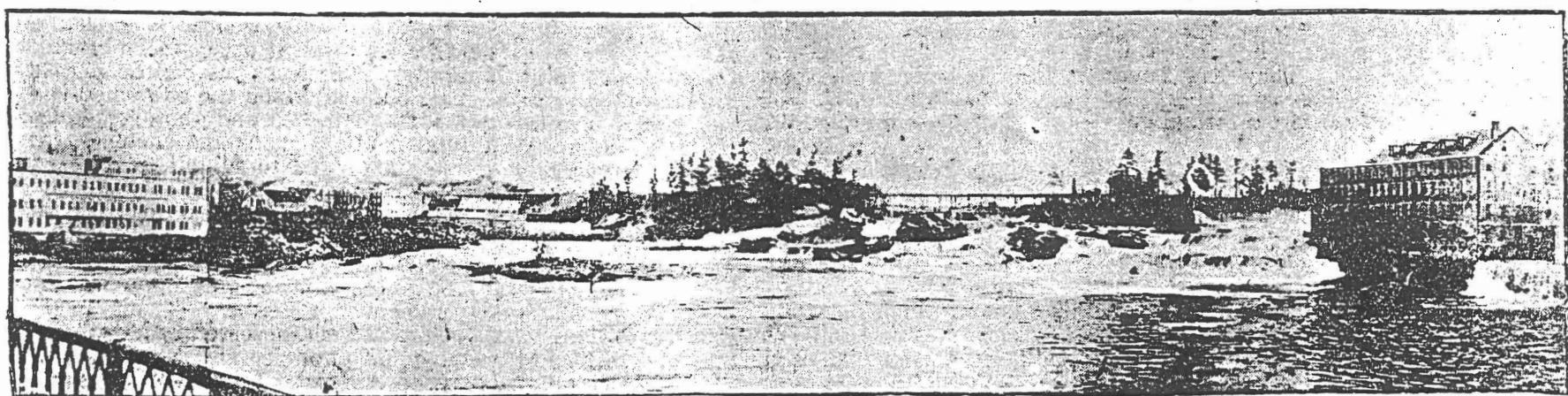


Auburn, Maine---A City with an Appreciation of Utility and Beauty and a Striving for High Ideals

*The Full Text of the New City Plan for Auburn—Devoted to Industrial, Social and Community Progress—The Photographs and General Plan as Prepared for the City of Auburn
by Myron H. West of the American Park Builders, Chicago, Illinois, 1919.*



THE FALLS OF THE ANDROSCOGGIN AT AUBURN.
Site of the Proposed Civic Center Shown at Left.

WE ARE publishing the details of the proposed City Plan for Auburn, lest otherwise it might be buried among the documents of the city and never reach your attention and in the hope that its publication may give the people of Auburn a better understanding of what, under proper direction, this exquisite Maine city may become.

Auburn had a distinctly pastoral beginning. It was settled by farmers, who discovered the richness of the land; and who were attracted by the wonderful scenic beauties of the location and the opportunities of the great river that flows by its shores. They built by the foot of the cataract of the Androscoggin. The elevation of the land was marked; the land was rich and early; the valley of the river was in the heart of a fine country. The forests were heavy and valuable. The nearness to other centres was valuable.

It has always been a distinctly American town and a centre of farming interests. Its faults are those of such a beginning and its virtue come from the same source. We always had a liberal way of thinking; but we always had a controversial attitude and a way of settling matters without much plan on the streets and in chance gatherings of the people—a sort of curb-stone, hap-hazard town meeting that typifies the early New England life. It could generally unite on matters pertaining to its own welfare and put over its purposes. In this way it became the shire town of the county and when any community spirit was required, it could be found. It carried to the front education and industry. Alongside its farming and its pastoral life it became also a pioneer shoe-manufacturing city. The factory system was born here of itself. It has thus evolved its citizenship as have few other cities. Very little has been brought here, transplanted from other communities. Thus the citizenship of Auburn is homogenous; New England; idealistic and practical; progressive and self-reliant. Auburn is absolutely convinced that no commercial prosperity can have stability, unless backed by the good-will of the citizenship. It has developed aspiration and ideal, within a recent period, that demanded this city plan.

We have said that the shoe-manufacturing industry was born here. From scattered little "tent-shoemakers" all over the country-side, where men and women made shoes by hand, there developed factories in which long before the Civil War Auburn was making shoes for the world with a reputation for workmanship and solid value that has never been hazarded. Today the same initiative, in some cases transmitted from father to son and extending thru three generations, has made Auburn a pioneer in specialties in shoe-making. For instance, here was the beginning in a large way of the manufacture of the canvas shoe and here is said to be the leading centre of their manufacture in the world.

Being in a rich valley along a great river which was early developed for its water power, it turned to railroading early and was quickly linked up

capitalists came here from Boston and walked the shores of the river above and below the "Falls," and finally built dams, dug canals for disseminating the water-power along the mill site and began the development of the city of Lewiston which lies across the river from Auburn and which so far as community goes amalgamates and unites with Auburn, emulation not competition being the watchword of both cities. The river that everyone in Auburn and Lewiston looks to as the dynamic power of the community, has properties of endurance; of fixity, of usefulness, of perpetuity, rather notable in a way. In the various Federal summaries of water-power developments, the Androscoggin River has a place of leadership. It has the finest of storage development at its headwaters. It has a wonderful fall from lake to confluence. Millions have been spent to make its flow steady. All along its many miles from New Hampshire to the Kennebec, it is made to do its work in factories, mills, domestic-lighting and power plants. A mill along the Androscoggin never knows what "low" water means. Vast power utilities at Rumford, Livermore Falls, Lewiston and Auburn go on with never a drouth. It makes cotton cloth, woollens, paper, shoes, many other commodities with never a pound of coal required for power-production. Hydro-electricity, backed by a great system and dams along a swift falling stream, with steady volume, make the people of Auburn feel a reliance and a confidence in the future that add an element of power to their own character of citizenship. The farm, the dairy, the orchard, the summer-hotel, college and schools, have made it a desirable city, not wholly utilitarian, but something more—a city with a love of beauty and a striving for ideals.

The business faculty is not the only quality needed in a well-rounded community. While it is essential, it can never be permanent, unless other factors of a city's life are considered. Social progress starts with industrial progress. It develops when industrial progress has come. But unless social progress evolves, industrial progress wavers, falters and ceases. This is the history of many communities. In their industrial success, they have become sordid and squalid. They have been "factories" in which money is made. Once made, its possessors remove to communities where there is beauty of life as well as money. Such cities retrograde.

Cities everywhere are perceiving this. The far-sighted cities began to remedy it, some years ago. City planning as a science was developed in response to the demand for an answer to the new vision. They have kept before their eyes certain ideals. They have made them practical and more; they have made them even pay. They have called in science, not alone for the advancement of industrial progress but also for human contentment and human growth, without which all life is a mistake and without which commercial prosperity is worthless. Cities are to live in; as well as to work in. The maintenance of social

on art, education, cleanliness, religion! Opportunities for the cultivation of the senses are demanded. Art, music and entertainment must be provided and the eye must be pleased with beauty. No man will labor for a community or live in it, in the future unless it pleases him. He will demand henceforth that all of the requirements of his physical, intellectual and spiritual being are met. Proper housing, fine streets, playgrounds, civic centres, community comforts for children as well as for adults—all these are in the vision of the coming city. Not a work-shop alone; but a home, is in the mind of the folk. The cornerstone of democracy is in education, but even education is no practical value to the body that is stunted and enfeebled by slum life and inadequate open air privileges, that is denied pleasure of a proper sort. Children cannot well play on city streets. They cannot develop the city of Auburn you want, thru relaxation in pool-rooms and cheap club-rooms. Good air, good sunlight; open spaces; swimming pools; athletic fields; gymnasias—all of these are essential to growing boys and girls and to growing men and women as well.

We talk much about "The City"; what do we think of, when we discuss it? We always idealize it. We always want it better and better. But we are apt, after all, to settle down to a matter of its industries. We are apt to take the narrower conception of its industrial supremacy and yield everything to the requirements of the industry, for the time being—without plan or consideration of the future. And yet, as we send children to schools, as we go to church, as we talk about good roads; as we discuss park projects we feel that there is something more. And this "something more," the beauty, yea! the very soul of a city, is what modern city-planning seeks to systematize; to bring to a scientific standard. And this is why Auburn has spent its money for a city plan and why it should be brought to the attention of every citizen that he may devote thought to it; may understand it and may give it a fair show in his own plans and his attitude towards the future.

This plan of Auburn will be found comprehensive, of large vision and very practical.

If you just look at it and sniff and say that it is a dream you hardly fill the bill as a citizen. It is a dream in a way; but it is not a nightmare—like belching chimneys, city slums, dirty streets, factories pushing into happy home limits and making lives miserable; impractical railway stations; poor transit arrangements.

With all of its faults, Prussianism knew how to build towns and cities. Every German city of any size was planned just as Auburn is planning—years ahead and on dreams and drawings. Germany realized these changes. You would find in any town in Bavaria, or Saxony, towns that were models of cleanliness; in which the factories were in one section connected with the railway terminals; in which bands played each afternoon in beautiful public squares surrounded by restaurants amid trees and thru which happy children

their knitting or their sewing. It was no dream; and those towns and cities are still doing business, in the same way, and this, above all things else, is going to preserve the sanity of Germany against radicalism and make for a reconstruction in better ways.

It has been said that human nature does not change—but human aspirations do change. American cities are looking ahead to conditions of sweeter life. The city that gives it first will prosper most. City slums will have to go. Homes belong in open spaces. Mean housing of workers is poor economy. We should not continue to go sprawling into quiet streets with belching chimneys and expect the people who have lived there to rest content with the new environment. The railroad station may be artistic. The factory may be attractive inside and out. No city can be happy for long when a large proportion of its citizens live on mean streets. Auburn cannot expect to attract residents when it flaunts in the eyes of every automobilist such a water-front as exists below North Bridge. No city can give to its people what they have a right to enjoy, without a public park of a kind, worthy of the name. A beautiful city; full of lovely homes; blessed with every natural advantage; with hills that look away to all of the glories of the Lord and yet not a community centre of any kind; no means of satisfying the gregarious needs of mankind! It is impossible!

All of these things require intelligent planning! They cannot be done by chance. They cannot be left to themselves to happen. They can never grow right any more than weeds grow right. It must be cultivated and planned like a formal garden.

The plan of Auburn meets this requirement. It is art and science combined. It considers not only beauty; but also economy, far-seeing permanence of improvement; building for all time. Had Auburn been laid out on a city plan by an engineer seventy years ago, it would have saved millions of dollars. Its sewers would not be found running up hill—or trying to. They would have gone around hills naturally instead of blasting them. The city plan would have considered soil and ledge instead of laying a city out on a drawing board, as it was. This new city plan is not intended to be revolutionary—not a thing to build to, now; but to grow to soon. Under its guidance squalid streets should gradually disap-

pear. We should take seriously every year, some element of it to put into reality. In this plan boulevards should come; civic buildings should be grouped; public parks should be opened up. If we will take this plan seriously, factories will be segregated; we shall begin to improve our river front; "patches" will be obliterated; falling hovels will be cleaned out and the places made sanitary; schools will be more commodious and beautiful; in short—read this plan and see for yourself. Aye! Dream about it if you will—you are not the last of the Auburnites. Others will come! They will thank you for your foresight in this plan.

We never knew until the Great War, what we could do in the way of paying out money. We raised and gave millions. We have not begun to give yet as will be given in our day and by those who come after us. The people of Auburn will be called upon to give more and more for the city.

One need not enter on the outlook that such a plan has for a city that takes it seriously and intends to live up to it. No one expects all of this in this generation. It is a plan of a city larger than we expect in our day; but not larger than we expect our children to see. Such a city would discourage breeding-spots of crime and disease. It would be prepared for growth along practical lines. It would be alive to what beauty, art, cleanliness opportunities for rational amusements, desirable homes and comfortable surroundings, may have to offer. It would not send children out on the streets with no place of amusement to attend. It would have its forum and its public educational centres of civic uplift. It would care for the soul of a city as well as for its body. It would educate the people insensibly into law, order, frugality and virtue. In short, it would be all that the maintenance of social progress would require after industrial progress had been established and maintained thru a term of years.

The people of Auburn should not look upon this plan of Auburn perfunctorily or apathetically. It should mean something to them. It should set a standard of aspiration. It should be brought out constantly and referred to, in all of its procedure and development. It should be in mind in all progress. It should be the plan to follow as the architect offers the plans to the builders of the house.

The issue with all of us is a larger and clearer

conception of citizenship. That conception is impossible under poor surroundings. A virtuous and consecrated democracy comes only from clean cities. The crying need of the nation is a better class of municipalities. These are the units. When every home is virtuous and happy, the municipality averages to be happy and virtuous. When the municipalities are all right, the state is all right and when the states of this nation are all right the nation is secure.

The plea is, therefore, take this plan for what it proposes itself to be—a scientific and skilled answer to the needs of Auburn, its possibilities; its proper development; its wise and sensible structure into a beautiful city. As its planners have said: "None offers greater possibilities. It rests with the people of Auburn to build."

You will find in this plan a remarkable application of economics, in the shortening of streets, the reclamation of waste land now occupied as thoroughfare; the saving of care of streets, the suggestion of new sources of revenue, the reducing of grades, the conversion of roads and streets away from flood districts; the development of transit by means of additional bridges, estimates of revenue therefrom, suggestions as to the establishment of a factory district and how it would pay—all of these and many more all laid before you in the details of the plan are worth your study.

In short, this purports to be a practical plan to spell economy everywhere. We are publishing it because we think it ought to be given the widest publicity. The least you can do is read it.

This plan, of which the subjoined is a complete reproduction in text and photograph, lacking only a number of the maps and sketches, too intricate and too extended to submit to reproduction was prepared for Auburn by Myron H. West of Chicago, Ill., of the American Park Builders of that city. Mr. West spent months in Auburn in its preparation.

The publication of this issue was inspired by the Auburn Chamber of Commerce, whose directors and whose secretary have believed in the value of its publicity and who have worked diligently to this end. Certain of the prominent citizens have also given it their hearty support; the manufacturers and merchants have responded cordially and not a dissenting voice has been raised in regard to its wider circulation in this form. To all these kind friends we return our thanks.

The Full Text of the City Plan For Auburn, Maine-- By Myron H. West, American Park Builders, Chicago, Illinois.

To the City Plan Commission and City Council of Auburn, Maine. Gentlemen:

In conformity with our contract with the city of Auburn dated October 1st, 1918, we are hereby submitting the findings of a survey together with recommendations and plans forming a comprehensive program for the physical improvement and extension of your city.

Our motive has been not to furnish exact working details, for these would need be changed or modified as time goes on and therefore would entail unnecessary labor and expense. The purpose has rather been to set forth a comprehensive policy which may serve to guide in a general way, the upbuilding of your city. So long as the main features are adhered to and worked for constantly, the detail may safely be left to the city's engineering departments.

The main object of a city plan is to give a vision of what the city may hope to attain and to furnish a general policy on which the citizens may agree. Once committed to such a policy, the efforts of successive city governments and of the various civic organizations may gain added consequence, the extravagance of energy and money caused so generally by working to cross purposes will be lessened and a better city built at reduced cost, will result.

MYRON HOWARD WEST.

'SCOPE OF CITY PLANNING

A city plan may be defined as a program of city improvement and development. Following this definition, a city plan becomes a much larger and more important undertaking than that which the professional city planner may be competent or may be expected to make complete and definite recommendations upon. Broadly speaking, the city plan has to do with the upbuilding of the city physically, economically, socially and ethically.

The city plan as it is commonly known is but a series of recommendations illustrated with drawings showing the manner in which the city may be improved and developed physically. It is a design for the

out may be expected to produce a workable, efficient machine for human use. Therein industry and trade may be carried on economically; homes may be arranged conveniently and attractively; people may go to and fro safely and without undue loss of time. Therein will be placed in suitable relationship the standard elements demanded in the modern city, parks, schools, public buildings, railroads, street car lines and the like, all so placed that they may function as a whole to the best advantage.

In the larger meaning, the city plan includes the program by which this tool of civilization may not only be built but may be used to its fullest. The city planner may incorporate in his recommendations, ways of producing better housing conditions but these suggestions will be of little avail unless a well defined policy is actually carried out which will result in not only causing these better housing conditions to exist but to

make them result in producing more healthful conditions as well as moral and social improvement among city dwellers.

The city planner may propose ways and means for a more satisfactory installation of factories and railroads but the city plan of the broader sense should include a policy which would provide for the securing of new industries and the aiding of established industries so that the city may be built up and kept strong in the industrial field.

The city which invests in the services of a city planner should organize to put his recommendations into force for the ultimate and far reaching results that may be achieved.

LOCAL CONDITIONS

In surveying the city of Auburn for the purpose of preparing the following report, a number of outstanding conditions are noteworthy. The first is the comparatively slow growth which the city has under-

gone. Settled in 1797 and incorporated as a village in 1842, it had become well established when the sites of many populous centers of today were but wilderness. The average growth between 1900 and 1910 was 16 per cent and between 1910 and 1917 the government estimate is but 1.5 per cent per annum. The average growth of American cities is approximately 2 per cent per annum. Compared with this, however, many smaller industrial cities, not including those of extreme rapid growth brought about through war conditions, have doubled their population each ten years.

The following curve shows the past and estimated future growth of Auburn compared with some other smaller cities of the country. This curve for Auburn is based upon a 15.6 per cent increase per decade, and at this rate of growth, it would take the city until the year 2020 to reach a population of 75,000, which the plan provides. Many cities have



accomplished this growth in thirty years and there is reason to assume that Auburn's rate of growth may be materially increased.

The reasons for this comparatively slow growth in the case of Auburn are of course largely problematical. Among other contributing causes, however, the following may be important, namely, the comparatively high cost of living, the labor situation and the limited and high cost of transportation.

As to the higher cost of living, Auburn suffers together with all New England cities, due to the fact that they are remote from the great food producing centers of the country. Industrial development has to a considerable extent followed agricultural development. It is a well known fact that since the Civil War, agriculture in New England has declined in comparison with that of other parts of the country. The turning point in this regard, however, seems to have been reached. New England's agriculture bids fair to come back to its own. This may be expected to have a marked effect in accelerating the growth of New England cities, for a city must depend largely upon its tributary country and if this country is prosperous and develops with rapidity, the same conditions are apt to be reflected in the city. It is therefore pertinent to the city planning program, that every aid be given to the development of the surrounding farming community, to which the city must look for its first requirement—food.

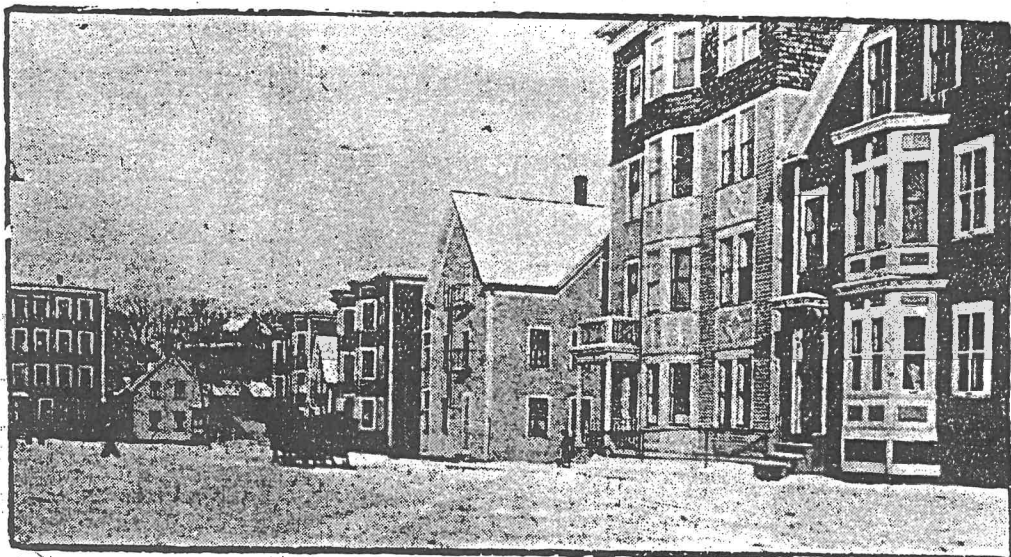
As to the labor situation, while Auburn is much nearer the great New York market than many of the faster growing cities of the west, it is out of the beaten labor path. Labor in spreading throughout the country, does not naturally flow through Auburn. In many respects this is a fortunate condition but in other respects it has possibly had its effect in keeping down the industrial growth of the city. Auburn depends largely upon native labor, and upon that secured from nearby Canadian territory. To a considerable extent Auburn's labor belongs to the home owning class, which inevitably produces a better citizenship. Labor troubles in the past have been few. The situation on the whole has made for stability and for a good quality of output but not for rapidity of expansion. If the city is to take on new industries or greatly increase its present ones, it must prepare for more working men.

To make the city more attractive to laborers there must be a number of requisites besides employment. Chief among these are good housing, good schools, parks, playgrounds and other suitable attractions, the opportunities to own homes and again the opportunity to procure the necessities of life, at as low a cost as possible in other cities.

In the matter of transportation, no city without adequate and low cost transportation with other cities and with the outside world can long meet modern day competition. Auburn is none too well off in this respect. The topography of the country and the long severe winters make the cost and operation of railroads high. Whatever may be done to cure this defect by procuring better connections, schedules and rates will have a marked effect upon the city's industrial growth.

Auburn's distance from the coal fields handicaps her in no small degree but to more than offset this, is the possibility she has in securing abundant and low price hydro electric power. In fact, the development of this power in the Auburn district may be looked to in time to place Auburn and Lewiston in a most enviable position among New England cities. Auburn's future seems to lie in developing those industries using raw materials to be secured close at hand, made into products representing high value in relation to tonnage and in manufacturing these products with native power.

Auburn seems to have entirely neglected to develop a possible source of income, which many cities less fortunately endowed, have capitalized to their extreme advantage, namely the resort business. Auburn's location in this regard is rarely surpassed. The city lies in a



TENEMENT DISTRICT, NEW AUBURN.

and on account of its geographical position becomes a gateway through which the great numbers of tourists from the populous sections farther south could be induced to pass to and from the wonderful playgrounds of the north woods. Indeed, a large proportion of these tourists could be induced to make the environs of Auburn their playground. Good roads leading into and through the city, modern hotels, a cottage colony on the lakes, a municipal golf course and provisions for summer and winter sports, together with the natural attractions of the country around, might well make for the city's added prosperity. The growing popularity of winter sports places the cities of Maine in a position to secure a two season business, which many other resort sections cannot hope for.

These recommendations deal entirely with the development of Auburn. This city is however, strictly speaking, but a part of a community in which the city of Lewiston figures even more prominently. The interests of the two cities are so intimately interwoven that any benefit or injury to one immediately reflects upon the other. This plan can never hope to attain its fullest importance until it is coordinated with a similar plan for Lewiston.

THE STREET PLAN

First of all in importance to any city plan is a general policy of street extension. City planning for established cities is based on the assumption that the city in question will grow larger. If this takes place, new streets must be built. Once in place, these streets become the thoroughfares over which the business of the city must be carried on for all time. Of all causes which have made the building of cities without plan over costly and above all unsatisfactory, the laying out of new streets by individuals without regard to community needs is the most striking. Everywhere there is going on the work of widening streets, of cutting through valuable

property to establish better traffic connections, of changing and remodeling, bringing about only at tremendous cost what could so easily have been obtained with but a little forethought.

Streets constitute the city's skeleton. They are most intimately connected with the lives of every city dweller and upon their proper location, width and grade depends principally the city's ability to function. No city plan is rightly named unless it shows a skilfully arranged system of streets, plotted to meet the many requirements and furnishing room for the city's growth over a reasonable length of time.

The street plan as shown herein for Auburn covers 7,680 acres, of which the present built up area comprises 1,330 acres. The proposed residence plotting 5,970 acres of which 3,720 acres are devoted to curved streets and the proposed factory district of 380 acres. The entire area covered by the plan includes 12 square miles or 7,680 acres. This would accommodate a population of 76,800, based on a ratio of 10 people to the acre.

The proposed plotting extends to the north and west as far as Lake Auburn and Taylor Pond and south to provide for a considerable extension to New Auburn and to develop the region west of the Little Androscoggin.

The hills immediately surrounding the city make the installation of streets exceedingly difficult and in order to secure permissible grades it is necessary to use curves until the more level lands to the west and south are reached. Here a more orderly system is shown, rectangular blocks 600 by 300 feet are employed, with a system of diagonals connecting with main thoroughfares leading into and through the present city.

An effort has been made to keep all grades under ten per centum and to provide against pockets which would interfere with sewers. The plans of the sanitary commission have been considered and streets have been so plotted that sewers may

be extended logically beyond the limits as contemplated in these plans.

The framework of the street plan consists of existing main thoroughfares leading into the city from outlying points. These for the most part, have followed the easiest grades to be found and make connection with outlying towns in the most direct manner. These thoroughfares consist of the River Road both to the north and south, Central Street, Turner Street, Sumner Street, Gamage and Minot Avenue, Washington Street and Mill Street and the old Danville Road in New Auburn. Court Street although extending directly through the city reaching out into outlying country cannot be considered valuable as a trunk line thoroughfare on account of its severe grades.

These trunk thoroughfares have been connected by main cross thoroughfares designed to carry traffic past the center of the city to provide easy access from the home districts to the factory section.

Secondary streets designed primarily for homes are planned to connect with main thoroughfares and extend as far without interruption possible. Streets have been arranged to provide for a suitable distribution of street car lines.

The plotting of the factory district and contiguous workingmen's home sections has been carried out with particular reference to industrial development. Direct approaches to the factory section from the north, east and west are provided.

The territory near the lakes has been plotted so as to secure public access to the water and to provide desirable sites for homes.

A park playground and boulevard system has been designed in harmony with the street layout. School sites have been designated with reference thereto.

While lacking the geometric precision so often unnecessarily sought after, the street system as shown on the ground, makes the best of a topographical situation and gives an economical and workable a plan



reet extension as perhaps could be revised.

Street Plots

The proposed layout of streets is shown on two plans. The first drawn to a scale of 200 feet to the inch, shows the present streets of the city and the territory immediately adjacent to the built up section. Proposed changes within the present city are shown on this plan. The second plan drawn to a scale of 1000 feet to the inch is comprehensive and shows the proposed arrangement of all territory covered in the Auburn plan.

Plotted Areas Within the City

Auburn has had a straggling development. Subdivisions have been laid out leaving vacant areas between them and the built-up sections of the city. Little thought has evidently been exercised in planning these subdivisions that their streets should be in with existing streets. Many of these subdivisions have been old and scattered houses erected. To change the layout at this time would therefore be extremely costly and is not contemplated. The problem lies in plotting the intermediate spaces as well as the areas beyond so that these detached streets may be woven into the general scheme and be used to advantage. Cases in point are the sections lying on both sides of Minot Avenue.

Block Sizes

A radical departure from present practice is advocated in the size of city blocks and residence lots.

City blocks in Auburn at present range from 200 to 1600 feet in length and are invariably 200 feet in width. For the most part, blocks are not more than four hundred feet long. This gives an unnecessarily large proportion of ground area used for streets. Traffic is handled to no better advantage and the burden of excessive costs for building and maintaining these streets falls on the taxpayer.

The following figures are prepared to show the saving in money which may be brought about over a period of years by adopting a systematic plan for street extension:

In a representative section of Auburn the length of streets was measured on an area of 139 acres. In this area, 44 per cent of the land is given up to streets, or 342 lineal feet of street to the acre.

Another representative area was taken in New Auburn, a tract of 153 acres. In this tract, the streets comprise 41.7 per cent of the area or 300 lineal feet to the acre.

In the new plotting proposed, the rectangular arrangement of blocks 300 by 600 feet exclusive of streets, gives 35.5 per cent of the area in streets or 233 lineal feet of street to the acre.

In an area of 944 acres of curved street plotting, according to the proposed plan, there are 153,100 lineal feet of streets or 9,568,812 square feet of street area. This amounts to 23.3 per cent of the tract or a length of streets of 162 feet to the acre.

The following table shows the saving in land and in street costs of the proposed layout as compared with the above mentioned representative portions of the present city:

NEW RECTANGULAR PLOTTING
Area of streets (old system) 2250x41.7% = 938 acres
Area of streets (proposed system)

$$2250 \times 35.5\% = 798 \text{ acres}$$

$$\text{Saving} = 6.2\% \text{ of } 2250 \text{ acres}$$

$$= 140 \text{ acres}$$

$$\text{Lin. feet of street (old system) } 2250 \times 342 = 769,500 \text{ ft.}$$

$$\text{Lin. feet of street (proposed system) } 2250 \times 233 = 524,250 \text{ ft.}$$

$$\text{Saving by proposed system}$$

$$= 245,250 \text{ ft.}$$

NEW CURVED PLOTTING

$$\text{Area of streets (old system) } 3720 \times 41.7\% = 1551 \text{ acres}$$

$$\text{Area of streets (proposed system) } 3720 \times 23.3\% = 867 \text{ acres}$$

$$\text{Saving} = 18.4\% \text{ of } 3720 \text{ acres}$$

$$= 684 \text{ acres}$$

$$\text{Lin. feet of street (old system) } 3720 \times 342 = 1,272,240 \text{ ft.}$$

$$\text{Lin. feet of street (proposed system) } 3720 \times 162 = 602,640 \text{ ft.}$$

$$\text{Saving by proposed system}$$

$$= 669,600 \text{ ft.}$$

$$\text{Total saving in land } 824 \text{ acres.}$$

$$\text{Total saving in streets}$$

$$914,850 \text{ feet} = 173.3 \text{ miles}$$

COST OF STREET IMPROVEMENT FOR MILE

Item	First Cost	Int. & Depreciation
Sewers @ \$2.40 per ft.	\$12,672.00	\$715.97
Water @ \$1.80 per ft.	9,504.00	536.98
Catch basins	750.00	42.38
Trees and planting	5,000.00	255.00
Lighting	6,000.00	510.00
Paving (30 ft. wide @ \$2.75 per sq. yd.—\$1.00 per ft. for curb	53,680.00	5,368.00
Sidewalks 5 ft. @ \$1.80 per ft.	9,504.00	807.84
Grading (average)	13,950.00	697.50

$$\text{Total per mile } \$111,060.00 \text{ } \$8,933.67$$

The above table of costs is based on present prices with 5% municipal bonds and sinking funds drawing interest at 4%.

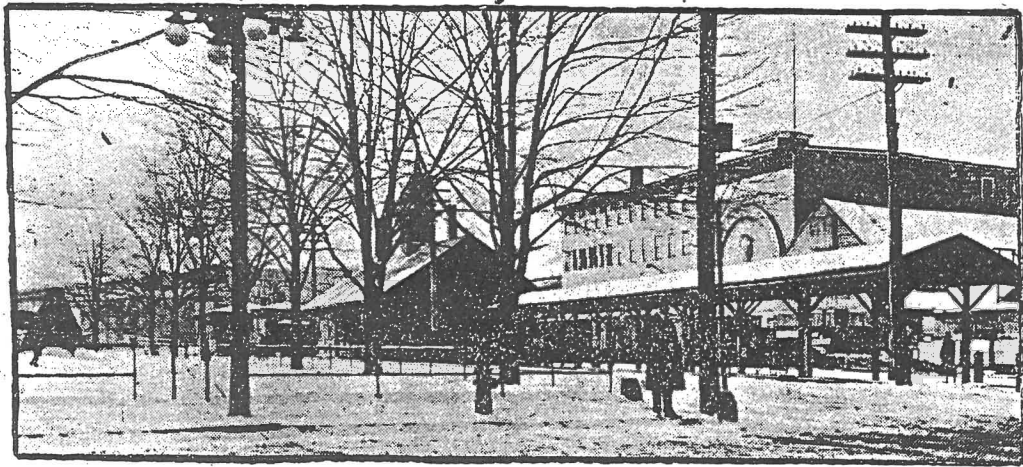
The total saving in first cost by this proposed system of streets, would be as follows:

$$173.3 \text{ miles street improvements @ } \$111,060.00 = \$19,246,698$$

$$824 \text{ acres of land @ } \$3,000.00 = 2,472,000$$

$$\text{Total saving } \$21,718,698$$

PASSENGER STATION, AUBURN.



The annual saving in taxes based on the above would be:

Interest and depreciation on 173.3 miles street improvements @

\$8,933.67 per mile \$1,548,205

Maintenance on 173.3 miles street @

\$100.00 per mile 17,330

Total annual saving \$1,565,535 or \$20.87 per capita for a city of 75,000 inhabitants.

The saving to property owners of 824 acres of land at \$3000 per acre, a reasonable value for city lots would be \$2,472,000, which at 4% would give a net income to property holders of \$98,880 per year.

The above figures are only typical of the first saving in money which may take place by extending a city according to a scientific plan.

The only fallacy is in the assumption that all the streets will be improved. What will certainly happen is that the city's investment in street improvements will go much further, a higher percentage of the residence streets will be improved, which will increase the value of the land and increased taxation will provide funds for still further improvement. In this way the city will be financially able to improve the streets as it grows instead of several decades afterward and will have a sound financial program, instead of being compelled to annex outlying areas in order to tax for improvements in the older portions of the city.

Alleys

With the exception of areas designated as future business districts, blocks are plotted without alleys. These are superfluous in residence sections where lots are of proper width. The expense attached to the building and maintenance of alleys, the little use to which they are put and their tendency toward breeding unsightly and unsanitary conditions has led to their discontinuance generally in modern town plotting.

Lot Sizes

By increasing the width of blocks from 200 to 300 feet, lots of 150 feet in depth are made possible. This will be a great advantage over the present arrangement. A building lot less than 60 by 150 feet has few possibilities for a modern home. The tendency of domestic architecture is to use more ground for the house. The bungalow, so popular at present, must furnish on the ground floor all the conveniences once demanded in the two-story cottage. The garage has become a fixture and more than this, the vegetable and

flower garden and the lawn with its shrubbery, perennials and trees have properly come to be considered as indispensable to the home.

The lot 100 feet deep and but 50 or possibly 30 feet in frontage is too small to meet these requirements. Neither is the small lot good city planning. Space cannot be had for sufficient set back for homes and the street is therefore given a crowded aspect. Subsequent widening if found necessary proves exceedingly costly. Shallow lots on rough topography are especially unfortunate as the different levels at which houses are placed cannot be satisfactorily overcome by grading as is possible where deeper lots are employed.

Larger lots help to guard against tenements, labor turnover and unsatisfied workmen, important in connection with greater industrial output and better citizenship.

To own a home is human instinct. To the laboring man few things appeal so strongly as a plot of ground on which he may keep chickens and raise fruit and vegetables. It gives him the diversion he needs from his daily toil. It gives occupation for the children and it gives an outlet for the thrift which the average laboring man possesses.

Land about Auburn is not high priced. A few hundred square feet added to future house lots will not materially increase the cost of homes and both for economical and sociological reasons, this should be done.

Whereas in rectangular plotting shown, house lots of 150 by 60 are suggested, in the irregular plotting even larger lots become necessary to fit in with the best arrangement of streets. Lots in these instances would be irregular in shape and size, giving a constantly changing orientation for buildings made necessary by the winding streets. This will develop a residence section of wonderful attractiveness as has been exemplified in scores of cases throughout the country.

Auburn will have an advantage however over many of these so-called residential parks for the reason that her streets will not only be winding and easy of gradient, but will lead with comparative directness between important points, so that houses may be numbered and streets may be designated with some degree of order.

PROPOSED STREET CORRECTIONS

The following recommendations are made with reference to correcting bad street layout within the present city.

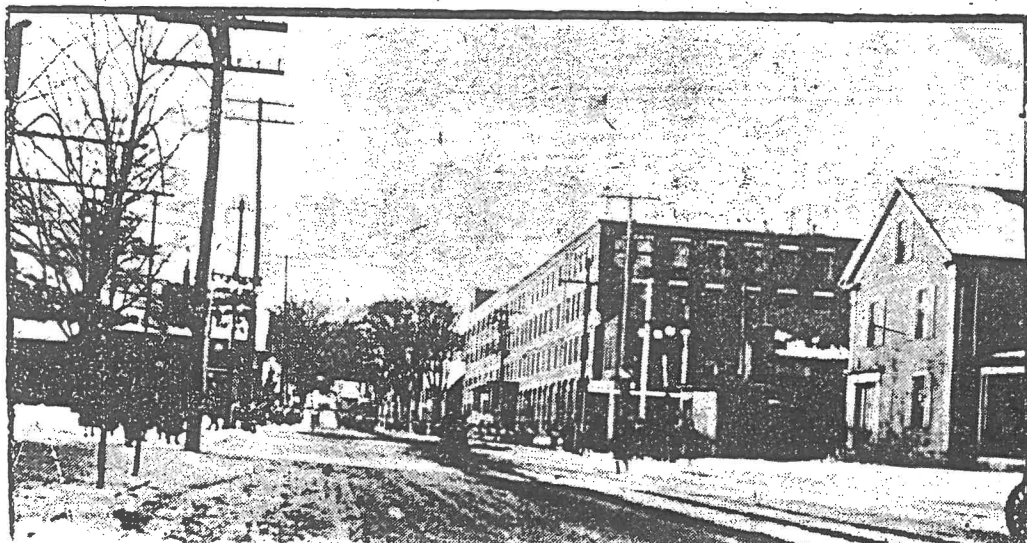
North River Road

The change in the location of North River Road at its intersection with Center Street is made with the view of taking the road out of the area subject to floods and doing away with considerable excessive maintenance.

The road where it crosses the lagoon outlet needs to be raised a does a short section of Center Street to the north in order to protect it from floods, especially if the dam is to be raised.

A cut off as shown around the hillside would carry the road well above the danger line. This project also coincides with the parking scheme elsewhere set forth.

Connection Between Franklin and Whitney Streets



existing diagonals, Center and Turner Streets.

Connection Between Summer and Gamage Streets

The lack of a street across the ravine northwest of Dennison has caused, for many years, serious inconvenience. It is suggested to carry Davis Street through to Summer Street as shown and thence on to connect with Center Street. The line selected permits of reasonable grades through draws approaching the ravine which would be spanned by a bridge of medium height.

Extension of Orchard to Gamage

Orchard Street has been platted but not built beyond Highland Avenue. As platted it extends in a straight line. By curving this street slightly to the west a better grade can be secured as well as a better lot width on each side.

Extension of Davis and Hillside Avenues

It is suggested to carry these streets through as shown. The grade of Davis Street although steep will permit of its use as a through thoroughfare.

Connection of Manley With Goff

Manley Street now stub ends at the ravine. To connect with Goff, the ravine would have to be filled. This could be done with cinders and other good filling material from the city. At the same time a connection could be made with the park drive shown leading through the ravine.

Extension of Cushman Place and Subdivision of Land in the Neighborhood

The curved street subdivision which has been partially developed west of Washington Street and south of Court, although as yet unimproved, provides some of the choicest building sites in the city. This is equally true of the unplatted land immediately to the south and west. This land south to Minot Avenue and as far as Western Avenue has been plotted in conformity with the layout on top of the hill. Edgehill Avenue connection with Washington Street has been carried around the crest of the bluff crossing Cushman Place and down through the draw to the intersection of Western and Minot Avenues. This street would give excellent frontages facing east as well as on the proposed parking along the ravine to the west.

Harris, Weaver and Summit Streets are connected through to a curved drive skirting the proposed park and making connection with Western Avenue. Cushman Place is also carried through on a curve to connect with the same thoroughfare.

Extension of Drummond to Minot

In conformity with the railroad changes elsewhere treated on the carrying through on Drummond Street to connect with Minot would be advantageous. This would necessitate encroaching slightly on one of the factory buildings. The street, however, carries considerable traffic and should be allowed to feed into Minot.

Grade Corrections

While several streets in Auburn have well high impassable grades such as on Drummond near its intersection of South Main and on Court Street, there is seemingly no opportunity to correct these at a cost which would be within the means of

the city or which would be warranted by present traffic. There are, however, exceptions, where by a moderate expenditure, grades could be eased and a great convenience and saving in cost of haulage could be brought about.

An example is High Street within the block next to Court. Here by adopting the profile shown, the grade could be reduced from fifteen to seven per centum. Lake Street also could be lowered at its crest and brought into Court at a much reduced grade. Several streets in New Auburn should be corrected as to grade before they are paved and this also applies to main trunk roads leading into the city and which in time will build up and become city streets.

BRIDGES

Auburn is inadequately supplied with bridges. At least three bridges connecting with Lewiston are needed to meet present requirements, one north of the city, one at the falls and one at the rips below the city. Another bridge connection is needed across the Little Androscoggin connecting Washington Street with New Auburn. A site for this bridge is suggested connecting Mill Street with Washington Street at a point where the bridge could carry over both railroads. This would be about half way between the Court Street bridge and the bridge shown leading into the south end of the factory district.

STREET BUILDING

The beauty and convenience of a city depends but little less upon manner in which streets are built than upon the way they are arranged as to line and grade. It is therefore pertinent to the city plan that a more or less definite policy be adopted at the onset regulating the way in which streets shall be paved, lighted, planted and ornamented. It is not practical, however, to go too much into detail in such a general plan on account of the constantly changing and improving of methods. To specify pavements at this time for ten years ahead for instance, would be folly for the reason that by that

time great improvement in pavements may be brought about. The same holds true of lighting, sidewalk construction and the like.

On the other hand, nothing detracts from the looks of a city nor causes more inconvenience or waste of money than the constant changing and experimenting, which goes on in cities relative to street building. If successive administrations could but follow a policy which would at least hold to types, much would be gained.

Streets naturally divide themselves into groups according to their prevailing uses. A type of pavement like the asphalt group is eminently suited to light traffic, residential streets, park drives and the like. While improvement in asphalt streets may be expected from time to time, it may hardly be expected that they will ever give satisfaction on streets subject to heavy trucking.

On through traffic streets like Court, Minot, Main, Turner, etc., a heavier type of pavement such as brick, granite or wood block doubtless would be preferable.

These types once adopted should be followed consistently and not broken with intermediate stretches of other pavement of a general character, unfitted to the street in question.

The same principle should hold true in street lighting. The beauty of many cities has been marred by constantly changing the type of electroliers. An artistic standard should be selected at the onset. This may be specially designed and copyrighted. The height and spacing should be determined for business and residential streets and the scheme of installation adhered to. In this manner the city will be assured of efficient illumination as well as an individuality which a standard form of street decoration will give.

Street Planting

No element of street furnishing suffers from lack of plan and intelligent supervision as does the street tree system. Providence alone seems in most cases to protect street trees against the combined attacks of man,

beast, insect, gas, drainage and all the unnatural conditions to be found in cities.

In Auburn conditions are especially uncongenial to tree growth. The narrow streets have caused trees to be planted along the curbs where they receive no protection from horses and vehicles. Sidewalks and pavements cover the tree roots and lines of wires cut through their tops. Yet with all, there are some very fine trees in Auburn without which the city would lose much of its charm.

In planning new streets, tree spaces of not less than 6 feet in width should be provided. The city should adopt a definite policy of street planting and should have planting plans prepared in advance for each street before trees are set. No trees should be set out by individuals without a written permit from the proper authority, in which permit the species, variety, size and method of planting should be set forth.

The city should set aside an appropriation for the pruning, spraying, thinning out and replacement of trees on existing streets. This work should be done only by experienced men under the direction of a trained arboriculturist. Year by year this work should go on until the whole city has been covered and the trees are placed in a perfect state of repair and maintenance.

Species for Planting

Much time and money has been wasted in Auburn in planting streets with species of trees unsuited for the climate, place or purpose. Box elders, silver maples, catalpas, poplars and other soft wood trees of quick growth are undesirable. While variations to the following list may be safely made, undoubtedly the best street trees for Auburn are as follows:

For narrow streets less than sixty feet between buildings: Honey locust, *Gliditsia tricanthos*; American Ash, *Fraxinus Americana*.

For wide streets over ninety feet between buildings: American Elm *Ulmus Americana*; Red Oak, *Quercus Rubra*; Sugar Maple, *Acer Saccharum*.

Planting distances for trees should be as follows:

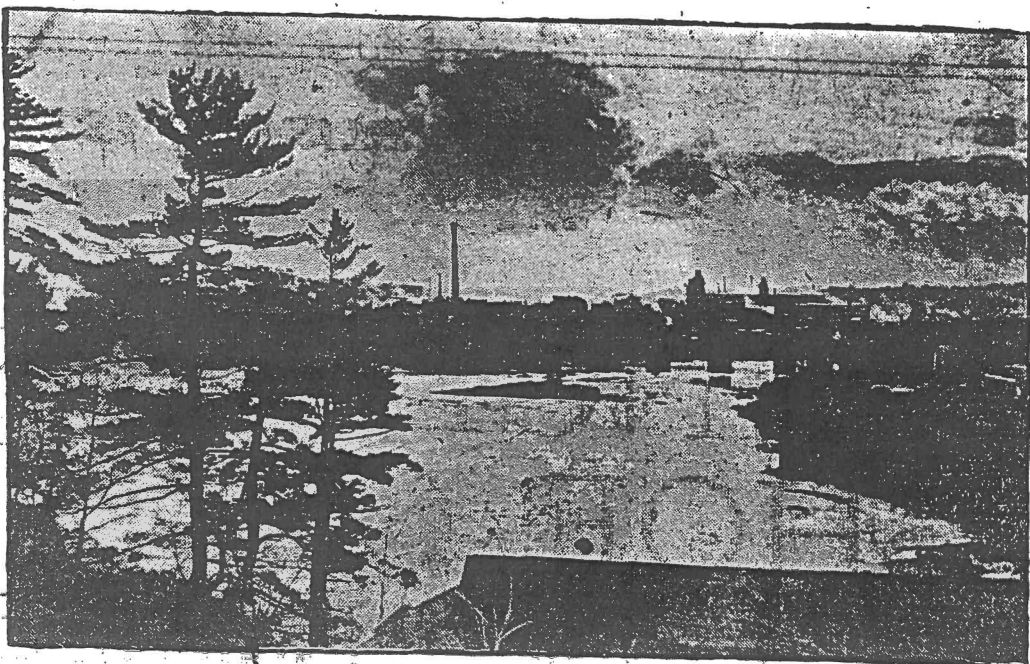
Honey Locust and American Ash 30 feet; Norway Maple and Red Oak 35 feet; Sugar Maple and American Elm, 50 feet.

Uniformity of Planting

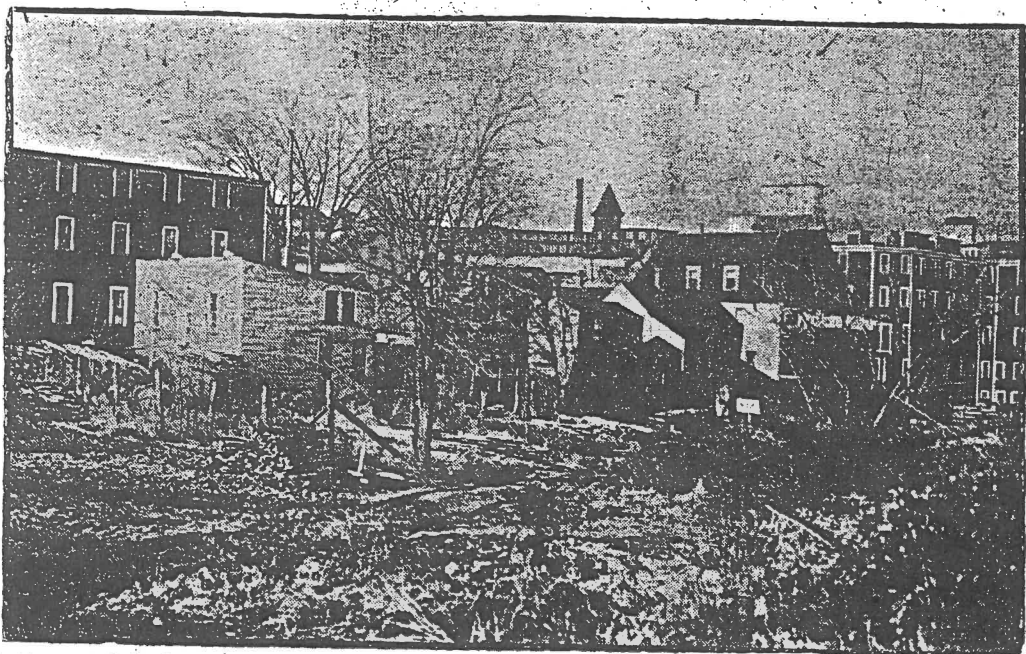
We recommend that in planting new streets but one species or variety of a species be used in a single street that the kind of tree selected be in conformity with the character of the street, that uniformity of planting spaces, methods of planting, etc., be maintained and that in existing streets crowded and incongruous specimens be removed and vacant spaces be planted to gradually bring about a uniformity of street planting over the entire city.

Overhead Wires

Since the new vision of cities there has been much effort to do away with overhead wires on streets. Some attempts have been successful many have failed. There is no dispute as to the advantages to the city from an aesthetic standpoint in plan-



LOOKING TOWARD COURT STREET BRIDGE AND LEWISTON FROM SITE OF PROPOSED UNION STATION.



They are many times a serious detriment to shade trees. They have other disadvantages. In northern cities like Auburn where sleet storms are common in winter, no small loss of service is caused by the breaking of wires. With modern methods of construction there is no doubt that better service would result by underground construction. To combat the idea, however, is the larger first cost and the habit. People are slow to insist on a marked change from what they have been accustomed, even though such a change would be to them a marked advantage.

A Board of Park Commissions recently caused a straggling row of telephone poles to remain through a beautiful park because one of the members observed: "There is a telephone line past my residence and it looks all right."

To cause all overhead wires to be placed underground in Auburn at once would probably be disadvantageous. Ordinances can, however, be adopted providing for the regulation of new streets in this regard and time and again in this connection so will with his own" has been advanced to bring about gradually, the elimination of all overhead wires.

Sign Boards

The campaign against sign boards has also been waged far and wide over the land. Many state laws and city ordinances have been enacted, some with jokers attached that they might prove invalid. The foundation principal of our democracy, namely "that one may do what he pleases" after years of effort to clear our streets of the ever present and obnoxious sign boards little progress has really been achieved. However, much may be done to mitigate the nuisance. Overhanging signs in the business district and sign boards dangerous to human life or those constituting a fire hazard, may be regulated by ordinance. The mutilation of street trees by posters or the placing of advertising matter on public streets may be prohibited. Better art in the size, the placing and the design of sign boards may be influenced by public appeal from the Plan Board or other civic bodies.

As in many other benefits suggested, far the greater progress may be hoped for by arousing civic pride which will cause individuals in their efforts to effectively advertise their wares to cease to offend the public sense of fitness.

THE FACTORY DISTRICT

Important in the consideration of the street plan is the scheme of arrangement for a factory district, the means by which this may be made accessible from other parts of the city and the method of arranging contiguous land that it may adapt itself best to residence purposes.

A proposed segregated factory district has been incorporated in the plans, careful study having been given not only to its own particular arrangement but to fitting it into the city's structure in order that it may become an integral part of the city as a whole.

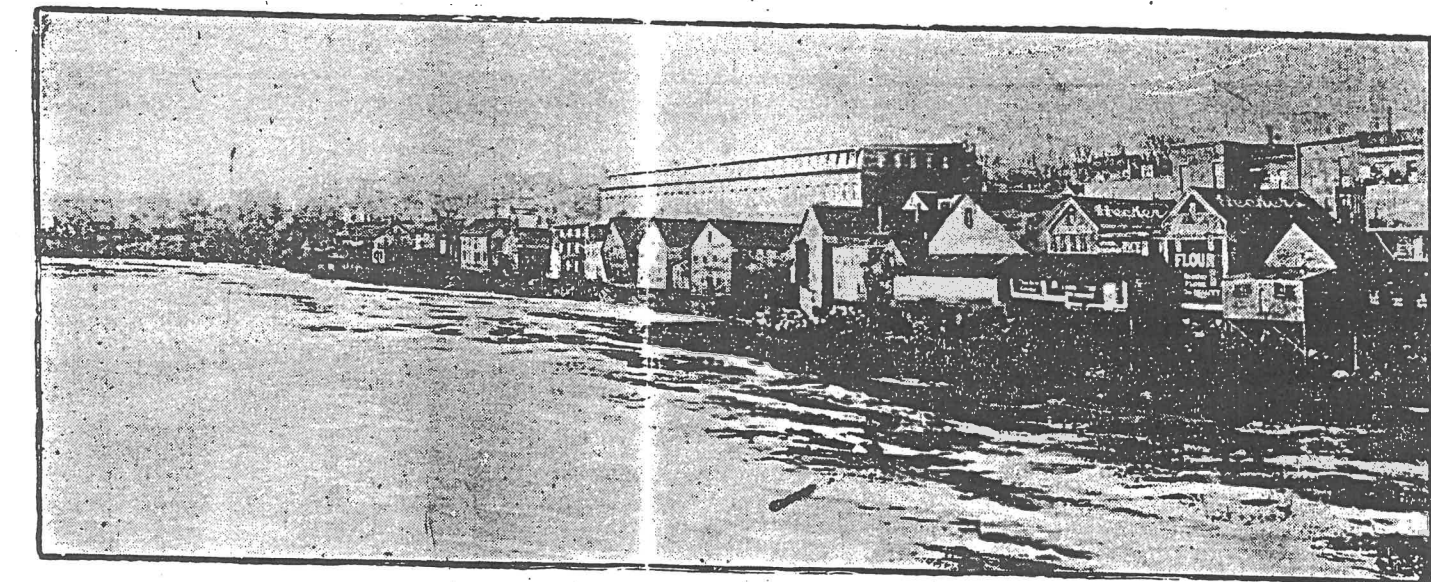
The land selected comprising three hundred and eighty acres lies to the south of the city between the Grand Trunk and Maine Central Railroads.

A combination of circumstances makes this tract an ideal one for industries while conversely no other site near the city affords advantageous conditions.

The land is comparatively level. It is served by the two railroads entering Auburn as well as by the Portland and Lewiston Electric Line. The Rangeley Division of the Maine Central connecting with the main line at Rumford Junction is close at hand. The Little Androscoggin flows along the south and east sides of this tract and its pure water would be of importance to manufacturing enterprises, while the valley formed by this river to its junction with the Androscoggin gives an opportunity to install necessary sewers.

New Auburn, which now contains the homes of a large proportion of Auburn's workmen, lies directly to the east across the Little Androscoggin. One or more bridges across this stream are already needed and with these built, the proposed factory district would be immediately accessible from this established workmen's home section.

The land lying between the factory section and Taylor Pond is ideal



VIEW SOUTH FROM COURT STREET BRIDGE, SHOWING SHACKS ALONG RIVER FRONT.

for city building. Here, protected by prevailing winds, a great modern addition to Auburn could be built up, with Taylor Pond and its attractive shore lands close by for recreation purposes.

Reasons for a Factory District

If Auburn is to forge ahead, she must pay attention to the future of her industries. There is no doubt but Auburn has great potential possibilities and by acting now and by constantly following a well defined policy, there is no good reason why these possibilities may not be realized.

In a paper read by Mr. Walter Sawyer before the Lewiston Chamber of Commerce on February 11, 1913, the importance of developing hydro-electric power with relation to the building up of the city of Lewiston and Auburn was set forth. It was pointed out that with each additional horse-power developed, two people were added to the community. By the impounding of water behind storage dams a considerable increased power had at that time been secured and the danger of industrial curtailment due to lack of power, had been corrected.

At present there is approximately eighteen thousand horse-power developed and used in the two cities.

Mr. Sawyer is authority for the statement that twenty-one thousand additional horse-power may be developed within seven miles of the cities by further water impounding, while in addition to this, ten thousand horse-power may be developed within twenty-five miles or within easy transmission distance.

The present factory district of Lewiston is already hedged about with houses and its extension would be exceedingly costly; the same holds true in Auburn. To utilize this available horse-power then, an entirely new industrial section needs to be built.

Auburn seemingly possesses the advantage of available sites and should profit by this possession. With low cost hydro-electric power and improved transportation facilities as suggested in this report, Auburn may not only expect to keep her lead as a center for the manufacture of canvas shoes but may well be able to enter into other fields of manufacturing such as the reclamation of by-products from the pulp

mills, the manufacture of paper specialties, bleaching powder and caustic soda by electrolytic process from common salt, of carborundum, calcium carbide, hard wood specialties and the like.

What the cities of Pennsylvania, West Virginia and Illinois have achieved in manufacturing by reason of their coal supply and what the cities of the oil fields are doing by reason of their natural gas, the cities of Northern New England may do by reason of their vast and only partially harnessed water-power.

The Plan of the Factory District

The triangular tract of land proposed for the factory district has been plotted in rectangular blocks 600 by 300 feet with 66 foot streets. Through the center of these blocks would extend railroad streets 45 feet wide, each designed to accommodate two lines of switches and a running track which would turn, connect with the proposed classification yard, described under the chapter in railroads.

The course of the Little Androscoggin would be straightened as shown, to give a better use of the land and to save in the construction of bridges.

The district could be developed gradually, a single switch being installed first at a point nearest the city where the first factories would be near the present freight yard, an advantage in handling broken car-load shipments.

Economics of Factory Segregation

The segregation of factories has mainly been brought about as a protective measure for the home, whereas from an economical standpoint it has even greater bearing in the operation of industry itself. There is no greater menace to a growing industry than the slow but sure creeping up upon it of homes, stores, churches and other elements of the city. Not having the power of eminent domain and unable to take over at the onset sufficient land for ultimate expansion, the factory plant soon becomes circumscribed and hedged in on all sides and ultimately is forced to move to a new location. Many times when this takes place, the city is in good chance of losing the industry altogether. Companies are apt in such cases, to survey other cities and to establish themselves where conditions are more propitious. A stable and con-

stantly growing industry is perhaps a city's best asset. To insure this condition, three things besides raw materials and market are required, namely, transportation, labor and room to grow, unrestricted.

The definitely planned factory district furnishes these requirements. There need never be paid bribes to a city council for a spur track if beforehand a comprehensive scheme is laid out whereby each plant will have uniform and adequate railroad privileges.

No factory district is complete without its attendant housing section. This should be developed in pace with industrial development. If this is done with the primary motive in mind to aid industries, the labor problem will be largely solved. Lastly, by setting aside land to be used only for factories, ample room will be had for expansion. Given these conditions industries in any city may receive an advantage of tremendous importance.

In the matter of protecting the home from the encroachment of factories much has been written and many laws have been enacted. It suffices to say, that if the home comes first and becomes established, the factory with its noise and smoke and odors has no right to intrude. Marked deterioration in the value of residential property is too often apparent in such cases to admit of justification.

As a matter of fact, the factory is generally established first and the houses group around, both to the disadvantage of the home and the factory.

Therein is shown the service of city planning which aims to guard against that which, left to itself, acts to hamper and retard the community. **WORKINGMEN'S HOME SECTION**

The factory district as proposed would be flanked by two residential districts which, although not characterized by difference in arrangement from other parts of the city, would lend themselves ideally to workingmen's homes. These sections consist of an extension to New Auburn and the territory extending westward to Taylor Pond.

In the extension to New Auburn, curved streets have been employed, fitting the natural contour of the ground and forming a series of street terraces on the steep side hills. The



LOOKING SOUTH ON MILLER STREET.

new streets would converge to meet existing streets and eventually lead into Broad and Main Streets which, provided with bridges, make direct connection with Lewiston and Auburn.

Transverse streets have been carried down the hillsides on the best grades attainable and following natural draws. These make connections with the River Road on the east and to the west carry over bridges to the factory section. Long blocks have been employed for the reason that but few opportunities are afforded for these cross streets. Lots approximately 150 feet in depth are for the most part provided. Parking along the Little Androscoggin would form an effective and charming buffer strip between this home section and the factories.

To the west of the factory district, the land stretches away comparatively level to Taylor Pond, giving an opportunity for a more regular layout of streets.

The central feature of this plotting is a broad avenue leading from the center of the factory district to Taylor Pond and terminating in a park. Midway on this avenue would be located a business and community center.

The rectangular streets are superimposed by existing diagonal streets making direct connection with the city's center. Thus, the tract possesses the advantages of being contiguous to the factory section, of being within easy communication with the business section, excellent of topography and ideally supplied with recreational features. With proper guidance, this could become a most attractive cottage colony. With large lots, good soil, attractive surroundings, and comparatively low priced land, all the elements would exist for real homes.

It is left only to the enactment and enforcement of proper building and housing laws, to insure this.

BETTER HOUSING FOR AUBURN

To bring about a character of housing such as to be desired in any up-to-date community, the keynote must be struck in the city's building code. Building codes as a rule go no further than to insure buildings against structural defects, the theory being to protect life and limb. In late years there has been a marked tendency to so modify building codes that there will also be insured a protection against adjacent property deterioration, against unhealthy living conditions and against civic ugliness. It has become accepted that for the city to merely guard against a building collapsing by reason of imperfect material or faulty construction, is but going part way.

Important housing legislation has been enacted in a number of states, notably in Indiana and Pennsylvania. A zoning law has been recently passed in Illinois which materially affects an important phase of better housing. The United States Government during the recent war set a good example in providing model living quarters for laborers.

Auburn's housing conditions on the whole, show no cause for complaint, especially when conditions in many other cities are taken by com-

parison. It should be one of the policies of the city plan, however, to keep conditions from falling to the plane elsewhere found and to bring a constant improvement in living conditions.

For the greater number of Auburn's people live in their own homes. These can, as a rule, be little improved upon. The home of the average American citizen is undoubtedly far better than that of the average citizen of any other country and seldom may one find a city where homes are better maintained and where there may be found a greater air of contentment and love of home, than in Auburn. Auburn, however, has a limited tenement district and herein lies her chief menace. The buildings cover a larger percentage of the lots than should be allowed. Of wooden construction, they present a serious fire hazard and in the arrangement of rooms, lack of good ventilation, sufficient fire escapes, window area and bath room facilities, they are by no means up to the standard required in modern housing. While every possible effort should be made to do away with tenements in favor of individual houses in the future, if tenements are to be built, they at least should furnish the best housing conditions possible.

The following suggestions are given as improvements to the present building code.

Subdivision of the Land

At least ten per cent of newly platted territory should be reserved for school and park purposes to be arranged in conformity with the city plan. Streets should have a minimum width between property lines of sixty-six feet which should increase according to their relation to the city plan. Pavements on sixty-six foot streets should vary from twenty-six to forty feet according to character of street. Main thoroughfares should be extended according to width established.

Building lots for single dwellings should contain not less than 7500 square feet.

Lots on which multiplex buildings

are erected should be increased in proportion.

Height of Buildings

No dwelling should exceed in height, the width of the widest abutting street.

Open Spaces

All dwellings should have a set back from front of property line of twenty feet.

Side yard space between adjacent buildings to be twenty feet, space to be increased proportionately for each additional story. Rear yard space to be not less than height of building, space between back of buildings to be not less than fifty feet.

Sanitation

No living quarters to be allowed in basements. No outside privies allowed in sections provided with sewers. First floor of dwelling not to be lower than street grade unless set back from street exceeds fifty feet. In multiplex buildings, running water and suitable bath accommodations to be furnished in each apartment.

Stables, the keeping of pigs, chickens, etc., to be regulated by zones fixed from time to time by city ordinance.

Windows and Ventilation

Every room to have at least one window opening directly to outer air. Each room to have window area of not less than twelve square feet. Cross ventilation to be provided for all rooms through windows, transoms or doors. Bath room and water closet windows to be not less than six square feet, open directly to outer air. Ceiling heights to be not less than eight feet. Rooms except bathrooms, water closets and kitchenettes to contain not less than eighty square feet of floor space. In apartment dwellings, in each apartment there should be at least one room having not less than one hundred fifty square feet of floor space.

Fire Protection

Provision in multiplex dwellings for ample means of egress, fire walls, fire escapes, hallways, basement entrances, etc.

Maintenance

Proper repair and maintenance of

rented buildings by owners. Cleaning of catch basins, providing receptacles for garbage and rubbish, prohibition of the storage of combustible materials.

STREET CAR TRANSPORTATION

Recommendations at this time calling for increased street car service seems little less than preposterous for the reason that transportation companies everywhere are at present fighting against insolvency.

Adequate street car transportation is necessary to the operation of the modern city. Not only does such transportation make it possible for the modern city to function, enabling people to traverse within reasonable time the constantly increasing distances between their work and their homes, but upon the arrangement and operation of street car lines largely depends the character of the city.

No greater evidence is there of the need of city planning than the deplorable conditions so often observed due to the undirected extension of surface lines and the natural tendency on the part of private companies to follow the crowd, always keeping a little behind the city's growth and thereby causing territory tributary to the lines, to become thickly settled. Tenements and congested housing follow in natural sequence.

This policy of extending lines only after a sufficient population in any district insures dividends also causes lines to be built on streets unfitted for their use. An unwieldy system or rather lack of system is brought about with resultant slowing down of service, increased cost of operation and general inconvenience to the people.

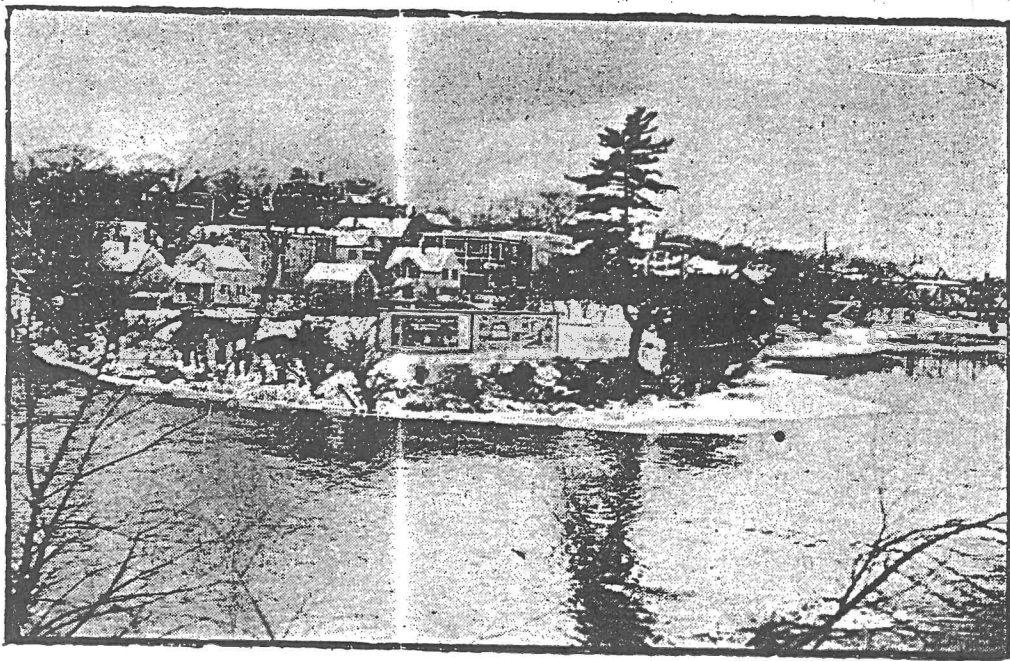
Street car lines should only be built on streets of ample width to accommodate them and in turn these streets should be planned in advance to give the most advantageous routes. Lines should be kept extended into districts of medium population density so that encouragement will be given to build homes on larger lots and thereby produce better home conditions. Whether street cars are owned and operated by private companies or by the municipality, there should be a definite and complete control by the municipality over the plan of extensions as well as of operation.

Auburn's Street Car Line Plan

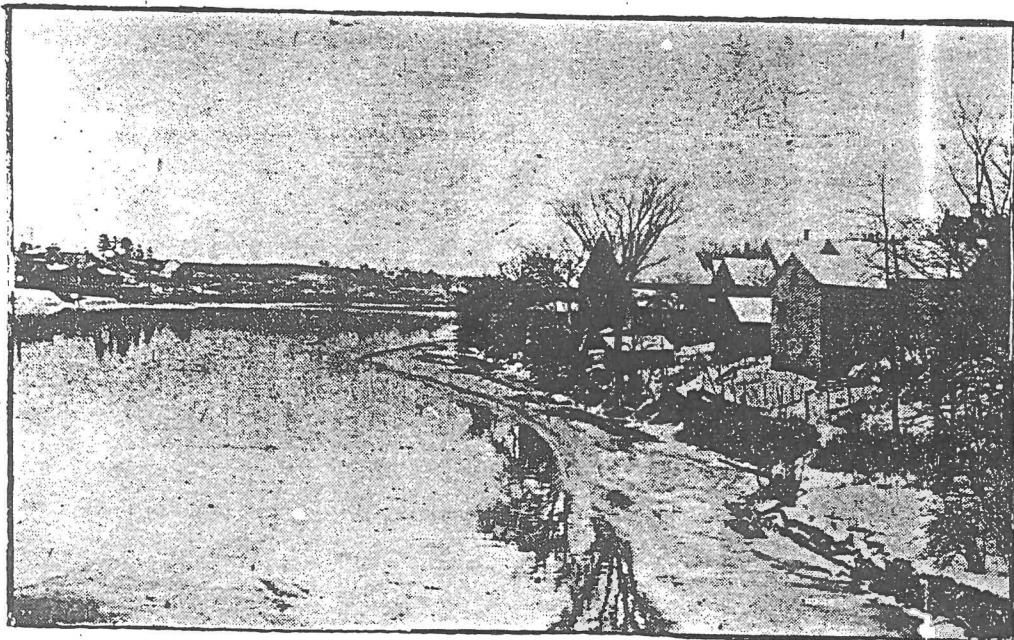
A comprehensive plan is shown providing the entire platted area with a car line system designed to serve most directly important points, to traverse permissible grades and to furnish as efficient service as possible.

The system is laid out for a maximum walking distance from homes of fifteen hundred feet. There is a total mileage of 32.6 of which 21.9 miles would be new track and 10.7 miles of old track would be used.

Seven routes are designated, five of which are through routes leading from outside districts to the center of the city, the remaining routes being shuttle lines connecting these routes. Two through lines and one shuttle line extend through to Lewiston.



CONFLUENCE OF ANDROSCOGGIN AND LITTLE ANDROSCOGGIN RIVERS.
The Point of Land Would be Developed as a Park.



actory district, the center of the city and Lewiston, either direct or with out one transfer.

New Auburn is connected directly with the proposed factory district and with the present factory district of Auburn and Lewiston. All interurban lines remain as they are.

The changes in the present local lines consist in the abandonment of part of the Washington Street, Minot Avenue loop and the Davis Street, Court Street portion of the "figure" loop.

The plan contemplates increasing the present mileage three times to take care of five times the population, at the same time giving proportionately better service. Lines are carried within fifteen hundred feet of a large portion of the lake shore and can easily be extended to any important point which may develop on the lakes.

Routes are shown as follows:

Route 1—Civic center and East Auburn with a branch on River Road.

Route 2—Civic center north to point between Auburn Lake and Taylor Pond with a branch east.

Route 3—Civic center northwest over Goff Street to south end Taylor Pond with a branch from proposed park to the north.

Route 4—Shuttle line from route five, Minot Avenue on Western Avenue around proposed park to route three, then northeast across route two and ending at route one on East Auburn Road.

Route 5—Court Street to Minot Avenue, over Minot Avenue with branch on Portland Road and a branch on Washington Street. Both branches serving proposed factory district, and Minot Avenue part serving present factory district.

Route 6—Court Street over Main Street, to New Auburn. Branch to east and west.

Route 7—From Lewiston factory district through New Auburn, across river to route five, through proposed factory district and workingmen's residence district and around the boundary of the plotting to the end of route two.

Operation scheme combines routes five with route one. Routes three, seven and two extend to Lewiston. Route six extends only to Court Street.

Temporary connection of route seven cuts off part of the loop, pending development of the factory district. If this line is installed it could be abandoned when the factory district has grown sufficiently to warrant building it at its proposed ultimate location.

Combining routes five and one avoids turning cars down town and gives direct connection between those sections of the city served by route one and five with down town and both the present and proposed factory districts.

Route seven connects the proposed workingmen's residence district and factory district of Auburn with New Auburn and Lewiston.

Route three to Lewiston connects the central residence and business districts of the two cities and by transfer at the civic center or on shuttle route four or crossline seven all points in Auburn are connected with the business and factory district of Lewiston. Route two connects civic center and railroad station to Lewiston.

Economics of the Plan

The car lines as laid out can be installed and operated at a profit figuring on the rate of increase of population and the ultimate population which will be accommodated within the plotted area. The combined population of the cities of Auburn and Lewiston is now about forty-five thousand. The total rides during 1917 were 3,837,858 or 85 rides per capita. Auburn is increasing in population at the rate of 15.6 per cent per decade. Assuming that the two cities increase in the future at this ratio, the total population of the two cities will reach 200,000 in about one hundred years, the period during which, at the present rate of growth, it will take Auburn to reach a population of 75,000.

Experience in the operation of traction lines shows that the rate of increase in the number of rides averages about double the rate of in-

capita per year at the end of the one hundred year period or a revenue of \$2,740,000 based on a 5 cent fare. At present costs of construction and operation, a one dollar increase in revenue will justify a three dollar increase in investment at 7 per cent or an investment of \$8,220,000 by the end of the period. By the time the population of the two cities will have reached 150,000 the rides per capita will have passed two hundred. The scheme as laid out for Auburn will have 32.6 miles of track, one mile to each 2300 population. At 200 rides per capita this would produce an annual revenue of \$23,000 per mile of line, hence justifying an expenditure of \$69,000 per mile which is ample to build and operate the lines proposed.

These figures are based on an average population density of ten people to the acre and would of course apply to an increased rapidity of growth.

THE RAILROAD PLAN

The following recommendations may seem too radical and costly to undertake especially while the railroads are in their present chaotic condition. It will be found, however, that the benefits to be derived both by the city and the railroad companies will justify the cost.

The plan in brief, calls for the unification of all railroads serving Lewiston and Auburn, the building of a Union passenger station, the remodeling and enlargement of the present freight station and team yards in Auburn and the installation of a Union classification and distribution yard in the proposed factory district in Auburn.

It also contemplates the elevation of the Maine Central Railroad through the present built up section of the city and beyond, thus pro-

viding for the elimination of all grade crossings.

Unification of Lines

The Rangeley Division of the Maine Central, connecting with the main line at Rumford Junction and the Lewiston branch of the Grand Trunk would be combined. A new line extending across the proposed factory district would join with the Maine Central. The west portion of the Rangeley Division would remain as at present. The Lewiston branch of the Grand Trunk would be abandoned. This would allow all freight from the west over the Grand Trunk or Maine Central to enter the factory district or be carried on through Auburn to Lewiston direct.

The Brunswick and Lewiston branch of the Maine Central from Crowley Junction would remain as at present for freight purposes. A cut off would be built from Crowley Junction to connect with the main line near the Fair Grounds. The Farmington branch through Sabattus to Leeds Junction would be abandoned. By this means, freight from the east could be carried directly through to Auburn and to the new factory district and passengers to the Union Passenger Station.

In combining the Grand Trunk and Rangeley branches a total saving of 4.8 miles of main line track would be brought about. In abandoning the Brunswick and Lewiston line a saving of 5.2 miles of track would be made and the saving in distance in bringing freight into Auburn as compared with routing via Leeds Junction would be 13.2 miles. Altogether in the changes contemplated 17.6 miles of track would be abandoned and 7.6 miles of new track built.

The main objects to be obtained by these changes would be:

The through routing of freight to

the present and proposed factory districts of Auburn from points east and the saving in hauling distance.

The better handling of freight from points west.

The elimination of the Grand Trunk terminal in the two cities with the two freight, the two passenger stations and the bridge across the river.

The consequent opportunity to improve the appearance of the city.

The handling of all passengers at a Union Station.

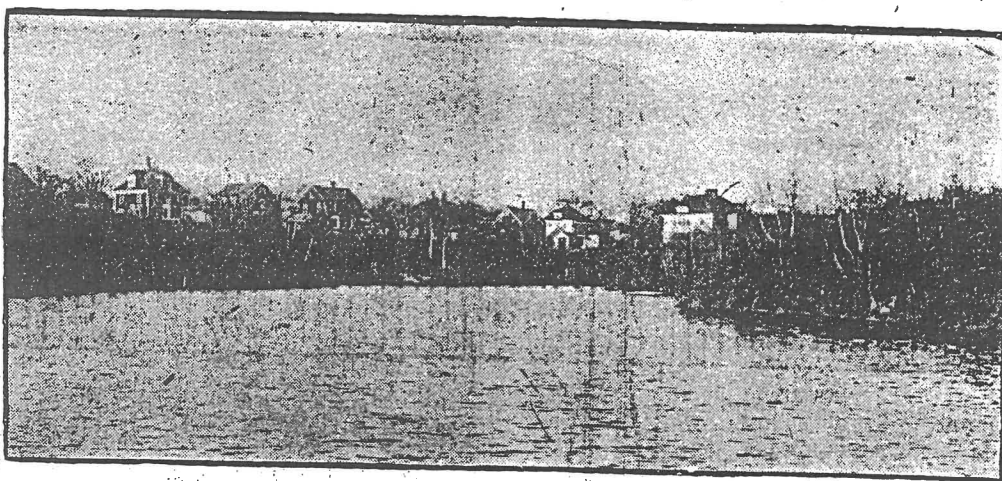
Elimination of Grade Crossings

The Maine Central extending through the entire built up section with all save one street crossing at grade presents a serious barrier. The delay to street traffic especially at Court Street gives sufficient reason for grade crossing elimination. This fortunately can be accomplished by elevation, bringing about an actual improvement in the grade of the railroad. As shown by the profile the grade drops 33 feet in entering Auburn from the south and 17 feet from the Lewiston end of the bridge; the grade of the bridge itself being .71 per cent.

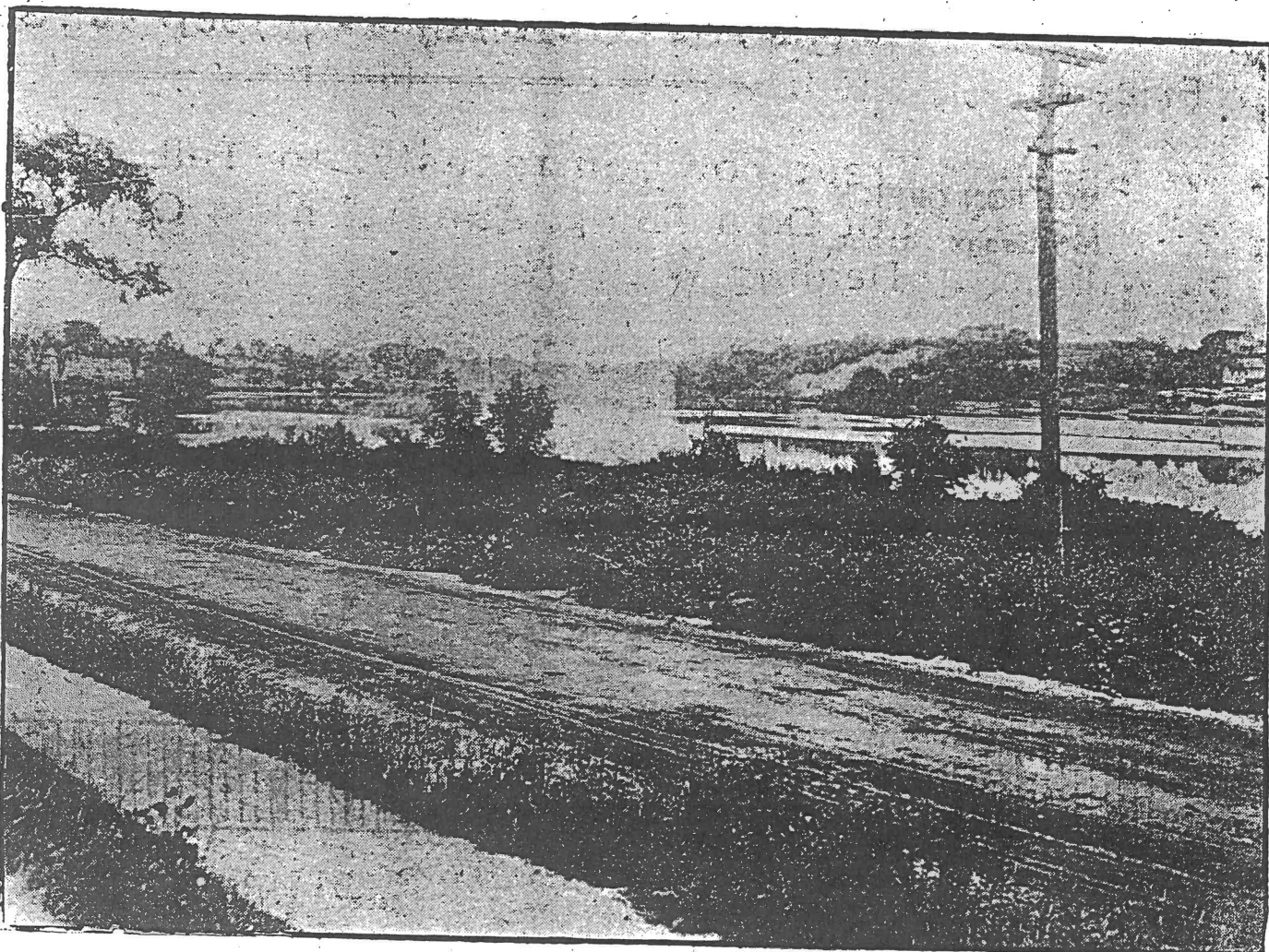
By leveling the bridge and carrying a grade of .123 per cent through the city, all streets could be crossed with ample head room without depressing in any instance more than 2½ feet. In all 7500 lineal feet of track would be elevated between the bridge and the Grand Trunk crossing. Including the extension of Drummond Street to connect with Washington, eight grade crossings would be eliminated.

Freight would be delivered to the second story of present factories abutting the railroad.

Beyond the danger of accidents which is always considerable even with the best protection at grade



LAGOON SOUTH OF THE BALL PARK.
This Would Form an Attractive Feature to the Athletic Park Suggested.



crossings and the delay to traffic, the cost of which can hardly be computed but which will as a matter of course increase with the growth of the city, the money saved by the railroads in not having to guard crossings would pay interest on the investment.

An approximate estimated cost of the elevation from the Lewiston end of the bridge to the Grand Trunk viaduct is as follows:—

Raising tracks 7500 feet	\$28,650
16,000 yards embankment	38,670
Raising industry tracks	46,000
1,000 feet retaining wall	30,000
Raising river bridge	5,000
Street crossings including Drummond and Adams Streets)	200,000

Total \$348,320

Annual saving in guarding the six crossings now provided with watchmen, \$20,280. This would give a return on the investment of 5.9 per cent.

Should the guarding of Adams and Drummond Streets be included an annual saving of \$27,040 would be brought about or a net return on the investment of 7.7 per cent.

It would cost approximately \$12,000 additional to carry the elevation through the factory district as shown. This would be necessary in order to give better grades for track connections.

Classification and Storage Yards

The classification and storage yards would be located at the factory district, well outside of the present city, where land is low in price and where ample room could be had for expansion. The noise and smoke would be far removed from the residence district and factory owners would profit by direct and quick handling of cars to their doors. The yards would occupy an area of 300 by 600 feet with a storage capacity of 600 cars and a daily handling capacity of at least 600 cars.

The yard is so arranged that no streets would cross at grade. Washington would be deflected from its present line and carried under the tracks through a ravine as shown.

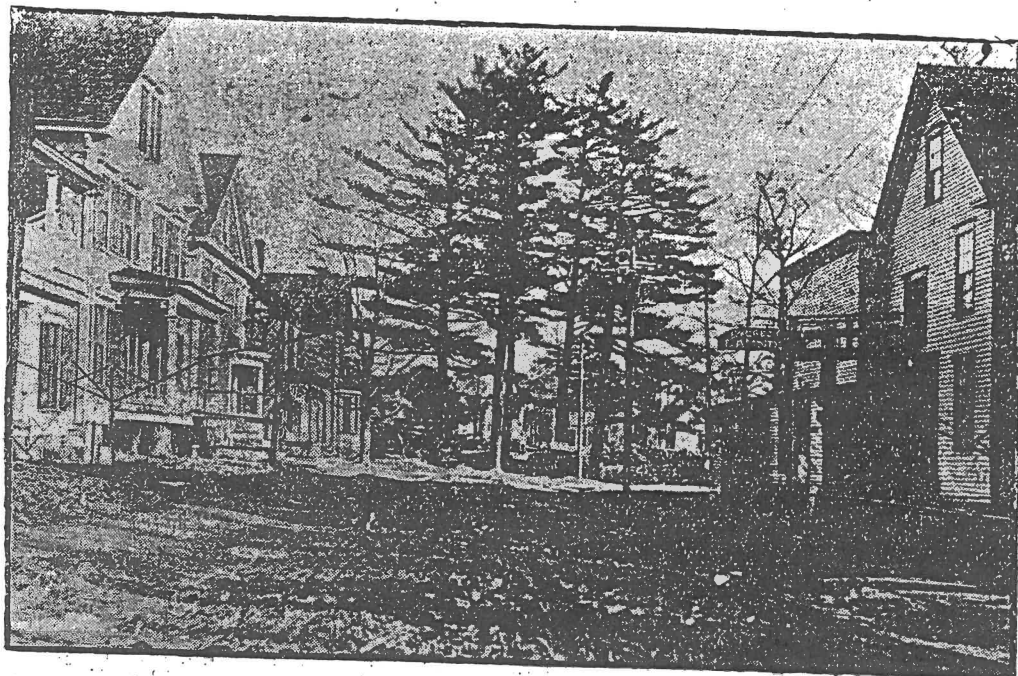
Teaming Yard
A plan has been drawn providing

for an enlarged teaming yard to meet conditions imposed by track elevation. It is proposed to fill in and use the land lying directly east of the present freight station. This area would be used for team tracks only. The freight station would be placed west of the track fronting on Washington Street. Being on the street level freight would have to be lowered from the unloading platforms by elevators.

Freight house and transfer shed track capacity of 322 cars with freight house area of 22,000 square feet is provided.

High Street would be raised as shown by profile to enable teams to reach the track level. This change would materially help the grade of the street in its approach to the railroad.

It would also be necessary to raise Elm Street from its intersection with Drummond if access over it to the yards should be desired.



LOOKING TOWARD THE PROPOSED RAVINE PARK FROM MANLEY STREET.

The yard would have a capacity of 60 cars. There would be a maximum grade of 3 per cent on the switch lead from the main track.

Ware house sites of 47,000 square feet with track capacity of nine cars would be provided on the High Street frontage.

This yard although small is conveniently located and occupies the only available space to be found in the city. Subsequent team yards could of course be provided in the factory district.

The Union Passenger Station

Not only would the Union Passenger Station become an important element in the railroad plan but it would form a most imposing feature in the civic group elsewhere discussed.

The location suggested is immediately west of the river on what has been long known as West Pitch. By thus placing the station there is no reason that it should not serve both

cities equally well.

With the suggested arrangement of car lines which could be supplemented in Lewiston, passengers from all railroads could transfer to any point within the two cities without loss of time.

The location near the center of both cities and looking out over the falls and park would be most convenient and attractive.

AUBURN'S BUSINESS SECTION

As is to be expected with a larger city so close at hand, the business section of Auburn has been relegated somewhat to the background. With increased population and with the development of other features of the city as outlined, especially with the advent of more industries, the present business center of Auburn surely may be looked to to increase proportionately in size and importance. The retail section can be expected only to follow other development within the city and within the city's tributary

A PLEDGE

WE, The Chalmer's Lumber Co., Executives and Workers, Do Hereby Pledge Ourselves to the Best of our Ability and Resources, to Maintain Quality of Goods and Workmanship, Keep our Service Efficient, and to Price our Goods in a Reasonable Manner.

We Agree to Treat You Courteously, to Tell You Honestly Whether We Can or Cannot Do a Thing, And to Enjoy Our Jobs So Much, That You Will Enjoy Dealing With Us.

We Shall Add From Time to Time, New Equipment, Workers or Merchandise, That Will Enable Us to Keep Up With Your Demands.

So, That, If You Need Lumber, Mill-Work; or Builder's Hardware, You Will Look to Us in the Future as You Have in the Past.

Signed; CHALMER'S LUMBER COMPANY

J. E. CHALMER'S Pres. & Treas.

ELLA F. DAGNEAU Clerk.

Chas. C. Small
A. L. Washburn

Cyrus Brown

Charles McLaughlin

Alger I. Millett
Erlon Rand
Clyde Smith
Harry Goss
Thomas Chiffell

Lee Bolster
E. L. Gould
Albion Cobb
Bert Eveleth
Margie Monk

Fred W. Quimby
Herbert A. Lucas
Irving E. Alexander
Edward Harradon
Perley A. Smith

untry. Several things might be ne, however, to make Auburn's isiness district more attractive and erefore tend to keep Auburn's trade ore largely on the home side of the ver and possibly attract from the ewiston side.

The civic center and river front improvements would, no doubt, help aterially in this regard. The re-oval of the present city hall and the ilization of the space for business rposes would without doubt help ourt Street from a business stand-oint.

What is needed most are features hich will liven the district especially ight. A good theater would help eatly and there would be room, king the two cities together, for a ally good playhouse.

A community club has been sug-ested. The new Y. M. C. A. will oubtedly be of help. 'As soon as the vic center park is completed band oncerts, pageants and other open air ents may be held.

A new hotel would mean much to e business center. A public market as been tried out with some degree :uccess. There is no doubt as to e value of a public market when ropriately operated and its effect in imulating the business district ight to be good.

Some things may be done to im-rove the looks of the business reets. As has been mentioned be-ore, overhead wires may be dis-laced with underground cables. igns may be regulated and a uni-orm and decorative system of street ghts installed. Store window dis-ays could be improved and fairs and azaars held to attract more people to uburn's places of trade.

The Chamber of Commerce can o doubt do much in fostering these atters and in fact the success of the ntire city plan must depend very rgely on the efforts in its behalf ne part of this and similar organiza-ons.

Physically, the business section of uburn is limited; Court, Turner nd South Main Streets being about ne only thoroughfares suitable for usiness purposes, by reason of their idth and grades. These, however, upplemented by the business section f New Auburn and by the detached enters which may be expected to ring up later, will doubtless be ufficient to serve the city.

ZONING

Udoubtedly the best interests of he city may be secured by limiting ndustries to restricted areas. At resent the laws of Maine do not ive authority for fixing such zones or does the special city charter of Auburn make such provisions.

It is improbable that city ordi-nances would be effective in con-trolling such restricted areas. The remedy lies in obtaining suitable laws from the State Legislature.

The Illinois law recently passed, rovides for the initiative to be taken y property owners within any pre-scribed district. Upon referendum he question of thereafter allowing actories or stores within the area is lecided.

A zoning plan for Auburn, if fixed y the city plan, should limit indus-tries to within a small radius of the resent factory district and to the

area designated for future factories. If it were deemed advisable to in-clude tenements in the zoning scheme, they would naturally be limited to the section immediately surrounding their present location and to a special zone nearer the factory district.

If tenements are to be regulated, apartment houses, which are only high-class tenements, should be also regulated.

To go further and limit the area in which stores may be built has often been suggested.

The whole problem of zoning is one which has to be handled with delicacy and good judgment.

What may seem objectionable from a theoretical standpoint may be of profit and convenience to a community. There is no doubt but in many instances, stores intruding on

residence streets have caused a de-preciation in near-by property values; while on the other hand these places of business have come about through an obvious demand.

The chief objection to neighbor-hood stores has been their tendency to build forward to the property line, thereby cutting off the view from houses along the street. By the uni-versal regulation of building lines this cause for complaint may, of course, be obviated.

Zoning in some parts of Europe, especially in Germany, has been car-ried to an extreme which undoubtedly would not be tolerated in any dem-ocratic American community. Just how far we should go in this regard in order to protect the majority and at the same time respect individual rights is an open question.

PARKS

From a standpoint of natural beauty Auburn is in itself a park. Were we to know that the city would never be larger than it is today, that the surrounding woodlands would be as free to enjoy without trespass and that the boys could always use the old swimming holes, barely anything would be needed in the way of parks save perhaps an out-of-door resting place "down town." We are, how-ever, assuming that Auburn will grow continually. By the time the city reaches a population of fifty thou-sand, vacant lots in which children now play will be built up. The an-noyance to farmers by townspeople overrunning their lands will be stopped by land posting and the woods and pasture land now so free to romp over and on which to picnic will be not for the next generation.

Parks and recreation spaces are therefore considered a standardized requisite of the modern city. For a city to be properly outfitted with parks is of relative importance to providing a system of schools, fire engine houses, or sewers. Providing cities with parks has become a science in itself, a science in which there are rules of procedure based on the needs and experience of cities.

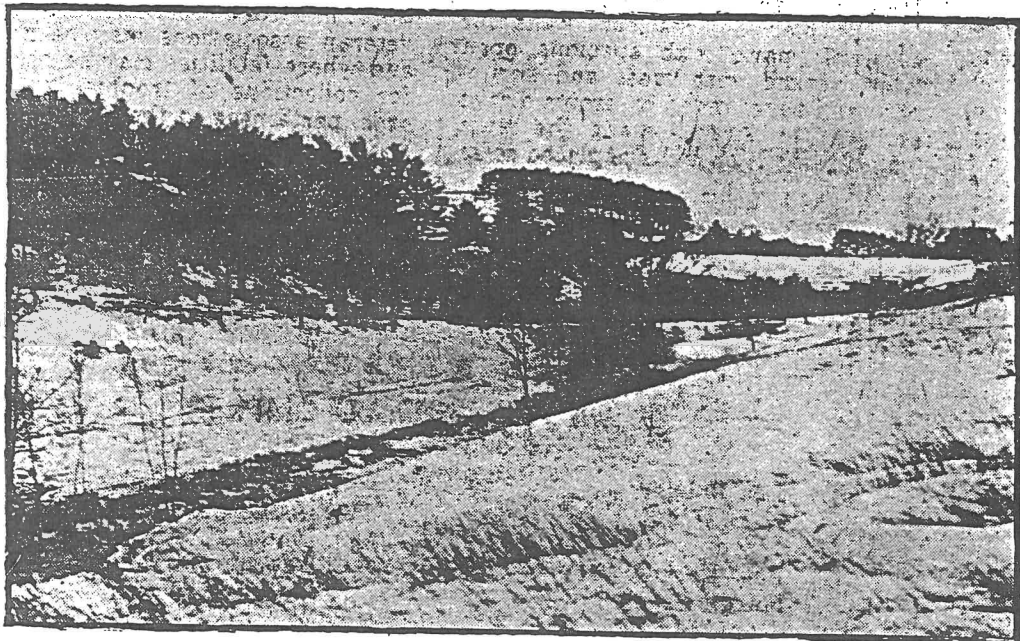
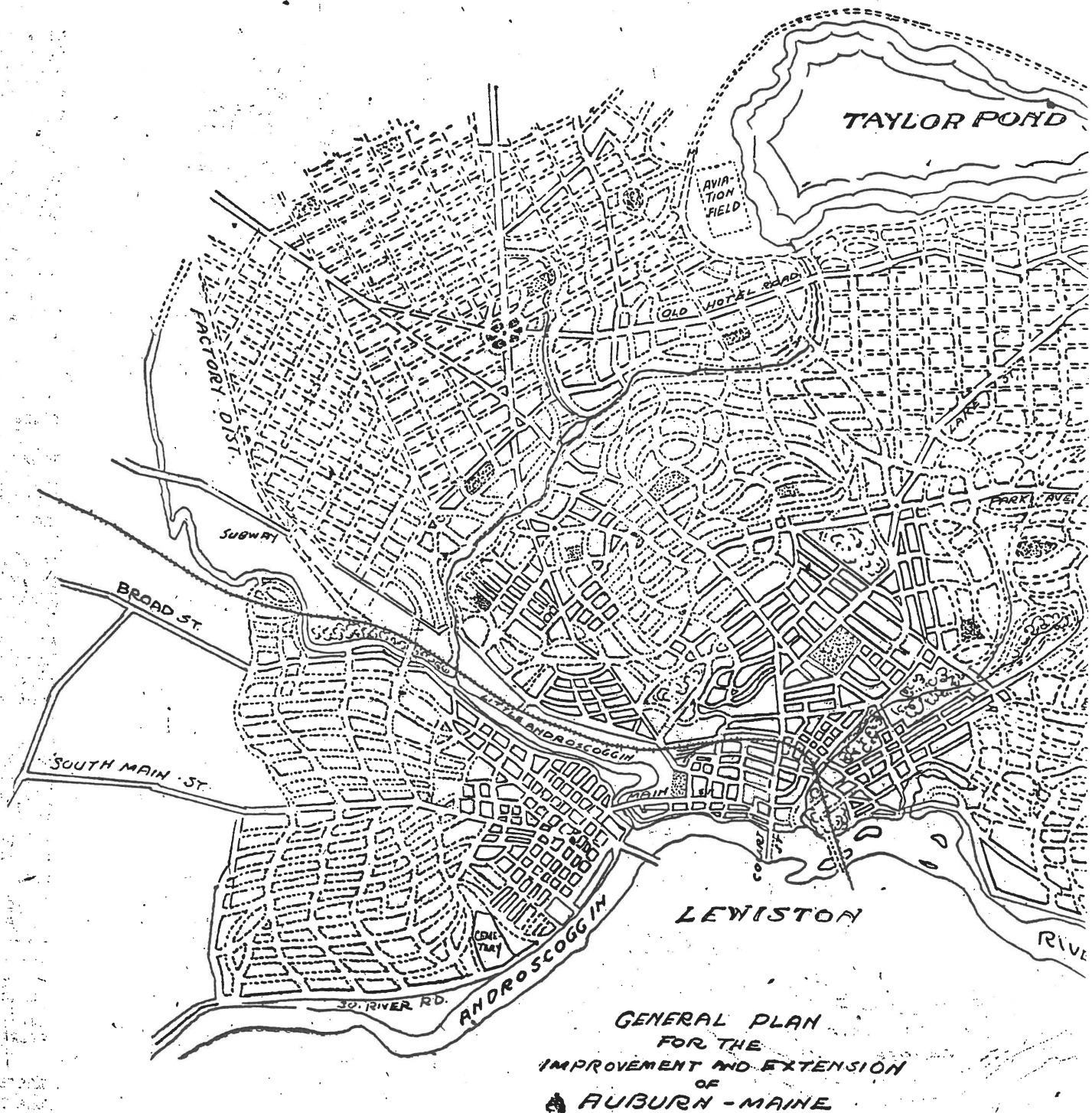
Briefly, some of the accepted prin-ciples governing the selection of parks are as follows:—

There should be a fairly fixed ratio of park area to the population; the accepted standard being one hundred people to the park acre.

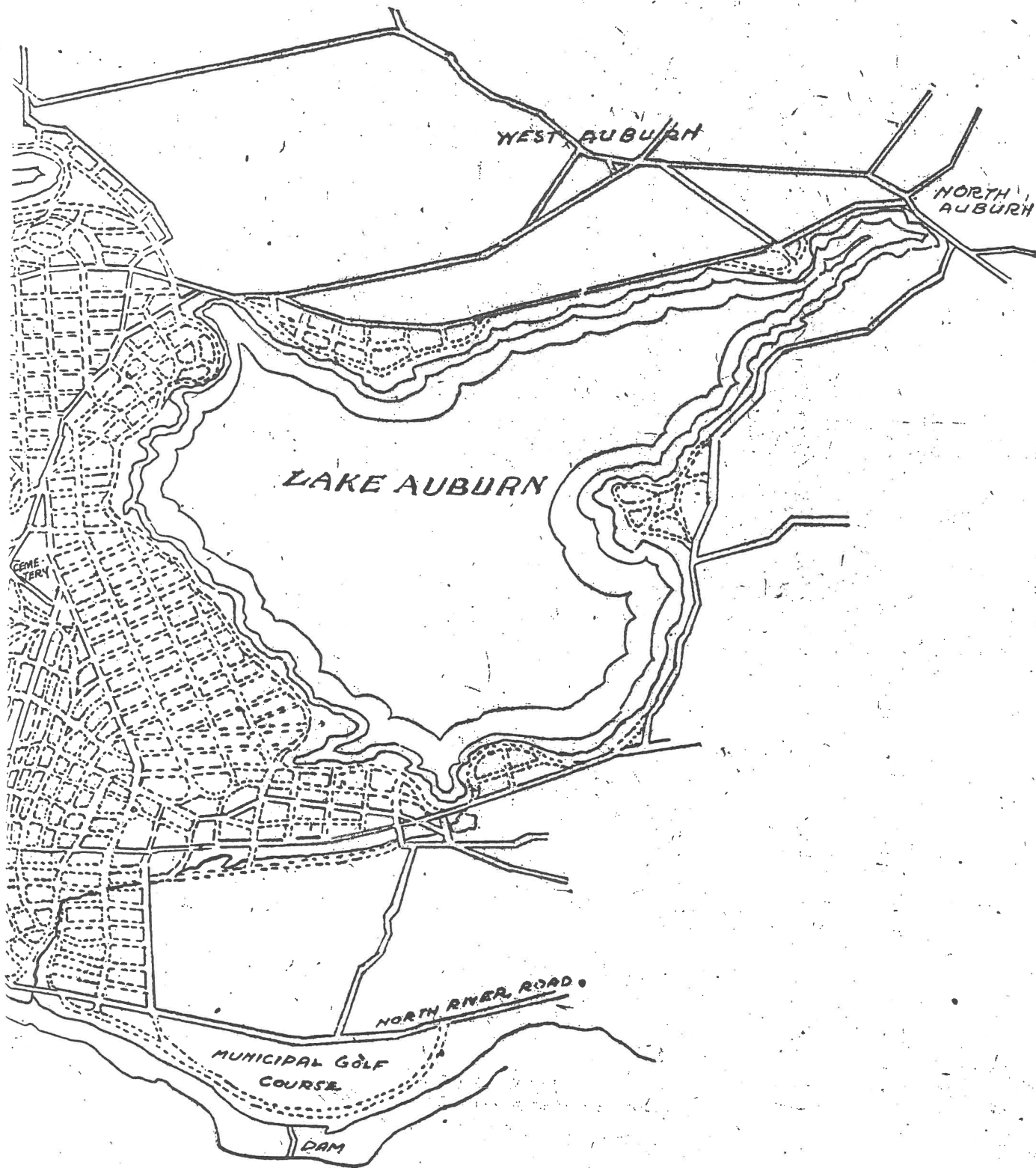
Park units should be so located that all parts of the city will be conveniently accessible thereto. A park unit within a half mile of every home is the ideal sought after.

In the selection of land for parks, effort should be made to preserve landscape of natural beauty; the shores of waterways, vantage points, beautiful woodlands, etc.

GENERAL PLAN FOR THE IMPROVEMENT



EXTENSION OF THE CITY OF AUBURN



will lend themselves to purposes of organized recreation.

Parks should be arranged in conjunction with schools, in order that the school buildings may serve the purposes of neighborhood centers, a use which may be greatly aided by reason of having well arranged park spaces in conjunction.

In the selection of park sites where possible, land should be selected which is of least value for residence, factory or other purposes. Such lands are generally most advantageous for park use on account of rough topography, streams and other features of natural beauty.

Parks should be planned for use as well as beauty. They must be made to serve as effective safety valves for the physical well being of the city's population. Provision should be made for all sorts of healthful recreation to fit the needs and desires of all, old and young. A successfully developed and operated system of parks in any city makes for physical and moral uplift. Parks are insurance policies for better citizenship.

Parks should be planned for beauty as well as use—that is, real beauty based on adherence to the rules of art,—proportion, line, color, mass, balance, not on whitewashed tree trunks, cobblestone edges, cast iron fountains, ugly statues, incongruous flower beds, and other freaks. Art in landscape does not depend upon ornateness and cluttered bric-a-brac. Millions have been spent for such in parks only to be torn out. Nothing better reflects the culture and true character of a city than the manner in which its parks are built, unless it be the character of its homes.

THE PARK PLAN FOR AUBURN

In the plan for a system of parks for Auburn, the needs of the present as well as the future city have been

problem is to meet the city's present needs and in such a way that there will be secured a nucleus for a larger park system that in time may be developed by gradual stages as the city expands.

The general system as outlined comprises 890 acres, considerable of which is included in narrow strips of parkings along boulevards. Boulevards comprise 32.3 miles.

The Falls, Park and Civic Center

The outstanding need today is for a centrally located park where out-of-door public meetings may be held, where automobiles may be parked, where band concerts may be held and where the city may give its first expression to out-of-door art on public grounds.

The site recommended lies along the river bank opposite the Falls on property which has for years been known as the Clay Bank.

The land in question is largely vacant. The few buildings thereon aside from those of the Penley slaughter plant, being of minor consequence. The ground is high and out of danger of floods. It commands a full view of the falls, is in the very center of the city, is on the Turner Street car line and but a few steps from the lines on South Main and Court Streets. Altogether it is a most fortunate site, the wonder being that such a spot has been left so comparatively free from improvements.

The Falls of the Androscoggin are unique and beautiful. It is most unusual to find a natural feature of this kind in the heart of a city. At night a large amount of water flows over these falls, and with very little expense they could by means of searchlights be illuminated to give a wonderful effect. Whereas at times there is a disagreeable odor arising from the water due to the lignins or wood cellulose wasted from the pulp mills above, in years to come this

or be altogether eliminated by one or both of two reasons. First the tendency of states to legislate against the pollution of running streams when such pollution in any way causes annoyance of urban population. And second, on account of the rapid tendency to utilize all possible by-products in manufacturing. It has been demonstrated that these lignins are susceptible of being manufactured into alcohol at a reasonable cost, and with the phenomenal increase in the use of internal combustion engines and the difficulties in securing an adequate production of gasoline the manufacture of wood alcohol may be looked to as a coming industry of great importance. Therefore, although the cleansing of the Androscoggin River may not come at once, the tendency is in the right direction and the menace may be looked upon to decrease rather than to increase.

Motif of Plan

The plan of treatment calls for a simple park with spacious open lawn banked with trees and shrubbery and surrounded by ample drives and walks. A wall along the river would be built on a curve placed so as

to reclaim considerable ground which has in the past been washed out. Along this wall should be an esplanade.

The park would be surrounded by public and semi-public buildings, providing a civic center of striking beauty.

The scheme of layout is informal as influenced by the irregular arrangement of the surrounding streets, the proximity to the falls and the rustic character lent by the wooded promontory.

The buildings would be interestingly grouped but without a predominating axis. Each unit would have a commanding view and would in itself be prominent from other locations in the scheme.

In the architecture of buildings the Colonial style would predominate. Solidity, strength and permanence fitting to the rugged hills and climate would mark their design.

An uncovered bandstand of simple, classical lines would be the only architectural feature within the main plaza.

The Post Office would fit into the scheme admirably, the only suggestion being to remodel its north elevation in order that it may present a more attractive front to the park.

It is necessary for the most successful working out of this project to include the triangle surrounded by Pleasant, Hampshire and Turner Streets. Unless this area is acquired and appropriately treated an in-harmonious element will be interposed between two important buildings of the group, the Y. M. C. A. and the City Hall. The triangle, once cleared of improvements, may be held as a future site for a minor public building or preferably left as a parking, treated by massing heavy planting in the rear and introducing a simple but effective fountain with a single jet rising high above a plain basin of granite.

Y. M. C. A. Building

Acting upon the preliminary recommendations regarding the civic center, the committee in charge of building the new Y. M. C. A. have secured the site suggested and have taken necessary steps toward the erecting of the building.

The die is cast therefore and there should be no turning back until the plan in its entirety has been carried out.

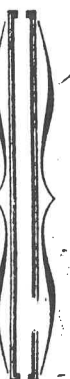
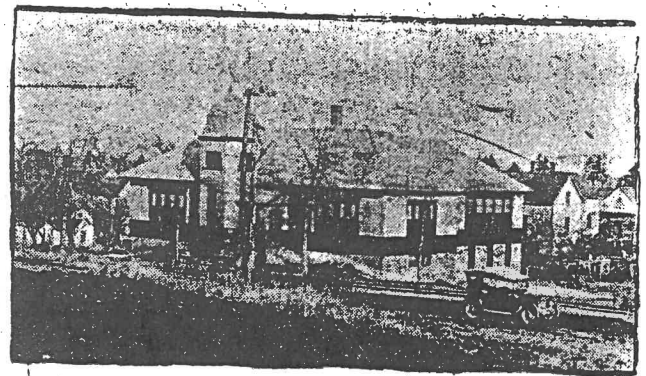
City Hall

The proposed city hall, a building of which the city is sorely in need, would occupy a triangular space formed by Turner Street and the proposed drive. While occupying a commanding position in the group and standing out prominently as approached over Turner Street or from the park, it is not intended to cause the building to predominate the scheme.

The entrance motive would repeat on three sides, and while dignified as befitting an administration building, it would be essentially convenient and business-like.

Liberty Buildings

In line with the present idea of erecting liberty buildings in place of the archaic and useless monuments, which were wont to be erected in memory of the country's heroes, we have suggested a building to be used as a community gathering place or forum, where a large assemblage may be accommodated as in conventions, musicales, concerts, etc.; where veteran associations may be housed, and where facilities may be provided for collections of trophies and records, pertaining to the history of the city. We believe it would not be



MERRILL HILL SCHOOL

ness to also include in this building game rooms, club rooms and a spacious lounge, so that the building could be used as a free public club. Indeed the limit of use for such a building in a city the size of Auburn may be hardly estimated.

As an auxiliary to the community park, it should contain public toilets, and the location of an out-of-door swimming pool in the rear with dressing booths may well be considered. The building would be placed on the north side of the plaza, facing south at a proper height, so that with its supporting planting screen, it would shut out from view the packing plant in the rear.

Hotel

Designated by the letter E on the plan is shown the proposed site for a new hotel in Auburn. The location would be such as would be immediately accessible to the business section and would command a striking view of the falls and of the civic group. Auburn is already feeling the need of a modern, spacious and homelike hotel. Nothing would give greater impetus to the building up of a tourists trade and to increasing the activity of the business district.

Union Station

One of the most important features of the civic group would be the proposed Union Station. Not only is a railroad station strictly speaking a public building but its location on the site suggested would make it most imposing as well as convenient of use. Nothing is more fitting than this; the front door to the city should be located amid an attractive environment. The stranger stepping from a railroad train into the midst of such a charming layout as contemplated could not fail to form a high regard for the place. This is a psychological element in advertising which should not go overlooked. There is little excuse for the railroad station to be the usual dreary, uninviting stopping off place.

Necessary to the location of the station would be the carrying of a street and bridge across the river to Lewiston. This street as shown

would form a continuation of Turner Street, passing under the Maine Central tracks, curving around the base of the hill and crossing the Androscoggin on an attractive bridge just above the falls, finally making connection with the business district of Lewiston over Chapel Street widened. The construction of an attractive bridge at this point would do much to increase the beauty of the falls from the civic center, and Court Street bridge, as it would hide the more commonplace bridge of the Maine Central railroad from these points.

All the elements of the proposed civic center are even at this time needed in Auburn. There should be no hesitation in going ahead with the project as fast as funds and opportunity will allow. It will mean an investment but it will prove a good one. Property values around will be enhanced and tax returns will in-

crease as has invariably been the case with similar undertakings elsewhere. The municipal buildings will have room for expansion and in the future the city will be saved the cost of securing new and increasingly costly sites as these structures become antiquated. An incentive will be given for leading the growth of the business district along Turner Street, a logical outlet from the present district.

From this civic center will radiate the future park and boulevard system. It will be the heart of the town, the town common replete with a significance of hospitality and a feature somehow omitted from this New England community.

The Proposed River Treatment

It is proposed to clean up the river banks both to the north and south of the civic center and restore them to public ownership. Could the city have been given a plan at the onset

unquestionably one feature of would have been a broad drive along the river bank, but growing without a plan, in the everyone-for-himself way, it was but natural that the settler's instinct to build near water caused the river banks to build up with homes and the public denied rightful heritage. Cities everywhere are striving to reclaim their river fronts. In few can the work be carried out with as little cost as in Auburn. To the north of the city the riverbanks are practically free of improvements.

South of Court Street bridge a condition exists which constitutes a menace to the city as a fire hazard and which makes ugly what otherwise might be an attractive water front. The shacks standing between Miller Street and the river occupy ground which can hardly be expected to become valuable for business purposes. It is recommended that the



WEBSTER SCHOOL, SHOWING LACK OF PLAYGROUND SPACE.

Darling Automobile Co.

29-31 Turner St., Auburn, Maine.

Distributors of Automotive Equipment

Our policy is to supply the rapid growing demand with merchandise of merit. Our sales-rooms and stock rooms are full of up-to-the-minute automobile accessories. We have just what you want right in stock ready for immediate delivery.

.... Wholesale and Retail....

Our large illustrated catalogue will be ready for distribution soon. Write for copy.

Darling Automobile Co.

29-31 Turner Street, Auburn, Maine.

city acquire this strip beginning at Court Street and extending at least as far south as Laurel Street, better yet to Newbury Street, ending with a promontory park at the junction of the two rivers. The parkway would carry a drive and walk connecting with Drummond, Elm and Academy Streets. South of Miller Street this would necessitate the cutting off of lots which now extend from Main Street to the river bank. These lots are, however, quite deep and the homes would be damaged in no great degree. The work will entail considerable expense. It is doubtful if the city is at present able to undertake it. Within the next ten years, however, the time may arrive when the project could be put through. Meanwhile the Council might well consider the passage of ordinance condemning the unsightly shacks and cause them to be torn down, while as fast as possible lots could be taken over by the city until the entire property is secured.

COMMUNITY PLAYGROUND

The site of the ball park on the North River Road is recommended to be secured as a community playground. A plan is shown giving a proposed arrangement of athletic features. The site comprises about 30 acres and has for many years been a popular gathering place.

By doing away with the river road at this point and combining it with Center Street a large swamp area along the river is left free. A portion of this could be dredged out, using the material to raise the remainder above high water level. This would provide a cove for a boat house and would give nearly four acres additional space.

A drive would be carried up the hill and a parking place for automobiles provided. Baseball, football and tennis fields are shown, together with outdoor athletic features and a field house.

The stream would be dammed, forming a pretty lagoon which would flood back to the northern end of the park. This lagoon would be crossed by foot bridges.

The park would merge with the

present ground of the Washburn School.

A swimming pool complete with dressing quarters is suggested to be placed at the north end of the tract.

THE RAVINE PARK

The advisability of securing the ravine extending through the city has engaged much attention. Obviously the land is worth little for other purposes and would lend itself well to a picturesque treatment. To secure and develop this tract would entail comparatively little expense. The stream would be dammed at intervals, forming a series of pools, and a drive would be carried along the base of the bluffs to connect with the curved street platting to the northwest.

MOUNTAIN PARK

Another tract of land of little value for building purposes but ideal for a park is the small mountain west of the intersection of Lake and Davis Streets. From here a magnificent view of the city and country about may be obtained. To one who has witnessed a perfect sun-

set from this point, the idea that the place should be forever free to public use, immediately presents itself.

The tract is readily accessible and its improvement with a drive, a lookout, water supply, benches and facilities for picnicking would necessitate but small cost.

SHORES OF THE LAKES

Around Auburn one might go on indefinitely selecting nice places for parks, but of all opportunities outside the city the shores of Lake Auburn and Taylor Pond afford the strongest arguments.

Encircling both these bodies of water should be a well-built driveway, and as far as possible the land between the driveway and the water should be taken over for public use. This would in no wise detract from the cottage sites which would face the drive and the water. Around Lake Auburn the advantage of such an arrangement is obvious from a sanitary standpoint, for wherever private property extends to the water's edge, pollution is extremely difficult to guard against.

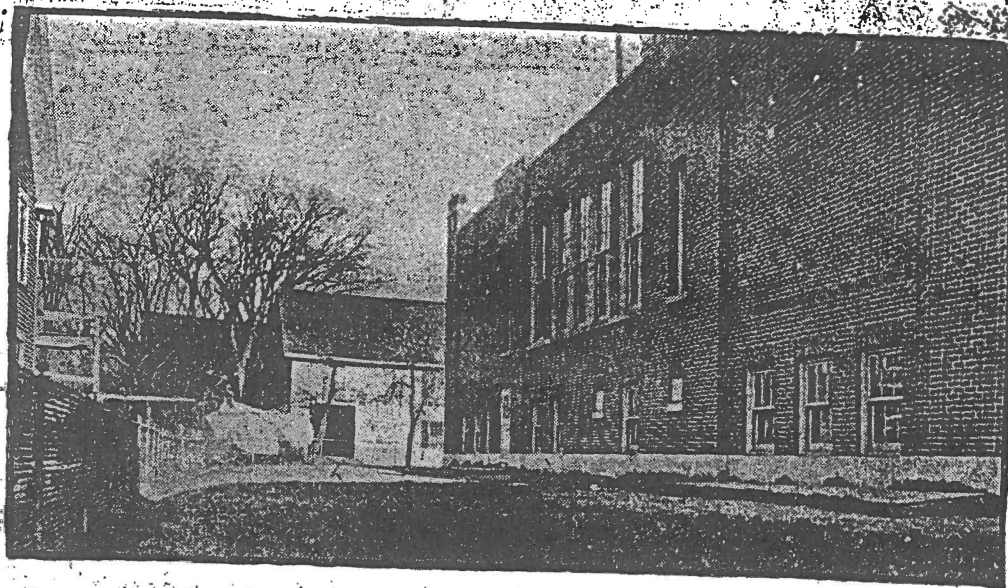
With Lake Auburn barred to bathers on account of the water being used for drinking purposes and with the river in its present condition, Taylor Pond becomes about the only body of water convenient to Auburn fit for bathing purposes. The relation of this body of water with the scheme for general development of the city makes the project to secure the entire shore of the pond desirable. The park strip would vary in width and at the south end would widen into a spacious field which could be used for aviation.

TAYLOR POND PARKWAY

A parkway is shown extending along Taylor Brook from Taylor Pond to Washington Street. Drives would extend along each side of a narrow parking containing the water course.

NEIGHBORHOOD PARK AT MINOT AND WESTERN AVENUES

A small ravine park is suggested for this location. The land along the run is of little use for building sites and a small playground in this



THE CHAMBERLAIN SCHOOL YARD.
Showing Difficulty of Extension on Account of Improvements.

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Auburn,

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the present time.
A MUNICIPAL GOLF COURSE
 The growing interest in golf and the fact that a good municipal course would doubtless aid in attracting tourists as well as serving the people of Auburn leads to proposing such a course in conjunction with this plan.

A number of excellent sites are available, that seeming to combine the most advantages being on land lying along the river near the upper dam. This land is high and rolling, affording a wonderful view of the river, and is sufficiently broken to produce natural hazards with good locations for fairways and greens. It will be within short distance from the hotels.

BOULEVARDS

A system of boulevards has been shown in connection with the plan. These when finally developed will make Auburn renowned among cities. It is doubtful if any feature of the plan would do more to attract people to Auburn than such a system of fine drives along the river and around the lakes. Maine as a state has been backward in building good roads. To become a leader among the cities of the state in this regard would therefore be to attain distinction which unquestionably would react to the financial benefit of the city.

A series of parked driveways has been laid out traversing and encircling the city. Starting at the civic center and going north, a boulevard would skirt the river as far as the golf course. From there it would branch to the west, connecting with East Auburn and entirely encircling the lake. From Lake Auburn the drive would connect with and encircle Taylor Pond, thence extending along Taylor Brook across Washington Street and the Little Androscoggin and north along the river to connect with the south river parking. Thus completely encompassing the city.

A diagonal boulevard would be carried through the ravine to connect with Taylor Pond over Summer Street, while another would form a continuation of Gamage Avenue connecting also with Taylor Pond.



EDWARD LITTLE HIGH SCHOOL.
 A Splendid Setting Has Been Provided for This School.

The South River Road, one of the most picturesque of Auburn's drives, should also be improved and incorporated in the boulevard scheme.

SCHOOL PARKS

Located at regular intervals throughout the newly plotted section are proposed sites for schools. These in nearly every case would occupy a full block. They are placed at least one block away from street car lines and are so situated as to be within a quarter of a mile distance from every home.

The size of these tracts would give opportunity to make of each a neighborhood park. The school building could then be designed for community purposes and thereafter there would be no need of duplicating the expense of these costly buildings in erecting special neighborhood centers as has been the case in many of our larger cities.

There would furthermore be ample room for enlarging the school buildings as population increased.

Placing these units away from future car lines is done as a precaution against danger to pupils due not only to cars but to the heavy traffic which is likely to obtain on these

thoroughfares. The schools would also be protected from the noise and would not take up the more valuable property along these routes.

In all there are designated forty-one new school sites comprising one hundred seventy-seven acres or an average of 4.3 acres each. These with the nine present schools would give fifty schools which, at three hundred pupils each, would accommodate fifteen thousand pupils, expected in a city of seventy-five thousand population.

The ratio of 4.3 acres to each school although large as compared with the sites on which Auburn's present schools are built is exceedingly conservative. While in most cities new schools are not built on areas of less than a full city block, in many instances from ten to twenty acres each has been used for school grounds.

PROPOSED ENLARGEMENT OF PRESENT SCHOOL SITES

Many of Auburn's present school sites are too small to permit of suitable play space or to permit room for extension to the buildings.

Authorities agree that at least one hundred square feet for each child

is necessary for proper out-of-door school work. This makes no provision for using the school yards as neighborhood parks or doing other than to provide for organized play and drills.

The following table shows the deficiency of a number of school sites in meeting this standard.

	Attendance 1913	Percentage of attendance increase in the past 15 yrs.	Total area of grounds	Available per child
Webster	620	9	39500	23 sq. ft.
Lincoln	315	2	19800	46 sq. ft.
Wilson	183	62	39200	185 sq. ft.
Franklin	196	37	12000	54 sq. ft.
Washburn	149	46	48500	302 sq. ft.
Park Hill	77	43	10000	97 sq. ft.
Merrill	125	69	37600	258 sq. ft.
Chamberlain	174	83	22950	77 sq. ft.

Thus far the school yards have not been outfitted with playground apparatus and no vacation work in playground activities carried on. Whenever this is undertaken the lack of space will prove a serious handicap. In the case of the High School

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REUEL W. SMITH, Secretary

FRED W. ROBE
 HARRY F. WHITEHOUSE
 EMIL DICK

COME IN AND ASK QUESTIONS

The room is given for a proper fitting for the building. A playground in connection with a high school is not so important as in the case of a grade school. However, it is desirable that somewhere in the city a well developed athletic field may be had for the use of the older boys and girls. This is provided for in the proposed athletic park on the North River Road.

Webster School

At the Webster School a small block has been practically covered by the new building, leaving no space for play. With the large attendance, over six hundred, this presents a serious problem. The streets abutting are narrow and being near the center of the town are subject to frequent traffic, making them unsafe for children. Could the building have been placed a block to the north and a portion of the ravine land taken for play purposes, a much better arrangement could have been obtained.

As it is there seems no better way than to acquire this block and clear it of houses. This would give sufficient play ground which in time could connect with the proposed ravine park. Another way would be to close Oak Street and acquire part of the block beyond.

Lincoln School

The present site gives but forty-six feet of play space for each child. It is recommended that if the full block cannot be secured the south line of the property be extended through to Fifth Street. A whole block of this size is none too large for the accommodation of a modern school of 200 attendance.

Wilson School

By taking four more lots along

Roak Street a full block could be secured. The Lincoln and Wilson schools are placed somewhat too close together for good spacing.

Franklin School

The grounds of the Franklin School are not only too small but are not conveniently accessible from various points of the district which it serves.

We recommend the taking of lots as shown, thus carrying the grounds through to School Street and enlarging to the southeast along Pine Street.

Washburn School

These grounds are of ample size and would be further enlarged by the proposed park.

Park Hill School

We recommend doubling the present site by acquiring land as shown along Fourth Avenue.

Merrill School

Playground area at this school is ample for the time being. The district is sparsely settled and the school is small in attendance. The ground would be insufficient for a school of three hundred which may be looked for in time. There is now opportunity to secure vacant land contiguous to the site.

Chamberlain School

The school board has purchased an improved lot immediately north of the original site. With this cleared, a play space of one hundred thirty-four square feet per child will be secured. This extra room is much needed.

School Park

A suggested arrangement for a school park is shown on land bounded by Highland, Lake, Hillcrest and Shepley Streets. This is an area of

approximately fifteen acres, not unusual in size for modern school grounds. The location would meet the need of a school in this section of the city. The plan calls for out-of-door playgrounds, gardens and features for a community park. A fine stand of native pine is now on the ground and should be preserved.

WAYS AND MEANS OF CARRYING OUT THE PLAN

In the new charter granted to the city of Auburn in 1917, provision is made for the appointment and duties of a city planning board. It is provided therein that "The Board shall keep itself posted in the progress of city planning in this and other countries and shall make recommendation for the improvement of the plan of the city with view to the present and future movement of traffic, the convenience, health, recreation, general welfare and other needs of the city, dependent on the city plan; to consider and report upon the designs and their relation to the city plan of all new public ways, lands, buildings, bridges, and all other public places and structures, of additions to and alterations in those already existing, and of the layout and plotting of new subdivisions of the city."

The act further provides that the Council may at any time, call upon the Board to report with recommendations and that the Board may report of its own volition on matters which in the opinion of either body affect the plan of the city. Matters referred to the Board by the Council shall be acted upon within thirty

days unless a longer period is specified to the Council. An annual report on the Board's activities shall be rendered to the Council.

Other provisions are that the city engineer shall serve as chief engineer to the Planning Board; that the Planning Board shall constitute the Board of Park Commissioners and that the Board of Health shall advise the Planning Board of improvements which in its opinion would aid the healthfulness of the city.

It will be seen therefore that the powers of the Planning Board under the law are purely advisory and there is no compulsion whatever in regard to the carrying out of recommendations by the City Council. Again as has been stated should the Council elect to carry out by ordinance some of the more sweeping and important recommendations which could be made in order to render the plan comprehensive, no state laws would be found in force at this time making such ordinances effective.

The only hope therefore in inaugurating and carrying out such a far reaching scheme as is herein presented lies in obtaining popular approval. Generally speaking, whenever a city is in accord for a public improvement, ways and means will be found to put it through. The great undertaking which immediately presents itself therefore is in properly introducing the plan to the people. A campaign of education must be carried out skillfully and persistently, if the popular appreciation and enthusiasm is to be aroused and kept alive.

The carrying out of a city plan—

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ARROW COLLAR—We have all the new styles in both the soft and stiff collars.

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The Specialty Cloak Store

I. GOODKOWSKY, Prop.

application of the plan to the ground is a difficult and multiplex undertaking. Many projects are contemplated, some of which are needed now and some of which should not be attempted for years to come. The value of the plan, however, is chiefly in showing how these improvements co-ordinate, and in steering the city clear of mistakes in so arranging improvements first to be built that they will not interfere with equally important projects coming afterwards.

The city plan is so comprehensive and so far reaching that it cannot be officially adopted in the sense that the Council or any other public body shall pass upon it as final. The great danger is that although the present Council may endeavor to follow out the plan, a succeeding Council will partially or entirely lose sight of it.

Councils being directly responsible to the will of the people, it is necessary that the City Planning Commission go directly to the root of authority—the people. In order to do this effectively, certain machinery is needed. A Commission of three is hardly large enough to undertake such a campaign of popular education. While it may not be necessary to enlarge the official Plan Commission, we would suggest that it be supplemented by a citizens committee of twenty-five or possibly fifty members of a personnel that would be thoroughly representative. This committee should organize and departmentalize its work. The press, the schools and the pulpit may all be used to advantage in making the people of the city cognizant of the meaning and value of the city plan. Lectures before various organizations, special bulletins and leaflets explaining the application of parts of the plan as time comes for their consideration, would be of value.

Where this procedure has been carried out, and the plan has been kept free from political interference, most progress has taken place. As a matter of fact in few instances where city administrations have taken the initiative of city planning has important progress resulted. The same is true in cases where the work

has been engineered by official city plan commissions, the reason obviously being that the people are apprehensive that projects fostered by a political board are prompted by ulterior motives. A case in point is the lack of city planning progress which has taken place in the cities of Massachusetts. In that state a law makes mandatory city planning commissions in all cities of over ten thousand population. At the present writing no city in Massachusetts has a comprehensive city plan.

On the other hand, the city plan of Chicago, conceived and paid for by a commercial club of that city, has been so uniformly adopted by public sentiment that rarely can a public improvement be suggested that people do not at once ask, "Is it in accord with our city plan?" The Chicago plan although unofficial, being almost entirely unsupported by state laws or city ordinances and in itself superficial in character, is today guiding the expenditure of millions of dollars in reconstruction projects.

By far the most important part of the Auburn plan is that which has to do with guidance rather than with remodeling. The logical extension of streets year by year, following out the guide therein set forth, is by far the most important element of the plan, for in time to come, the city will thereby automatically become convenient to use and attractive to look upon. In all probability, the following out of this portion of the plan can be brought about without serious trouble.

The Council can, by ordinance, adopt this layout and refuse to make public improvements on streets not in accordance therewith. It is doubtful, however, that private property owners will take exceptions to the plan, inasmuch as it shows a logical way to improve their holdings and does away with the necessity of studying out a method of plotting. Most property owners are glad to adopt any scheme which seems to be in conformity with the general welfare of the city.

In the matter of industrial development and the working out of the factory district, the enlistment of the

services of the Chamber of Commerce will be especially necessary. These matters will have to be handled largely by private capital, assumably with the aid of the city government.

Better housing is a matter to be handled by the city ordinance with the aid of special state laws which may be enacted.

In the matter of railroad rearrangement, the working out of the various projects suggested will have to depend largely upon their economical advantage to the railroads and upon the diplomacy and energetic action of the citizens committee, the City Council, the Chamber of Commerce and other such bodies. The same holds true of improvements and extensions to the car lines. In the matter of installing parks, the making of various corrections to streets, the acquiring of school sites, etc., the city has, of course, necessary powers, the only limitations being the available bonding capacity of the city and the consent of the electors. The balance of Auburn's bonding power is not large, the amount being approximately \$225,000. Money is needed for paving, lighting of streets and for better sewerage. The city therefore cannot afford to be extravagant or to attempt projects which can be done without. A city must practice economy and forbearance like the individual. It cannot, however, afford to omit suitable provision for the future in such matters as pertain to the acquisition of school and park sites. Especially should it act in such matters to prevent the loss due to the advancement in the price of real estate.

Lastly it should not be considered that this plan is infallible or a panacea for all the city's structural defects. Modifications will doubtless be made in the plan to the city's advantage. It is not to be expected that all the recommendations cannot be improved upon or is it to be expected that all the projects can be carried out.

If the plan will prevent the city from making but a single mistake of consequence, the labor and money expended therefor will prove a good investment.

REPORT ACCOMPANYING DELIVERY OF PLANS TO CITY COUNCIL

TO THE AUBURN CITY COUNCIL:

Your contract with Myron H. West for a comprehensive city plan expires with the completion of the plan.

We herewith present to you a full set of maps, prints and drawings, together with the complete city plan report.

This plan was produced at the expense of Auburn's tax payers and we recommend that it be used as their property for their benefit. We do not recommend spending any more money under this present administration for this plan. It is true that the plan should be published in book form and we hope to see this done, at some future time. With your permission we believe we can arrange through the Chamber of Commerce to give the plan a reasonable amount of publicity so that it may be thoroughly understood and appreciated by the general public. We favor united effort toward voluntary adoption of those features of the plan which are applicable to our immediate needs and can be brought about without expense to the city. We believe that the platting of new sub-divisions should be approved by the planning board and their engineer.

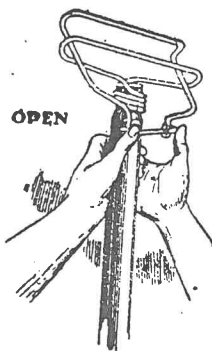
We would recommend immediate passage of such ordinances as the city council may properly pass for the control of new plotting and new development. We would recommend ordinances revising and strengthening our building code. We recommend ordinances protecting, so far as is in the power of the city, the entire shore of Lake Auburn as shown in Lake Auburn Boulevard and park plan. We further recommend occasional conferences between the various city boards to the end that their several activities may harmonize with the general scheme and policy of the city plan.

Very respectfully,

FRANK W. WINTER,
Chairman of C. P. B.

November, 1919, Auburn, Me.
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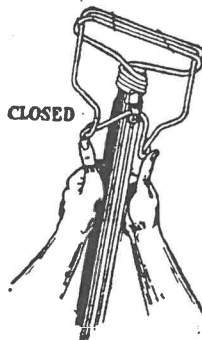
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Scientific manufacture has strengthened the stress point without adding weight.

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