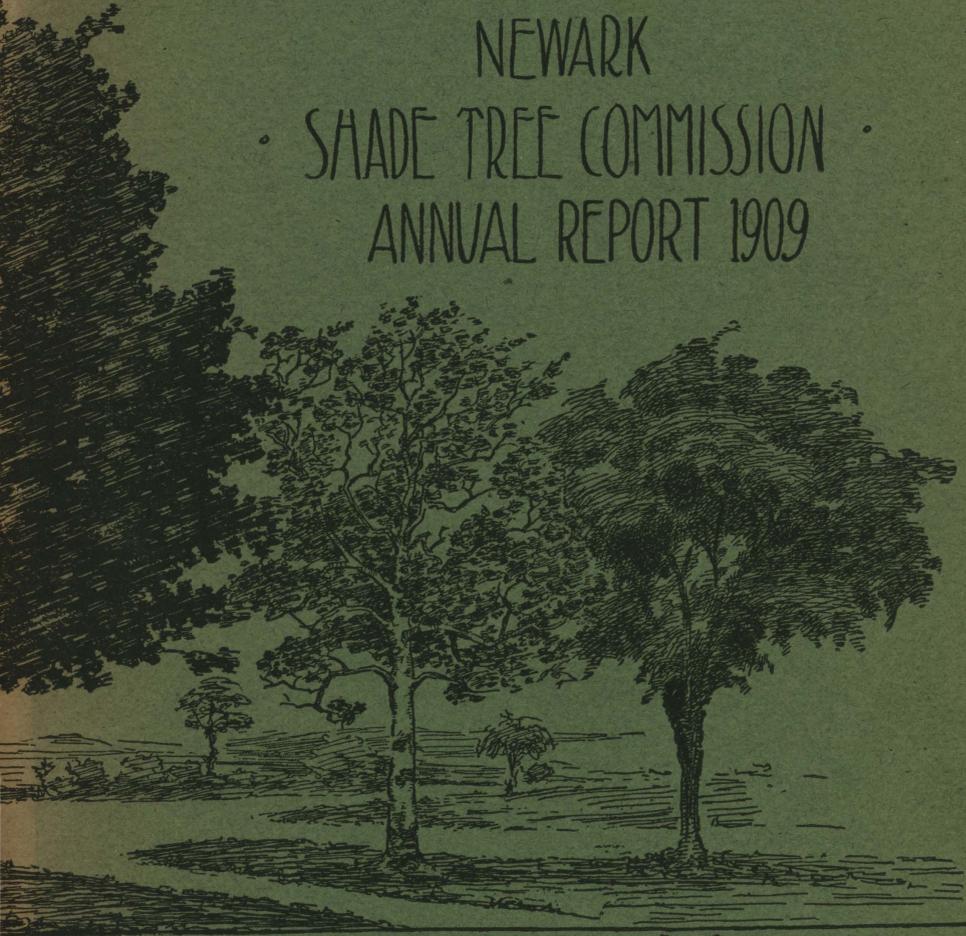


STATE
163
552
1

NEWARK
SHADE TREE COMMISSION
ANNUAL REPORT 1909



ORIENTAL PLANES
747

ELMS
718

NEWARK SHADE T

TOTAL OF EACH SPECIES PLANTED FROM
THE ORGANIZATION OF THE
COMMISSION TO DECEMBER 1910.



ALL OTHER
KINDS
1529

POPLARS
1007

OAKS
1338

OR.
PLANES
2718

Sixth Annual Report

OF THE

Shade Tree Commission



NEWARK, NEW JERSEY, 1909

SIXTH ANNUAL REPORT
OF THE
Shade Tree Commission

*To the Honorable, the Mayor and Common Council of the
City of Newark, New Jersey:*

GENTLEMEN:—The Shade Tree Commissioners have the honor herewith to submit their report for the year 1909, being the sixth annual report of this department.

The aim of the Commission has been to add to the number of street trees by setting out new plantations; to conserve and care for these and for the older street trees; to care for and improve the city parks and seek to establish new parks where necessary and feasible; to awaken, sustain and stimulate an enlightened interest in street trees, in parks, in lawns, plants, shrubs and flowers—and by these means to enlarge for Newark the scope of life's wholesome pleasures, to enhance the city's beauty, to increase its healthfulness, and advance its realty interests; to make this Newark of ours yet more lovable and beloved, a city the dwellers wherein may justly say: "The lines have fallen unto us in pleasant places; we have a goodly heritage."

There needs no prophet to foretell the exceeding larger life and wider scope fast coming to this city. For "good, old, comfortable Newark" there awaits a future the greatness of which he that runs may read already. To adorn our Newark with stately trees and noble parks is to have

part in "hasting the coming" of that wished-for time, the dawning of the morning of Newark's larger day.

Thus to contribute to a consummation devoutly to be wished, the Shade Tree Commission during the year just closed has sought to exercise with increasing zeal the double function of its office, viz.: (1) the setting out of new street trees and the maintenance, protection and care of the same; as also the maintenance, protection and care of the older street trees, and (2) the management, maintenance, improvement, repair and control of the public parks belonging to the city. Below we undertake a brief detailed account of the Commission's activities during 1909 under the two heads indicated. And first

AS TO PARKS.

During the year the increasing interest of the people in the parks was manifested by the people's increased use of these pleasant open spaces. The large numbers, including many women and children, who have frequented the centrally located parks especially, demonstrated the utility of these places in furthering the public health and contentment and in promoting good order and good citizenship. For instance, early of a summer's morning one would see sitting at their ease on the benches many a mother and babe resting or asleep in the cool morning freshness of the park after the exhaustion of a hot, sleepless night within doors. And how good it seemed that the people's parks were thus ministering to the people's comfort! Later in the day one would see such a mother "keeping watch over her flock" of growing boys and girls while they romped upon the lawns in the cooling shade of the trees; or the mother presided in the midst as the youngsters sat circled around her on the grass, receiving from her their portions of lunch and partaking of that same with gusto and shouts of glee.

Or, when the heat and labor of the day were o'er, pleasant it was to see the working man, long lines of him, sitting at ease, enjoying their leisure, smoking perhaps the pipe of peace, contentedly chatting or placidly surveying the flowers and greenery all about them. Or again, in the very midst of the day's glare and heat, the busy wayfarer sat him down under some spreading tree and in its shade found rest and coolness for a while, then rose refreshed to take his way again.

Scenes like these demonstrated how the people use and enjoy their parks; and, moreover, such scenes testified very practically to the people's appreciation of the efforts made to maintain and add to the parks' attractions and conveniences. A summary of these efforts may be here attempted.

To "maintain" the parks throughout the year, to keep them up to the grade of attractiveness they had already attained, has been a primary care. This entailed attention to such matters as mowing the grass, edging the lawns, taking out weeds, digging, watering and mulching the shrub and flower beds, trimming, spraying and "tangle-footing" 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 lawns, etc., etc. This routine work, persistently kept up, was rewarded by the fine appearance presented by the parks throughout the successive seasons.

LINCOLN PARK.

Here the principal flag walks were relaid. The lines of several lateral paths were changed. All the lawns were manured and kept well watered. Those along the southerly side were re-seeded and re-sodded. A temporary bandstand for public concerts was erected. In their season clumps of evergreens, left-overs from the Christmas festival, were set out.

WASHINGTON PARK.

Here, as indeed in all the parks, special and persistent watering was necessitated. The flower-beds received special attention. A large elm on the Washington place side, which had ennobled with its stately presence that end of the park for more than five human generations, had to be taken down, having died of old age.

MILITARY PARK.

Several sickly young maple trees were removed and replaced with elms. The edges of all lawns were re-sodded. Shrubs were planted. The liberty pole was re-painted, and the ball at the top re-gilded. An additional flag was added to the equipment. Ground was broken for the proposed public comfort station. As to this latter convenience, more is said further on in this report. In this park extensive lines of Christmas trees were set out.

JACKSON PARK.

Three beds of flowers were set out. The lawns were seeded. The fountain was repaired. Paths were graded and walks repaired.

BELMONT PARK.

This park, which had been regraded in 1908, was reseeded in 1909.

VAILSBURG PARK.

This tract was practically a sunken slough. With many truck loads of earth it was brought up to grade; after which some twenty lindens were set out. We propose to begin developing this bleak spot into a park in the spring of 1910.

MILFORD PARK.

This park is coming into its own. It is a plot of awkward triangular shape, seven hundred and forty feet long, one hundred and fifty feet wide at the base and tapering to a point. Originally it had been only graded and dotted with rapid-growing trees. No well-conceived plan had been followed and there was no prospect of increased beauty and utility for this tract except through radical re-arrangement. Pursuing the policy of developing some of these plots thoroughly every year, a landscape architect was employed to study the possibilities of Milford Park. The plans were constructed after several conferences on the spot between the architect and the Commissioners. These plans now being executed will give character to the plot. Extensive subsoiling has been done. Thus has been laid a foundation for further treatment, insuring a growth into beauty increasingly greater from year to year.

CENTRAL SQUARE PARK.

This park, which had been developed in 1908, flourished beautifully, and the rustic shelter set up early in 1909 was much used. Waverly Park, which also had been thoroughly overhauled, showed fine results. In Lombardy Park a number of Carolina poplars were set out.

STREET WORK.

We proceed now to a summary of trees set out by the Commission in 1909. These totals show an increase in the number planted over the figures of any one of the preceding five years. Three thousand seven hundred and sixty-five trees were set out on twenty-eight miles of Newark's streets, this number exceeding the highest previous record by five hundred and eighty-six. Adding to these seven hundred and thirty-five, the approximate number of those set out by

private initiative, we may conclude that more trees were planted in our city than in any preceding year. If we estimate the tree population of the city at eighty thousand, one out of every eighteen trees on our streets is seen to have been set out this year and approximately one out of every four planted during the six years of activity on the part of the Commission.

When the Commission was instituted in the spring of 1904 the city had two hundred and forty miles of improved streets. This total has now (January, 1910) become two hundred and ninety miles, showing an increase of fifty miles of streets during the six years. "Are the tree-planters keeping up with this rapid growth?" is the question which naturally arises at this time. We are. A mileage equal to nearly one-tenth that of all improved streets was planted in 1909 alone. While the city added ten miles to its total of streets during the year, the Commission planted twenty-eight miles of streets, approximately three miles planted to one opened. Including trees in place at the beginning of the six years, one hundred and nineteen miles of streets, two hundred and thirty-eight miles of frontage, have been planted during the period indicated. In all, 14,563 trees have been set out by the Commission. If these were set in a straight line at intervals of the usual thirty-three feet, the line would reach from Newark to Philadelphia.

In these plantings a high standard of tree, both as to quality and size, was insisted on as in former years and great thoroughness characterized all preparatory measures. The selections included none but healthy trees of straight growth with good heads, fibrous roots and two inches or more caliper a foot above ground.

Preference was given to the same species as were used in former years. Fourteen hundred Norway maples, nine hundred and twenty-two Oriental planes, and seven hundred and eighteen elms made up the bulk (six-sevenths) of

our planting for the year. The elm, it may be explained, is losing caste as a street tree because of the many forms of insect attack to which it is susceptible. On the other hand, the Oriental plane, because of its rapid growth and ability to resist insect attack, is rising in favor; and the Norway maple is still the favorite for streets of ordinary width, because of its hardiness, its ornamental qualities and its medium size. Three hundred and two pin oaks and two hundred and seventy-one poplars complete the tally. These latter were chiefly used in factory districts, in one case in alternation with maples, it being the intention to remove them when the maples have attained sufficient size to add color and shade to the street. Unsparring care was exercised to adjust the varieties to the soil and social conditions of the neighborhood, technical knowledge and extensive experience furnishing the guide.

Of the streets chosen for planting, more were in the outskirts of the city than had been the case formerly. These newly laid out streets present virgin territory, and our methods of planting on these straight stretches of roadway insure for each street parallel lines of trees of uniform size and variety and at equal distances apart. Trees so disposed will ultimately be much more attractive than on the streets where we are compelled to intersperse our young trees with those of older plantings of undesirable or of mixed varieties.

Every request for planting, whether received from a society or an individual, was complied with. The Commission welcomes such manifestations of local interest and initiative, and is disposed to accede to every request which upon investigation proves well grounded. In addition to these streets where planting was requested, long stretches of streets selected personally by the Commissioners on account of their desirability were supplied with trees. No

effort was spared to be impartial and to give each section of the city equal attention.

There has been no relaxation in the thoroughness of soil preparation for these plantings. The same minimum as to area prevails—4x4x3½ feet—56 cubic feet. This is enriched with fertilizers and manure, and, if necessary, replaced with topsoil. In some districts, for instance, in Delancey, Peddie and South Fifteenth streets, we encountered ashes and other refuse materials. In such cases the planting pit was made larger, and in some localities as much as five tons of topsoil was supplied for each tree. The work was carried forward with due regard to the financial advantage of property owners. While every article and service connected with the planting process has increased in price—labor, teaming, trees, fertilizers, wire guards, stakes, etc.—yet the assessment for finished trees completely set, with perpetual guarantee, does not exceed the customary price for trees of the same variety and quality in nursery rows, if bought singly at retail prices. The average assessment for 1909 plantings is \$2.98. The minimum and maximum assessment for 1909 were respectively \$1.80 and \$3.89.

More durable tree guards than of old have been used. Experience had proved the desirability of a heavier wire cloth, a product heavier indeed than the trade usually furnishes. Such a product is now made to order for our use. The durability of the guards under ordinary conditions will be thus increased. In the event of violence, the new guard will be much more effective as a protector.

These tree guards and the machine by which they are made are an invention of the Commission. No manufactured guard was available for less than seventy-five cents. This sum, added to the items of labor and supplies, would often make a tree assessment look formidable. Again, the manufactured guard being obtrusive, detracted from the

graceful, natural appearance of the trunks. These disadvantages are largely overcome by the guard of our own make. The Commission turns out the present substantial guard with rubber collar at thirty-two cents.

During this year we had opportunity to test the effectiveness of that section of our ordinance which is calculated to do away with the planting of undesirable street trees. As an instance of the necessity for such a provision, take the case of the silver maple, which has been so generally planted. This tree is subject to borers to such a wholesale extent that scarcely one reaches maturity without being riddled by the burrows of these grubs. The wood of the silver maple is naturally very brittle and the branches are easily broken off by severe storms. It becomes all the more vulnerable in this respect after the borer gets in his work. To combat these and other insect enemies of this tree makes disproportionately large demands upon our force; as the responsibility of protecting all street plantings against insects ultimately devolves upon the Commission. Every effort is made to induce private parties proposing to plant on their own account to set out trees which have proven adapted to city conditions. A city street tree must be hardy in growth and immune from the common forms of insect attack. It should require a minimum amount of attention and give a maximum return of longevity.

The advantages of setting out such trees and no others are obvious. The new ordinance enabled us to promote such a policy. Three classes of intending planters apply to us. One class deals directly with nurserymen. Ordinarily they would stipulate for the Maple without specifying, and so without discriminating between the desirable and undesirable varieties, the Norway Maple being a most desirable tree, the Silver Maple not at all desirable. The nurseryman makes a larger profit and a larger showing with a Silver Maple. The chances of rapid growth are with this tree

which is one reason why it is favored by the uninitiated. We have been able, however, to point out to such persons how the Silver Maple in the long run proves inadequate, and to induce them to stipulate for the desirable trees in dealing with the nursery.

Another class consists of land companies. These set out many trees on new streets. In conference with these we have induced the managers to make stipulations which assure them a maximum return for their money and to the city a better ultimate result.

The third class consists of those who appeal to us to set out trees on frontages not announced in our proposed plantings as advertised. This class of planters, who avail themselves of the guarantee which goes with the plantings of the Commission, has multiplied, an index that marks the growth in popular favor and the increase of the labors of the Commission.

Last Fall, in addition to our planting, proper pits were prepared by the customary subsoiling (three tons to each pit) for 1574 trees to be set out in the Spring of 1910. The advantages of doing this work thus in advance are several. We avoid the necessity of meeting in one and the same month the cost of purchasing several trees and that of excavating and subsoiling several thousand planting pits. Further, it is an advantage to both the men and the work to employ ten men for five months rather than fifty for one month. The former course is possible, because the season for subsoiling is always open except in times of frost whereas the season for planting is practically limited to a variable period in the Fall and Spring. If the pits are prepared in advance, the planting season is relieved of what would otherwise be a rush which might tend to superficial work, also our expert foremen can concentrate attention on the important work of planting. And further, the soil in

the pits has an opportunity to settle thoroughly before we set out our trees. When it is remembered that subsoiling represents seven-eighths of the labor involved in each planting, it will be seen that our record for this year for street trees is higher than the figures of completed plantings alone show.

It has been said, "He who plants a tree, plants a hope." These trees are as yet only a hope, but they are a living hope. A well-defined beginning has been made, and the hope will fructify to reality. The systematic care these trees will receive at the Commission's hands will promote their development into sturdy and increasingly beautiful ornaments of the city's streets. Not far distant is the day when mile upon mile of these thoroughfares will show forth the wisdom of this generation in devising this means of promoting the healthfulness and beauty of the city. In that day Newark will be known, already is known, indeed, as a City of Trees.

STREETS PLANTED BY THE SHADE TREE COMMISSION
 IN 1909, GIVING THE NUMBERS SET OUT THE
 VARIETIES PLANTED, AND THE SEASONS
 WHEN PLANTED.

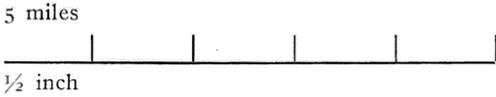
SPRING, 1909.		FALL, 1909.	
NORWAYS.		NORWAYS.	
Clifton Ave.....	198	Goble St.....	5
Halleck St.....	23	Hedden St.....	25
Hedden St.....	30	Johnson Ave.....	45
Mt. Pleasant Ave.....	81	No. 10th St.....	5
No. 5th St.....	181	No. 11th St.....	13
No. 9th St.....	32	No. 12th St.....	50
Parker St.....	114	Seymour Ave.....	27
Seymour Ave.....	19	So. 11th St.....	82
So. 10th St.....	84	So. 13th St.....	110
Springdale Ave.....	20	So. 15th St.....	147
Watson Ave.....	72	Third Ave.....	37
Total	854	Total	546

SHADE TREE COMMISSION.

PLANES.		PLANES.	
Badger Ave.....	57	Delancey St.....	168
Belmont Ave.....	67	So. 16th St.....	149
Branford St.....	47	Oliver St.....	70
Eighteenth Ave.....	110		
Grafton Ave.....	21		
Hudson St.....	85		
Hunter St.....	19		
Orange St.....	34		
Total	<u>430</u>	Total	<u>387</u>
OAKS.		ELMS.	
Fabyan Pl.....	112	Johnson Ave.....	46
Ridge St.....	137		
So. 17th St.....	53		
Total	<u>302</u>	Total	<u>46</u>
ELMS.		POPLARS.	
Belmont Ave.....	100	Astor St.....	78
Hillside Ave.....	83	Emmett St.....	83
Hunterdon St.....	54	Oliver St.....	73
No. 8th St.....	40	Third Ave.....	37
No. 13th St.....	39	East Kinney St.....	105
Peshine Ave.....	60	Hermon St.....	56
Renner Ave.....	152		
Runyon St.....	144		
Total	<u>672</u>	Total	<u>432</u>
	2258		1411
Request Planting.....	<u>51</u>	Request Planting	<u>45</u>
	2309		1456
Total.....		Total.....	3765

COMPARISON OF STREET MILEAGES PLANTED BY THE
SHADE TREE COMMISSION.

1904	.....	( 5.53 miles)
1905	.....	( 8.95 miles)
1906	.....	(25.42 miles)
1907	.....	(24.62 miles)
1908	.....	(19.50 miles)
1909	.....	(27.65 miles)
1910	{ Excavations made }	..... ( 6.75 miles)



One-half inch5 miles

	Elms	Lindens	Norway Maples	Sugar Maples	Total Maples	Poplars	Lombardy Poplars	Bolleana Poplars	Total Poplars	Oaks	Oriental Planes	Gingkos	White Ash	Acer Negundo	Tulips	Willows	Request Plant	Season Total	Yearly Total
1904—																			
Spring	---	---	85	---	85	---	---	---	---	---	---	---	---	---	---	---	---	85	
Fall	250	23	245	---	245	147	---	---	147	---	---	---	---	---	---	---	---	665	750
1905—																			
Spring	410	35	393	96	489	---	---	---	---	25	75	64	---	---	---	---	---	1,098	
Fall	192	--	313	177	490	12	---	---	12	72	---	---	55	---	---	---	---	821	1,919
1906—																			
Spring	385	--	---	361	361	---	---	---	---	333	164	---	---	---	---	---	32	1,275	
Fall	229	2	216	---	216	346	8	---	354	126	179	27	---	---	---	---	20	1,153	2,428
1907—																			
Spring	587	--	701	---	701	---	---	---	---	124	385	107	---	---	---	---	54	1,958	
Fall	82	--	318	---	318	---	---	99	99	126	504	---	---	74	---	---	40	1,313	3,271
1908—																			
Spring	681	--	490	---	490	---	85	204	289	160	664	---	---	---	98	14	90	2,486	2,486
1909—																			
Spring	672	--	854	---	854	---	---	---	---	302	430	---	---	---	---	---	51	2,309	
Fall	46	--	546	---	546	502	---	---	---	---	317	---	---	---	---	---	45	1,456	3,765
Yearly totals																			
1904	250	23	330	---	---	147	---	---	---	---	---	---	---	---	---	---	---	---	750
1905	602	35	706	273	---	12	---	---	---	97	75	64	55	---	---	---	---	---	1,919
1906	614	2	216	361	---	346	8	---	---	459	343	27	---	---	---	---	52	---	2,428
1907	669	--	1,019	---	---	---	---	99	---	320	889	107	---	74	---	---	94	---	3,271
1908	681	--	490	---	---	---	85	204	---	160	664	---	---	---	98	14	90	---	2,486
1909	718	--	1,400	---	---	502	---	---	---	302	747	---	---	---	---	---	96	---	3,765
	3,534	60	4,161	634		1,007	93	303		1,338	2,718	198	55	74	98	14	332		14,619

INSECT DESTRUCTION.

The insect enemies encountered were the same as in former years, the tussock moth caterpillar and elm leaf beetle being numerically in the lead; the elm borer, wooly louse and various other forms of elm and maple scale adding materially to the magnitude of the problem.

In our efforts to combat this insect horde which destroys the foliage and menaces the life of every city tree, we took a long step forward. In former years we had lacked sufficient equipment. This defect was removed last Winter by the purchase of five new one-hundred-and-fifty gallon Niagara Sprayers. As a result we had for the first time enough apparatus to do our work during the strategic period when the caterpillars and beetles are most vulnerable and while they are young and tender and therefore too small to accomplish much damage.

With five new Sprayers added to the three we already had we were enabled to send eight gangs into the field. A spraying outfit consists of a single wagon with a 150-gallon tank and with two leads of hose tipped by nozzles which scatter the spray in a fine mist. Ladders are also part of the equipment. Three men are necessary to properly man the spraying outfit; one for each hose and one to drive. The driver also keeps the agitator in motion while the spray is spread upon the leaves. Occasionally a fourth man is necessary in streets where traffic is heavy to warn off pedestrians. A gang like this distributes about six hundred gallons of spraying fluid a day, eight pounds of Arsenate of Lead being used with each hundred gallons of the fluid. The number of trees sprayed varies of course as the size varies. A young tree can be treated roughly while the wagon is in motion; the old trees take longer time, in some cases two or three men being kept busy fifteen minutes, in order to effect a thorough result and eight gangs would

spread four hundred pounds of Arsenate of Lead over eight hundred trees each day at a cost for power, poison, teaming and labor of about twenty cents per tree.

In the season beginning May 25th and ending July 22nd, including about thirty working days, the trees most affected by insect attack were sprayed on ninety-seven miles of streets. On this mileage stretching east and west, between South 12th and Vincent Streets, north and south between Harvey and Peddie Streets, all the trees were sprayed for leaf-eating insects, whether caterpillars or beetles. In addition we sprayed the elm trees in a large area where they alone were affected. Fifty-four miles of streets in the well-treed section north of Orange Street, east and west of Branch Brook Park were sprayed in this manner.

The adequacy of the equipment enabled us to make the spraying more thorough. This thoroughness was attested by the unimpaired foliage and by the fact that the poison was visible on the leaves, despite heavy rains, months after the close of the spraying season. One application of this poison sufficed to protect against both the second and third broods of insects. Indispensable to the accomplishment of results were the expert supervision and skilled labor employed. The latter we ourselves had trained from raw material. Beginning with intelligent men of good physique, we had developed them into a nucleus of skillful men. These employees are dexterous in handling the mechanism of the spraying machines and in mixing the poisons and they are fearless to climb the highest trees.

The spraying operations were supplemented by banding thousands of trees with "Tree Tanglefoot." While this treatment does not kill large quantities of insects, it aids in controlling them. The caterpillars lower themselves to the ground from the end of a limb by means of a thread spun as it is used. When they again ascend the trunks of

"tanglefooted" trees they strike the impassable mass. This excludes them from the top, thus rendering the foliage immune. It also limits the area where these insects cocoon, compelling them to do so at a point within easy reach from the ground. As a result, one man with a steel brush standing at the base can rid such a tree of all cocoons. These may then be destroyed and thereby so much caterpillar propagation hindered. In addition to this effective service, "tanglefoot" killed great numbers of larvae of the elm leaf beetle as they tried to cross the banded strips.

As Newarkers contrasted the condition of their green Elms with those of surrounding municipalities, where the trees had not been sprayed, they had an object lesson of the efficiency of spraying operations. Although the trees in our suburbs grow under more favorable conditions, greater vitality of tree and destruction by insectivorous birds reducing the insect problem, nevertheless the leaves of these trees turned brown under the ravages of the beetle in July in these places. In such cases the immediate loss is the green foliage with its beauty and cooling shade. The ultimate loss, where such defoliation is repeated, is the very life of the tree. The ravages of this beetle alone resulted last year in the death of four hundred splendid Elms in Cambridge, Mass., according to Professor C. S. Sargent.

Great encouragement is in the fact that the insect problem, hitherto full of unknown quantities, has been reduced to definite terms. Given an adequate equipment intelligently and energetically directed and the problem of warfare against the leaf-eating insects, at present indigenous to or naturalized in this section, is all but solved.

While territory sprayed was much larger than in any previous year complaints of staining houses or windows, or clothing of passers-by, were both proportionately and numer-

ically less. To avoid such mishaps is not always easy; as the fine mist which carries the poison under great pressure goes twenty to thirty feet with the wind. The damage where a house is spotted (easily remedied by soap and water or by time and the rains) is a negligible quantity when compared with the beneficent results of destroying by wholesale these insect pests.

Our own plantings and other young trees were guarded against insect injury with particular vigilance. A young tree is a tender plant. The shock of transplanting, the change from the nursery rows to the city streets, with different soil and different environment, with less moisture and more heat, invite diseases and preying insects. This condition must be met by special measures. The young Elms, susceptible to the wood-eating borer (Wood Leopard Moth) whose attacks are so fatal, were defended by systematic treatment. The oyster-shell scale and woolly louse were checked by spraying the trees with a contact poison at a time when the scale was most vulnerable.

Again, in addition to the work above enumerated, an average of thirty daily requests for spraying, were complied with during the season. These came from all parts of the city. It may be mentioned that they necessitated inspection work as well as spraying. These requests come by mail, telephone and interview, upon every conceivable real or imaginary danger. The necessary first step is inspection by a Forester. Then follow such other steps as the case calls for, it being understood that the Department considers the protecting of trees against insects a paramount duty. One Niagara Sprayer equipped for rapid movement was constantly employed on these jobs. Incidentally this spraying campaign had an educative value. Individual tree lovers obtained expert advice on the needs of their trees. They learned how to apply on the spot at the moment of need

the ounce of prevention which often costs less effort than to communicate with the Commission.

The Commission communicated with State authorities during the Summer on the need of new action in defence of the elm trees along the roads of southern New Jersey. State Entomologist John B. Smith and State Forester Alfred Gaskill gave unqualified endorsement to the need of such action by State and County authorities to protect the Elms. The danger of losing these stately trees, the patient growth of half centuries, by a failure to realize and meet the need is very great. This Commission has sounded a warning. It is hoped that adequate action will follow.

PRUNING.

During the time of planting and that of spraying every employe is busy at these respective labors. In the intermediate seasons the most efficient of the men are engaged at pruning. The same policy with reference to this work has been consistently followed by the Commission for several years. The Commissioners assign a section of the city, for example the territory east of Broad street. In this assigned district all the living trees are pruned.

The change effected by this treatment is radical. Thousands of trees take on a new outline. They are groomed—cared for. The pruning has been done in the sight of all the citizens and speaks of itself. The cuts are treated antiseptically so that the bark may cover the scar before decay can set in. Aside from the removal of unsound wood, which menaces the life and limb of the passers-by and which threatens adjacent property, the decayed portions which are also breeding places for insects are removed, and the cocoons and egg-masses are destroyed. The owners are requested to remove their dead trees so that the neighborhood may make a new start as far as its trees are concerned.

In addition to pruning streets within an assigned section as above remarked the trees of our own planting all over the city received all necessary attention. The Poplars are pruned annually, other varieties when necessary.

Some two hundred and fifty requests for pruning on behalf of one thousand trees were received. These were complied with in the order of their needs.

Many owners applied for permits to prune the street trees fronting their properties. In such cases we first inspected the trees; then if they needed pruning and if we had assured ourselves that the work would be done by competent hands we readily granted the permit requested. Caution was and is necessary inasmuch as many splendid trees have been ruined by inexpert pruning.

The extent of territory pruned this year exceeds that of any former year; as does also the number of trees pruned. The following list calls the roll of districts thus treated:

STREETS ON WHICH ALL THE TREES WERE PRUNED.

Abington Ave.	Grafton Ave.	Ogden St.
Austin St.	Gouverneur St.	Oriental St.
Avenue A	Goble St.	Oraton St.
Avenue C	Gray St.	Oliver St.
Beach St.	Garden St.	Orchard St.
Belleville Ave.	Green St.	Pacific St.
Bergen St.	Heller Parkway	Pennington St.
Broad St.	Harvey St.	Peabody Pl.
Calumet St.	Hinsdale Pl.	Parker St.
Camp St.	Hermon St.	Ridge St.
Chester Ave.	Hill St.	Rowland St.
Chestnut St.	Johnson St.	Runyon St.
Clifton Ave.	Kearny St.	Renner Ave.
Crittendon St.	Lafayette St.	Second Ave.
Columbia St.	Lake St.	Summer Ave.
Dawson St.	Liberty St.	Sylvan Ave.
De Graw Ave.	Mt. Prospect Ave.	Stengel Ave.
Elwood Ave.	Montclair Ave.	Scheerer Ave.
Elm St.	Mt. Pleasant Ave.	Shepherd Ave.
East Kinney St.	Marshall St.	Scott St.
Fourth Ave.	Mulberry St.	South 6th St.
Franklin St.	Mechanic St.	South St.

Saybrook Pl.	Union St.	Ward St.
Third Ave.	Van Wagenen St.	Washington Ave.
Taylor St.	Verona Ave.	Woodside Ave.
Thomas St.	Vesey St.	New York Ave.
Tichenor St.	Walnut St.	

STREETS ON WHICH ALL TREES WERE PRUNED EXCEPT
BETWEEN CLINTON AVENUE AND BROAD STREET.

Astor St.	Murray St.
Emmett St.	Parkhurst St.

STREETS ON WHICH YOUNG TREES OF OUR PLANTING
WERE PRUNED.

Walnut St.	First St.
Bergen St.	Mulberry St.

PARKS IN WHICH ALL TREES NEEDING IT WERE
PRUNED.

Court St. Park	Military Park
Lincoln Park	Washington Park
Jackson Park	

PARKING STRIPS.

A method of residential street development which lends itself to a great variety of ornamental treatments is the parking strip method. To reserve such a strip from ten to forty feet in width in the middle of a thoroughfare does much to give it a park-like appearance. Before the eyes of the resident the front view is enhanced with an ornamental ribbon changing in color and texture under every altered condition of season and weather.

Such cities as Washington, Buffalo and Rochester have made great use of this treatment either through municipal effort or private laying out of streets. Here in Newark during the past year through the efforts of private land companies, 4000 feet of such strips on Meeker, Custer, Seymour and Chadwick Avenues, and Scheider, Conklin and Yates Streets, were deeded to the City and parked with grass and shrubbery by the Commission.

CITY NURSERY.

The City Nursery, a ten acre plot situated at Ivy Hill, has continued a helpful factor in the prosecution of our work. It was given the usual routine nursery care; cultivation, manuring, pruning, transplanting and spraying. In return for such care we had the convenience of a reserve supply of transplanted trees. We were enabled to purchase in bulk, at favorable prices, with the added advantage that the stock set out in the nursery increases in value as it increases in size. This is, moreover, a healthy stock, grown under roomy conditions which develop thrifty plantings with good heads and roots.

ELBOW ROOM FOR THE TREES.

In some sections the old trees are dying as a result of a most hurtful practice, viz.: the flagging or cementing of the walk close up to the base of the tree. This shuts out air and water from the roots and robs the tree of these essentials to its life. There is need of enlightening owners in this matter. They doom their trees to certain death by this practice. Yet owners who would pay large sums rather than lose their trees offend in this respect. A space of open ground of sufficient size should always be left about the base of a tree so that the water and air could have free and unimpeded access to the roots. On narrow walks this end can be attained with little encroachment by having the opening long and narrow, or with no encroachment by the use of iron gratings.

As to the amount of area of open ground, the very minimum is set forth in the following provision of the Shade Tree Ordinance.

"10. No person or corporation shall, without the written permit of the Shade Tree Commission, place or maintain or cause to be maintained or placed upon the ground

in a public highway of the city, any stone, cement or other sidewalk, or any stone, cement or other substance which shall impede the free access of water and air to the roots of any tree in such highway. Unless otherwise provided for in such written permit, there must be maintained about the base of the trunk of each shade tree in the streets of the city four square feet of open ground for a tree of three inches in diameter, and for each three inches of increase of such diameter there must be an increase of at least one square foot of open ground."

But this requirement is, we repeat, only the minimum. In leaving, or constructing, the opening, the wise lover of his trees will not be niggard of space. Be generous to your tree. Give it plenty of surface room through which to get air and water in abundance. And make provision for the future. The tree grows. Every annual increase in the diameter of it decreases the open ground about it. So that unless a proportion be maintained the very prosperity of the tree contributes to its own undoing. Again, the soil is continually giving of its substance to the tree and is receiving nothing back; hence its vitality becomes depleted. Thus with lessened life in the soil, insufficient water to make the mineral salts available, and insufficient supply of oxygen to the roots, the tree is grievously handicapped in its struggle for existence.

The provision of the Shade Tree Ordinances above referred to was enacted during the year. It formed one of a number of new enactments constituting an "Amended Ordinance." Special efforts were made to spread the knowledge of these provisions among the people, and to point out to property owners that a wise regard for the needs of their trees would insure a cordial compliance with the same. Some owners most gladly complied when the "sweet reasonableness" of the requirements was thus pointed out. But there is much room for improvement in this particular.

PROPOSED LINCOLN MEMORIAL.

All persons hereabouts know of the generous public benefactions of the late Amos H. Van Horn, among others his bequests for a Washington Memorial, a Lincoln Memorial and a Soldiers' Monument to be respectively erected in different city parks. The plans for the Lincoln are already in way of execution. The first model, a sketch of which accompanies this text was completed early in December. It is the expression of the artist's idea in first form and has been inspected and approved by the Shade Tree Commission. A second and then a third model will be constructed. From the third, which will be the last, will be taken the final moulds from which the bronze will be cast.

The Lincoln planned for is to be idealized. It will show the great President as he was during the especially stressful and anxious days of the middle period of the Civil War. The model shows him as he might have appeared when returning from one of his long vigils in the War Department. Walking homeward, he has seated himself on a rustic bench (in some park, perhaps) to rest and give himself to contemplation. The attitude of the figure is one of weariness and relaxation; yet the facial expression is that of complete absorption. There is about the whole man a pathetic air of melancholy and loneliness, a suggestion even of Gethsemane, as of one set apart to bear the burdens and carry the sorrows of his people.

The bronze Lincoln will be six feet six inches in height and will be seated on a bench two feet high and eight feet long. Statue and bench will be of one piece, and will rest upon a base of granite or marble. The base is to be twenty-nine feet four inches across the front, with a depth of twenty feet ten inches, and will be arranged in four gradations, the lowest one longer than the upper three, which latter will rise regularly.

The Court House plaza is designed to be the site for this memorial. It will stand at the architectural center of the plot and will face eastward toward Broad Street, down Market Street. The base will have, at its northern and southern extremities, a slightly raised rail of stone.

John Gutzon de la Mothe Borglum, who will be sculptor of the statue, is an American, a native of Idaho, and educated in this country. He studied art in San Francisco and then in the Academie Julian and Ecole Des Beaux Arts in Paris, and exhibited both as sculptor and painter in the Paris Salon. He received the gold medal for sculpture from the Louisiana Purchase Exhibition. He is the sculptor for the Cathedral of St. John the Divine in New York City. Among his most noted works are groups in the Metropolitan Museum of Art, designs on buildings at Princeton University, the statue of John W. Mackay at Reno University, Reno, Nevada; the Lincoln head in the Capitol at Washington, and others. He has made a close study of Lincoln's life and character and his expression of the Emancipator's character in bronze is considered among his best work.

PUBLIC COMFORT STATION.

The necessity for such public utilities as public comfort stations is coming to be more and more recognized. From many points of view it is obvious that such stations are not only desirable but essential. It was fitting that Newark should set about establishing such conveniences. Accordingly, August 6, 1909, the Common Council voted an appropriation of \$17,500 for the construction of a public comfort station in Military Park. The grant of this appropriation was approved by His Honor the Mayor on August 13th. On October 1st, after due advertising and submission of bids, the contract for the construction of the entire edifice

was awarded by the Shade Tree Commission to J. Allen Conklin. The work of construction began forthwith and, at this writing, is still in progress.

The Station will be of the underground type. When finished it will be, as to inside measurements, thirty-three feet and seven inches wide by forty-four feet and eight inches long. On the men's side there will be ten closets, twelve urinals and four lavatories; also a male attendant's room. On the women's side there will be seven closets and five lavatories, with a female attendant's room. It is probable that some of the closets will be reserved, charging a small fee for their use. Many persons, no doubt, would prefer to pay for such privilege, which would also include the use of fresh soap and clean towel.

Other parts of the equipment will be the heating room, the coal bins, the ventilating tower with steel flue, fire proof stairs and partitions, tile floors, stall partitions of polished Italian marble, etc., etc.

The first act towards the achievement of this edifice was the formal breaking of ground on October 4, 1909. At this ceremony President James A. Berry of the Shade Tree Commission officiated. He was assisted by the other Commissioners, Hon. James S. Higbie and Hon. John H. Ely, and by Alderman James Snape and Secretary Carl Bannwart. President Berry opened the ceremony by a brief address as follows:

"We gather at this spot to-day to break ground for the first of a series of public comfort stations, with which it is hoped Newark will ere long equip itself.

"We live in a day of vast undertakings designed to promote the material well-being of mankind. This is the era of trolleys, subways, Hudson River tubes, automobiles and what not. One stands bewildered and grateful in presence

of the numerous facilities which have been brought about to enhance the comfort, health, convenience and business of men. Not the least among these benefits are the public comfort stations already constructed and now in course of construction in our sister cities throughout the country.

“It is fitting that our own progressive Newark should fall in with this march of improvement and assume the task of setting up such conveniences within its own boundaries. We surely do not mean to be laggard in these matters. Ere long, we trust, Newark will have a chain of these stations extending up and down the city. As for the utility and necessity of such conveniences—these are manifest, they need no demonstration. I heartily congratulate the citizens of Newark on the prospect that within a few months a public comfort station will be an accomplished fact here on this Common so long dedicated to public uses.

“As President of the Shade Tree Commission, which has jurisdiction in the name of the people over this park, there has been assigned to me the pleasant task of breaking ground for the contemplated structure. I esteem it an honor thus to be associated with this great work, and to initiate with my own hand the labor of its construction. It will be to me a cherished remembrance that I had this part in an undertaking which in the years to come will redound to the comfort, convenience and health of the people of Newark and of the stranger within our gates.”

President Berry then removed the first spadeful of earth, Commissioner Higbie the next; then Commissioner Ely, Alderman Snape and Secretary Bannwart, in the order named, removed each a spadeful; and the construction of the first public comfort station (in the modern sense) ever undertaken in Newark was thus formally put under way.

FINANCIAL REPORT FOR 1909.

RECEIPTS.

Balance on hand January 1, 1909.....	\$ 2,427.04
By Tax Ordinance Appropriation.....	35,000.00
“ Tax Ordinance Appropriation, Supplement... ..	5,000.00
“ Appropriation from Contingent Fund.....	2,000.00
“ 1908 Shade Tree Assessments.....	1,538.82
“ Arrears Tree Assessments.....	575.29
“ By Interest	205.41
“ 1909 Shade Tree Assessments.....	3,781.48
“ Receipts from Sundry Services.....	966.89
	<hr/>
	\$51,494.93

DISBURSEMENTS.

Payroll—Planting Street Trees.....	\$5,321.43
“ —Maintaining Street Trees....	7,110.02
“ —Spraying Street Trees.....	2,109.17
“ —Parks	9,319.36
“ —Office	5,031.25
	<hr/>
	\$28,891.23
Carting	3,266.25
Hire of Rig.....	122.50
Landscape Architect's Services.....	92.50
Advertising	622 57
Purchase of Horse.....	275.00
Shoeing, 2 Horses.....	54.50
Harness and Repairs, 2 Horses.....	59.45
Fodder and Keep, 2 Horses.....	477.00
Purchase of Wagon.....	204.80
Wagon Repairs.....	73.10
Tool Cart.....	48.00
Tools	165 81
Tools Sharpened and Repaired.....	88.53

SHADE TREE COMMISSION.

31

Ladders and Repairs.....	37.12
Hardware	57.15
Lumber	44.47
Trees	4,670.49
Tree Guards.....	65.69
Tree Collars	50.00
Wire	1,351.13
Stakes	523.50
Manure	192.00
Fertilizers	476.79
Bedding Plants and Shrubs.....	469.18
Seed	99.24
Sods	26.56
Stone, Cement, Screenings.....	247.15
Stone Cutting.....	43.25
Repairs to Fountains and Plumbing.....	25.02
Hose	40.00
Water Rent.....	100.00
Park Cans and Can Holders.....	361.80
Rustic Shelter, Central Square Park.....	299.00
Lights for Band Concerts.....	32.49
Lanterns	9.26
Squirrels and Squirrel Feed.....	26.00
U. S. Flags and Repairs.....	27.62
Painting Flag Staff.....	28.00
Tablet for Flag Staff.....	15.00
Insecticides	1,238.80
Gas	591.05
Spraying Machines, Appurtenances, Repairs....	562.57
Paints, Oils, Brushes.....	180.86
Storage Rent.....	126.00
Printed Matter.....	980.52
Stationery	317.97
Postage	186.12
Photos and Supplies for Exhibitional Purposes..	226.81

Books, Pamphlets, Periodicals.....	100.96
Block Maps of Newark.....	310.00
City Directory.....	6.00
Pamphlet Files.....	9.60
Book Racks.....	21.10
Sundry Office Supplies.....	11.51
Messenger Service.....	21.80
Telegrams and Telephone Service.....	25.35
Street Car Tickets, R. R. Fares, Trav. Expenses.	286.91
Expressage and Freight.....	187.98
Annual Inspection.....	43.25
County Fair Exhibit.....	100.77
Trenton Exhibit.....	44.40
Tree Defenders' Pins and Buttons.....	81.00
Special Officers' Badges.....	14.60
Signs	32.70
Moving Metal Case.....	9.90
Extra Help.....	16.90
Tax on Nursery.....	26.19
Insurance	54.50
Purchase of Automobile.....	875.00
Top for Automobile.....	25.00
Garage, Auto Supplies and Repairs.....	580.42
Balance	429.44

\$51,494.93

Of this amount \$30,384.72 was expended for the planting, maintenance and care of trees on streets, and \$20,680.77 for the development, maintenance, care and improvement of Public Grounds, Parks, etc., from January 1, 1909, to December 31, 1909.

Respectfully submitted,

JAMES A. BERRY,

JAMES S. HIGBIE,

JOHN H. ELY,

Commissioners.

CARL BANNWART, *Secretary.*

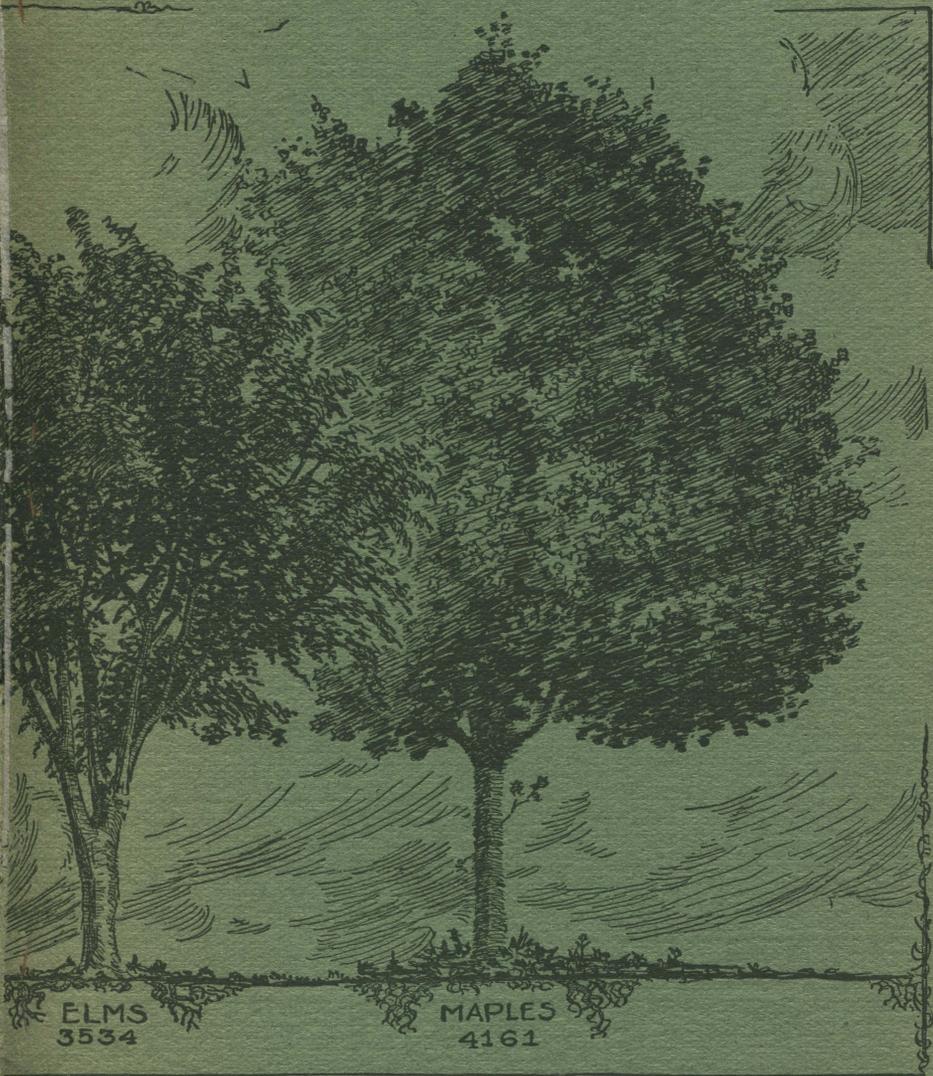
SHADE TREE COMMISSIONERS 1910.

JAMES A. BERRY, *President.*

GEORGE B. ASTLEY,

BERNARD M. SHANLEY, JR.

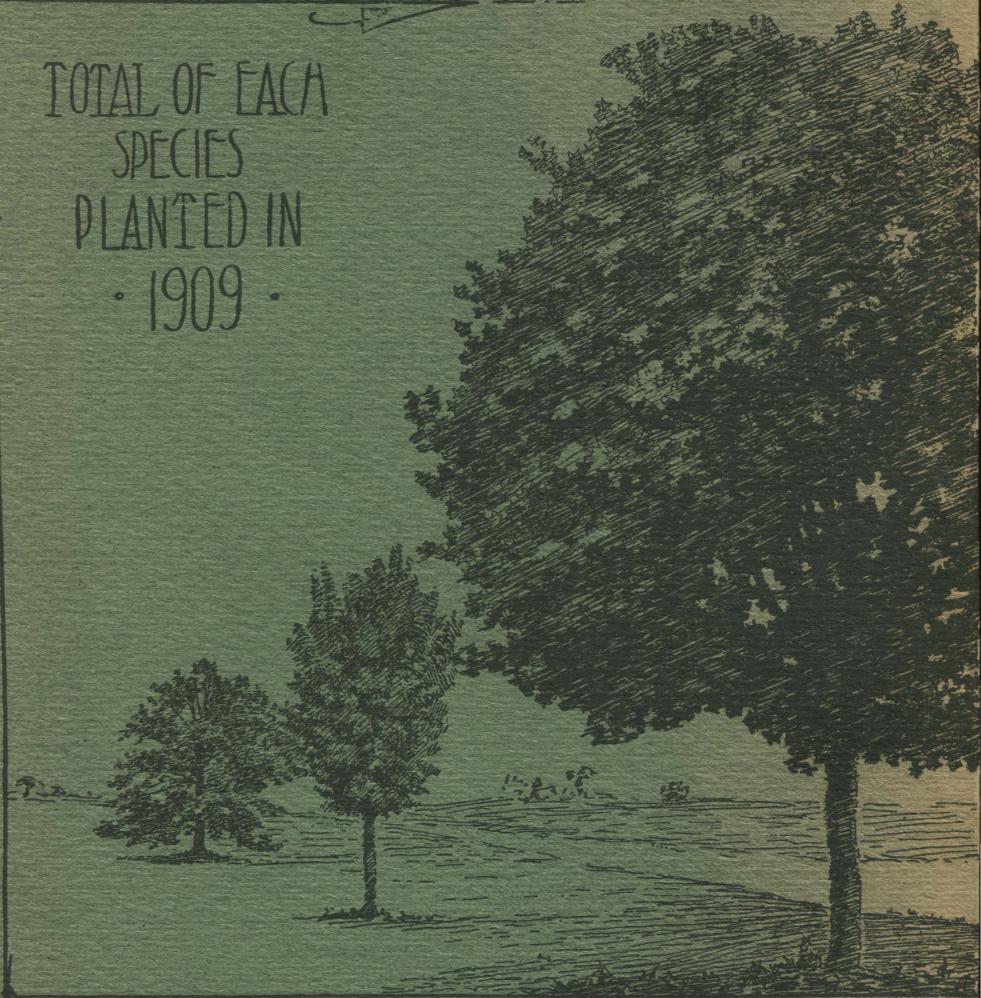
TREE COMMISSION ~



ELMS
3534

MAPLES
4161

TOTAL OF EACH
SPECIES
PLANTED IN
• 1909 •



OAKS
302

POPLARS
502

NORWAY MAPLES
1400