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A CIVIC SURVEY OF AN IOWA MUNICIPALITY

A Preliminary Report on a City Plan for Mason City, Iowa

BY ROLLAND S. WALLIS



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ENGINEERING EXTENSION DEPARTMENT
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A CIVIC SURVEY
OF
AN IOWA MUNICIPALITY

A Preliminary Report on a City Plan for Mason City, Iowa

By

ROLLAND S. WALLIS

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Ames, Iowa

PREFACE

While this report is focused on the problems of one Iowa community, its discussions apply to many others throughout the state. Mason City is in most respects a typical rapidly-growing city. Most of its problems are problems commonly encountered in other communities. The Mason City survey was undertaken to furnish a basis for a report intended to be of suggestive value to every municipality in Iowa.

So many individuals and organizations have contributed to the progress of the civic survey of Mason City that it would be impracticable to give specific credit for all such assistance. It is desired, however, to mention certain instances of the hearty cooperation so uniformly extended.

The steady backing of the officials of the Chamber of Commerce has been in evidence throughout, particularly that of its competent secretaries—Mr. H. M. Van Auken, during whose office the work was begun, and his successor, Mr. Lester Milligan, who has proved untiring in his interest and helpful cooperation. Many of the members of the City Planning Subdivision of the Chamber have given most generously of their time and efforts in carrying out the work of this survey.

All requests for information have met with gratifying responses on the part of municipal officials. Much information was secured through Mr. C. H. Stevens, city engineer, whose long experience in and about Mason City has made him a fruitful source of information on local conditions and history. The many courtesies extended by Mr. E. H. Crofoot, manager of the water department, together with his interest and valuable suggestions, also have been heartily appreciated.

The exceedingly valuable cooperation of Mr. Walter H. Ross of the Iowa Insurance Service Bureau in placing his valuable maps at the disposal of the survey committee, together with his careful checking of the copies, deserves special mention. The interest of Mr. W. F. Muse and Mr. Enoch Norem has been responsible for the considerable publicity and impetus given to the city-planning movement in Mason City through the columns of the Globe-Gazette.

Much credit for the concrete results of the survey should go to Mr. Milton J. McColm of Sioux City, who was temporarily employed by the Engineering Extension Department in connection with this project.

While it is not feasible to give credit for such commonly-accepted principles and ideals of city planning as are set forth on the pages of this report, much credit is due to the many authorities who have made substantial contributions to the public storehouse of city-planning knowledge.

FOREWORD

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CONTENTS

| CHAPTER | PAGE |
|--|------|
| I. INTRODUCTION | 9 |
| Need of City Planning | 10 |
| Nature of City Planning | 11 |
| Some Popular Fallacies | 12 |
| II. THE PROJECT | 13 |
| Object of Report | 14 |
| III. MAKING THE SURVEY | 15 |
| Value of a Survey | 15 |
| Survey Procedure | 15 |
| Fundamental Data | 22 |
| Presentation | 26 |
| IV. SURVEY ANALYSIS AND RECOMMENDATIONS | 29 |
| Natural Physical Conditions | 29 |
| Early History | 31 |
| Population | 34 |
| Area | 36 |
| The Street System | 36 |
| Grade Crossings | 45 |
| Traffic Regulations | 50 |
| Transportation | 52 |
| Public Recreational Facilities | 57 |
| Public Schools | 73 |
| Housing | 74 |
| Sanitation and Public Health | 87 |
| Public Utilities | 95 |
| Public and Semi-Public Buildings | 97 |
| Appearance of the City | 100 |
| Zoning | 112 |
| Public Nuisances | 116 |
| Industries | 118 |
| Carrying Out the City Plan | 119 |
| V. STATUS OF CITY PLANNING IN MASON CITY | 125 |

A CIVIC SURVEY OF AN IOWA MUNICIPALITY

I. INTRODUCTION

Iowa is usually thought of as being an agricultural state. In the 1920 Census, however, 36.4 per cent of its population was classified as urban; and this figure did not include 832 towns that had populations numbering less than 2500. Had all of these incorporated towns been included as urban territory, over 56 per cent of Iowa's population would have been accounted for. In fact, a little more than one-half of the people of Iowa live in municipalities having populations over 500.

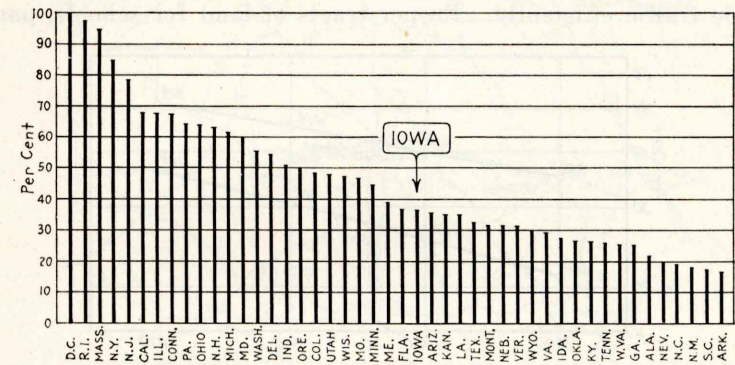


Fig. 1. Percentages of state populations living in towns having populations over 2500.

In comparison with the other states, Iowa ranks about midway as to its percentage of urban population (Fig. 1). The diagram shown as Fig. 2 shows that this ratio is increasing at a rapid and uniform rate, and that it is increasing at a more rapid rate in Iowa than in the United States as a whole.

These population facts have been mentioned because they show the growing importance of Iowa's municipalities. It is time that their problems be given their fair share of attention.

The municipal officials of the typical Iowa town are conscientiously trying to manage the affairs of their community properly, and the surprisingly efficient results that they secure indicate the exercise of much good, sound common-sense on the part of these public servants. For the most part, however, the time that they

can afford to devote to community affairs is insufficient to enable them to study much beyond the solving of routine matters in urban government and management.

Need of City Planning

As time goes on hamlets come to be villages, villages to be bustling towns, and towns to be small cities. The transition of a municipality from town to small city is a particularly trying period full of many perplexing problems. When one considers how rapidly these problems multiply, it is not strange that many phases of city growth are neglected. Thus it happens, in one community after another, that the same mistakes go unrecognized until, in many cases, it is too late to remedy them at a reasonable cost. Poorly-arranged streets are allowed to build up with expensive business structures, so that it soon becomes very difficult to do away with dead-end streets, awkward jogs, and streets that are too narrow to handle traffic efficiently. Proper tracts of land for schools, parks,

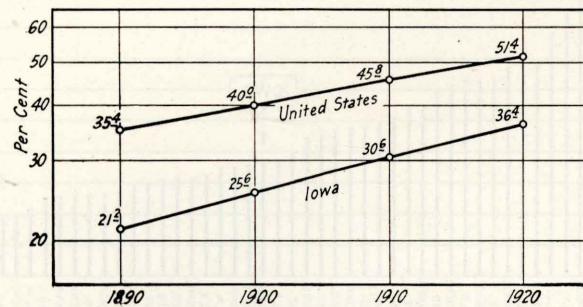


Fig. 2. Comparative increases in urban population (towns over 2500) for the United States and for Iowa.

and playgrounds are not secured in time, so that land inferior as to type and location is often all that can be secured at any reasonable price after the property really needed has been given over to other developments.

In order that a community may enjoy an efficient physical growth and constantly grow to be a more convenient, healthful, and pleasant place in which to live, it is necessary that there be organized planning for its future growth. Planning of this sort has come to be known as 'city planning.'

The unplanned town grows in a piecemeal fashion—first one necessary improvement is made and then another, with little or no correlation. Where there is a comprehensive plan for the future, each necessary improvement takes place in a logical order and coordinates with the other improvements already made, as well as with those to come. Lost motion, duplication, and interference are

avoided. The results are more efficient, better-appearing, and more economical as to cost than result from haphazard growth.

Nature of City Planning

After all is said, city planning simply means planning ahead for an orderly and efficient community growth. As time goes on many improvements must be made. Obviously, these improvements will be far better coordinated if all are tied into a comprehensive plan. Their cost cannot be avoided. City planning will tend to reduce

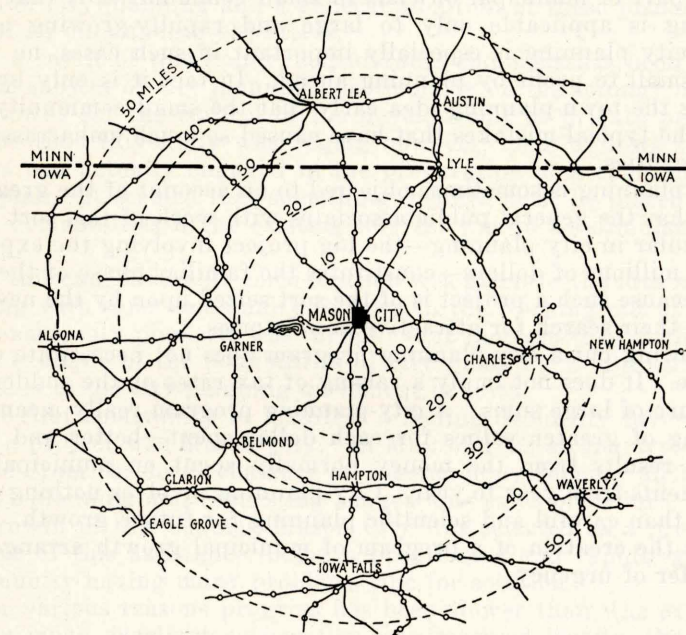


Fig. 3. Mason City as a railroad and distributing center. This sketch map shows the towns and connecting points within a radius of fifty miles.

this cost by preventing interference and duplication—by making every improvement count for its full value toward the desired end. Careful planning avoids the mistakes commonly made and, by correcting existing mistakes in streets and circulation, reduces the cost of doing business—in other words the cost of living in any town. These, very briefly, are the fundamental arguments for city planning.

A comprehensive city plan should be broad and general in nature—a sort of ideal to guide the future growth of the community. The working out of the details of each public improvement is left for the

future. Plans and estimates are carried only to the point where the feasibility of each project is assured.

Some Popular Fallacies

It should not be thought that city planning usurps the functions of any municipal official—such planning really serves them by combining and coordinating their ideas into one comprehensive plan to guide the future growth of their communities.

City planning should concern every community. A common error on the part of municipal officials in small communities is that such planning is applicable only to large and rapidly-growing cities. While city planning is especially important in such cases, no town is too small to profit by planning ahead. In fact it is only by embracing the town-planning idea early that the small community can avoid the typical mistakes that have caused so much embarrassment to large cities.

City planning is sometimes objected to on account of the great expense that the general public associates with work of this sort. The spectacular in city planning—the big project involving the expenditure of millions of dollars—constitutes the familiar phase of the subject, because such a project is of the sort seized upon by the newspapers in their search for attractive news stories.

Following out a city-planning program does not necessitate extra expense. It does not imply a raising of tax rates or the sudden expenditure of large sums. A city-planning program really means the securing of greater values for each dollar spent—better and more lasting results from the money normally spent on municipal improvements from year to year. City planning involves nothing more or less than careful and scientific planning for future growth. This implies the creation of a program of municipal growth arranged in the order of urgency.

II. THE PROJECT

Recognizing the growing need for city planning throughout the municipalities of Iowa, as well as the engineering character of the fundamental problems in city planning, the Engineering Extension Department has for a number of years regarded the forwarding of a movement looking toward a state-wide understanding of the advantages of city planning and a general adoption of these principles as one of its outstanding objectives.

As a result of this policy, considerable emphasis has been placed on the subject of city planning, particularly on the zoning* of cities and towns for the control of the development of private property. At the time this study was begun, however, none of Iowa's larger towns was actually engaged in the preparation of a comprehensive city plan. It seemed that something definite must be placed before Iowa communities if the existing interest was to be stimulated into action.

To this end, favorable consideration was given to the idea of cooperating with some community in Iowa in the working out of a comprehensive city plan. It was thought that the results of such a concrete example of the possibilities of city planning would serve as a stimulus to the city-planning movement in Iowa.

The first community to manifest a feeling decidedly favorable to such a project was Mason City. In May of 1922 an inquiry was received from the local chamber of commerce evidencing an interest in city planning and requesting suggestions as to procedure. As an outgrowth of this contact, Mason City was selected as a proper recipient of this assistance, being a progressive and rapidly-growing community having many problems ripe for solution.

For various reasons progress has been slower than was expected. While much excellent cooperation was received locally, the collection of the needed information has been handicapped in several ways. Another serious handicap resulted from various unexpected demands on the time of the Engineering Extension Department personnel.

During this period the efforts of those working toward the securing of certain city-planning legislation resulted in securing a zoning enabling act, which was passed by the State Legislature in 1923.

*Two bulletins on zoning have been issued by the Engineering Extension Department: Bulletin 52, "Zoning for Iowa Cities and Towns" (contains the text of the state zoning law), and Bulletin 65, "Zoning Procedure for Iowa Municipalities."

The passage of this act has done much to stimulate a definite interest in zoning—a very important phase of city planning. A number of Iowa communities, both large and small, have appointed zoning commissions which are actively at work. At least three of our larger cities are engaged in working out comprehensive city plans in connection with their zoning ordinances.

This zoning legislation was followed, in 1925, by the passage of an act (Chap. 117-41 G. A.) authorizing all municipalities to create and to maintain city-plan commissions. This act has placed city planning in Iowa on a firm legal basis.

Object of Report

City-planning progress has been so marked, subsequent to the passage of the legislation referred to, that the advantages of working out and publishing a comprehensive city plan for an Iowa community as an example for other Iowa municipalities have been materially diminished. Several excellent examples of such city plans will soon be available. It has been thought best, therefore, to make this report preliminary in character.

Consistent with this decision, no attempt will be made to present detailed solutions of the local problems or projects discussed, such as would constitute a part of a city plan for Mason City. The report will serve, however, to sum up much of the fundamental data on which such a plan must be based, as well as to discuss the collection and presentation of such information. The procedure of the Mason City survey and the facts secured will be used as illustrative material.

The following discussions and recommendations, then, are presented with a two-fold purpose: (1) to guide Mason City's city-plan commission-to-be toward the preparation of a complete plan for the future growth of the city, and (2) to guide in a general way similar organizations in other cities.

Of the various suggestions tentatively advanced, a goodly share are of local origin. This publication, then, might be regarded as serving another purpose—that of assembling a number of local ideas for the consideration of the people of the community.

III. MAKING THE SURVEY

A civic survey is the getting together of available data on the local conditions that affect community growth and development. It includes the collection, compilation, and presentation of all information relative to the physical, social, economic, and financial conditions of any municipality.

The amount and character of the information necessary depends on the purpose of the survey and on local conditions. Information necessary in one community might prove of little value in another. Good judgment is needed in determining just how far to carry such investigations; beyond a certain point the information may not be worth its cost. Ordinarily a considerable saving in time and effort may be made by having the survey outlined and directed by someone experienced in city-planning investigations.

Value of a Survey

City planning necessitates studying ahead in order to estimate and provide for the future growth of a community. Such a forecast must be based on a study of present and past conditions and tendencies. The civic survey, in supplying just such information, constitutes a necessary basis for city-planning studies.

While the fundamental purpose of most civic surveys is to collect data to serve as a basis for city planning, the information is well worth collecting and assembling even if no such use were ever made of it. Such data, clearly and attractively presented, will go far towards establishing a 'know your community' sentiment. Greater interest in community affairs invariably results in community progress.

Survey Procedure

Much of the information needed can be collected by local committees working under the guidance of an experienced survey director. Important sources of valuable data are the records of city engineers, city assessors, real-estate men, the railroads, and the public utilities. While such a survey necessarily means a lot of hard work, with the right spirit of cooperation in evidence throughout a community, excellent results may be secured without any great outlay of funds or of individual effort.

Organization. Some local group must organize to handle the survey. In Mason City the project was headed at first by the City Planning Subdivision of the Chamber of Commerce. Usually it tends to do

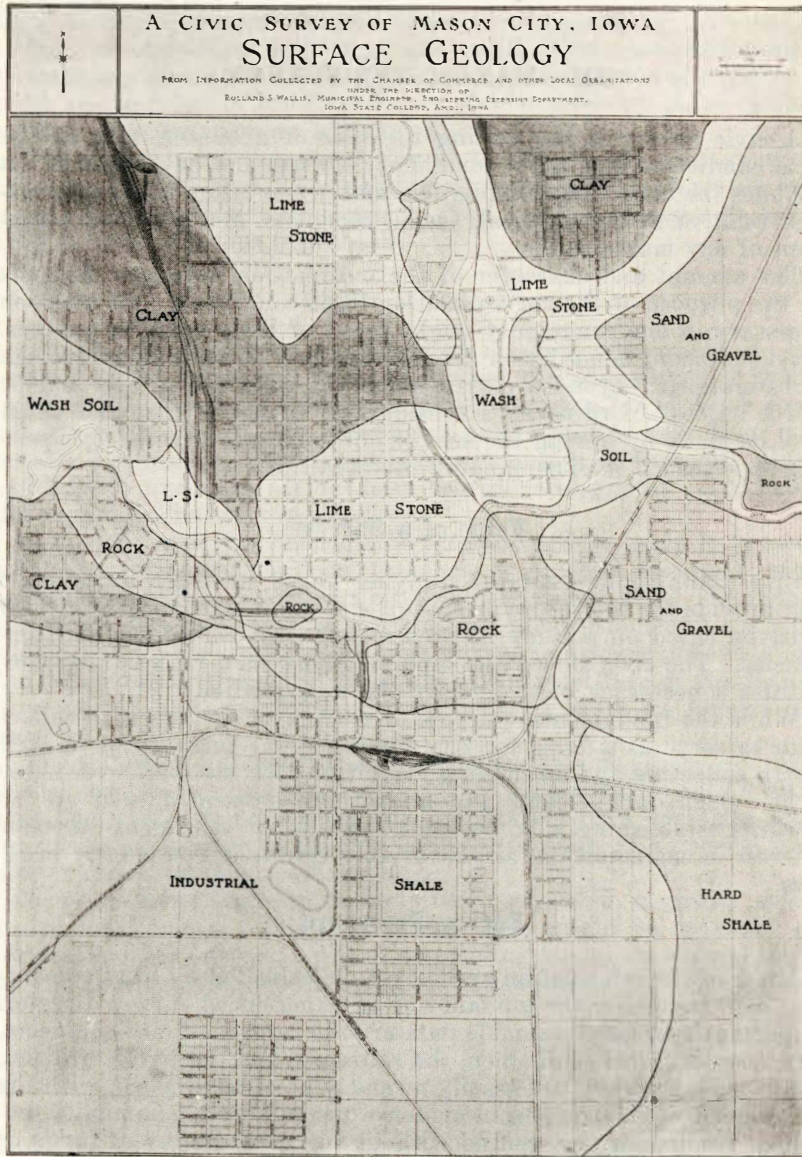


Fig. 4. This map shows the varied surface conditions throughout Mason City. The data for this map were furnished by Mr. C. H. Stevens, city engineer.

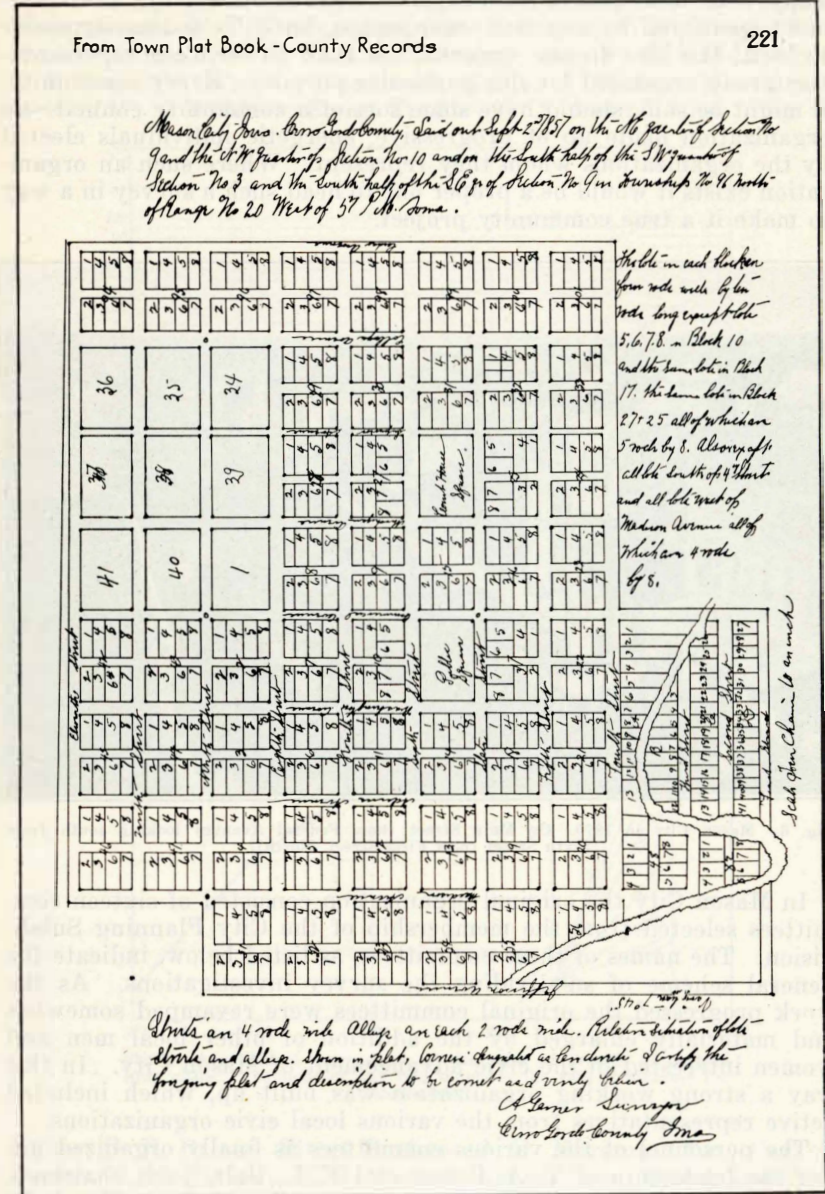


Fig. 5. Paul Felt's plat—considered as completing the original official platting of Mason City.

away with local jealousies and enmities to avoid having the movement sponsored by any one organization, but it is ordinarily easier to 'sell' the idea to one organization than to secure a representative group organized for this particular purpose. Every community, it might be said, should have some sort of a community council—an organization made up of progressive, energetic individuals elected by the organizations whom they represent. Where such an organization exists it would be a proper one to head such a survey in a way to make it a true community project.

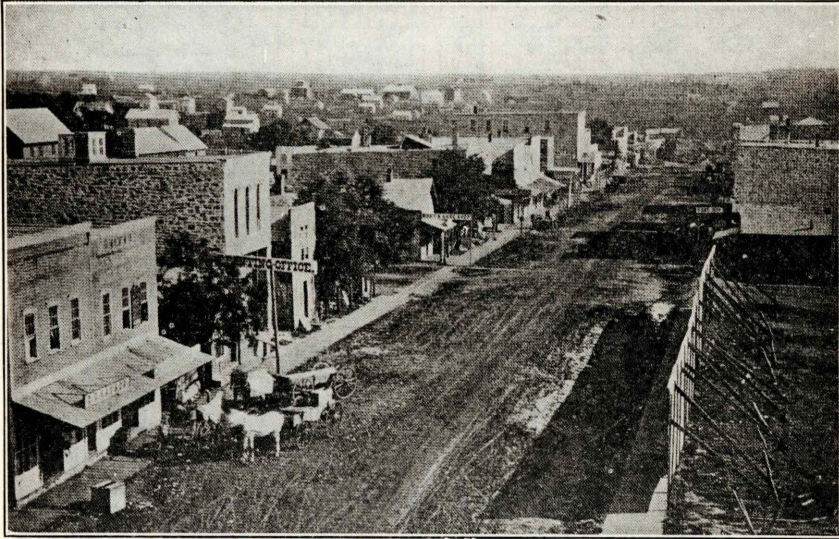


Fig. 6. Mason City in 1870. On Main Street (now Federal Avenue) looking south from Sixth Street (now First Street, North).

In Mason City the original organization consisted of sixteen committees selected from the membership of the City Planning Subdivision. The names of these committees, as listed below, indicate the general scheme of subdividing the survey investigations. As the work progressed the original committees were revamped somewhat and materially enlarged by the addition of other local men and women interested in the civic advancement of Mason City. In this way a strong working organization was built up, which included active representatives from the various local civic organizations.

The personnel of the various committees as finally organized under the leadership of T. A. Potter and E. L. Balz, joint chairmen, follows: **Zoning**—George S. Marty, Chm., Allan F. Beck, Frank D. Pearce, Raymond Zack, A. M. Schanke, Walter H. Ross; **Transportation**—F. C. Eslick, Chm., H. W. Odle, L. L. Forbes, S. H. Arne-

son, E. H. Wagner, Claude Newman, B. J. Drummond; **Parks and Playgrounds**—F. T. Vasey, Chm., Geo. E. Penson, C. E. Gilman, Miss Arcley Marshall, Fred Thomas; **Housing**—Dan F. McMillan, Chm., J. F. Schaible, Wm. L. Woodward, Walter J. Walker, Miss Agnes Helbig, W. S. Winders; **Street Traffic**—O. A. Merkel, Chm., Roy W.

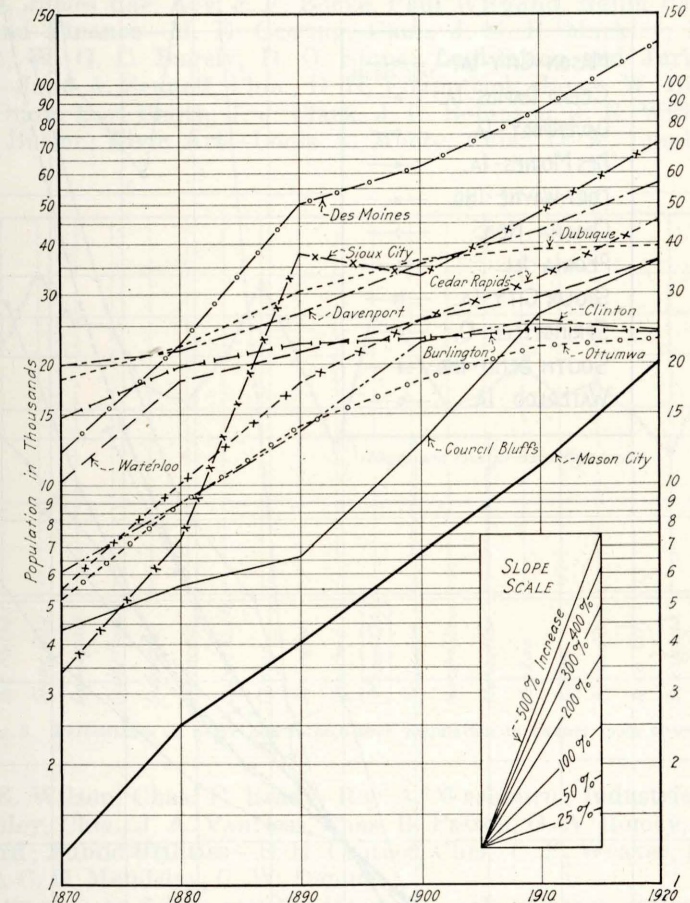


Fig. 7. A graphical comparison of the rates of growth of certain Iowa cities. The slope of any line indicates the rate of increase for that period.

Keller, G. E. Bresse; **Street System**—J. H. Marston, Chm., Carl A. Parker, C. H. Stevens, W. L. Patton, Albert Hass; **Street Details**—Mrs. C. H. McNider, Chm., Mrs. J. E. Blythe, Mrs. D. H. Fitzpatrick, John W. Hare, H. M. Knudson, E. A. Ely, Mrs. Vesta Martin, Mrs. Frank E. Nelson, Mrs. W. F. Muse, Mr. E. W. Clark; **Sanitation and**

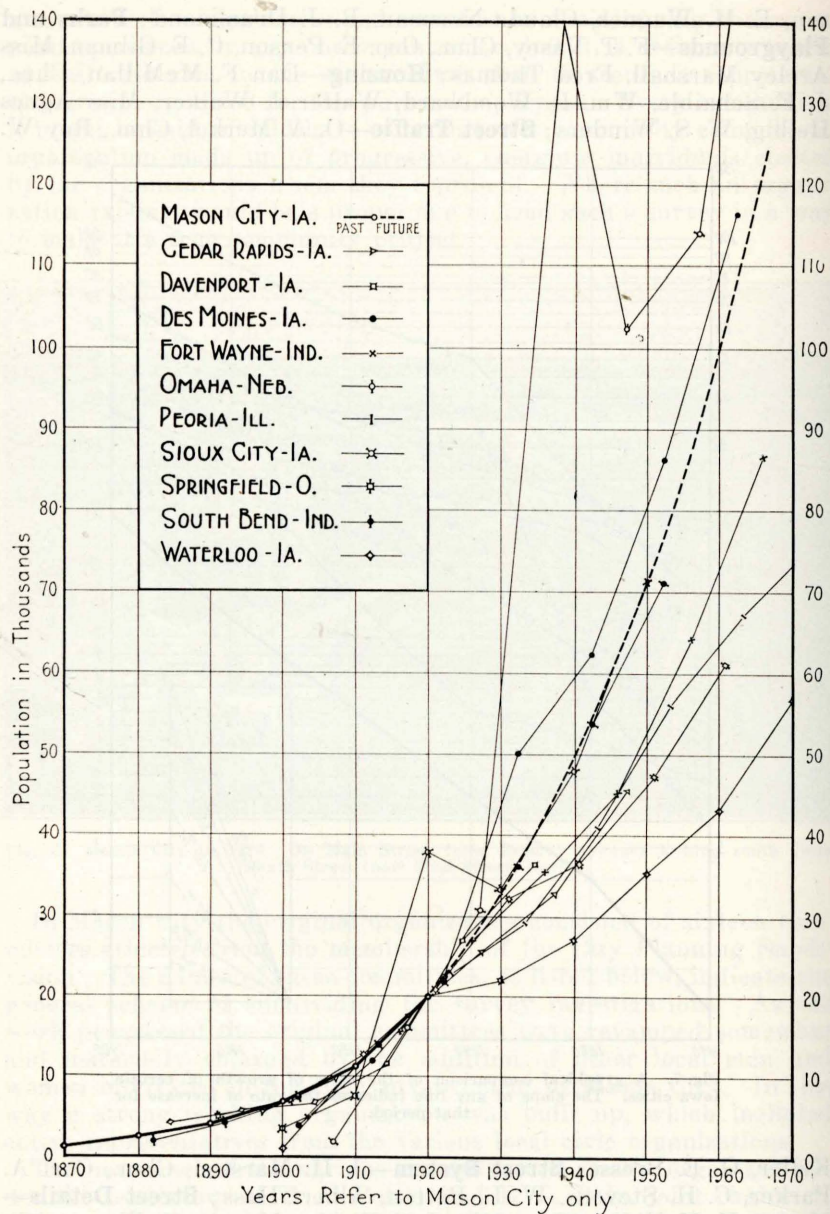


Fig. 8. A graphical comparison of the population curves of certain selected cities with a curve showing Mason City's past and probable growth.

Public Health—G. O. Gould, Chm., Dr. C. E. Dakin, G. C. Blackmore, C. H. Stevens, H. B. Hasbrouck; **Publicity**—W. F. Muse, Chm., C. H. McNider, B. C. Way, W. J. Holahan, Enoch Norem; **Nuisances**—Dr. Geo. M. Crabb, Chm., J. D. Evans, Hardy F. Pool, Ralph Lloyd Jones, W. A. Westfall; **Public Buildings**—J. W. Beck, Chm., W. S. Wilcox, James Rae, Rev. J. F. Boeye, Paul Wiegand, Ralph Patton; **Law and Finance**—M. E. Geeting, Chm., J. E. F. Markley, R. F. Clough, W. G. C. Bagely, D. O. Stone; **Legislation and Jurisprudence**—John A. Senneff, Chm., D. H. Fitzpatrick, James W. Blythe, E. C. Dunn, Earl Smith, J. J. Clark, J. C. Robinson, J. E. Williams, W. P. Butler; **Civic Art**—Louis A. Moore, Chm., D. K. Lundberg,

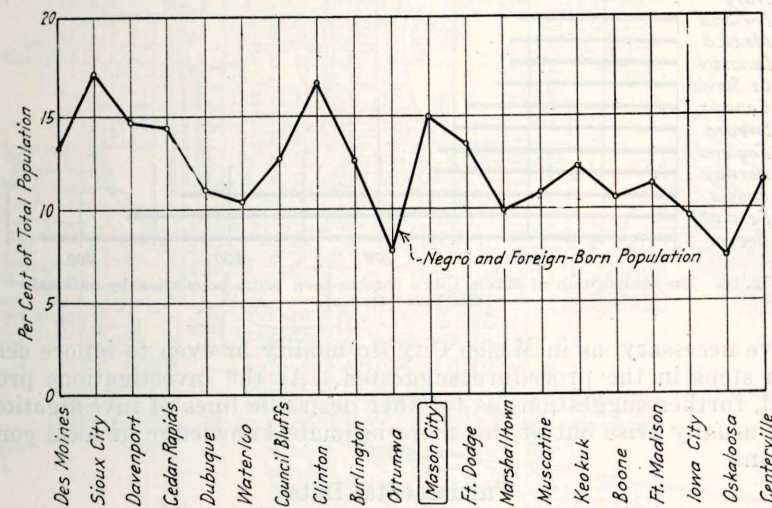


Fig. 9. Percentages of negro and foreign-born population in twenty Iowa cities.

Wm. E. Wilson, Chas. F. Brady, Roy A. Washburn; **Industries**—R. E. Pauley, Chm., J. A. VanNess, Chas. R. Patton, G. A. Romey, High Shepard; **Public Utilities**—E. H. Crofoot, Chm., C. F. Weaver, North Lientz, C. G. Maudsley, C. W. Damon.

Meetings. At fairly regular intervals each of these committees was called together for the purpose of reviewing their progress and of making such suggestions as seemed called for by the developments. Joint meetings of all the survey committees were held at less frequent intervals. The purposes of these meetings were to obtain (1) brief progress reports from each of the committees, (2) an exchange of opinions and suggestions between committees, and (3) the inspiration that the work of the stronger groups afforded for those that tended to lag behind.

Instructions to Committees. With the purpose of giving them something definite on which to work, a set of preliminary suggestions (see Supplement) was furnished to each of the survey committees. These suggestions as to the information desired were based on a purely superficial knowledge of local conditions, and they may be regarded as generally applicable to other communities. It may

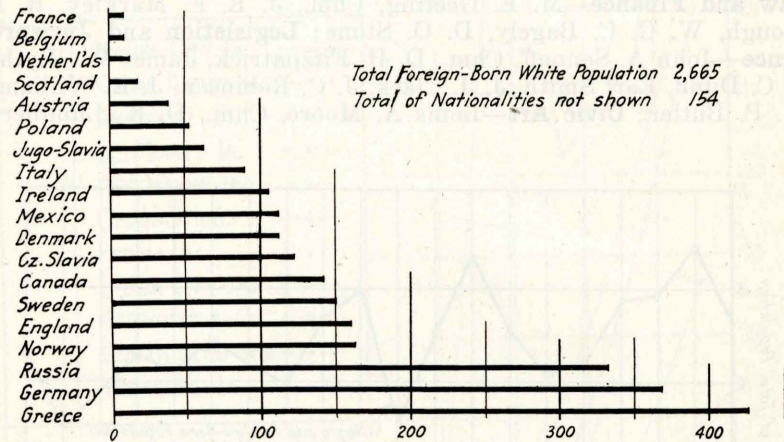


Fig. 10. The composition of Mason City's foreign-born white population by nationalities (1920 census).

prove necessary, as in Mason City, to modify or even to ignore certain steps in the procedure suggested. As the investigations proceed, further suggestions as to other desirable lines of investigation will usually arise out of this more intimate knowledge of local conditions.

Fundamental Data

The fundamental data needed as a basis for city-planning studies consist of information on existing conditions in the community—

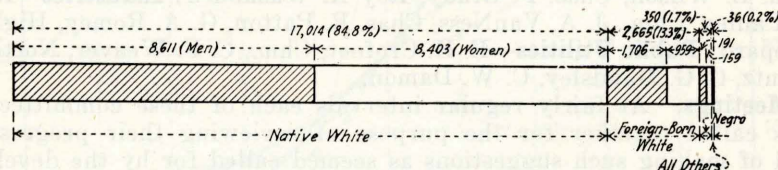


Fig. 11. The composition of Mason City's population according to the 1920 census.

physical, social, economic, and financial. Since the instructions given to the Mason City survey committees outline in detail the collection of such data, it seems sufficient here to state the scope of the survey in more general terms.

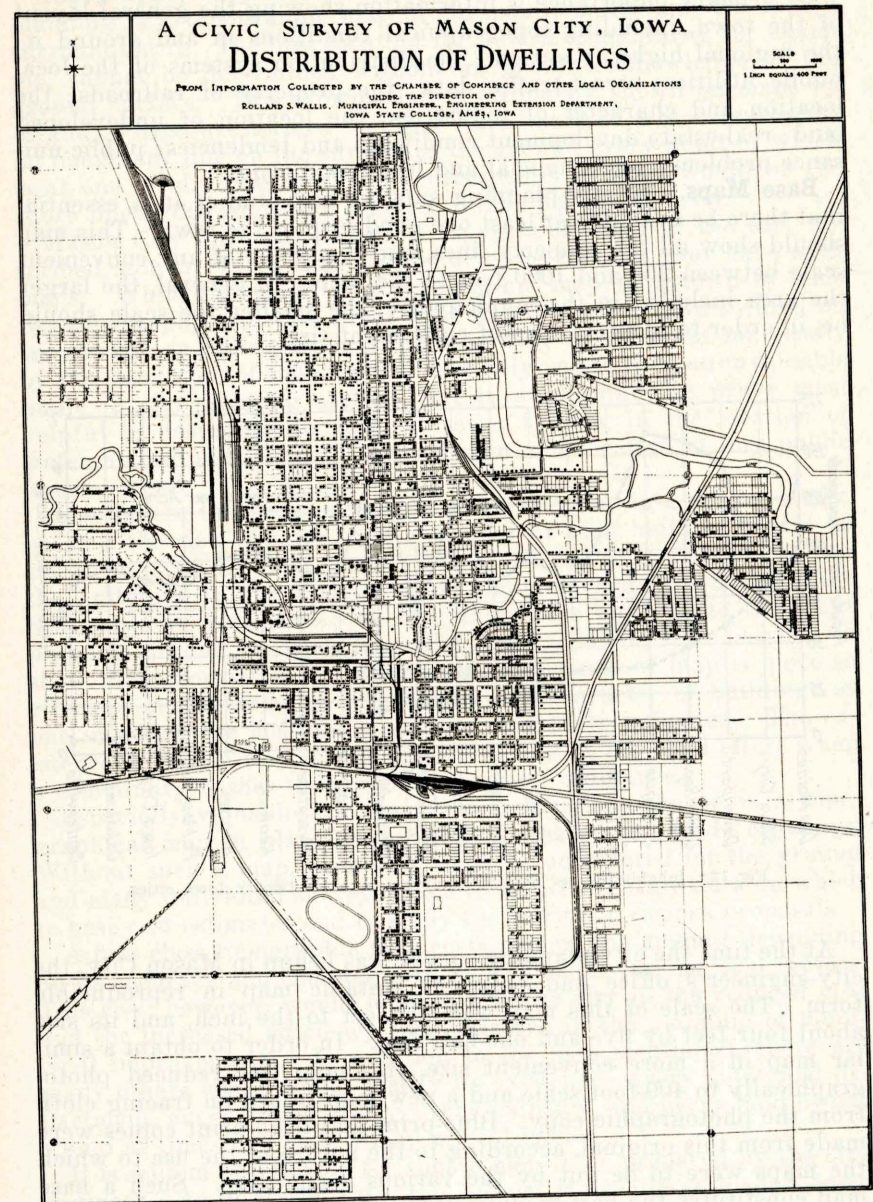


Fig. 12. The distribution of population is approximately indicated by this map showing the distribution of dwellings.

Of primary importance is information showing the general layout of the town, including topographical conditions in and around it; the regional highway system; the distribution systems of the local public utilities; street-traffic data; the property of railroads; the location and character of industries; the location of undeveloped land; real-estate development conditions and tendencies; public-nuisance problems; and financial and legal conditions.

Base Maps. In city-planning surveys and studies it is essential that there be available at least one good map of the town. This map should show all the property lines, and it may be of any convenient scale between 200 and 1000 feet to the inch. In general, the larger the area included in the municipality, the smaller the scale should be, in order to secure a map of convenient size.

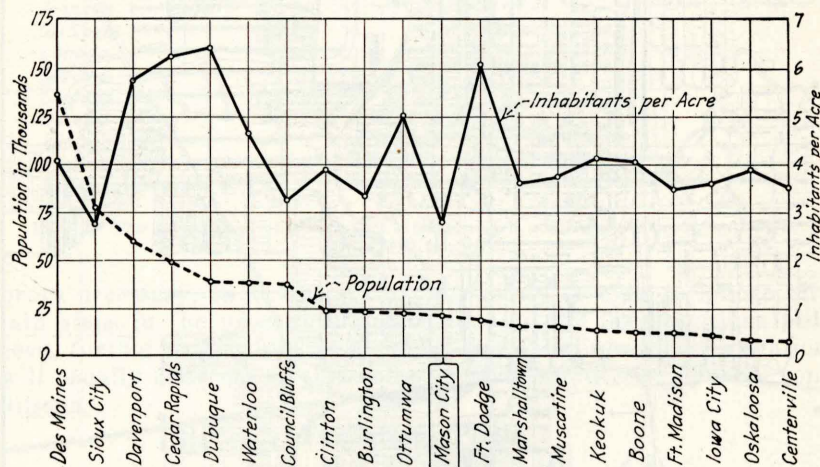


Fig. 13. Inhabitants per acre of municipal area for twenty Iowa cities.

At the time the city-planning survey was begun in Mason City, the city-engineer's office had only one suitable map in reproducible form. The scale of this map was 300 feet to the inch, and its size about four feet by five and one-half feet. In order to obtain a similar map in a more convenient size, this map was reduced photographically to 400-foot scale and a new map traced on tracing cloth from the photographic copy. Blue-print and litho-print copies were made from this original, according to the nature of the use to which the maps were to be put by the various committees. Such a base map constitutes the best medium for putting the results of the survey into graphical, easily-understood form—valuable alike to the public and the planning organization.

Topographic Maps. A fundamental requirement for good city planning is a topographic map of the municipality and the region surrounding it. The best location for new thoroughfares, for example, cannot be determined without an accurate knowledge of the ground surface. This information is ordinarily shown on maps by means of what are termed 'contour lines,' each of which represents an imaginary line on the surface of the ground every point of which is at one level. Each such line corresponds to what would be the shore line if the land were flooded to that particular level.

Mason City does not possess a topographic map of the sort described, nor are there many towns or cities in Iowa that have such maps. While the value of a topographic map to a town of such flat topography is not so great as it would be to a town located on very rough or rolling land, still Mason City would profit materially by the possession of such a map. Not only would it be an invaluable guide in city-planning studies, but it would likewise prove most helpful in designing an efficient sewer system, in the location of water mains, and, in fact, in the design and location of any public improvement.

A complete topographic map is of great value in a zoning study, because the size, location, and character of each building would be shown on such a set of maps. One could see at a glance whether the buildings in any district were semi-detached or whether they had yards on both sides; whether they were built up to the front property-line or set back from the street. While it is possible to show this information by other methods, no sort of map is quite so effective in showing the distribution and character of buildings as one in which the location of each is accurately indicated. The existence of such a map means a great saving of time and effort when a community wishes to formulate a zoning ordinance.

Especially valuable are the ground elevations shown on a topographical map in planning for the elimination of grade crossings. Without such a map, each case must be considered on the ground and many individual surveys made to secure accurate data on which to base cost estimates and to study the merits of various proposals.

A first-class topographic map costs money, the amount depending on its accuracy and completeness, as well as on various local factors. This cost, however, would be repaid to the city in the reduced cost and the increased efficiency thus obtained in the planning of municipal improvements. In addition to the uses mentioned, there are many others which would justify its existence—every municipal department, every public utility, every industry, and every land owner would at times find such a map of real value.

It is seldom practicable for such a map to be prepared by the city engineer. As in Mason City, this official is usually so loaded down with routine engineering, surveying, and the keeping of proper records that the attempting of a project of this magnitude within a rea-

sonable length of time would be out of the question. It is unfortunate that city engineers, as a class, are continuously swamped with detail work—the clerical and engineering drudgery connected with their work. A city engineer should have plenty of help and adequate facilities, so that he may have time to study the future needs of the community in order to direct its physical development in a broad way—in short to be its real city planner.

With conditions as they exist in the average city, it is usually the better plan for the municipality to contract with some reliable topographic engineer to execute such a survey. In addition to relieving the busy city engineer, this plan places the work in the hands of specialists, with the result that greater speed and accuracy are obtained.

Presentation

The results of the survey, when collected and properly recorded, should be presented in a clear and interesting manner, preferably by transferring the information to charts, diagrams, and maps. Much ingenuity may well be exercised in the application of the available devices ordinarily used in the graphic presentation of facts to the problem of presenting the information in an interesting and forceful manner. Such graphical methods, properly applied, make the data clearer to the average person and amply justify the extra time and effort that their preparation requires.

Such maps and diagrams serve a dual purpose in that they are a great convenience to the planning organization in its studies and a like convenience in putting a knowledge of existing conditions clearly before the people of the community in connection with subsequent city-planning proposals.

Photographs. Photographs should be freely employed as supplementary records. Pictures of existing conditions, both good and bad, are of great value in connection with public discussions on the advantages of city-planning projects. Many such photographs may be effectively used as lantern slides. In subsequent years such a collection of photographs would come to constitute a public record of considerable historical, and perhaps legal, importance.

Maps. Much of the information to be secured by the survey can best be shown on maps. Suitable copies of the base map should be used for this purpose. The use of color, preferably in the convenient medium of colored pencils or crayons, is of great value in emphasizing conditions brought out by the survey. If maps are to be reproduced as line cuts for printing, it is essential to keep all symbols or designations in black and white, or color combinations that will photograph black—such as red and black.

A complete list and description of the maps prepared in connection with the Mason City survey is included (see Supplement) for

its suggestive value. Some of these have been reproduced, certain others have been modified for better reproduction, while others have been omitted. Enough have been included, however, to illustrate their general form and the methods employed. The original maps measure about three by four feet.

IV. SURVEY ANALYSIS AND RECOMMENDATIONS

Natural Physical Conditions

Location. Mason City is located in Iowa's north-central district, about twenty-five miles south of the Minnesota line and one hundred miles west of the Mississippi River. It is the county seat of Cerro Gordo County, and is an important industrial and railroad center. Its relative location with respect to other towns within a fifty-mile radius is shown in Fig. 3, while the territory immediately surrounding the city is shown on the sketch map used as the cover illustration.

Topography. The topography of the district in which Mason City is situated is very uniform—its surface that of gently rolling prairie varied only by the natural drainage, of which Lime Creek constitutes the main channel. This stream, with its tributaries, drains most of Cerro Gordo County. The general level of the county ranges between 1,000 and 1,250 feet above sea level. The topography of Mason City, for the most part, is flat. There are no ponds or lakes within its boundaries, and the two streams, Lime Creek and its tributary Willow Creek, constitute practically the only natural handicaps to the expansion of the municipal area. Of far greater significance in this respect are the various industrial holdings and excavations that make up a large part of Mason City's outlying area.

Soil. There are some seven different types of soil to be found in Cerro Gordo County, but two-thirds of the county's area is surfaced with what is known as 'Marshall loam,' while more than one-half of the remainder is covered with what is known as 'Marshall clay loam.' The Marshall loam, which averages about 18 inches in depth, is rather black or dark-brown, rich in organic matter, and of a mellow texture. It contains considerable quantities of sand of all grades of coarseness, and this distinguishes it from the heavier Marshall clay loam. For the most part the subsoil consists of clay containing sand and decomposing rock. The deep subsoil is glacial drift.

Geology. The surface geology of the land in and about Mason City is responsible for much of the industrial growth of the town and, at the same time, presents to the community several problems difficult of solution. The Lime Creek shales provide an ideal clay mixture for the manufacture of brick and tile. These deposits are not found elsewhere at workable depths. The extensive limestone and shale deposits are responsible for the local cement factories, while the extensive sand and gravel deposits supply these building

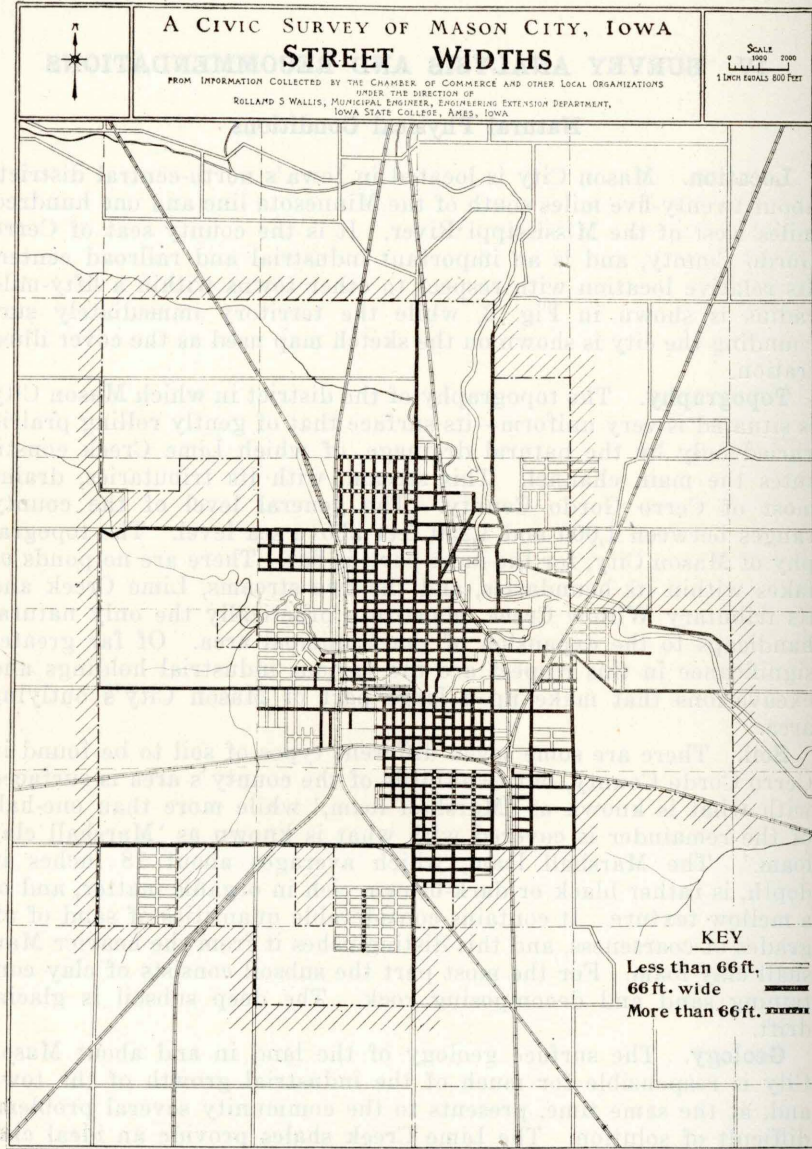


Fig. 14. Street widths in Mason City. This shows standardization of streets rather than functional design.

materials to a large area. One of the survey maps (Fig. 4) shows the extent and the nature of the various geological deposits at or near the surface throughout the main area of the city. It is interesting to study this map in connection with the survey map showing industrial holdings in and about Mason City (Fig. 72), and to note the natural barriers to city expansion created by these holdings. The presence of rock at or near the surface has been an important factor in preventing the development for residential use of certain areas otherwise desirable.

Early History

The development of the region in which Mason City is situated has taken place in less than three-quarters of a century. The first



Fig. 15. Looking north along Federal Avenue.

settlement in Cerro Gordo County was made in 1851 by Joseph Hewitt and James Dickerson, two pioneers from Clayton County. They came, we are told, to hunt the buffalo and elk that abounded in the region; and they constructed rude shelters on the shores of Clear Lake for shelter during the winter season. Spring brought to them a decision to remain and to take up claims to some of the fertile lands. Their little settlement was many miles from the nearest white settlement. Such clothing and supplies as they needed had to come from Dubuque, 150 miles away. The spring of 1852 also saw Elijah Wiltfong settled on the Shell Rock River, and he took up claims to the water power at Rock Falls.

Closely following the survey of the county and townships early in 1853, came John B. Long and John Biford from Illinois, and they es-

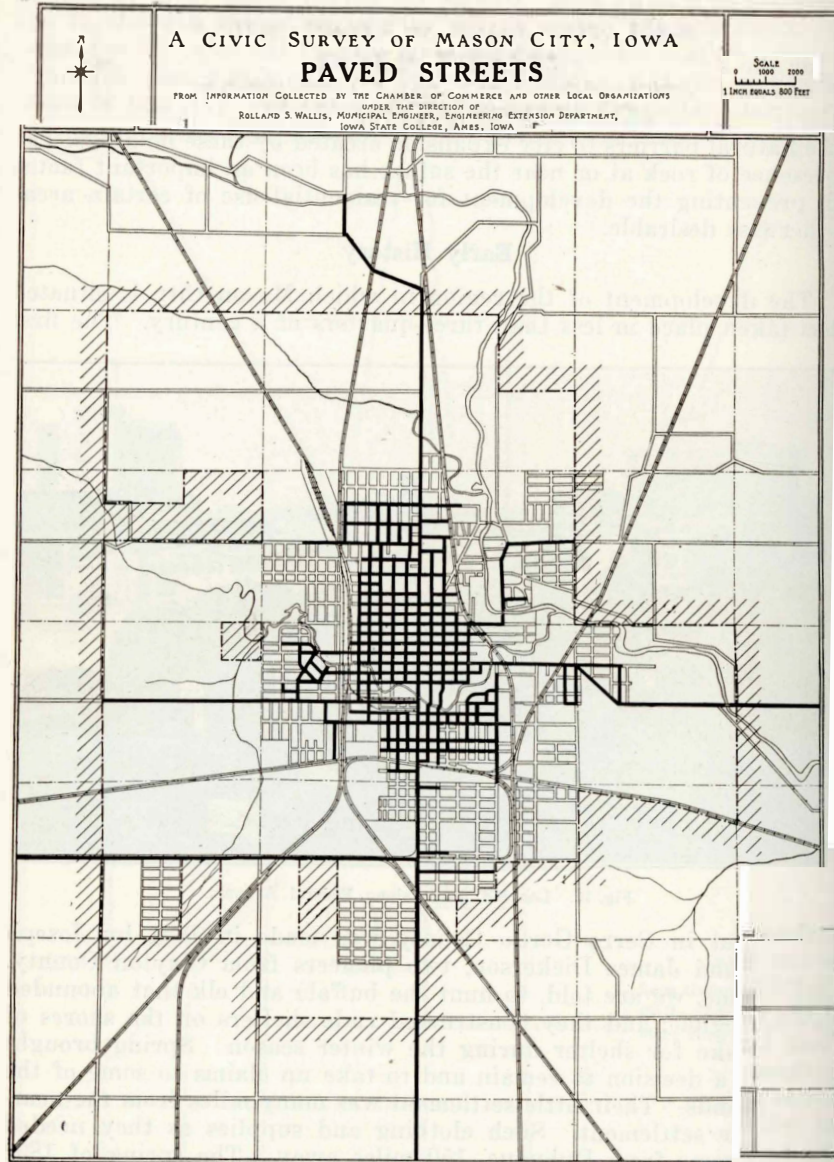


Fig. 16. Paved streets within the municipal area, together with the paved highways entering it.

tablihed extensive claims on timber and prairie land on Lime Creek in the vicinity of what is now Mason City. To the large wooded area extending northward from the junction of Lime and Willow creeks, Long gave the name Masonic Grove, and by that name the little settlement was known for several years.

Early Town Plats. During the summer of 1853, on land then owned by the Federal Government and now a part of Mason City a small town was laid out by John B. Long, Joseph Hewitt, and George Brentner. Each claimed equal rights in the new town site, and they named it Shibolet. At long after, however, Hewitt sold his interest, apparently having more faith in the future of a town on the shores of Clear Lake.

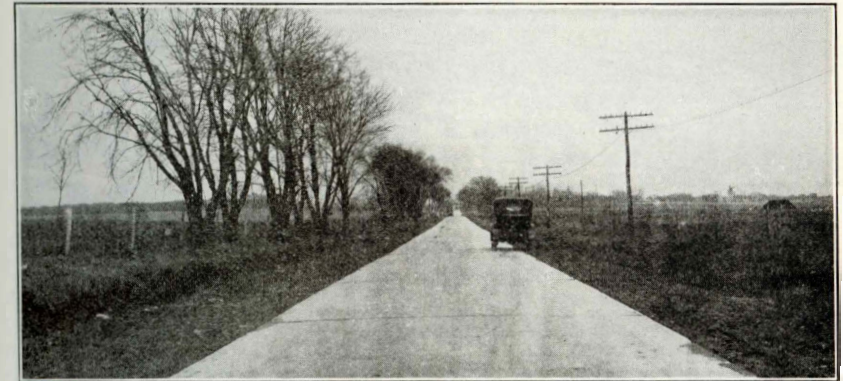


Fig. 17. Typical of the concrete highways radiating from Mason City.

The fall of 1853 saw the arrival of John L. McMillan and James Jenkinson, who constructed a rud cabin on the banks of Lime Creek about half a mile from the platted town of Shibolet but within the present limits of Mason City. In this habitation, the first built by and for a white man in what is now Mason City, Jenkinson passed the severe winter of 1853-4, awaiting the return of his partner McMillan, who had gone back to Illinois for clothing and provisions.

The first record of plat was filed in July of 1855 by Long and Brentner. In 1856 the Woodward brothers filed a plat known as Railroad Addition. In 1857 Paul Felt filed the plat (Fig. 5) that was subsequently known as Felt's plat. This included a part of the original plat prepared by Long and Brentner. As no further additions were made until 1869, the Felt plat is usually considered as completing the original official platting of Mason City.

Economic and Political History. The economic history of Mason City divides itself into three natural periods. The first began with the founding of the city in 1853, the second with the coming of the

first railroad in 1869, and the third with the development of the brick and tile industry, which had its commercial beginnings about 1886.

Mason City's political history likewise falls into three periods. The first began with the organization of Mason Township in 1856, the second in 1870 (Fig. 6) when Mason City was incorporated as a town, and the third when the town was organized as a city of the second class. An interesting feature of the earlier days was the spirited contest between the Masonic Grove and the Clear Lake set-



Fig. 18. Aero-photo of central Mason City, looking west of north. The dust clouds from the cement plant show clearly in the upper left portion of the picture.

tlements as to the location of the county seat, which a public election in 1858 finally established at what had already come to be known as Mason City. Had there not been an Iowa postoffice known as Masonville, this name would have selected for the new town.

Population

The 1920 federal census* ranks Mason City as Iowa's eleventh city as to population, crediting the community with a population of 20,065, and a higher rate of growth since 1910 than any other city of the first class in the state; the population growths of ten of Iowa's

*The 1925 state census credits Mason City with 22,600 population.

larger cities are compared graphically with that of Mason City in the diagram shown as Fig. 7. In this diagram the population figures were plotted to a logarithmic scale, so that the population curves indicate the rate of increase by their steepness. This diagram also shows a rather remarkable uniformity in the rate of population growth that had been enjoyed by this community, a fairly direct index of the steady growth of its industries.

Future Growth. A population diagram of another sort is shown as Fig. 8. In this case the population curves of certain larger cities having similar characteristics are compared by superimposing them on the Mason City curve. This has been done by selecting on each curve the point representing Mason City's population in 1920 (20,065), and then bringing these points together. Mason City's past record of growth is thus compared with the past growths of these other cities, while the graphical record of their subsequent growths serves as a guide in estimating the future growth of Mason City.

If the average slope of Mason City's population curve in Fig. 7 should be extended, it would be found to indicate a population approximating 250,000 in 1970, or about a ten-fold gain in a period of about 40 years. Such a prediction, however, would be based on the assumption that the present high rate of growth will be maintained throughout this period. This is not likely to occur, as the rate of growth usually tends to diminish gradually as a city increases in population. The heavy broken-line curve in Fig. 8, representing the probable future growth in the population of Mason City, is based on the assumption that there will be a similar decrease in Mason City's rate of growth. This graphical prediction serves to indicate that the next fifty years may reasonably be expected to bring to Mason City a population well in excess of 100,000. Important industrial changes, however, might easily upset the accuracy of such a long-range estimate. It is possible to look forward twenty-five years with much greater assurance; in 1950 Mason City may reasonably expect to have a population of about 70,000. A similar forecast made by Alvord and Burdick in their report (1920) on a municipal program of waterworks development shows Mason City with a population of 60,000 in 1950.

Composition. Due largely to the nature of its industries, Mason City has a relatively higher percentage of foreign-born white population than most Iowa cities. In Fig. 9 is shown, for each of the larger cities of the state, the percentage of the local population that is made up of negroes and foreign-born white population. The combined percentage for Mason City (15%) is exceeded by only Sioux City and Clinton. The numerical importance of the various nationalities represented in Mason City is shown graphically in Fig. 10, while Fig. 11 shows the relative strength of the native white, foreign-born and negro races.

Distribution. The distribution of the population of a community is frequently indicated by what is known as a 'spot map,' each spot indicating a certain convenient number of people as residing in the vicinity designated. Such a map was not prepared for Mason City, but a similar map showing the locations of all dwellings (Fig. 12) may be taken as indicating the general distribution of population. In an indirect way, the survey map showing the location of vacant property (not reproduced) serves the same purpose.

Naturally, the various large industries exert a marked effect on the character and the distribution of population in near-by districts. Lack of transportation and of convenience of access has retarded the development of certain districts.

Area

Mason City has grown in area from a platted tract (Fig. 5) of about one-quarter of a square mile to its present area of about 12 1/3 square miles. This area (7,910 acres) is large for a city of its population. As shown by Fig 13, the number of inhabitants per acre (1922 basis) is 2.8—a low figure even for Iowa cities. This diagram gives a graphical presentation of population densities for twenty of Iowa's larger cities.

Much of Mason City's area is undeveloped or vacant land, a large portion of which is being held by various industries (Fig. 72). As is indicated by the dwelling distribution map (Fig. 12), there is no residential development outside the city boundaries—in fact, only about one-third of the municipal area has been platted. Only about one-fourth of the total can be said to be occupied.

The Street System

Streets may be broadly classified as being either 'thoroughfares' or 'residence streets,' depending on their primary functions. The primary function of a thoroughfare is the carrying of large volumes of street traffic in an efficient manner, while that of a residence street is merely the providing of access to local residential property. It is not always easy to make such a classification of the streets existing in a town, because often standardization of street arrangement and design has tended to make all streets alike. In such a community a thoroughfare differs from a residence street only in that it happens to carry a greater volume of traffic.

Street Requirements. The requirements of these two sorts of streets are decidedly contradictory. A thoroughfare should have good alignment, that is, it should be free from jogs and sharp turns; it should be wide, so that a large volume of traffic can flow freely with safety and an absence of confusion and delay; it should have no long heavy grades to exact economic tolls from its traffic; and its pavement should be designed to carry heavy traffic satisfactorily.

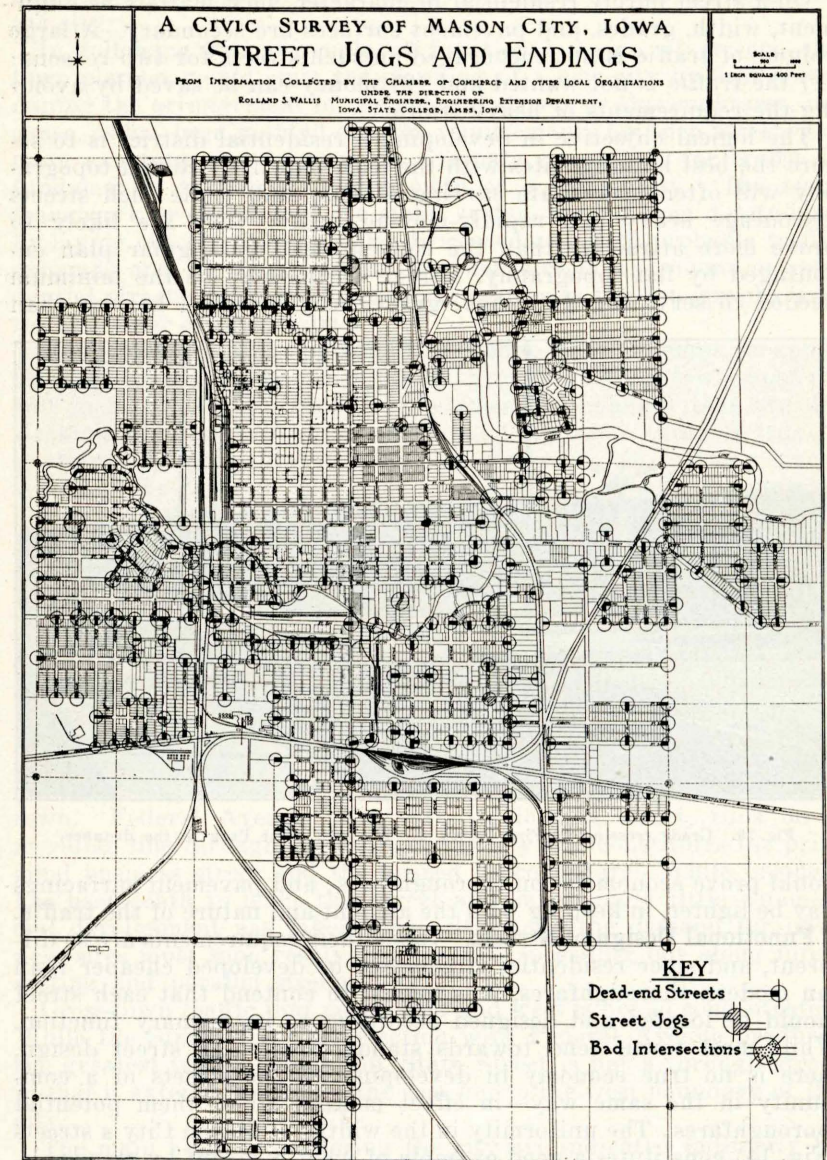


Fig. 19. Natural topographical conditions, particularly its streams, as well as such artificial features as railroads and industrial excavations, have served to interrupt and to limit Mason City's street system. Many street openings are needed.

On a street purely residential in character, such matters as alignment, width, grades, and pavement surfaces are secondary. A large volume of traffic is not encouraged on such streets for two reasons: (1) the traffic is not wanted and (2) money can be saved by avoiding the requirements of heavy traffic.

The logical objective in developing a residential district is to secure the best building sites with the least expense. Rough topography will often necessitate curving streets, and, while such streets discourage heavy and rapidly-moving traffic, they are likely to prove more attractive than the conventional rectangular plan encouraged by flat topography. Street widths may be the minimum needed to serve the dwellings; grades may be much heavier than

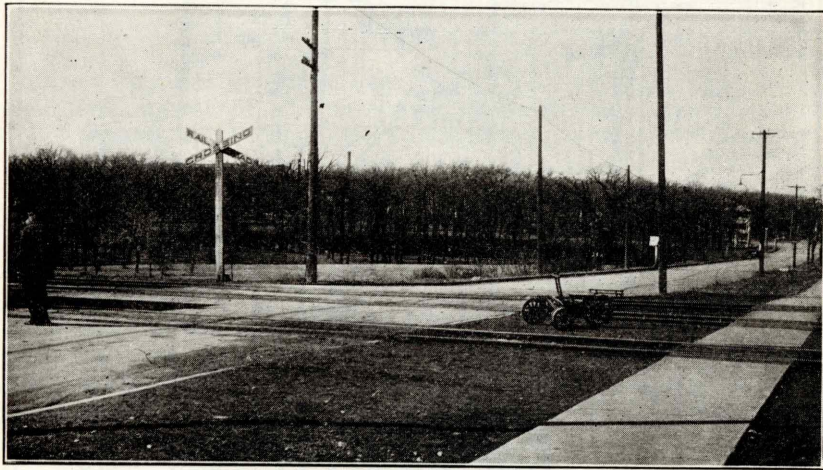


Fig. 20. Grade crossing at First Street, N. W., with West Park in the distance.

would prove economical on thoroughfares; and pavement surfacings may be lighter, in keeping with the amount and nature of the traffic.

Functional Design of Streets. Since their requirements are so different, and since residential streets can be developed cheaper than can modern thoroughfares, it is logical to contend that each street should be located and designed according to its primary function. While most towns tend towards standardization in street design, there is no true economy in developing all the streets of a community in the same way—in effect making all of them potential thoroughfares. The uniformity in the widths of Mason City's streets (Fig. 14) constitutes a good example of what is meant by standardization as opposed to functional design. All of the streets in the older portion of the city were laid out 66 feet wide, and this width has been commonly used as the city developed. While there are streets of greater width, it is interesting to note that their arrange-

ment has little relation to the main circulation of traffic throughout the city.

In following this principle of functional design of streets, the town planner would start the planning of a new city by first determining the arrangement of the arterial streets or thoroughfares, because, as has been pointed out, the requirements for such streets are more exacting, and because an adequate circulation for traffic is fundamental to the efficient growth of a community. The main framework or skeleton of the street system having been determined by laying out the thoroughfares in accordance with probable traffic demands and the requirements for such streets, the minor or residential streets would be fitted in as best suits the topography and the character of each district.

Application to Existing Street Systems. Any attempt to apply the principles of modern city planning to an existing town must result in a series of compromises between the changes that are desirable and those that are feasible; and the same thing is true in applying the principle of functional design to an existing street system. The first step should be an analysis of the existing system; a study of the circulation of traffic, preferably based on traffic counts, should be made to determine just what streets serve as traffic arteries and just what are the conditions as to traffic congestion. Usually the streets that serve as heavy-traffic streets may be selected with little difficulty, and on such streets traffic congestion is usually present or imminent.

The street studies in Mason City cannot be regarded as complete. Certain traffic counts seem desirable, but none have been made as a part of this local survey. It should be admitted, however, that the local traffic situation is not especially difficult of analysis.

Considering its size, Mason City is rather notably a single-street town. Federal Avenue (Fig. 15), its longest street, runs on a meridian line through the heart of the city and constitutes the principal business street and the busiest thoroughfare. While business has been loath to leave this street and surprisingly little commercial development has taken place elsewhere, the demand for business sites must soon result in a decided spreading out along intersecting and parallel streets.

Cross-town traffic that moves east and west is not so concentrated. While the State Street intersection with Federal Avenue produces the greatest traffic congestion, State Street is not a through street in that it extends neither to the east nor to the west boundary of the city.

The main highways entering the city are indicated indirectly by the survey map showing paved streets (Fig. 16). Paved highways (Fig. 17) extend 55 miles west to Algona, 32 miles east to Charles City, and 20 miles south to Sheffield.

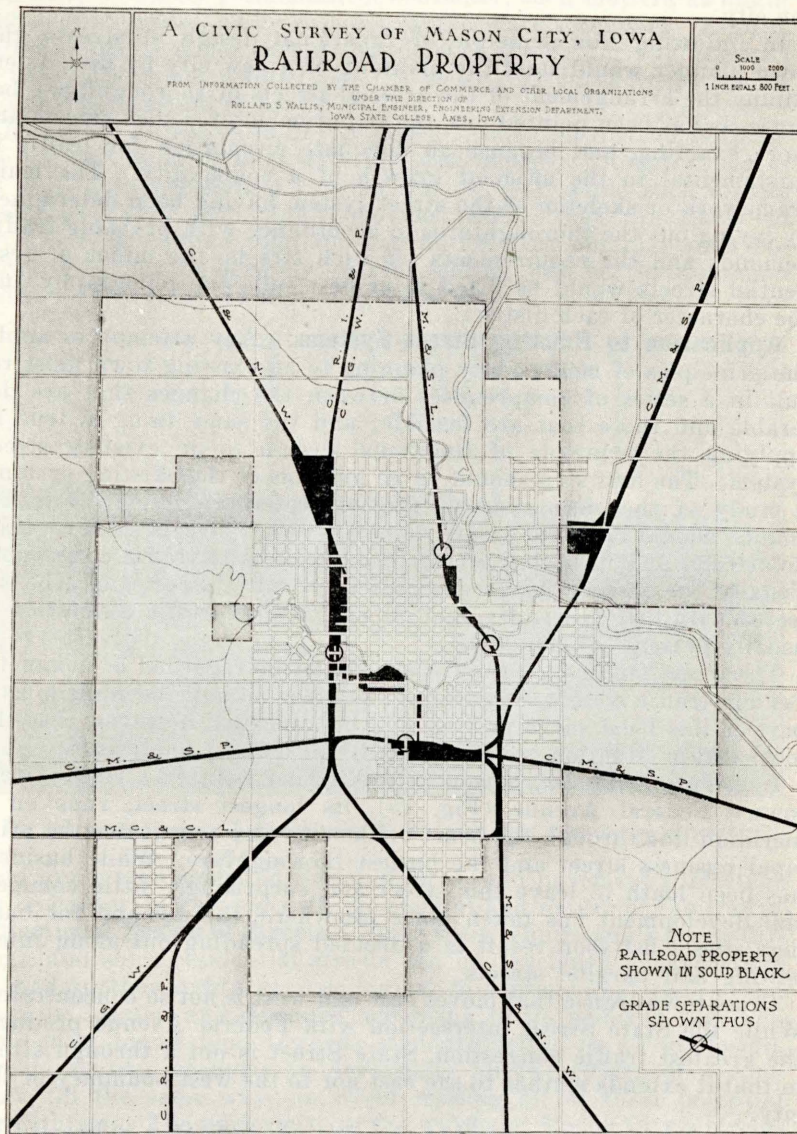


Fig. 21. Railroad properties in and about Mason City. While the central section is not cut by railroads, it is practically surrounded by railroad right-of-ways.

With few exceptions, other than those necessitated by the topography or such artificial obstacles as railroads, Mason City's streets are laid out on a strictly rectangular plan (Fig. 18). In addition to the irregularities caused by streams and railroads, there is faulty coordination between certain adjoining subdivision plats laid out at different times by different individuals who have not concerned themselves greatly about maintaining good continuity of streets. A study of Fig. 19 will show the various awkward and dangerous



Fig. 22. Looking south along Federal Avenue from Central Park.

street jogs, narrowings, and dead ends that have thus been created to the permanent danger and delay of street traffic.

The importance of preparing a comprehensive city plan showing the location of future thoroughfares is manifest. With such a plan in existence future street platting may be directed properly.

A comprehensive city plan for Mason City will undoubtedly call for many street openings. Connections are particularly needed across the railroads and the streams at various points. While these problems demand further study before definite recommendations should be made, the survey investigations have been sufficient to show the feasibility of many improvements that would materially facilitate the movement of traffic about the city and remove a serious handicap on the development of certain portions of the city.

Future Street Extensions. In addition to considering the many changes needed in Mason City's existing street system, the city-plan commission-to-be must provide for the extension of the street framework with the growth of the city. It will probably be found desirable to depart from the present rectangular system somewhat, particularly by the provision of diagonal thoroughfares leading toward the heart of the city and correlated with the highway system of the region. The layout of this system will be but little influenced by topography.

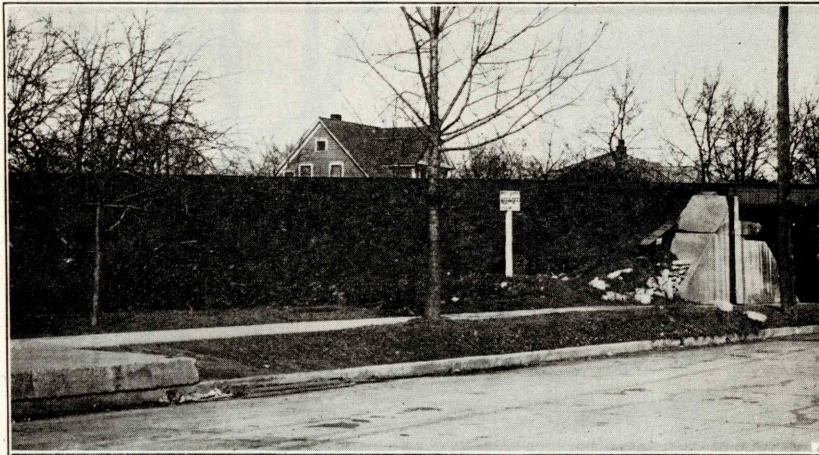


Fig. 23. A railroad usually constitutes an obstacle to the physical growth of a city.

The completion of a general plan for Mason City's major-street system should be one of the first duties of the city-plan commission, because without the existence of a comprehensive plan the commission cannot intelligently consider the deficiencies or merits of the development plans that must be submitted to it in accordance with the city-plan commission law.

Street Widths. The uniformity of street widths throughout Mason City (Fig. 14) has already been pointed out. Streets only 66 feet wide do not permit of pavement widths adequate for modern city thoroughfares. As the traffic demands on Mason City's thoroughfares increase, one of two things must be done—these thoroughfares must be widened or parallel thoroughfares must be developed to divide the traffic load. Often the latter method is the most practicable.

Street widening is the most direct and usually the most drastic method of relieving traffic congestion on any street. Sometimes, however, a good deal can be accomplished by altering the propor-

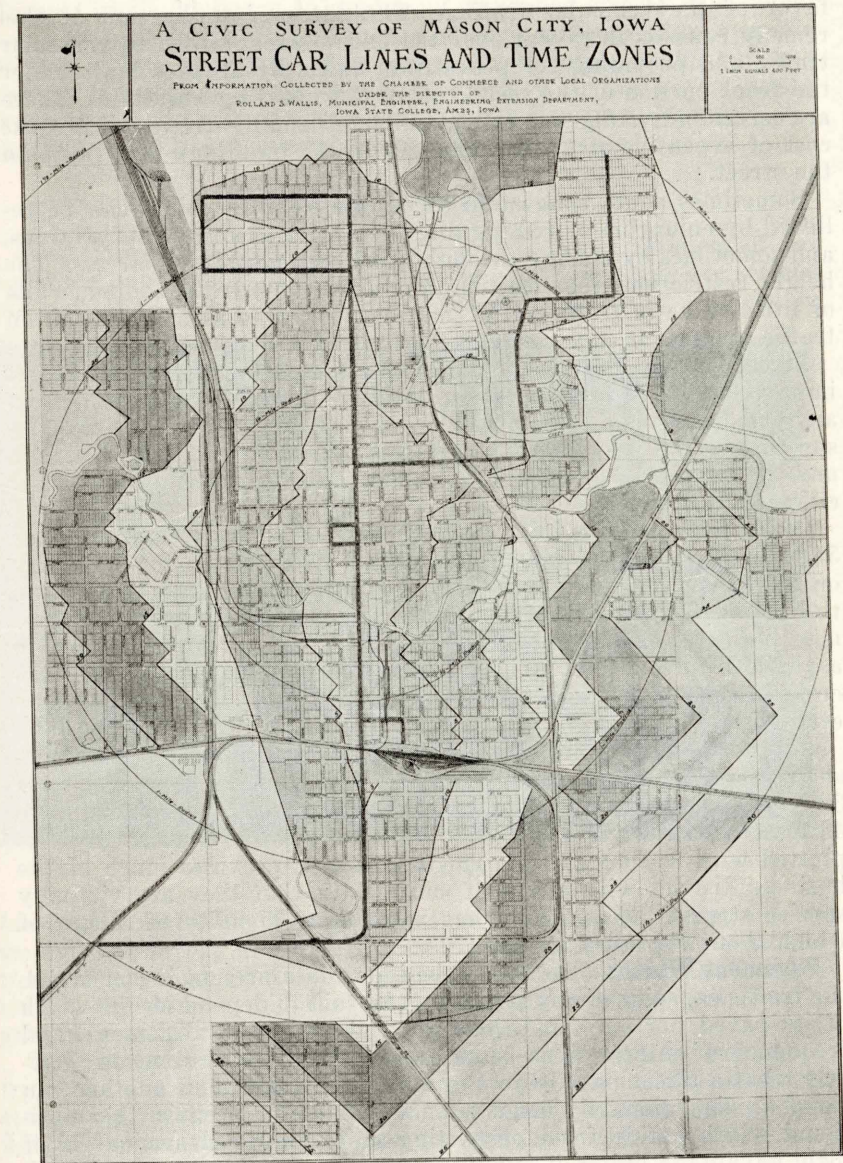


Fig. 24. A graphical representation of the comparative service of the street-car system to each part of Mason City. The figures on the zone boundaries give the estimated time in minutes to reach points on these lines. The circles were drawn at half-mile intervals.

tions of the street width assigned to pavement and to sidewalks in favor of the vehicular traffic. The extreme application of this remedy consists in giving over the entire street width to vehicular traffic and providing for pedestrian traffic by arcades built under the front portion of the second stories of abutting buildings. There are certain advantages to this plan, but it usually carries with it the cost of expensive structural changes in the buildings that front on the street.

Sometimes acute congestion at certain definite points can be relieved by enlarging or redesigning the spaces at street intersections, and sometimes by cutting through short sections of new streets. The height restrictions that may be imposed by municipal zoning, while of little value in traffic relief, may be looked to as a limitation on traffic increase in any particular section of a city.

Street Paving. Street paving is an all-important feature of street improvement. In fact, the extent and condition of paved streets in any community is a fairly reliable index of its progressiveness. Mason City is well paved; its streets are generally in good condition, and the mileage of paved streets compares very favorably with most cities of its size.

Of its total street mileage (about 107 miles) Mason City has some 55 miles of paved streets, distributed as indicated in Fig. 16. The original survey map, it should be mentioned, differentiated between the different types of pavement by means of contrasting colors. This map indicates that about 53% of the total pavement mileage is in asphalt, 40% concrete, 5% brick and 1% in wood block. The concrete pavement is about half of plain and half of reinforced concrete.

Another pavement map (not reproduced) was prepared in color to show the different pavement widths. Most residential streets have 30-foot pavements, while the main business streets vary from 40 to 48 feet. As shown in Fig. 5, the central portion of Mason City was platted with 33-foot alleys. This width now provides much of the business district with alleys of such width that they are virtually service streets. Mason City has more than 35 miles of alleys, of which about $2\frac{1}{2}$ miles are paved.

Pavement Widths. As far as the immediate present is concerned, the traffic capacity of any street may be said to depend on the width of its paved portion, conditions of grade, surface, alignment, and frequency of intersections being equal. This does not mean, however, that a street paved three or four feet wider than another can carry a proportionately larger amount of traffic, because this additional width (aside from permitting more traffic clearance) is of little advantage unless it is sufficient to permit the street to carry another line of traffic.

Pavement widths in Mason City, as might be expected, are in closer conformity with traffic demands than is the case with the

widths of its streets. The pavement width most common throughout Mason City is 30 feet. A number of residence streets have pavements 24 or 26 feet wide, and there are a few streets with pavements 20 feet or less in width. The pavements throughout the business district range from 36 to 48 feet in width, with the 40-foot width the most commonly used. East State, North Carolina, Second N. W., and Fourth N. E. are streets also paved to this width.

Grade Crossings

Grade crossings constitute a street and highway problem of nation-wide importance. The objections to grade crossings are serious and universally recognized, each of such crossings being responsible

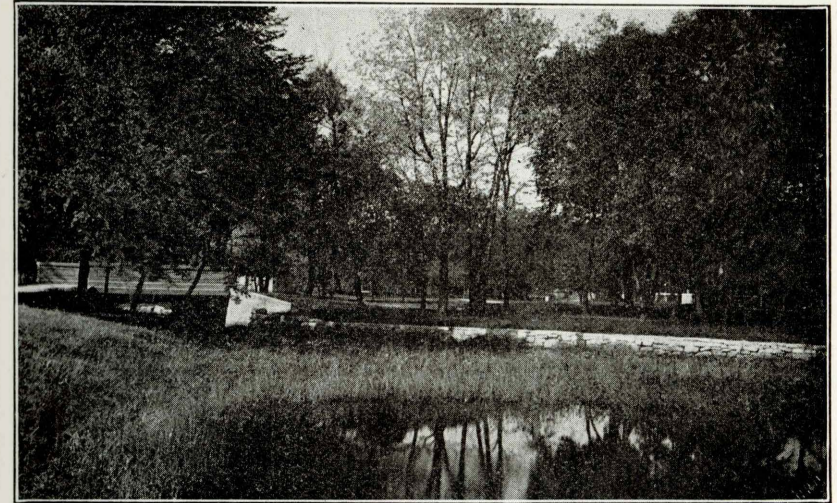


Fig. 25. In East Park.

for danger and delay to a greater or less degree, depending on the amount of railroad and highway traffic and the particular combinations of physical conditions existing. On account of the heavier traffic, the danger and the delay at grade crossings are usually greater in cities than on country highways.

Computations as to the economic loss to local business and industry alone due to traffic delays at grade crossings usually mount to staggering totals. The delays to local transit systems and to fire-fighting apparatus are also problems peculiar to the city.

In highway improvement such crossings can be eliminated by grade separation or by relocation of the highway or, in some instances, of the railroad. It is seldom that a city can do away with a grade crossing by relocating the street so that traffic is diverted to

another crossing—usually the community needs for its traffic more crossings than it has. Such is the condition in Mason City.

Methods of Elimination. The elimination of a grade crossing demands either carrying the tracks over the street or carrying the street over the tracks. Either plan may involve one of three possible operations. Either the track grade or the street grade may be altered sufficiently to accomplish the desired separation, or both may be altered.

Grade separation may be carried out in a comprehensive fashion, or each crossing problem may be studied on its individual merits. In a community where the topography is relatively flat, as in Mason City, it is increasingly important that the problem be studied in a

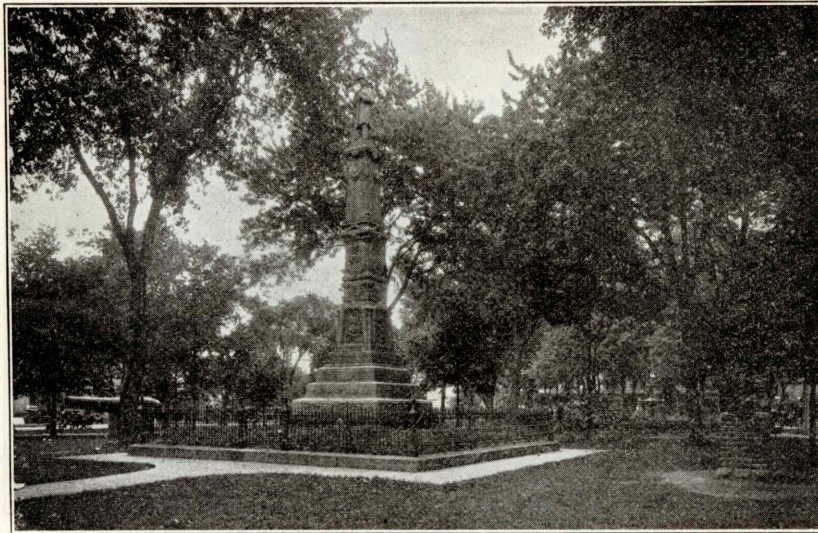


Fig. 26. Central Park—the "city square."

comprehensive fashion. In relatively few instances does the local topography favor economical grade separation.

A comprehensive solution would probably demand either the raising or lowering of railroad tracks throughout the city. Track depression is generally considered to produce a better appearing result in residential districts, but this method costs more than track elevation. Probably a compromise method, combining track elevation and street depression, would prove the solution most generally applicable. Nothing short of a thorough technical study of the problem, including comparative cost estimates, should serve as the basis for a final decision as to the best method. The geological conditions in and near Mason City would probably affect the ultimate solution materially.

Finances. The most troublesome factor entering into the question of grade-crossing elimination, however, is that of the cost. While the cost is frequently justified on the basis of traffic-delay elimination alone, there is usually considerable controversy as to the apportionment of the expense of making the change. Accepting the general principle that the cost should be distributed in proportion to the benefit serves only to show that the cost must usually be divided among the city, the railroad, and the state. Sometimes street-transit systems, and even private property holders, enjoy benefits from such improvements.

The nature of the advantages to the community are the converse of the disadvantages of grade crossings already stated. Certain

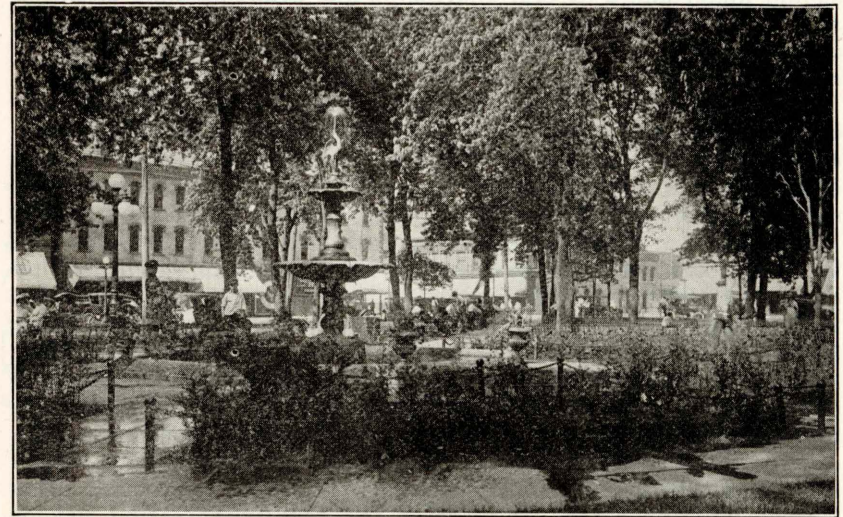


Fig. 27. Central Park is rather cluttered in appearance—a condition typical of the average city square.

definite advantages accrue to the railroad companies, such as doing away with the expenses of crossing protection and traffic accidents, relief from the trespass nuisance, increased speed and freedom of operation, as well as incidental opportunities to improve the grades and locations of tracks. Where the crossing is one used by street railways, the transit company gains by eliminating danger and delay at the crossing, as well as the cost of expensive crossings and safety devices, by savings in wear and tear on motors and running gear due to bad crossings and the additional starting and stopping necessitated.

There is little uniformity of opinion or practice as to the proportion of the cost to be borne by these various interests. The benefits

cannot be evaluated with anything like precision. As the matter stands at present in most states, this apportionment of grade separation costs is settled in each case by compromise. The natural tendency of municipalities to shoulder an unreasonably generous share of such costs upon the railroads concerned has undoubtedly delayed many feasible improvements. In fairness to the railroads it should be kept in mind that they have been passing through a trying financial period, and that the adoption of a wholesale policy of grade-crossing elimination would lead them toward bankruptcy. It has been contended by railroad authorities that there is little economic gain to railroads in grade crossing elimination, so that the compelling financial incentive is generally lacking. Mason City should undertake a careful analysis of the grade-crossing situation and all the feasible remedies. A carefully-drawn thoroughfare plan, as well as a grade-separation plan, should precede any attempt to improve a specific crossing.

Crossing Protection. All cities and towns in Iowa have power to compel railroad companies to place flagmen at street crossings, or to erect and operate suitable gates or signal devices. All controversies on such points are adjusted by the state board of railroad commissioners. Where, as is so often the case, the elimination of a heavy-traffic grade crossing is at best only a remote possibility, the best type of protection practicable should be installed for the protection of street traffic. While watchmen with traffic gates, or even watchmen without gates, are considered better crossing protection, there is a natural tendency on the part of railroads to use automatic signalling devices to warn street traffic of the approach of trains. Such devices are not standardized as to form or location, and there is always the danger that they may not be observed. Certainly such devices should provide a visible signal, preferably a moving one, in addition to the bell ordinarily employed as a warning signal. This is especially important in view of the rapidly-increasing use of closed cars.

Street traffic is now chiefly motor driven, and it moves much more rapidly than when the customary railroad crossing sign was standardized by our railroads. The design, height, and placing of such signs is ordinarily such that they do not attract the attention of drivers of vehicles until it is too late to stop. Even during daylight hours it is often easy for a driver who is not familiar with a street in a congested part of the city to fail to notice railroad tracks until he is practically upon them. Suitable warnings should be placed not less than one hundred feet from the crossing. Where the street is paved, a very effective method is that of pavement marking. Such signals are seldom missed by a driver, while he may easily miss a crossing sign, especially at night.

Of greater value than crossing protection, perhaps, is the provision of an adequate view of the track, clear and unobstructed in

both directions and from both sides of the track. While such a condition is not commonly attainable at grade crossings in cities, it is nearly always possible to improve visibility conditions by removing obstructions and then preventing the creation of others. No general rules can be given for such improvements; their nature depends on the conditions at each crossing.

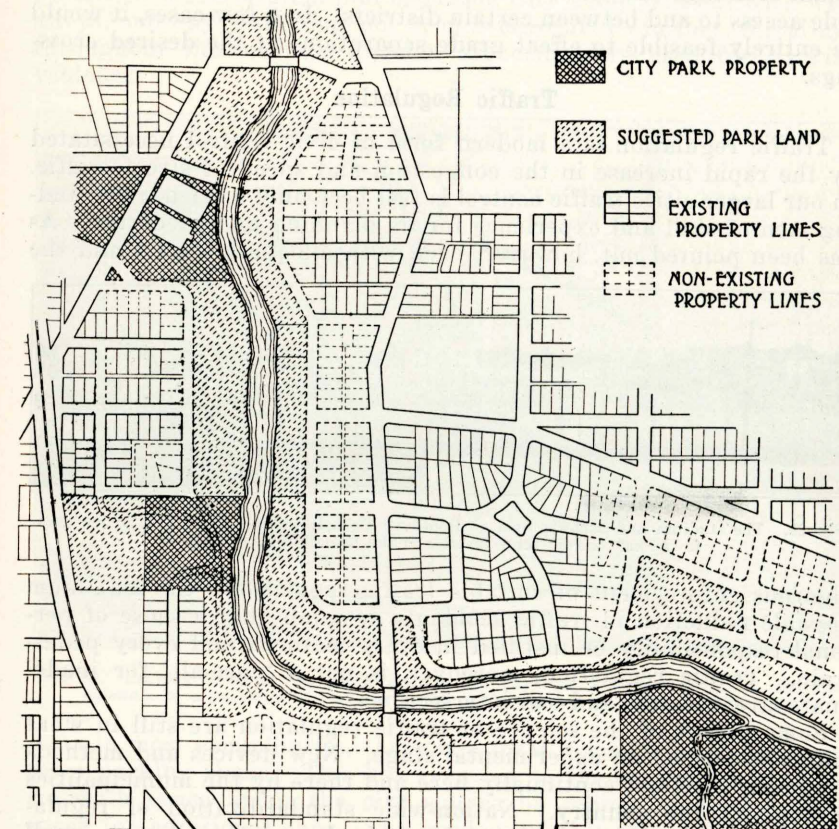


Fig. 28. An illustration of Mason City's many possibilities in parkway development, where building lots can be platted to front on the streams.

There are other conditions that reduce the danger at grade crossings. It is important (1) that the roadway be approximately level for, say, fifty feet on either side of the track; (2) that the planked crossing be of adequate width; (3) that the crossing be reasonably smooth; (4) that the street crosses the tracks as nearly at right angles as possible; and (5) that the street approach should be straight for more than one hundred feet from the track.

Additional Crossings. Mason City now has about thirty grade crossings (Fig. 20) within its limits. Grade separations have been effected at four points only, the locations of which are indicated on the railroad-property map reproduced as Fig. 21. While certain grade separations would be very desirable improvements, of even greater immediate importance would be the creation of certain additional crossings that have been needed for some time to give reasonable access to and between certain districts. In a few cases, it would be entirely feasible to effect grade separations at the desired crossings.

Traffic Regulation

Traffic regulation is a modern form of civic control necessitated by the rapid increase in the congestion and speed of street traffic. In our larger cities traffic control is fast becoming a science demanding men of skill and experience for its planning and execution. As has been pointed out, however, even with adequate streets and the

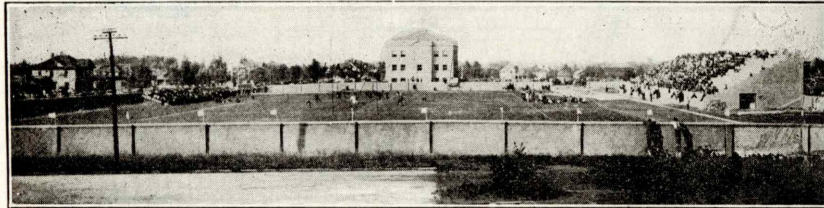


Fig. 29. The stadium and athletic field at Roosevelt School, looking north. A larger area to the east of the schoolhouse and the field is undeveloped.

vigorous enforcement of suitable traffic regulations, the maximum possible reduction in traffic accidents demands that a sense of personal responsibility be instilled in every motorist and every pedestrian. Traffic regulation, moreover, is not a 'cure-all' for inadequate street widths and bad intersections.

Some phases of the science of traffic regulation are still in what might be termed an experimental stage. New devices and methods are being tried out continually here and there by the municipalities throughout the country. Nation-wide standardization of regulations and devices is greatly to be desired, and the average small municipality will do well to employ only such regulations and devices as have proved satisfactory under similar conditions.

As a summary of the principles of traffic regulation that are coming to be generally accepted throughout the country, the conclusions contained in the report of the committee on traffic control to the National Conference on Street and Highway Safety, held at Washington in 1924, have been reprinted in the supplement to this report.

Existing Conditions. Mason City, like all other cities and towns where the streets are of only average width, suffers from traffic con-

gestion in the business districts. This congestion has been reduced to reasonable proportions by employing some of the standard methods widely employed elsewhere. The community has recognized that public streets should not be used for storage purposes when needed for traffic, and has for some time enforced 20-minute parking on central streets of the business district. Double parking is not permitted. The original plat of Mason City being laid out with wide alleys, one-way traffic has not been necessitated—in fact, the alleys, throughout the business district, are commonly used for parking vehicles.

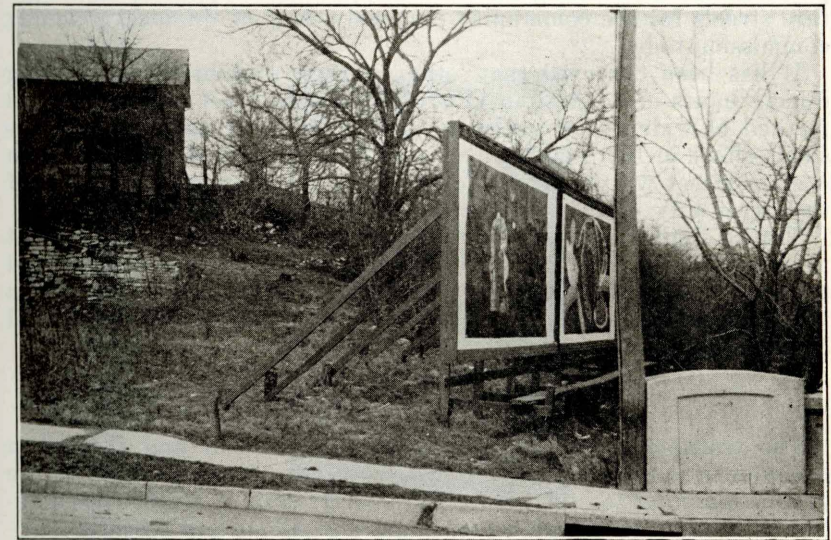


Fig. 30. Looking west at the south end of the Carolina Avenue bridge. A feasible entrance to a parkway to lead northwest to Commissioners' Park (see Fig. 28).

As in most communities, there is a local demand for more downtown parking space. This has even led to the suggestion that the sidewalk space about the city square be relinquished to provide space for additional cars. The wisdom of this plan and of similar suggestions current locally is open to question. No such device can provide sufficient space to accommodate all who wish to store cars, or even all who wish to park them for a short period during the busy portion of the day. In fact, even if Mason City does all it can to prevent the increase of street congestion by means of traffic regulation, by zoning restrictions on building heights, or even by costly street widening, the time will doubtless come when no parking can be permitted during business hours in the business districts. Our rapidly-growing cities must face the fact that car storage must be met by other means. If the cost of private storage is too high for

much of the traffic to bear, the natural result will be the resort by many to more efficient transit agencies.

Every effort should be made to relieve Federal Avenue, State Street, and other heavy-traffic streets of all unnecessary traffic. Not only should all traffic passing through the city be diverted around the congested districts, but such routes should be developed for the convenience of cross-town traffic.

Traffic relief by street widening is a costly method that, nevertheless, is frequently necessitated by conditions. No definite recommendation for any project of this sort, however, should be made previous to the working out of a comprehensive plan of thoroughfare streets for the community—an early duty of the local planning commission-to-be.

It has been observed that "the absolute prohibition of parking during hours of congestion (Fig. 22) is an indirect and economical method of widening a roadway. A limitation of parking time has small effect in this regard." A compromise method, effective with certain street widths, is that of prohibiting parking on one side of the street only.

Traffic Signs. Efficient traffic regulation cannot be effected at reasonable cost without a liberal use of suitable traffic signs and markings. While nation-wide standardization of traffic regulation is undoubtedly coming, the way of the out-of-town motorist should be made as easy as possible by clearly indicating local regulations.

Transportation

The transportation of people and goods within and through a community is a highly important factor in its development. In the proper planning for the future physical growth of a city consideration of local and through transportation of all sorts is essential.

Railroads. In addition to the fundamental importance of railroads to the industry and business of a community, this form of transportation exerts a controlling effect on city planning. While the railroads have pioneered in the development of most of our cities, it must be admitted that the inflexible nature of their roadways makes them an obstruction rather than an aid to application of city-planning principles to the arrangement of a community. A railroad right-of-way usually restricts city growth as effectively (Fig. 23) as does such a natural topographic feature as a stream or a deep ravine. Even with sufficient street crossings, a railroad constitutes a serious obstruction to the free flow of traffic. Industrial spur tracks, in many communities, are a serious problem.

Mason City has five steam railroads and one electric road, the combined effect of which is to make the city a railroad center of regional importance (Fig. 3). The essential importance of these roads to the commercial standing of Mason City cannot be questioned.

While the older portion of Mason City is practically girdled by railroad right-of-ways (Fig. 21) it is interesting to note that the heart of the city is not encroached upon by railroad property. Its business district is not, as in so many cities, cut up by railroad tracks; hence it can have a unity of development not always possible.

This outlying location of right-of-ways has resulted in placing the railroad depots at greater distances from the heart of the city than is ordinarily the case. This condition, and the distances between stations, has kept alive the local sentiment for a union station. While it would not be impracticable to run all the passenger trains into a common station and while several possible sites are available, the proper solution of this problem will require considerable study,



Fig. 31. Looking north along Lime Creek. Residential platting has turned its back on this prospect. Possibilities in this vicinity are suggested in Fig. 28.

together with a careful consideration of railroad economics. Under present conditions the railroads serving Mason City are not likely to feel that the construction of a new station is justified by the circumstances. If a new station is to come to Mason City, the feasibility of securing a more central location than now occupied by any of the depots should be considered.

Extensive railroad improvements come slowly. They are always costly, and financial considerations must be expected to control. The needs of the railroads are an all-important consideration, with local municipal demands only a nominal factor. However, the mere fact that such improvements come slowly should encourage careful study in order that the community will have a clear conception of the best local solution possible when changes become imminent.

Street Cars. The local street-car system, like many others, is suffering from a lack of patronage. Like others, it has had to resort to various devices to encourage regular riding on its system. Except for rush-hour traffic, the patronage is ordinarily too light to justify maintaining a convenient schedule.

The reason for this general condition is obvious—people generally have taken to the automobile. The convenience and flexibility of this means of transportation have triumphed over its extra cost, with the result that the flow of traffic in business centers is clogged by automobiles—inefficient traffic units from the standpoint of the street space required per passenger.

Our larger cities are witnessing the beginnings of a turning in this swing from public transit facilities. With the parking of automobiles prohibited throughout large central areas for the daylight hours, their use for general shopping and business purposes is being discouraged. Many people are finding it more satisfactory to use the established transit system to parking their cars many blocks from the place of business or to paying the storage charges demanded by garages. Under existing circumstances, however, it is idle to expect the local transit company to extend its lines to serve other districts as yet only partly developed.

The service of the local transit system to the community as a whole is shown graphically by the 'time-zone' map (Fig. 24). This survey map shows the time required to reach any point in the city from the main business district, using the street-car service to the nearest point and then walking the remainder of the distance. This map brings out rather clearly the existing handicap on the development of certain sections of the city due to a lack of transportation service. It is important that this need be met to a reasonable degree.

Bus Lines. Mason City is on several important highways. It is entered by about one hundred miles of paved roads, extending west to Algona, south to Sheffield, and east to Charles City. Under these conditions it is not strange that it should be fairly well served by through buses. The Red Ball Transportation Co., which has its headquarters in Mason City, operates well-equipped buses to Minneapolis, to Des Moines, to Waterloo, and to Algona.

It seems inevitable that, along with the improvement of our highways, motor buses will come to handle practically all local passenger transportation. They will logically come to serve as feeders to the long-haul or express service that can best be furnished by the railroads. The local passenger train, operating on short runs, seems doomed already wherever the highways permit adequate year-round bus service. The greater flexibility and convenience of auto-bus transportation has gained for it a great deal of popular approval. Cooperation between bus lines and the railroads can work out an efficient system of passenger transportation.

Reasonable municipal control should be exercised over the routes of bus lines, as well as their parking and loading places. In so far as is reasonably practicable, the routes of through bus lines should be diverted around the congested centers. The modern bus is bulky and it may easily constitute a real obstruction to traffic on a busy street. While auto buses are ordinarily permitted to load at hotels and at designated stops, they should not be permitted to park where they will obstruct traffic. With the growth of this means of transportation we may expect to see the down-town loading chiefly restricted to suitable stations or depots located on ground owned by the transportation companies.

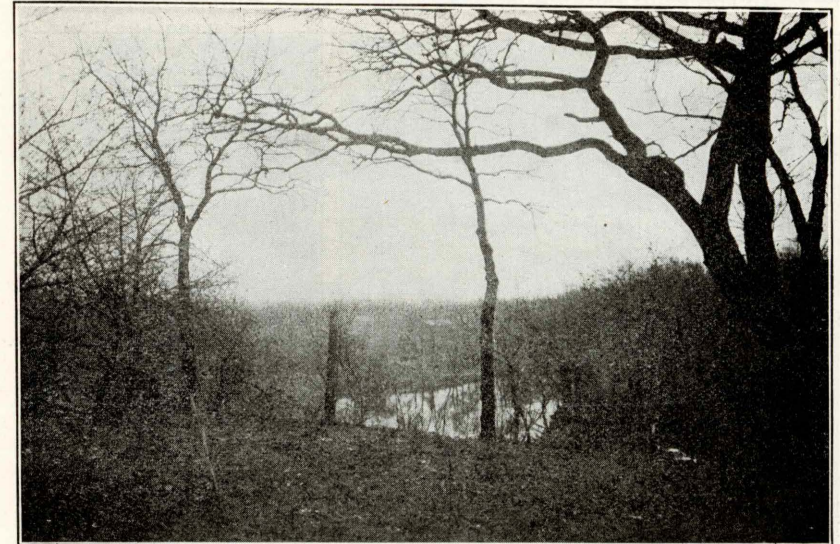


Fig. 32. Looking northwest over Lime Creek toward Commissioners' Park. See Fig. 28 for suggested development.

Mason City has no established local bus lines. Such lines are needed—not as direct competition, but as a supplement to the existing street-car system. Bus routes can be operated profitably in districts that would not justify an investment in street-car track and equipment. If the local transit company could operate a small fleet of auto buses in connection with its street-car system, Mason City would thus obtain a more comprehensive and flexible transit system. Direct competition of buses with the existing transit lines is certainly to be discouraged until such time as the traffic justifies such additional service.

Airways. While the commercial development of aerial transportation in this country has lagged far behind that which has taken

place in foreign lands, an early and rapid commercial development of this form of transportation is expected by many authorities. "No means of transportation which offers so much in the way of increased speed can long remain as little used as air craft are used today." It has been pointed out frequently that landing fields are as essential to flying as yards and stations are to railroads or as docks and harbors are to steamships. "Aeronautics is in the position of a railroad with its right-of-way and equipment but no terminals." Nothing would encourage aerial transportation like the general establishment of landing fields under municipal control.

Much information has been put into printed form on the layout and equipment of landing fields; such facilities are rapidly becoming

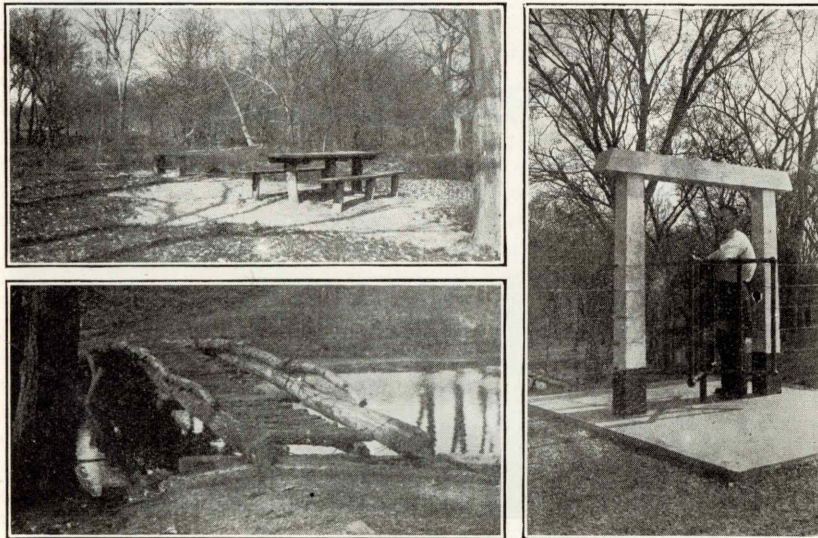


Fig. 33. Views in the privately-owned park land north of Mason City.

standardized. The equipment of a landing field can proceed by easy stages from the provision of fundamentals to that of completeness. From the standpoint of the city planner, the essential action that should be taken is the securing of adequate sites. Not every site is suitable in the exacting requirements as area, altitude, topography, shape, soil, drainage, surroundings, and accessibility. If the securing of suitable areas is deferred until they are badly needed, they may be impossible to obtain. The actual development of the field once the land is assured, may proceed slowly or even be deferred until conditions justify additional investment. Certainly suitable areas for landing fields should be a feature of every comprehensive city plan.

Mason City has areas that without improvement have proved feasible as landing fields for such amateur flying as has taken place about the city. It should not be too readily assumed, however, that these tracts are the best available. The selection of the best possible area can be determined only after a careful weighing of the advantages of each tract against the technical requirements of an ideal landing field.

Public Recreational Facilities

Seldom is it necessary to convince the average citizen that parks and playgrounds are desirable assets to any community. In fact, it is rather hard to find even a small community that does not boast of at least one park.



Fig. 34. An aero-photo of Clear Lake. The town is on the east shore of the lake.

Experience in many cities has served to demonstrate: (1) that frequent open spaces in cities contribute substantially to healthful conditions, (2) that elbow room is needed for outdoor play, (3) that parks contribute to the charm of community life, (4) that parks increase local property values, and (5) that parks and playgrounds tend to counteract some of the harmful results of the hurry and artificiality of city life; (6) that cheap land of irregular topography is suitable for park use; and (7) that such use often prevents unsuitable and unsightly developments.

While in most communities there exists at least a vague sentiment for more and larger areas devoted to parks and playgrounds, there are few communities that seem to comprehend just what should be included in a well-balanced system of recreational facilities. To a

mixed group of people from various towns, the word 'park' is apt to mean something different to each, depending on their individual experiences. There is ample justification for these differences, because open spaces given over to recreational uses in cities are of many sorts. In a sense parks and play spaces are like people—no two are just alike, each possesses a certain individuality.

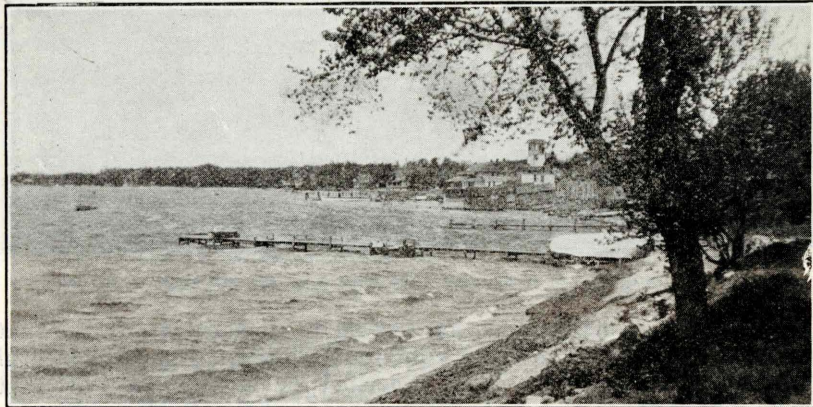


Fig. 35. Two views of the lake-front of Clear Lake.

Many attempts have been made to classify the different sorts of recreational areas, usually partly on an 'area' basis and partly on a 'use' basis. All such areas can be at least loosely classified as either 'parks' or 'playgrounds.' This, of course, implies that there is an essential difference between the meanings of these terms. It must be confessed that the modern slogan, "Every park a playground, and every playground a park," reflects the truth that there

is gradually coming to be less of a distinction. However, the terms serve as a rough sort of division.

Reservations. This type of park has been defined as "a municipal holding of country land, perhaps in connection with city forests or city water-supply, made accessible by roads, it may be, but not yet developed for intensive recreational use, and frequented mostly by picnic parties and others spending several hours at a time in the open." The practicability of such utilization of large tracts of public lands depends no longer on the availability of suitable transportation. Any tract reasonably accessible by automobile can be put to such use.

Country Parks. This term serves well to describe the large park that makes available to large numbers of city dwellers something of the pleasure-giving qualities belonging to the unspoiled country. Such a park may well be the chief feature of a city park system. It is apt to comprise several hundred acres and, for this reason, to interfere somewhat with city traffic and development; but without a certain degree of spaciousness it cannot have the attractiveness that goes with natural scenery. In Mason City, East Park (an area of less than fifty acres) serves the present community as a country park (Fig. 25).

Small Parks. The small park is "more accessible but less extensive, not pretending to a countrified appearance, but depending on its design, its foliage and flowers, even upon architectural accessories at times; providing amusements which can be enjoyed by crowds and making the crowd a part of its design." There are many sorts of small parks—'squares,' 'commons,' 'public gardens,' and 'neighborhood parks' are some of them. In the well-developed park system the small park is intended to serve its immediate locality, rather than the community as a whole. Of small parks Mason City has two: West Park (Fig. 20) is of the 'neighborhood' type, while Central Park (Figs. 26 and 27) is a down-town 'square.' There are also four undeveloped tracts, the most important of which is now called Commissioner's Park (Fig. 28) and consists of some four acres of filled land on the west bank of Lime Creek.

Parkways. A pleasure drive, when of ample width, may be given a park-like development. It then becomes a sort of elongated park, and often serves most of the purposes of the neighborhood park. Of true parkways Mason City has none, but they may be had—the opportunities are merely waiting recognition and action.

Playgrounds. A playground differs from a park chiefly in the intensity of its development and use. Playgrounds provide space for the more active sorts of recreation. With the possible exception of some types of playfields, an essential feature of all modern playgrounds is trained supervision.

There is always a keen demand on the part of adults and young people for suitable areas for such space-taking activities as baseball, tennis, football, and track athletics. This type of recreation area has come to be known as a *playfield*. The facilities at Roosevelt School (Fig. 29) are of this character, and room is available for further developments of this sort. *Outdoor gymnasiums* are provided for intensive use by adults and young people—usually separate gymnasium equipment is provided for each sex. *Children's playgrounds* are usually equipped with sand piles, baby swings, slides, teeters, and other equipment suitable for boys and girls under ten or twelve years of age. East Park has some equipment of this sort, while the various grade schools are similarly provided for.

Local conditions often afford certain *special play facilities* such as swimming pools, skating ponds, dancing floors, and bathing in natural waters. Many play spaces are arranged to serve in more than one of the ways mentioned.

Park Area Needed. A recreational standard that is coming to be quite generally accepted calls for an acre of park or playground land for every hundred people in the community. This would mean that Mason City should have about 225 acres of park land. The total park acreage existing is but little over 50 acres, with some five acres undeveloped. Another standard calls for one-tenth of the municipal area, but this, due to large areas of undeveloped land in Mason City, would demand nearly 800 acres of park land. A rough check of the platted areas that are at least partially occupied, however, shows an area of nearly ten times the 225 acres demanded by the population standard.

While such standards serve only as a rough indication of actual needs, they point out that Mason City can multiply her present park area four or five times without exceeding the area that modern civic authorities feel that such a community should have. While it is not too late to acquire many tracts that are suitable in character and location, a delay of only a few years may easily make impossible the building up of the park system that Mason City can now have.

Local Parks Needed. While East Park may be regarded as serving the east-central part of Mason City as a local or neighborhood park, the other sections of the city are still to be provided for. West Park (Fig. 20) is much too small to serve the rapidly-growing western district; and it should promptly be enlarged or another site developed. An opportunity exists to develop a very attractive wooded park along the banks of Willow Creek to the north and northwest of West Park. Such a park could be made large enough to serve this area adequately, and its existence would do much to encourage the rapid and attractive development of the surrounding districts. Another suitable tract for a local park is found south of Sixth Street S. W., and between Taylor Avenue and Polk Place.

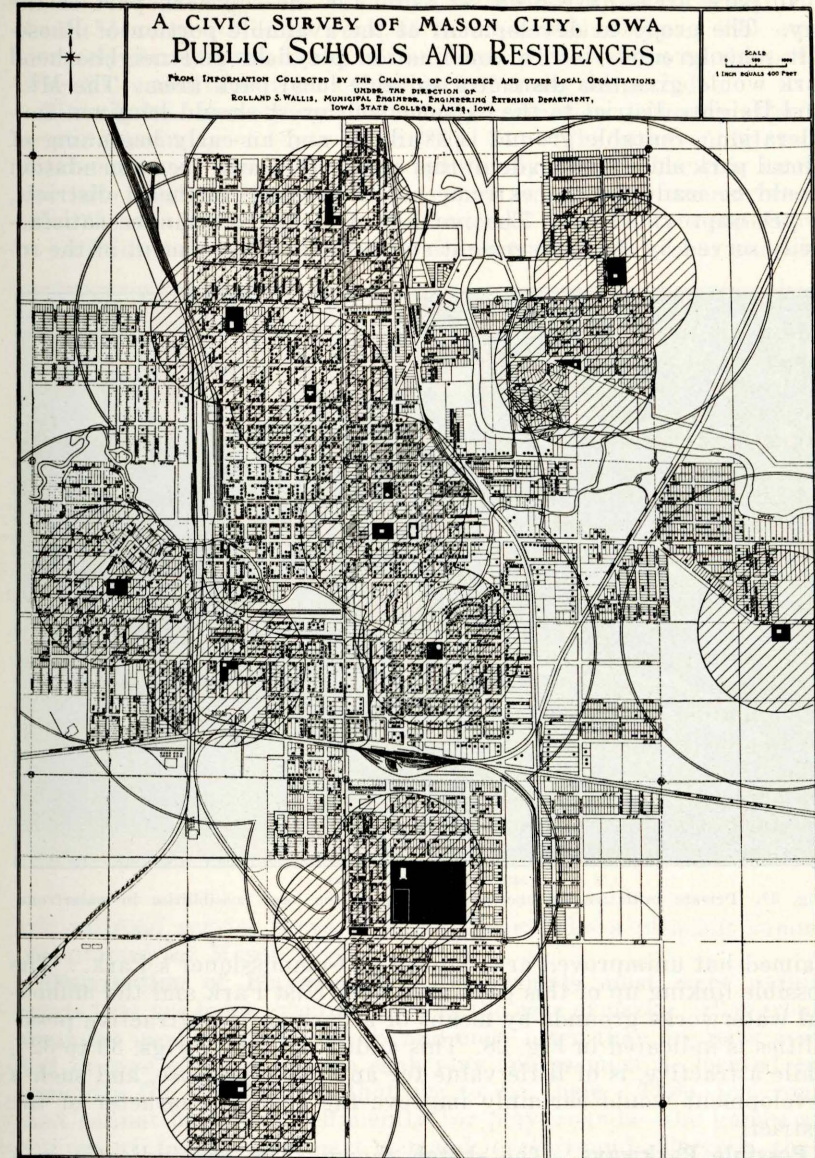


Fig. 36. The distribution and grounds of Mason City's schoolhouses. The small and large circles are drawn with quarter-mile and one-half mile radii, respectively.

No park areas have been set aside for the southern part of the city. The proposed development of the available portion of Roosevelt schoolgrounds into a combination playfield and neighborhood park would give this district a suitable local park area. The Midland Heights district to the extreme southwest should be given consideration. Suitable ground is available and an early beginning of a local park should be made in this area. The same recommendation should be made for the extreme northwest and northeast districts, as yet unprovided for. The north-central district can be satisfactorily served by the enlargement and suitable development of the re-

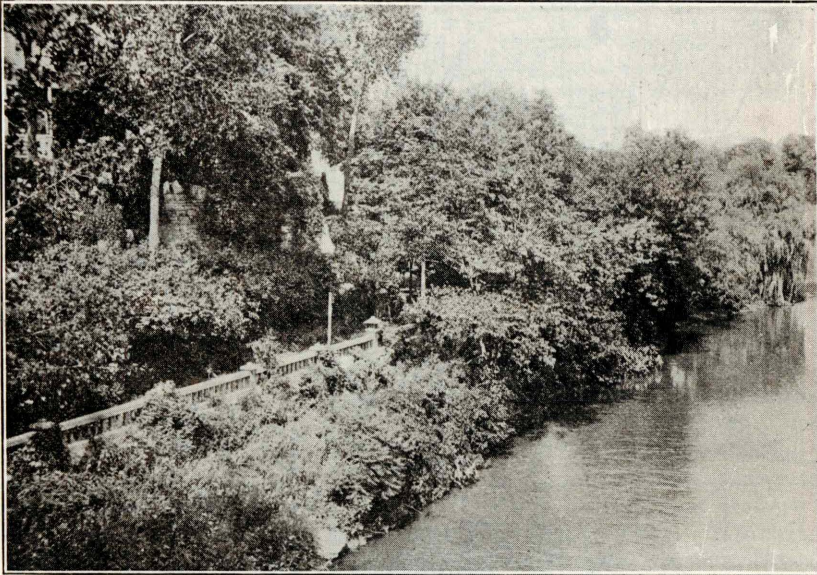


Fig. 37. Private initiative has shown something of the local possibilities in waterfront improvement.

claimed but unimproved area known as Commissioner's Park. The possible linking up of this park area with East Park and the municipal waterworks grounds by means of a parkway of attractive possibilities is indicated in Fig. 28. This additional land (Figs. 30 to 32), while attractive, is of little value for any other purpose, and such a development would certainly improve the general character of the district.

Possible Parkways. The sketch shown (Fig. 28) indicates in a general way only one of Mason City's opportunities toward the creation of an attractive parkway system. While such a scheme has not been developed in detail, the possibility of creating something worthwhile is certainly evident. The shore drive on the east bank

of Lime Creek may well be carried to the north, where Mason City should develop its large park of the reservation type. The small privately-owned park north of the city and now open to the public (Fig. 33) constitutes a bit of the sort of thing suggested.

Clear Lake. Something of a near-by recreation ground is afforded by the proximity of Clear Lake (Fig. 34). The intervening ten or twelve miles of paved highway practically means that this attractive lake and the facilities of a typical water-front summer resort (Fig. 35) are available to a large portion of Mason City's population. In addition to excellent highway connections, both steam and elec-



Fig. 38. Backyard conditions along Willow Creek. Many attractive possibilities still exist along this stream.

tric railroad service serve to make Clear Lake a pleasant summer playground for Mason City.

Distribution of Playgrounds. Playgrounds must meet requirements that are more exacting than in the case of parks. Playground areas are used more intensively and more often than are park areas, and to give efficient service such play spaces must be located conveniently for the children that are to use them. Then, too, rough land cannot be utilized efficiently for playgrounds—the games and equipment, for the most part, demand level ground. There is, therefore, less freedom in the selection of playground sites than in the case of sites for parks.

Children's playgrounds, experience has proved, should not be located so that any child in its district must walk more than about

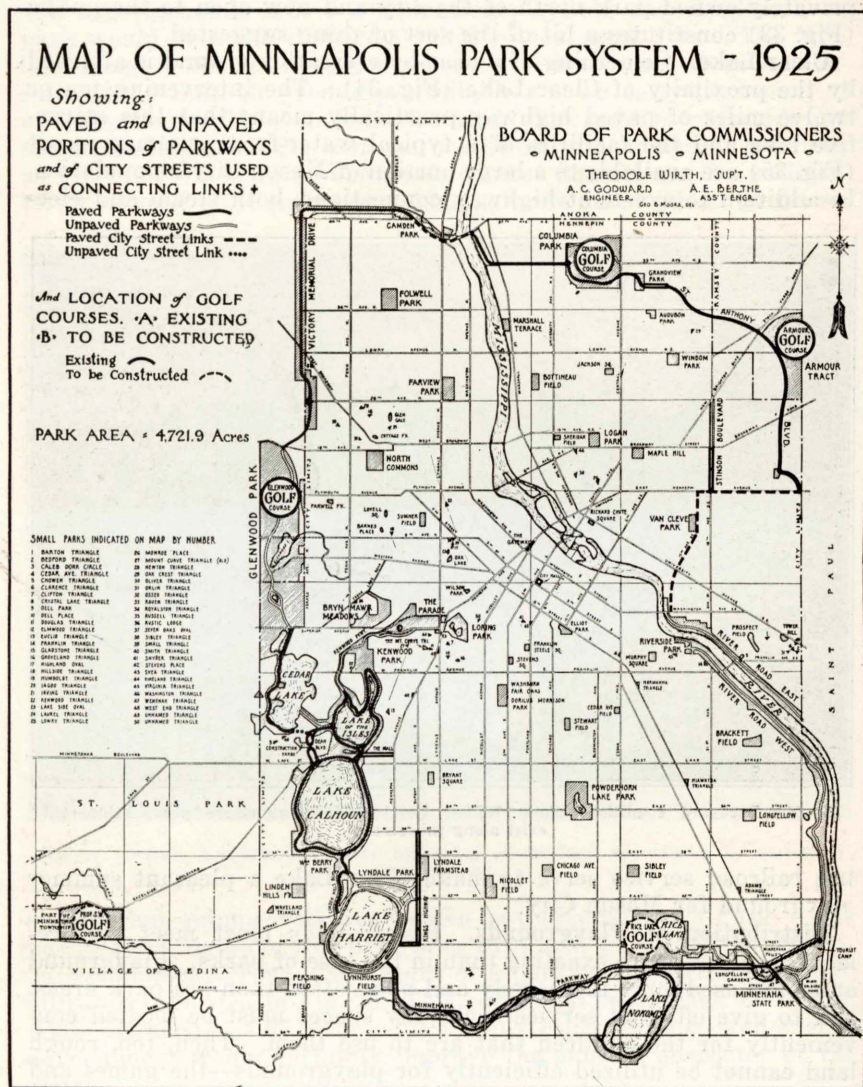


Fig. 39. Minneapolis, with all her wealth of water frontage, sees the wisdom of claiming and developing every available foot for her citizens.

one-fourth of a mile to reach it. This means spacing playgrounds approximately one-half mile apart. Playgrounds for young people and adults may be double the spacing required for the little chil-

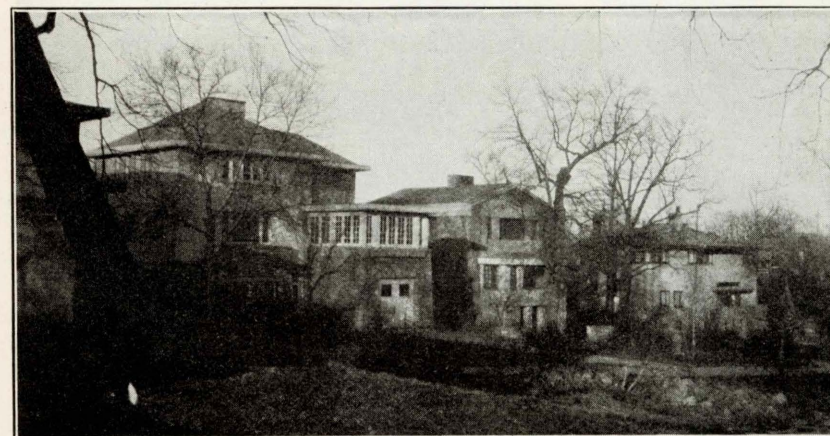
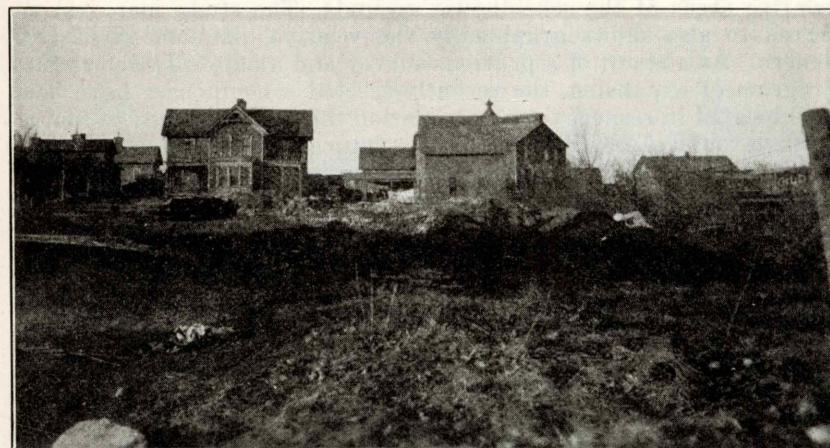


Fig. 40. High-class residential property (lower picture) and the dumping grounds (upper) across the street. These residential developments, contrary to local custom, have capitalized the beauty of their frontages on Willow Creek (see Fig. 37).

dren, while men and boys will go even further to reach suitable areas.

Playground Areas in Mason City. Strictly speaking, Mason City has no playgrounds. This does not mean that there are no play spaces or that there is no playground equipment. Most of the grade

schools have adequate play spaces, the newer school plants showing modern tendencies in their more generous playground areas. Most of these schools are provided with some playground equipment. The locations of the public schools are shown in Fig. 36, as well as the relative areas of the schoolhouse grounds. The study map just referred to also shows graphically the relative distribution of residences. As a result of a previous survey and a carefully-determined program of expansion, the recently-erected schoolhouses have been well located in respect to the population they are intended to serve.

Playground Administration. The future policy of Mason City as to the development of play centers of various sorts should be based on a study of what has been learned about the proper administration

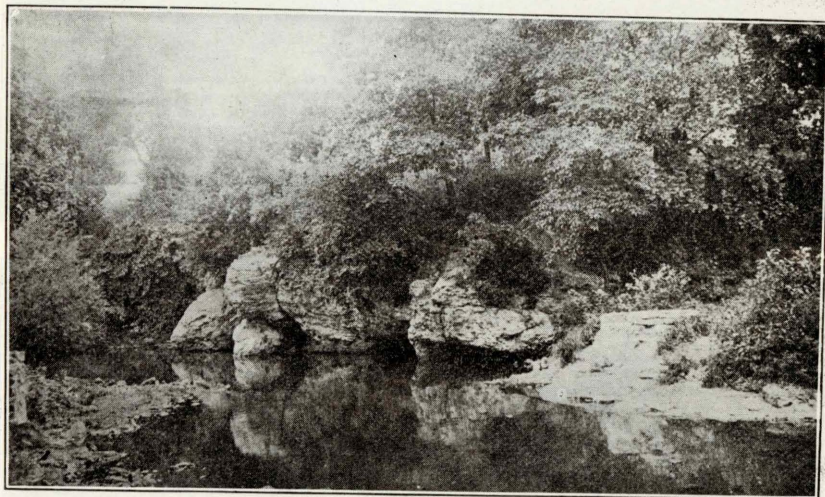


Fig. 41. A bit of waterfront in East Park. All available stream frontages should be obtained by the city.

of such recreational facilities—and it must be admitted that playgrounds have been managed in a number of ways, each of which has proved successful under favorable conditions. Play centers have been donated, equipped, and administered by organizations of citizens, but many more have been supported by public taxation. There has been, however, no settled municipal policy as to what department shall control this activity. It has often been delegated to school boards or to park boards, and in recent years, to recreation commissions. Sometimes the responsibility is divided by having the school authorities operate their own playgrounds, while the local park controls the play facilities in the parks. Sometimes the school authorities handle the playgrounds during the school year, and the park board during the summer months.

The average park board is hardly the logical agency to handle the playgrounds of a community. Even if the evils of political influences and too frequent changes in personnel are avoided, the primary interest of a park board is in building and maintaining parks.

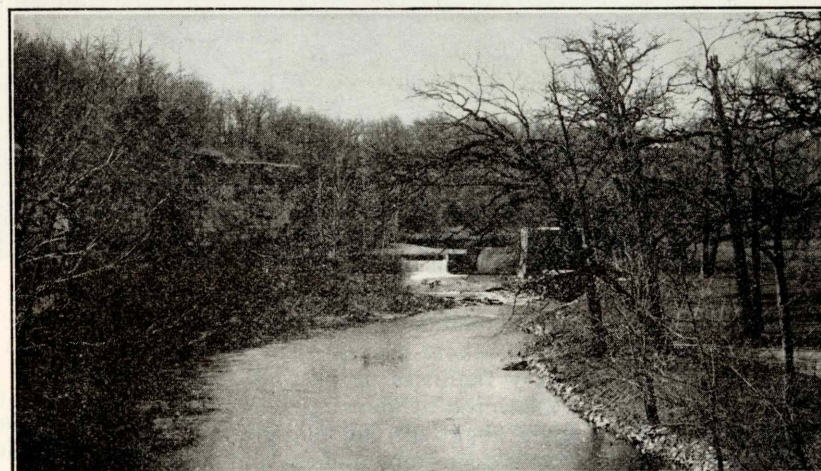
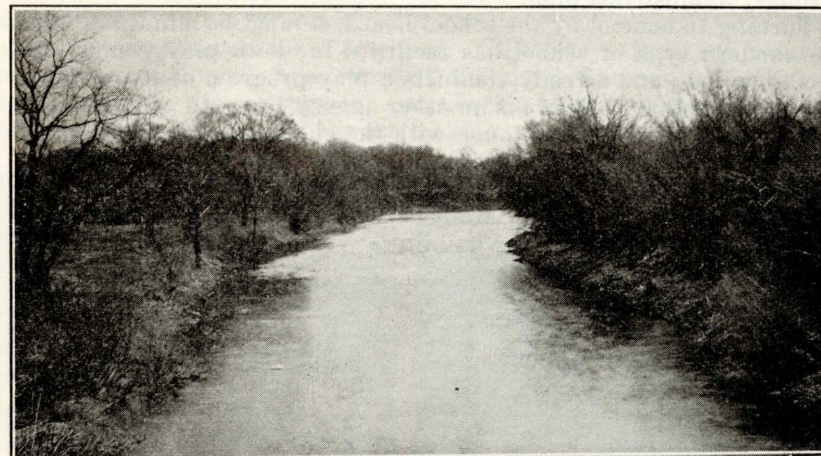


Fig. 42. The beauty of the streams in and about Mason City is varied and well worth saving.

Such officials do not ordinarily have any training for recreational education and leadership. Unofficial playground or recreational associations can have no more than advisory powers where the municipality finances the playground. The choice of authorities favors

either the school board or a recreation or playground commission. The commission can concentrate on recreational problems and give excellent service, but the addition of another municipal department in the case of a town or small city seems so undesirable as to argue strongly against this plan.

Turning to control by the school board, it must be admitted "that the modern type of school has facilities for both playgrounds and social centers, and already conducts a play program of its own during the school day. There is no other agency that can compare with the school in having close touch with the children and neighborhood conditions. Through the children, whole families are reached." Every public-school superintendent is aware of the educational value of supervised play. Many a schoolhouse could be made to serve as a community-center building.



Fig. 43. There is abundant opportunity for improving the appearance of Willow Creek as it flows through the city.

There are, of course, arguments against placing the playground system under the control of school boards. The contention that few schools have the necessary facilities or ground areas ordinarily is justified, but it may be answered by showing that in most small communities the schools have about all the playground facilities that exist locally. Most of the indoor conveniences and space are already available, the playground equipment can be purchased, and the additional adjacent or nearby ground needed can usually be obtained. It has been pointed out, also, that only some fifteen percent of a community's population is of school age, and that most of the play of this group occurs out of school hours.

If the schools are to serve as play centers, this phase of educational work must of course be placed on a year-round basis, with a

suitable staff of instructors to supervise the playgrounds through the after-school and evening hours. This means that the municipality must provide the school board with additional funds to provide trained workers and equipment for this program, but the additional cost is apt to prove much less than the building up of a separate system of playgrounds. Our public-school plants stand idle about twenty-five percent of the time. Why not receive a full return on this, the heaviest investment of the small community? Every schoolhouse should serve as the neighborhood community center. If certain conveniences or space are lacking, they should be supplied.

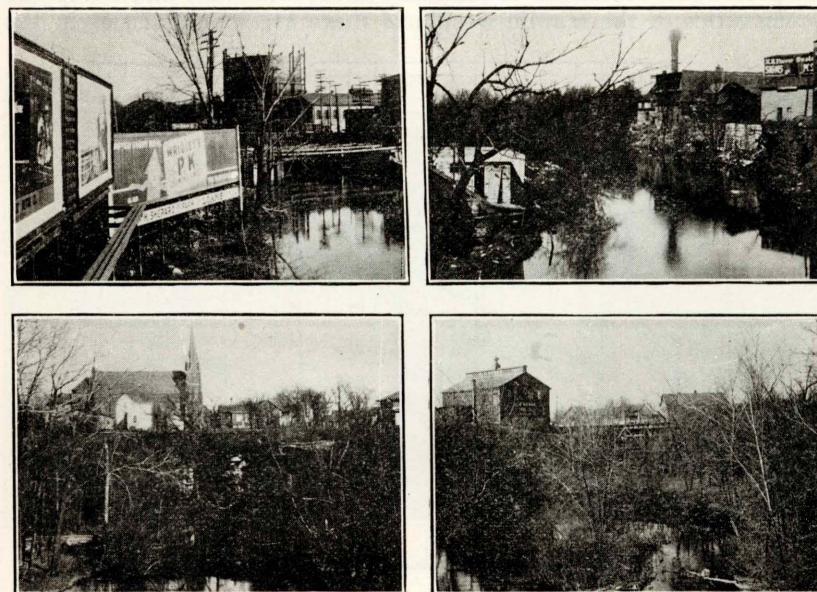


Fig. 44. A number of views along Willow Creek that show attractive possibilities as well as unsightly conditions.

Experience has shown that such a scheme is entirely practicable, particularly in small cities. This is the policy tentatively recommended for Mason City. The school grounds existing place an ample play space within a quarter mile of most of the existing dwellings, as indicated by the shaded areas in Fig. 36. The larger circles are drawn with a half-mile radius. Central, the oldest schoolhouse in Mason City, now occupies very valuable ground. When this old building is replaced, it would seem wise to give up the present location, which is badly needed for other uses, and to locate the new building a number of blocks west of the present location. This change would result in a better distribution of schoolhouses in rela-

tion to population, and it would probably be to the financial advantage of the community.

Water Fronts. In and about many of the communities of Iowa there is little variety of topography, without which it is hard to give a town an interesting individuality. To a number, of course, the problems and opportunities of irregular topography have been given, but there are few lakes, and many a town cannot even boast of a stream within its borders.

Nothing would seem more natural than that each prairie city and town would make the most of every bit of individuality that nature has presented—but what is found by those who visit and study the communities of the middle west? If there are irregularities in the

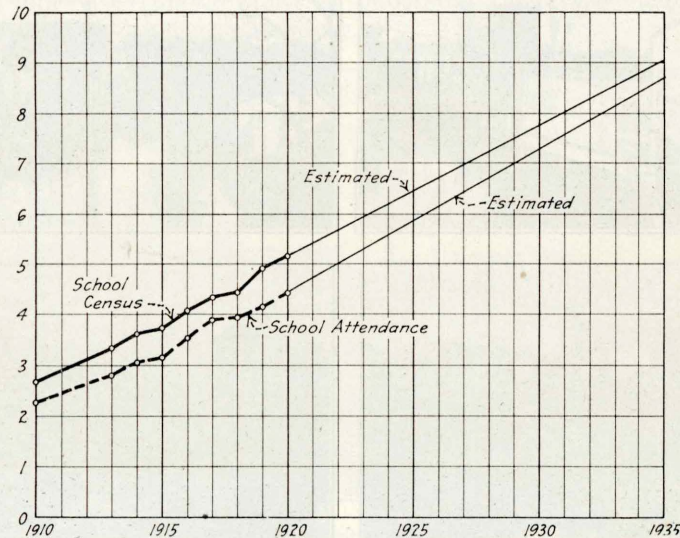


Fig. 45. School census and attendance in Mason City, together with future curves as estimated by the school authorities.

ground surface, usually no attention is paid to the possibilities of creating an attractive residential development. Streets are projected gridiron fashion over hill and hollow, in defiance of the expense and the ugliness of heavy cuts and fills; land is leveled off as if the real object were to give everyone a chance to reside on an absolute level with his neighbors. If a town, by good fortune, has water frontage on a winding stream, this gift of nature, with all its attractive possibilities, is usually regarded as an obstacle in the platting of more building lots. Instead of capitalizing the natural beauty of the stream (Fig. 37) the narrow-visioned property owner usually turns his back upon it. Instead of creating a parkway with drives that follow the winding banks of the stream, and then fronting as many

of the nearby lots as possible on this precious bit of park-like topography, the lots are turned away from any such prospect so that the stream is made a back-yard affair (Fig. 38), a place to dump tin cans and other rubbish.

Let any nature lover or civic 'booster' in Mason City who doubts the justification of this arraignment of the typical community study the present condition of the frontage on Lime Creek and on Willow Creek throughout the city with a city map in hand. Much of the present back-yard character of these streams will be found fundamentally due to short sightedness in the platting of land. If Minneapolis, for example, with her wealth of water frontage on lakes and streams (Fig. 39) finds it worth while to claim every available



Fig. 46. Mason City's high-school building.

bit of such frontage for the public, surely the community much less fortunate should husband every bit of its natural beauty.

There is yet time to reclaim for the people of Mason City a good deal of charming water-front land. In several districts there is room to front about on these attractive prospects. The owners of some such lands could readily afford to donate a liberal frontage strip for park or parkway purposes, because they would then have some very attractive and valuable property fronting on this public park land. Detailed studies have not been made of all these opportunities, but the possibilities of several such sites are suggested in Fig. 28.

Mason City should promptly adopt the policy of obtaining for the public every available bit of land fronting on her streams. Due to the practices just described, little of the frontage is of much financial

value. Oftentimes, particularly in the commercial districts, only narrow strips could be obtained (Figs. 43 and 44); but even this would give the city better control of the appearance of the stream. Even where the land cannot be obtained, a vigorous clean-up campaign should be carried out. Future dumping of refuse should be prevented, and other unsightly activities done away with.

Swimming and Wading Pools. In spite of the nearness of Clear Lake, a certain part of Mason City's population cannot enjoy this water. A number of wading pools should be provided throughout the parks of the city and in connection with each of the city playgrounds. At some central location a modern swimming pool should be provided. Such a pool, properly designed and operated, would undoubtedly be well patronized. Maintenance costs could easily be

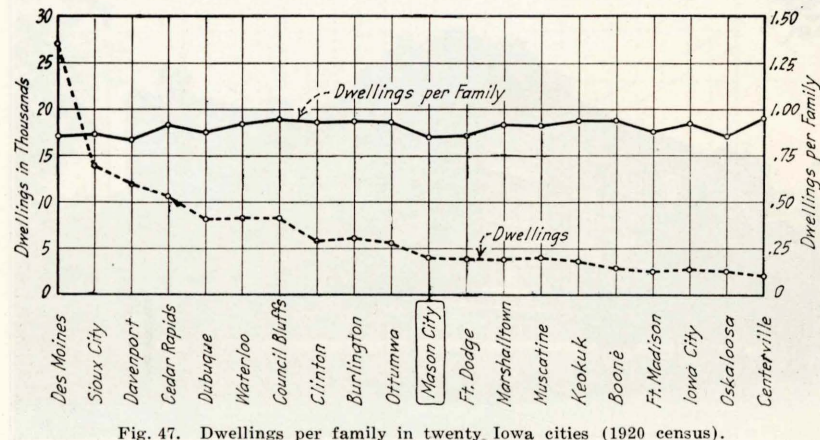


Fig. 47. Dwellings per family in twenty Iowa cities (1920 census).

met by charging nominal admission fees. The benefits of municipal pools are many and worth while.

Park Systems. A modern park system consists of a well-distributed system of recreational areas, tied together with a system of connecting boulevards or parkways. While Mason City can hardly be said to possess any traffic ways that could be classed as parkways, or even boulevards, the community (as has been suggested) is not without its opportunities to create such a system of pleasure drives—in short to build up a recreational system of the sort worthy of a progressive community.

Cemeteries. While cemeteries, like large parks, are established elements of a city plan, they usually interfere with communication and the development of the city. Once established, these areas are usually embarrassingly permanent. Fortunately Mason City's cemeteries are located where they have not interfered materially with the expansion of the city and the development of its street system.

The location of any future cemeteries should be carefully considered in the light of the extension of street and transportation systems, as well as of probable residential, commercial, and industrial developments. Motor vehicles and good roads have made accessible so many tracts outside of municipal limits that there seems to be little justification for the future dedication of large municipal areas to this use.

Public Schools

The character and the distribution of the schools of a community has a very definite bearing on its development—on its city plan.



Fig. 48. Industrial housing furnished by the Lehigh Portland Cement Company.

The progressiveness of a town may be estimated with no little accuracy by an inspection of its school facilities. Mason City is not slighting its educational system.

A detailed investigation of the school system of Mason City was unnecessary as a part of this survey, due to the excellent analysis and program that had been worked out in 1922. The facts that follow are taken from this report.

Approximately twenty percent of Mason City's population is enrolled in school—an unusually high ratio which will probably diminish with the growth of the city. Approximately 85 percent of the school census is enrolled, this ratio being graphically represented in Fig. 45.

“For the most economic operation of school buildings, they should be large enough to house over 500 children, from 1000 to 1500 is most desirable. The size of the building, however, is decided by the distance children are to go to school. Current practice has estab-

lished the following limits as maximum distances: (1) For children in the first six grades and kindergarten (ages from five to eleven)—one-half mile or approximately eight blocks of 300 feet each; (2) For Junior high-school students (grades 7, 8, and 9)—one mile or approximately 17 blocks; (3) For Senior high-school students (grades 10, 11, and 12)—from one to two miles.

“The program for Mason City is constructed to accommodate approximately all the children within the distances outlined above.”

In addition to the High school (Fig. 46) and the Lincoln grammar school, Mason City has twelve grade schools, most of which accommodate kindergarten and the grades up to and including the 6th.



Fig. 49. The workmen's houses provided by the Northwestern States Portland Cement Company. See Fig. 68 for their position relative to the cement plant.

McKinley, Wilson, Madison, and Harding schoolhouses are unit-type buildings and can readily be added to in accordance with the demand.

Housing

Practically every community has a housing problem. Usually among the poor and the near-poor there are many that are not properly housed. While slum conditions are aggravated by congestion such as is found in the heart of a great city, such conditions are not the exclusive possession of large communities. The small town and the rural hamlet have their slums as well.

The permanent housing problem encountered in some degree in every community has been well stated as that of “enabling the great mass of the people who want to live in decent surroundings and

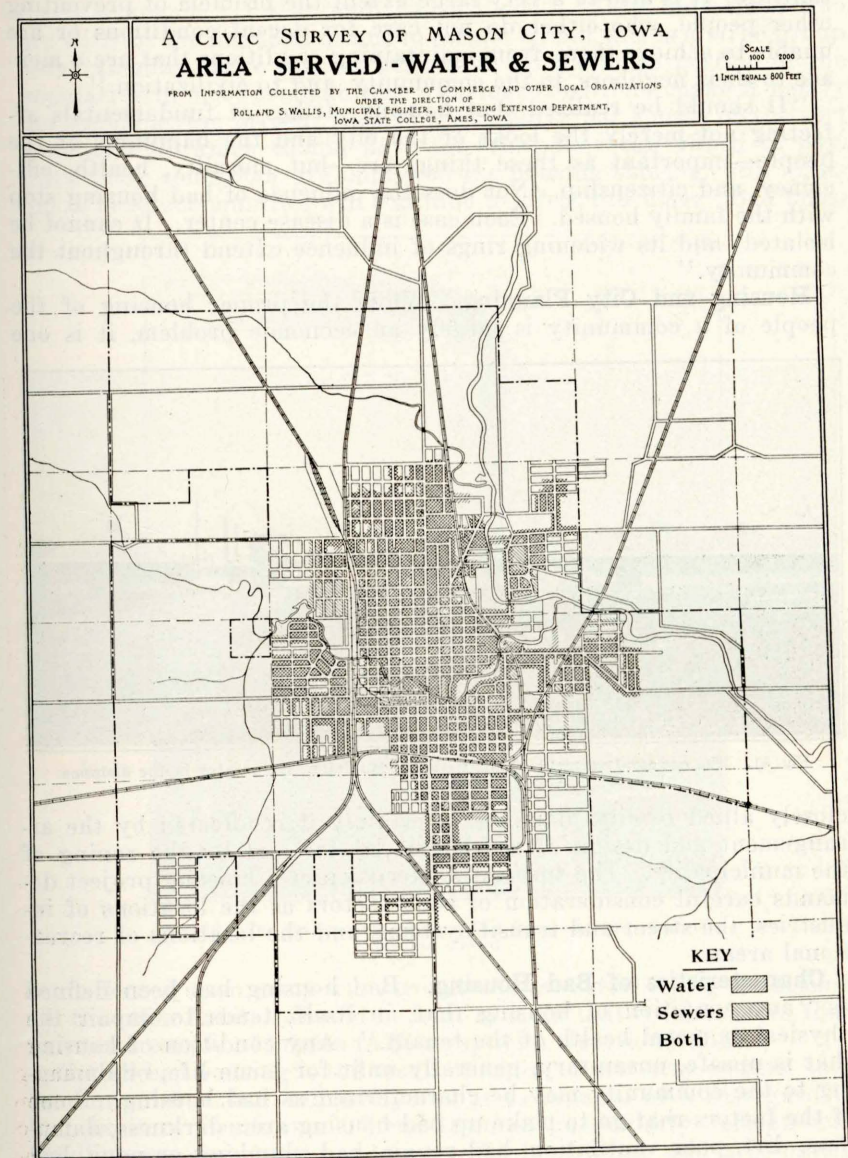


Fig. 50. This study map shows the areas served by water mains and by sewers.

bring up their children under proper conditions to have such opportunities. It is also to a very large extent the problem of preventing other people, who either do not care for decent conditions or are unable to achieve them, from maintaining conditions that are a menace to their neighbors, to the community, and to civilization."

"It should be realized that housing strikes at fundamentals affecting not merely the looks of the city and the happiness of the people—important as these things are—but morality, health, efficiency, and citizenship. Nor does the influence of bad housing stop with the family housed. Each case is a disease center. It cannot be isolated; and its widening rings of influence extend throughout the community."

Housing and City Planning. While the proper housing of the people of a community is largely an economic problem, it is one

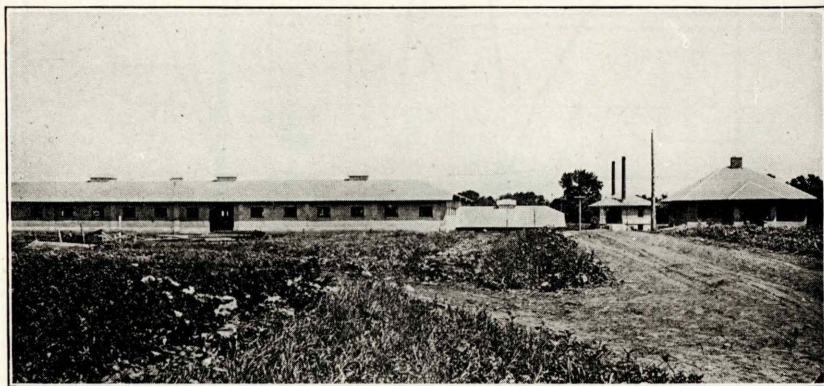


Fig. 51. The sewage-treatment plant, with the municipal incinerator in the distance.

closely allied to city planning. Certainly it is affected by the arrangement and design of residential streets and by the zoning of the municipality. The successful execution of a housing project demands careful consideration of such factors as the locations of industries, the street and transit systems, and the locations of recreational areas.

Characteristics of Bad Housing. Bad housing has been defined as "any condition of housing that, in itself, tends to impair the physical or moral health of the tenant." Any condition of housing that is unsafe, unsanitary, generally unfit for home life, or damaging to the community may be characterized as bad housing. Some of the factors that go to make up bad housing are: darkness, dampness, dirt, poor ventilation, bad repair, bad plumbing or none, bad water or none, bad toilets, depressing surroundings, lack of privacy, and overcrowding. Bad housing, in some respect or degree, probably exists in every community, large or small.

Causes of Bad Housing. The fundamental cause of most bad housing is economic. It is an evil that ordinarily affects only those who are without the financial means to escape it; but this is a large group—the humbler wage earners who make up the large portion of the population in most communities. Various conditions make it nearly impossible at the present time to erect individual houses of the sort American workmen should have for what they can afford to pay. Until these conditions are improved the housing shortage still existing in most communities will continue to affect this class. Bad hous-

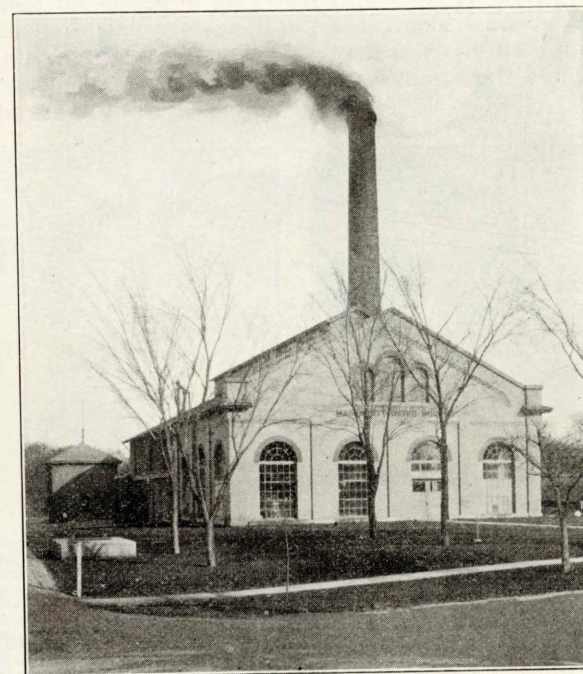


Fig. 52. The waterworks plant. The large storage reservoirs are not shown.

ing is forced upon many who strongly desire better living conditions. On the other hand, it should be kept in mind that it takes more than an excess supply of houses to do away with slum conditions.

Not all bad housing is the result of faults of property owners, such as rent profiteering, niggardlyness as to repairs, or a disregard of bad sanitary conditions. Some tenants, particularly foreign-born families, are accustomed to low standards of living and are content to live midst unhealthful and unattractive conditions. Such people will sometimes even fail to use the facilities that are provided. Education, frequently of the compulsory variety backed by suitable legislation, is demanded by this condition.

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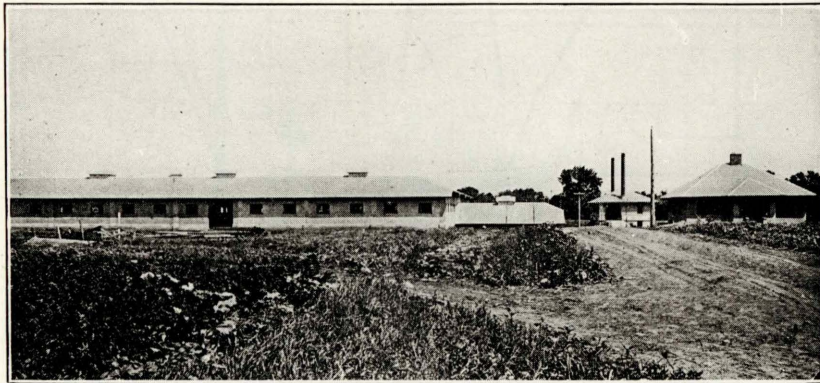


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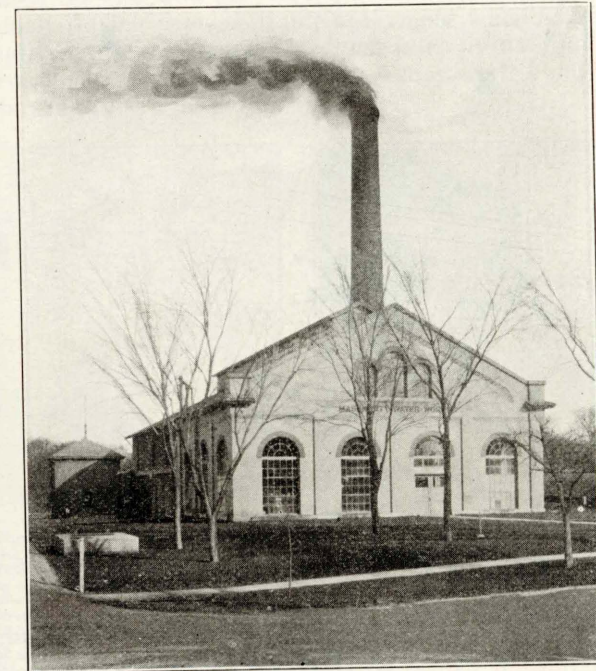


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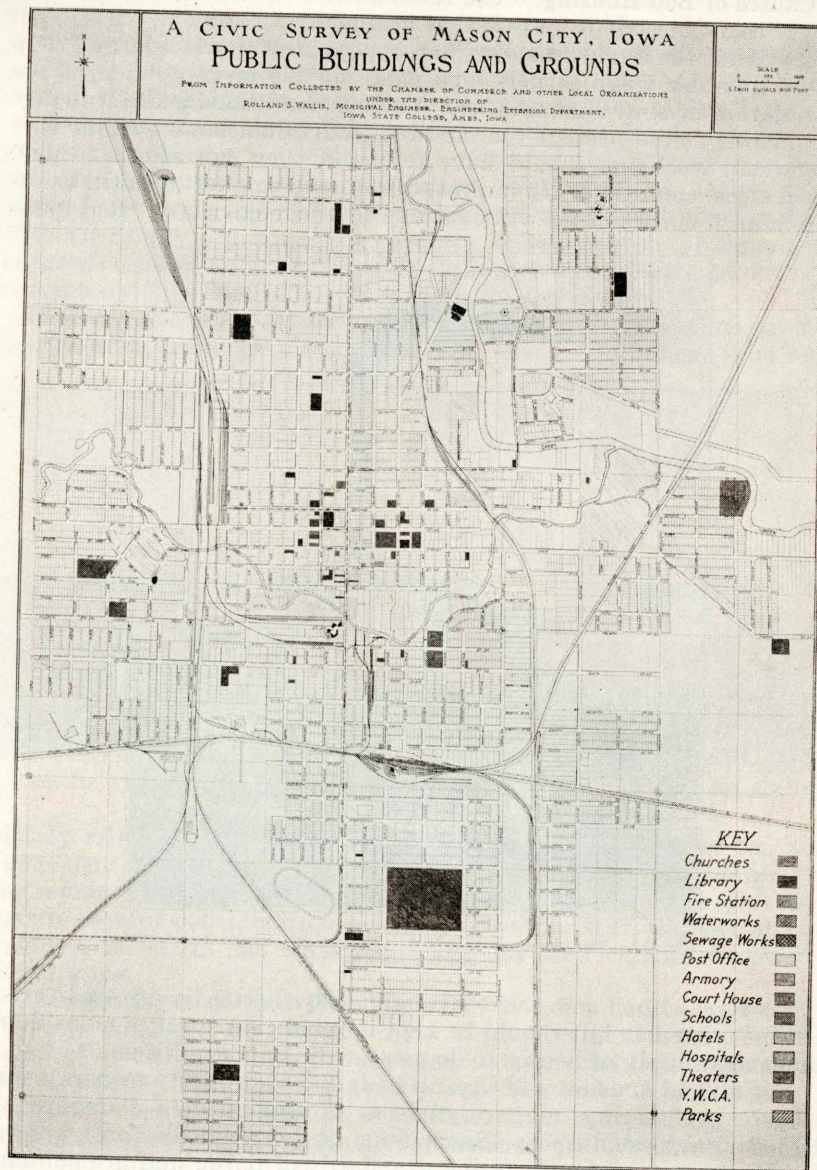


Fig. 53. The original survey map differentiated, by colors and symbols, between the various classes of public and semi-public uses of property as classified in the key shown.

Periods of unemployment, moreover, reduce the financial strength of the working man and contribute to overcrowding, a serious factor in bad housing. In fact, overcrowding is often more serious in its consequences than structural defects and lack of conveniences. Overcrowding always results in a marked increase in the infant death rate and encourages the spread of disease, notably tuberculosis. Patients cannot be segregated for the protection of the other members of the household.

Overcrowding is due to the use by a number of families of quarters intended for one, and also to the practice of taking in boarders—particularly during periods of unemployment when extreme economy is required. The privacy to which each individual and each family group is entitled is impossible under such conditions, and the results are always bad.

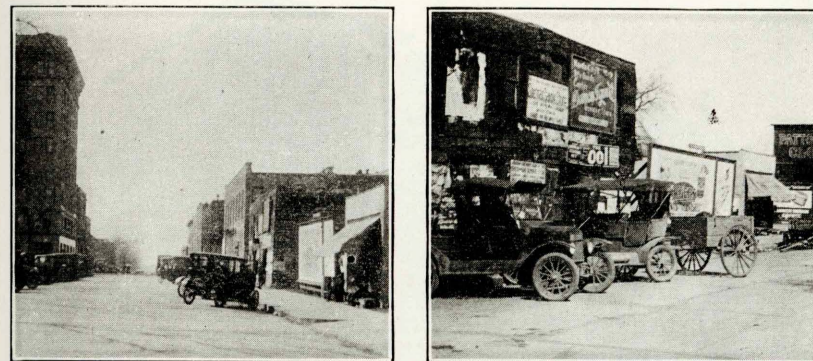


Fig. 54. The illustration at the right shows certain disreputable buildings (now removed) within a block of the heart of the city. The other view (left) contrasts this property with the fine office building less than a block away on the same street. This run-down property and the school property opposite suggest civic-center possibilities.

Advantages of Good Housing. The benefits of good housing may be said to be three-fold: the community, the industrial and commercial interests, and the individual citizen are all gainers through the securing of satisfactory conditions. The community then attracts and holds a better type of citizens, its juvenile delinquency is reduced, its vital statistics are better and, consequently, its industries tend to grow in number and importance. Industry profits because it secures a better grade of workers, a smaller labor turn-over, and efficient instead of dissatisfied workers. The well-housed workman obtains contentment in place of the restlessness and dissatisfaction that are characteristic of the workman whose family is poorly housed. He is more easily interested in community improvements and is a better citizen.

Existing Conditions. Mason City has a more serious housing problem than is found in the average Iowa town. The industries that

have done so much in forwarding the growth and commercial importance of the community are directly or indirectly responsible for most of the bad conditions existing. To the presence and the nature of her large industries Mason City owes the large percentage of foreign-born in her population (Fig. 9), and it is the housing of these people that constitutes the most critical local problem.

While no comprehensive survey of housing conditions in Mason City has been carried out, certain general statements may be made as to existing conditions. Mason City is essentially a community of single-family homes (Fig. 47). Except for the tenement-type of industrial housing (Fig. 48) furnished by one of the cement plants, there are few apartment houses. As in most communities of this type and size, there is a mixed character to the housing found

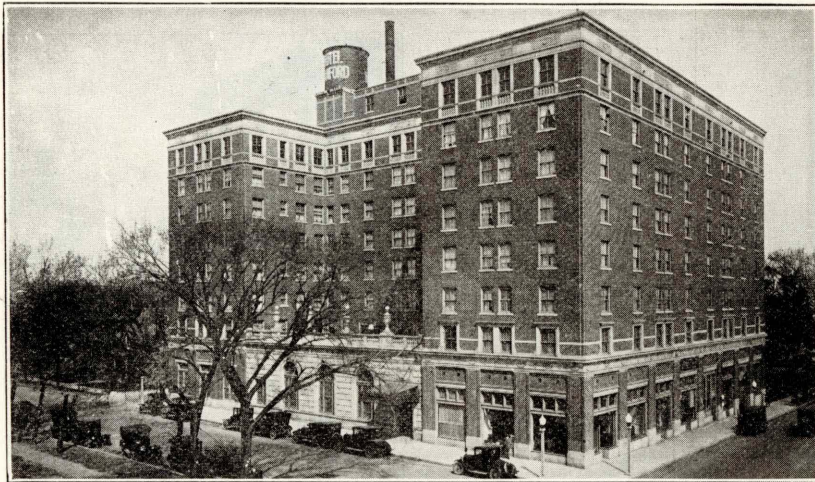


Fig. 55. The Hanford Hotel.

throughout much of the built-up area. This condition is particularly noticeable throughout the older portions of the town, where the tendencies in the type of buildings erected have gone through one or more transitions. Certain sections of the city, however, are given over to one general type of housing. Thus, several of the outlying sections are building up consistently to houses for tradesmen and laborers. Such developments, while not necessarily unattractive, are made up of houses decidedly smaller in size than those typical ten or fifteen years ago. To the encouragement of home ownership in these classes of citizens, much careful consideration may well be given. Zoning regulations, by their protection of home investments, would do much to encourage a greater percentage of home ownership.

In contrast to these sections in which many of the more independent and aggressive of Mason City's workingmen are housed, no extensive district exists devoted exclusively to high-class dwellings. This is undoubtedly due in a large measure to the influence of the industries. Not only is residential development cut off in most directions by the holdings of these industries (Fig. 72), but certain nuisance conditions—smoke, dust, and odor—are so general as to affect to some degree nearly all portions of the city. The prevailing winds have much to do with the nuisance conditions throughout the city.

Industrial Housing. The cement industries attempt to house a portion of their employees. The types of housing employed are the 'barrack' and 'row' types (Figs. 48 and 49). Sanitary condi-

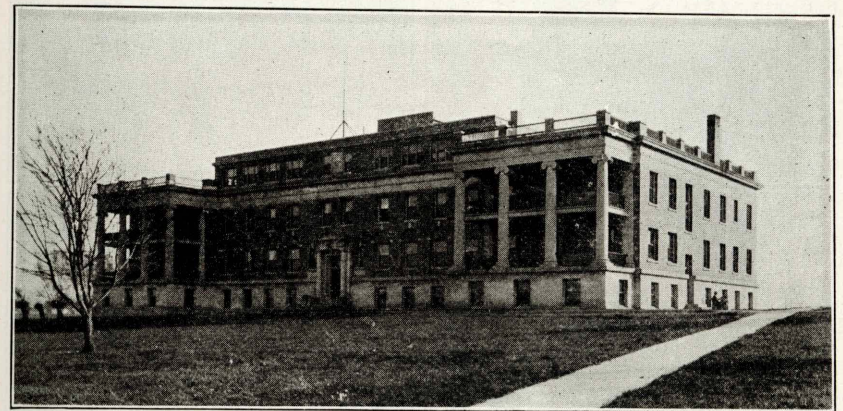


Fig. 56. The Odd Fellows' Home in southwest Mason City.

tions in and about these developments are far from satisfactory—in fact the class of workingmen that would consent to keep their families under such conditions could hardly be expected to worry much about sanitation.

One serious problem is that of the cement dust which at all times constitutes something of a health menace, particularly as to respiratory diseases. Mason City has a relatively high death rate from tuberculosis. The effect of this dust is serious enough with adults, but it is with the children (particularly the infants) that its effect is the most serious—these little folks do not have frequent opportunities to escape temporarily from the dust-laden atmosphere. Mason City's death rate among infants was exceeded in 1922 by only two other cities in Iowa. "The most pitiful victim of modern city life is not the slum child who dies, but the slum child who lives. Every time a baby dies the nation loses a prospective citizen, but in

every slum child who lives the nation has a probable consumptive and a possible criminal.”

It would seem to be to the interest of the cement companies to give serious consideration to the improvement of the conditions mentioned. Even if there were no economic gain to be effected by materially reducing the dust nuisance, certainly it should pay as a welfare measure to establish these company houses further from the plants.

The beet-sugar industry is decidedly, and the tile industry somewhat, seasonal in character. The results in a large ebb and flow

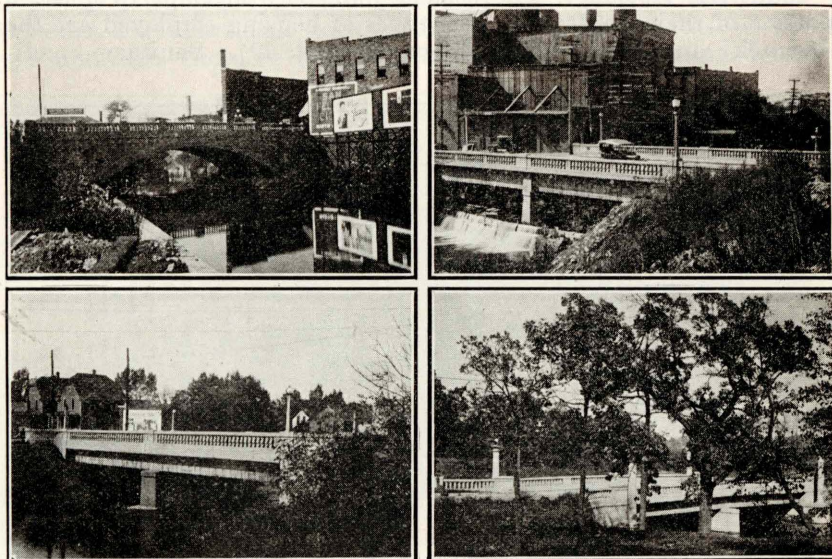


Fig. 57. Some of Mason City's bridges.

of industrial population, as well as considerable unemployment during slack seasons. The necessity of economy on the part of the workers results in much 'doubling up' as to living quarters on the part of the foreign-born laborers. During these periods very congested housing conditions are typical among these people; and along with this congestion come the numerous evils—sanitary and moral—that accompany such living conditions.

From a housing standpoint the chief objection to the packing plant is that under certain unfavorable wind conditions the houses near the plant are rendered almost untenable. From the standpoint of residence property in Mason City the location of this plant was unfortunate. Much land that would ordinarily be considered very desirable for residential development will never under existing conditions be occupied by a good class of homes.

The distribution of the residences of the employees of several of the large industries has been investigated by the committee on industry and the results shown graphically on a map (not reproduced) of Mason City. The results of this study are of particular interest in connection with this general discussion of housing conditions.

Need of Housing Survey. Good housing is a material asset to any rapidly-growing community—particularly to an industrial city. The commercial and industrial interests of Mason City would do well, therefore, to join forces with the municipality in studying ways and means of improving local conditions. Before anything like an adequate program can be worked out, however, a definite knowl-

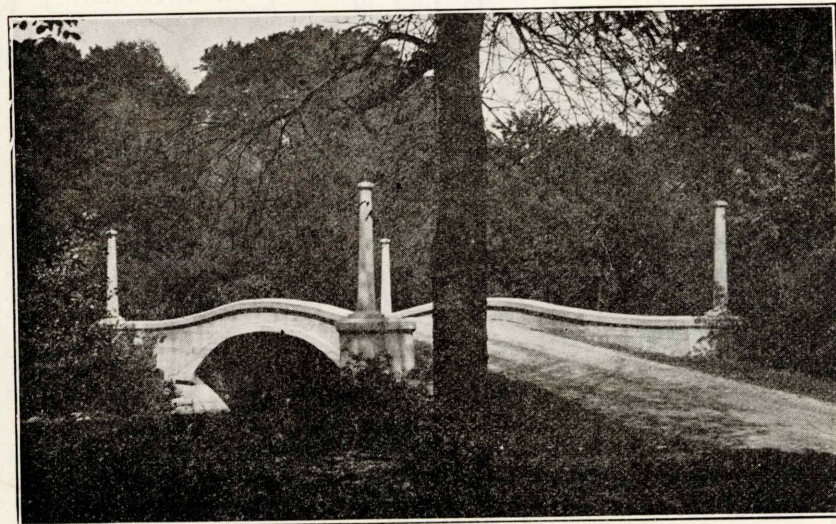


Fig. 58. The bridge in East Park. Due to faulty street arrangement, this bridge carries much traffic that should not pass through the park.

edge of the housing conditions existing throughout the city must be obtained.

The only way that this information can be secured is through a systematic housing survey of the entire built-up area of Mason City. While such an investigation would involve considerable effort and more or less expense, if the various organizations interested would undertake the project on a cooperative basis, the burden on any individual member would not be heavy. Only by such a house-to-house investigation will all the bad housing conditions be brought to light; and only by obtaining full and definite knowledge of such conditions throughout the city can any comprehensive action be expected. An outline suggesting the general lines of investigation that should be followed out in making a comprehensive housing survey is given in the supplement to this report.

lowering of building costs. Money may be made easier to obtain and at lower rates. At present the building and loan associations are doing the most in this direction. Housing investments are not ordinarily financially attractive, but if well worked out they can be made to yield a fair return.

The general factors that are tending to relieve building costs may be summed up as: (1) better design and (2) lower costs of materials. Through better design smaller houses are substituted for larger structures less efficiently arranged. Better planning reduces the waste that attends ordinary building operations. The costs of ma-

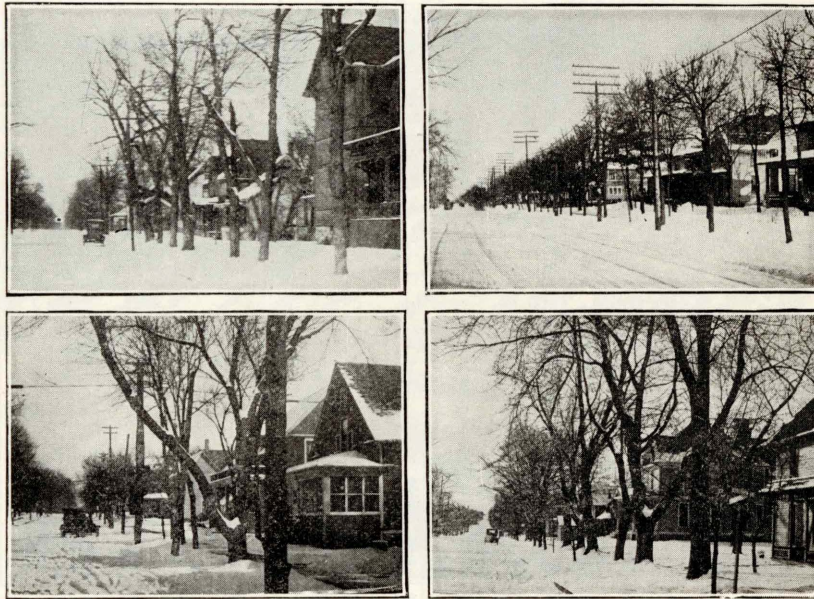


Fig. 61. A group of pictures illustrating some of the street-tree conditions existing in Mason City—trees in bad condition, of mixed sizes and varieties, badly spaced, and “topped” for wires.

terials are being reduced by simplification and by standardization. New building materials and processes are promising relief.

There is a general movement to lower the arbitrarily heavy requirements of many building codes as applied to the construction of small houses. The building code of Mason City should be examined critically in connection with the report of the Building Code Committee of the U. S. Department of Commerce on “Recommended Minimum Requirements for Small Dwelling Construction.” A similar investigation and report on plumbing requirements has been made (“Recommended Minimum Requirements for Plumbing in Dwellings and Similar Buildings”) under the same federal depart-

ment. The local plumbing code should be studied with a view to revision in the light of the results of this investigation. The relieving of hardships caused by unnecessarily severe structural requirements will tend to lower building costs and thus to encourage the building and owning of homes.

Many examples now exist of community organizations that have gone into housing developments and succeeded in making model houses available to workingmen at materially lower prices. These results have been obtained, for the most, through (1) better house design, (2) wholesale purchasing, and (3) quantity production. Building and loan associations can do much to forward better housing by encouraging the construction of single-family homes. Many

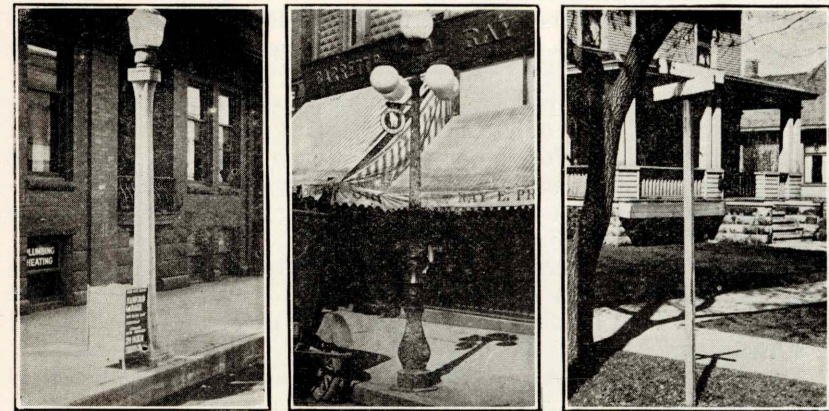


Fig. 62. The cast-iron lamp posts (center) used in the business district, are being replaced by concrete posts of the type (left) installed in Mason City some ten years ago. Street-name signs (right) on neat supports.

industries have found that they can secure better workmen and reduce their labor turnover by active cooperation with their employees in home-building programs.

Sanitation and Public Health

In March, 1923, a valuable survey of local conditions as to sanitation and public health was prepared for the committee to which this topic was assigned by Mr. Warren J. Scott of the Extension Division of the State University of Iowa. In this report, Mr. Scott made a thorough analysis of local health records. While in 1922 Mason City's crude death rate (11.0) was lower than all but two of the Iowa cities having populations (1920) over 10,000, the local specific death rates by age groups in 1922 was higher in most cases than the average figures for Iowa in 1921. Of the 212 deaths in 1922 (excluding hospital deaths of non-residents) over 12 percent were from

tuberculosis and diphtheria, diseases commonly regarded as preventable, while over 27 percent were from causes regarded as potentially avoidable. In the same year, moreover, Mason City's infant mortality rate (97.5) was only exceeded by two Iowa cities having populations (1920) of over 10,000. This rate exceeded the average rate for Iowa. Mason City's birth rate, as might be expected with its fairly large percentage of foreign-born residents, slightly exceeded the average for Iowa.

Health Department. Mason City maintains a municipal health department and laboratory under the direction of a part-time health officer. Records are kept of reportable diseases and of deaths. A sanitary inspector "looks after the quarantining of cases of contagious diseases, disinfections, the inspection of nuisances, and the inspection of restaurants and meat markets. Every spring he makes an inspection of privies over the city and issues orders where cleaning is needed."

The laboratory has proved "a valuable asset to the health department in the work of examining cultures, and is a strong arm in securing pure milk for the people of Mason City, besides looking after the purity of the municipal water-supply and private well supplies, and furnishing a guide in determining the efficiency of the sewage-disposal plant."

"The most urgent need of the health department at present seems to be the services of a trained public-health nurse.* There are at present two school nurses, who are under the direction of the Board of Education."

"On the whole, Mason City has a good health department. It is functioning well. . . . However, it cannot be expected that the maximum amount of service in health work can be given until the city has a full-time health officer on the job, and it is to be hoped that the time is not far distant when the city will recognize this necessity and pay a full-time salary."

Sewers. "A separate system of sewers is maintained in Mason City. There are said to be about 55 miles of sanitary sewers and some 17 miles of storm sewers. The sanitary sewers vary from 6-inch tile to the 30-inch intercepting sewer that takes the sewage to the treatment plant." One of the survey maps shows the complete sewer system, including the sizes of all mains and the location of all man-holes. Another map (Fig 50) shows the city area served by sewers. There seem to be no records in the city files as to the locations and sizes of the various lines of storm sewers.

Sewage-Treatment Plant. The treatment plant (Fig. 51) is located just west of Lime Creek in the eastern part of the city, between Second and Third Streets, N. E. The sewage dry-weather flow, averaging about one million gallons per day, after screening is

*Mason City now has a full-time public-health nurse, employed by the local civic organization and supported by funds from the community chest.

pumped to the Imhoff tanks, of which there are two. From these tanks the sewage passes to a dosing tank from which it is discharged two or three times each hour to the trickling filters. These filters are housed and contain 369 nozzles for sprinkling the sewage over the surface of the broken stone with which the filters are constructed.

The effluent from the trickling filters passes to a 'humus tank,' similar in design and operation to a small Imhoff tank. From this tank the purified sewage is discharged into Willow Creek near the plant.

The treatment plant, unlike many municipal plants, has been very carefully operated, and it produces excellent results when not overloaded. The fluctuations in flow following rainfalls indicate an excessive amount of leakage into sewers. This, together with the

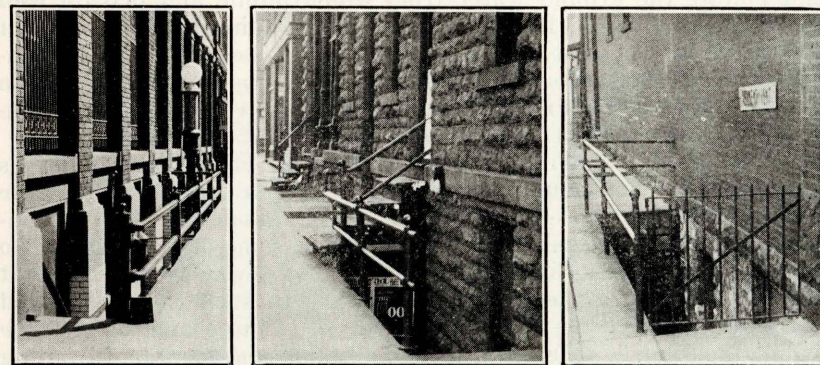


Fig. 63. Street obstructions such as these are dangerous and unsightly and reduce materially the traffic capacity of the sidewalks.

flooding that results from the backing up of water from Willow Creek during high-water conditions, complicates the problem of efficient operation.

The capacity of the plant does not allow for any material increase in the sewage flow of the city, and any large increase in factory wastes to the sewer would undoubtedly overload the plant. "There is a question as to whether, when additional capacity is required in the sewage-disposal plant, a site further from the built-up section of the city would not be desirable, especially if real-estate development goes on in this section of the city."

Private Sewage Disposal. Under this heading two types of disposal will be considered: (1) that of sewage from houses not connected with the sewer system, and (2) that of sewage from industrial plants, ordinarily called 'trade wastes.'

Residences. "The water department has in preparation a map showing the location of all private privies. A study of the list of

buildings supplied with city water shows that out of a total of 4660 buildings, 1022 are not supplied with city water. It is safe to assume that none of these 1022 houses are served by the public sewer system; and it is probable that in almost all these cases privies are used. In addition, however, there are undoubtedly many houses connected to the city water-supply system, but still maintaining privies with or without additional connection to the city sewer system.

"The rock in many parts of Mason City outcrops very near the surface or on the surface, so that the installation of many of the sewers requires blasting. Nevertheless, this must be done sooner or later and the added sanitation and convenience obtained by the connection to the sewers is well worth the expense of the work. Insanitary privies are a menace because they are prolific fly-breeders and pollute the ground water from which public and private well supplies are drawn. In general, the use of outdoor privies is not conducive to the best standards of health, because of the inconvenience and discomfort afforded to people using outdoor privies in winter weather. It is a fact that most privies are of insanitary construction and are kept in an insanitary manner.

"In addition to their menace to the health of the community as well as to the individual users, these privies are 'eye-sores' on the landscape and their use in a city the size of Mason City is to be condemned. It may be said that in the case of some of the 'shacks' to be found in Mason City, connection to the sewer would not cost nearly as much as the 'shack' is worth. In such cases, it would be better to force the property owner to connect and perhaps he would then see fit to erect a more habitable and sanitary dwelling house.

"It is probable that Mason City has an ordinance in connection with the inauguration of its sewerage system forbidding the use of privies where the public sewers are available. Regardless of this, however, Section 7, Rule 1, Section A, of the Rules and Regulations promulgated by the Iowa State Board of Health on July 19, 1921, forbids the maintenance of privies where sewer connections are possible. Penalty of \$20 per day may be meted out to any persons violating these Rules and Regulations. The local Board of Health is enjoined by law to enforce these state rules and regulations."

Industrial Plants. "At present the only private waste-disposal plant* is operated by Jacob E. Decker and Sons. . . . The wastes from this packing plant contain a large amount of blood, grease, hair, and other organic matter. They were formerly discharged without treatment into Lime Creek, a stream which flows through the northeasterly section of Mason City, past the Decker plant.

*The Northern Sugar Corporation now has a treatment plant under construction.

"In March, 1921, the District Court ordered the plant to provide treatment of the wastes so as to improve the condition of Lime Creek within thirty days. Later, an extension of time was granted, but the packers immediately engaged the services of Professor Edward Bartow of the State University, under whose direction the present activated-sludge treatment plant was constructed. This type of treatment was decided on partly because of the results of experiments by the Chicago Sanitary Drainage District.

"The plant contains a house for the sewage pump and air compressors, the aerating tank and a settling tank. All waste from the packing plant is brought to a pump pit with two compartments, from either of which it can be pumped by centrifugal pumps to the

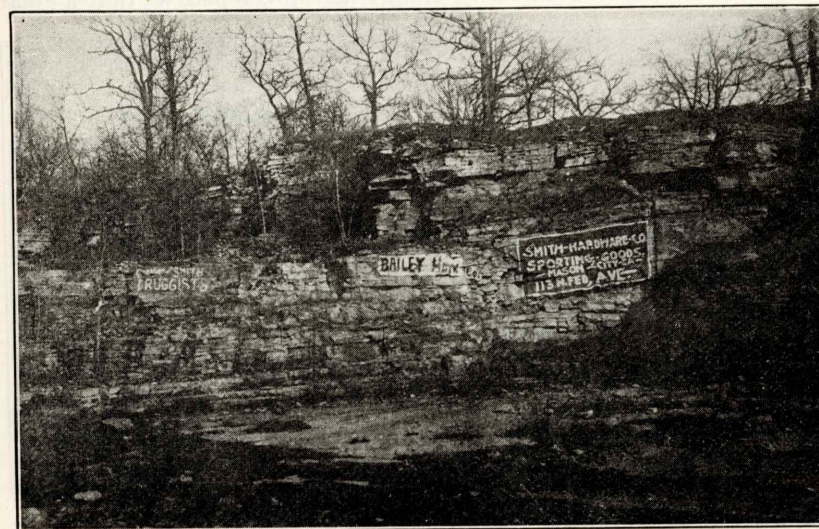


Fig. 64. Misplaced advertising.

aeration chamber. A small settling chamber has been recently installed to settle out some of the heaviest particles before pumping to the aeration chamber.

"In the aeration chamber the liquid passes four times up and down the length after being mixed with activated sludge. . . . The air is blown into the sewage through Filtros plates placed at right angles to the line of flow in such a manner that the plates cover about 20% of the area of the tank. Between the plates the bottom is elevated, so that the settling sludge will fall toward the plates and be carried to the surface by the incoming air. This aerating chamber has a capacity of approximately 155,000 gallons, so that with a flow of 300,000 gallons, with 30% sludge retained, there will be a detention period of 9 hours.

"From the aerating tank, the mixed sewage and sludge pass to a settling tank, which is a Dorr Thickener 36 ft. in diameter. This tank is built of reinforced concrete and is 14 ft. deep, with the bottom sloping slightly toward the center. At the center, the sludge drops by gravity into an air-lift well, from which it is pumped by air-lift to the mixing box. Here it is returned to the incoming sewage or it passes into the sludge bed. The sludge is to be treated with sulphuric acid which will cause the suspended matter to rise to the surface. The clear liquid will be drawn off and it is expected that valuable materials will be saved in this way.

"This plant was placed in operation in October, 1921, and . . . an improvement in the effluent was noticeable at once. Within ten days, a satisfactory sludge had developed, so that a clear



Fig. 65. One of many local examples of mixed uses of property—conditions that could be prevented in the future by means of a zoning ordinance.

and fairly stable effluent was obtained. . . . In the winter of 1921-1922 the plant did not give good satisfaction, which Professor Bartow has attributed to the large number of hogs killed, or to the cold weather. . . . As a matter of fact, the plant was originally designed with the idea that about 1800 hogs would be killed daily in the plant, whereas at times this figure has run as high as 3000."

The substantial enlargement of the plant begun subsequent to Mr. Scott's report, promises to relieve this situation and to reduce the pollution in Lime Creek to a negligible amount.

"The Court also issued an order to the Northern Sugar Corporation, a sugar beet factory, to treat their wastes* before discharging

*A treatment plant is being constructed to handle these wastes by a method that small-scale experiments have shown to be satisfactory.

into the creek. This plant operates over a period of about three months in the fall of the year, and the wastes are estimated to run as high as 4 to 5 million gallons daily. The effluent from the proposed treatment plant will discharge into Lime Creek.

"The cement plant has no objectionable wastes, although it is charged that they draw out subsequently large amounts of water from Lime Creek for their condensers, discharging it into the creek with oxygen withdrawn."

Refuse Disposal. Mason City's garbage is disposed of at a municipal incinerator plant (Fig. 51) located close to the sewage-treatment plant. The plant consists of a Jones incinerator, and it was placed in operation in 1916. The operation of this incinerator appears to have been highly satisfactory.

The rules issued by the city call for the draining of all garbage and wrapping in paper, after which it must be kept in water-tight metal cans provided with close-fitting covers. Tin cans, glassware, crockery, etc., may be placed in the garbage cans for disposal. The placing of combustible material in the garbage is encouraged because of the saving in fuel thus effected at the incinerator.

Through the warmer half of the year, garbage collections are made through the alleys twice each week; during the remainder of the year one collection each week is the rule. Two wagons of four or five tons capacity are used for wet garbage. Better than 90% of the population is said to be served by the garbage collection system.

The removal and disposal of ashes is at the initiative and expense of the property owners. Municipal rules prohibit the placing of ashes in any street or alley.

"Ashes are in most cases allowed to accumulate on the premises in unsightly piles during the winter months. In the spring a clean-up campaign is conducted and property owners privately remove these ash piles. In some cases, the ashes are stored in the cellars during the winter. Some property owners use the ashes to fill in low places in the near-by land.

"While these piles of ashes may not be unsanitary, they are certainly unsightly and it might be of interest to the city to investigate into the cost of municipal ash collection, both on the grounds of eliminating the unsightly piles of ashes and of convenience to the individual householder."

In the past the city has wisely used the ashes and other suitable material for the filling of low land. This practice is an advantageous one for the city, as it permits the creation of suitable sites for schoolhouses, parks, or playgrounds at low cost to the community.

Street Cleaning. The central business district is cleaned by men who traverse it daily throughout most of the year with hand carts, broom and shovel. This section comprises some twenty blocks. The

remainder of the city is covered by horse-drawn equipment of which the city owns a sprinkling wagon, a flusher, a machine broom, four wagons, and two snow-plows. The street sweepings are disposed of by dumping at the city dumping grounds.

Private Wells. "The Water Department states that there are 3638 services on the municipal system and 1022 buildings not supplied by city water. It is probable that almost all of these 1022 buildings are dwelling houses, so it seems from these figures that a large number of houses in Mason City must be dependent upon private wells—in some cases one well serving more than one dwelling-house.

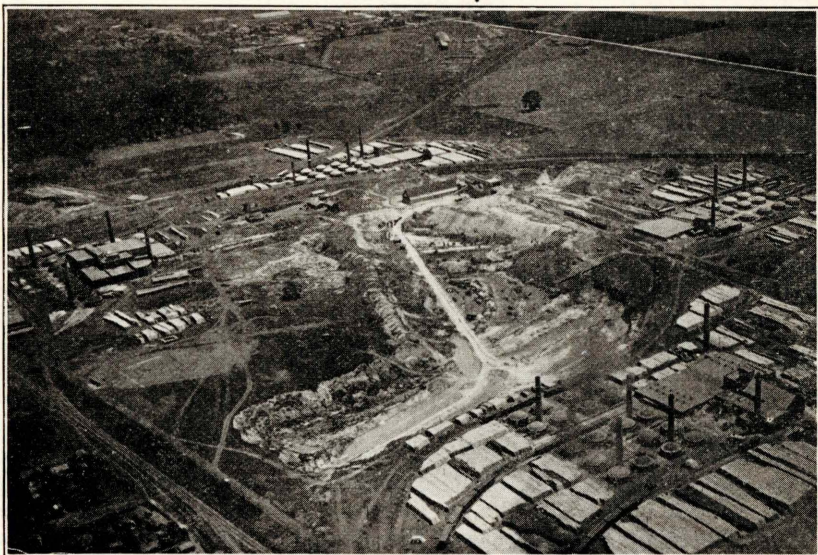


Fig. 66. Looking southeast toward the fair grounds over several of Mason City's brick and tile plants.

"A limited number of private well waters have been examined by the municipal laboratory upon requests by owners. During the year ending Feb. 15, 1923, the laboratory examined 36 private wells. The findings were reported on the basis of bacteriological examinations and inspections of the wells on the ground. Of these 36 wells, only 11 or 30.5% were reported 'safe'; 19 or 52.8% were 'unsafe'; and 6 or 16.7% were 'unsatisfactory'.

"It is seen from a perusal of these results that there are undoubtedly many unsafe private well waters in Mason City. This is to be expected in a built-up community. Many property owners having city water connections undoubtedly use private wells for drinking water. Probably the information most needed is in regard to the

locations of houses not served by the municipal water-supply (Fig. 50).

"It would be a very commendable piece of work for the municipal laboratory to make a sanitary survey of all private wells in the city, with analyses of each private well. This work could be done gradually at times when the routine laboratory work lets up. It would be desirable to have the laboratory equipped for doing 'ammonia' determinations, as well as 'chlorine,' 'nitrates,' and 'nitrites' to supplement the bacteriological analyses."

Public Convenience Stations. Every community in Iowa having over one thousand population is authorized by law (Sec. 5841—Code of 1924) to maintain at least one public convenience station. The population of Mason City places it in the class of cities that may establish and maintain such stations. Certainly such facilities are needed. The proposal to erect an underground station in the northeast corner of Central Park is commendable.* Such a location would be central and the type of structure would not seriously reduce the ground area of the 'square.'

Public Utilities

The service offered by public utilities has much to do with community development. The development of any district, in fact, may be accelerated or retarded by the presence or absence of the service offered by the local utilities.

Water-Supply. The water-supply of a municipality is a vital matter in its effect on public health and convenience. In Mason City this public utility is under the direction of a water-works board and under its admirable improvement policy an excellent plant is being developed. The attractiveness of the building and grounds (Fig. 52) is distinctly above the average, and future plans for improvement promise a substantial contribution to the attractiveness, healthfulness, and convenience of the community.

In 1920, Alvord and Burdick, consulting engineers, made a report on the water-supply of Mason City, which contained recommendations on the development of an adequate supply for the community. The following paragraphs and certain data have been taken from this report.

Historical. "The Mason City waterworks was first started about forty years ago. For the first ten years, while the supply was being drawn from springs and Lime Creek, the plant furnished very little water for domestic purposes, but was used primarily for fire protection. In the early nineties, however, the demand for a pure water-supply led to the drilling of the first deep wells, after which the service became generally used for all purposes.

"The history of the plant from that time to this has been one of more or less inadequate supply; the constantly increasing demand

*An underground station is under construction at this location.

has always been about up to or in excess of the supply, which has resulted in insufficient fire protection and high fire losses at times.

"The past five years have brought the most rapid growth in population which Mason City has experienced to date, and the inadequacy of the water-supply has become acute at times. It is important that this condition be remedied, and a waterworks policy adopted which will not only care for the recent growth, but, as well, provide for that reasonably to be expected in the near future."

Present Supply. Mason City depends on four deep wells for its water-supply. These wells penetrate the Jordan sandstone, which is found about 1200 feet below the surface. The water from all higher stratas is cased off, so that the water from these wells is uniform in quality. While all the wells are operated at regular periods, the normal demand is taken care of by one well operating at an economical delivering capacity. The combined capacities of the four wells is from 700 to 1400 gallons per minute.

Pumping Plant. The waterworks plant (Fig. 52) is located in the northeastern section of the city, about a quarter of a mile from the main business center. Water is pumped from the wells by air-lift pumps and delivered through a measuring weir to three large covered reservoirs which are of concrete construction and have a combined capacity of five million gallons. From these reservoirs the water is pumped into the distribution system by three pressure pumps of the Corliss type.

Mason City's system of water mains was characterized by the Alvord and Burdick report (1920) as inadequate, in that it was insufficiently reinforced, had too many dead ends, and had too large a percentage of small pipe. The rehabilitation of the distribution system has gone steadily forward, and Mason City now has an adequate system of water mains. Among the survey maps prepared is one (not reproduced) showing the location and sizes of all water mains included in the distribution system. The area served by the system is indicated by the map showing areas served by water mains and sewers (Fig. 50). While water mains ordinarily precede the sewers, a study of this map indicates that there is a close coordination of these services in Mason City.

Electric Service. Mason City's electric light and power, as well as its gas service, are supplied by the Peoples Gas and Electric Company of Mason City. This company also operates the local street-car line and the electric railway line to Clear Lake. The electric plant has a generating capacity of 6000 kilowatts, and the installation of a new 7500-kilowatt unit is planned for 1926. The distribution system is all alternating current, 60 cycles, at 13,200 and 2300 volts. A survey map (not reproduced) has been prepared showing the distribution system in detail. The larger manufacturing plants are served at 2300 volts, the smaller at 220-440, while the house services are at the usual 110 voltage.

A comparison of the survey maps showing residential and electrical distribution shows that the company's policy of keeping their service well in advance of the demand has been more than ordinarily successful.

Gas Service. The gas plant operated by the Peoples Gas and Electric Company manufactures carburetted water-gas. Its equipment consists of six-foot sets in duplicate, with a reserve holder of 55,000 cubic feet capacity and a city holder of 350,000 cubic feet capacity. The plant has an oil storage of 100,000 gallons, along with ample storage facilities for coal and coke. Steam is secured from the electric plant operated by the same company. The maximum 'sendout' is nearly 400,000 cubic feet in twenty-four hours.

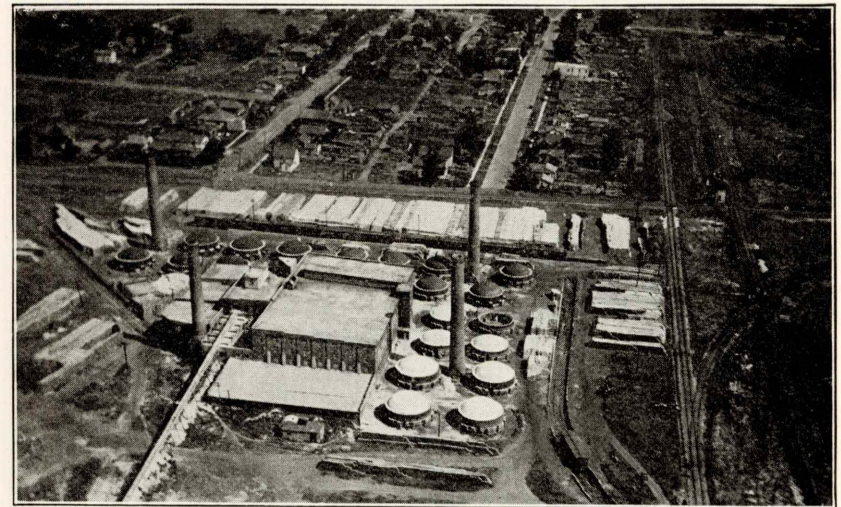


Fig. 67. The plant of the Mason City Brick and Tile Company.

The locations of the gas mains making up the distribution system have been represented in detail on a survey map (not reproduced). The mains are of ample capacity, so that it is not necessary to use any high-pressure feeders.

Public and Semi-Public Buildings

Public buildings are an important factor in the development of any comprehensive city-planning scheme. Particularly important is their relative location to the city as a whole and to each other. They constitute an important element in the general structure of the city. There is much in favor of arranging public and semi-pub-

lic buildings in suitable groups, the number of groups depending on local conditions. Such groupings of public buildings have come to be known as 'civic centers.' It has been said that public buildings are rightly placed when grouped in locations that will suit economic conditions and make them readily accessible to the public.

Advantages of Grouping. The general community advantages resulting from the proper grouping of such buildings have been well summarized by Mr. John Nolen as follows:

- "1. Additional convenience in the transaction of business;
- "2. Recognition in the location of the civic center of one important feature of a natural zone system, with certain incidental advantages in building regulations and fire protection;
- "3. Reduction to a minimum of the interference of public buildings and grounds with private business property and business interests.
- "4. Economy in the early purchase of land which can thus be had in large quantities at wholesale rates.
- "5. Better use of the same amount of land as a result of the grouping of buildings.
- "6. More permanence of the municipal center and therefore greater stability of land values.
- "7. Margin of land for future expansion and adjustment without unnecessary expense, as the need for additional public building develops.
- "8. A reasonable check upon speculative interests, and reduction or elimination of much of the bitterness due to clamoring over the selection of sites for each new public building. A logical place having been selected, the erection of buildings from time to time follows, as a matter of course, in accordance with a well-considered scheme.

"9. Financial return from increased taxes due to the higher values of property near the municipal center, and to the erection of hotels, theatres, office buildings, etc., which naturally seek the desirable locations adjacent to public buildings, and the open spaces and parks surrounding them.

"10. Larger dividends from the money which the city invests in architecture and other forms of outdoor civic art; a better effect is secured for the same money, or an equally good effect for less money, than would be the case with buildings without relation to each other.

"11. An effective combination of many of the arts in a single harmonious composition. This combination permits the municipality to engage more highly qualified and experienced men to make plans for its civic group.

"12. Suitable locations for civic sculpture and appropriate adornment of open spaces, with facilities for the incidental requirements in the way of parking spaces for automobiles, convenient car exchanges, and public comfort stations.

"13. Above all, a civic group stimulates civic pride, and nourishes civic life without which a city cannot truly grow and flourish. It aids a city in its competition with other cities; it gives form to community effort, and heartens, inspires and guides the development of private property."

In contrast to the possibilities obtainable through grouping, and in spite of the important advantages thus secured, few communities have consistently followed out any grouping scheme. Most municipalities select the site for each building as the demand arises, each decision being based on considerations that are purely utilitarian. Thus the public buildings of the typical municipality are scattered about on small tracts with little or no relation to each other.

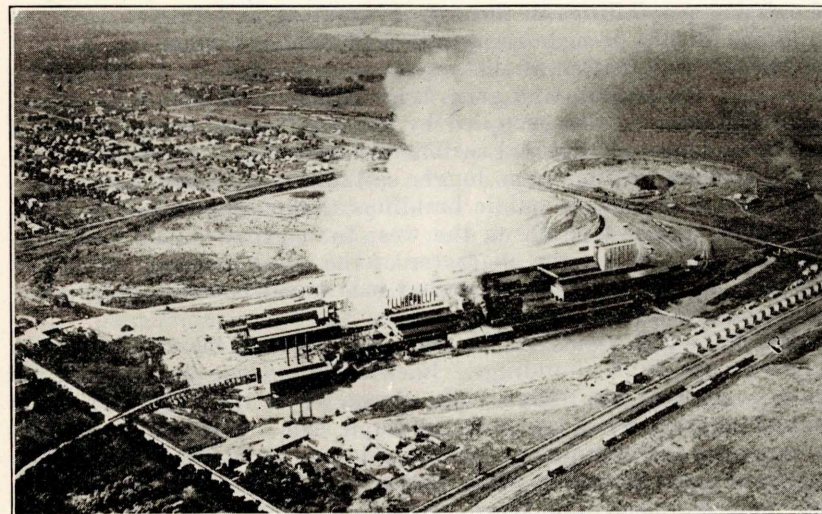


Fig. 68. Looking southwest over the plant of the Northwestern States Portland Cement Company. Note the large excavated area south of the plant, the cloud of dust and smoke, and the row of workmen's houses.

Principles Governing Grouping Plans. Mr. Nolen also lists the following points of special importance in the planning of public building groups:

- "1. The need of a dominant feature or building.
- "2. Provision for good vistas along important avenues.
- "3. Right relation of the shapes and sizes of the open spaces to the shapes, sizes and locations of surrounding buildings.
- "4. Harmony of materials and of architectural styles.
- "5. Unity of the composition as a whole—the buildings, the open spaces, the sculpture, fountains and incidental features.
- "6. Distinctness and individuality. If possible each civic center

should be expressive, to some extent, of the special character of the city itself,—its climate, its population, its needs.

“7. Finally, a permanently satisfactory and convenient civic center must have a proper location and relation to the general place of the city, especially to the system of street circulation, and to the retail, amusement and other sections used daily by great numbers of citizens.”

Mason City's Opportunity. Mason City's needs in the way of public buildings (Fig. 53) constitute a real and unusual opportunity. An adequate municipal building for the proper housing of the various municipal departments is badly needed, as is also a federal building adequate to house the post-office and certain other federal offices now without suitable quarters. Certainly a careful analysis of existing possibilities in the way of creating an effective group of buildings should precede the location of either of these structures.

It is not the function of this report to make definite recommendations as to the location and general arrangement of such a grouping. Certainly the site now occupied by the old Central school building should be given careful and serious consideration. It is convenient to the business section, is no longer suitable as a schoolhouse site, is near several important public buildings that might be worked into the group, and is fronted on the west by a group of old buildings (Fig. 54) unsuited to the character of the neighborhood. The chief objection to this site is the fact that it is somewhat cut off from expansion to the north and south.

Now is the time to use a little foresight as to the location of Mason City's future public buildings. Each building of a group gains by the proximity of the others. The character of the neighborhood is usually improved—in fact, this principle can sometimes be utilized to change a disreputable neighborhood into an attractive one. As for the expense of such a plan—it is not apt to cost any more in the end than the usual haphazard, wasteful, and short-sighted way of locating public buildings.

Appearance of the City

There are many things that affect the appearance of a community, and some of these factors will be discussed. It is important that a growing community should give heed to its appearance—to the things that go to make up conditions that are attractive to its citizens and to its visitors. An attractive city awakens local civic pride—a valuable municipal asset; while to the stranger first impressions are lasting. Clothes do not make a man, nor do outward appearances make a city. Nevertheless, no individual and no community can afford to neglect outward appearances. Progressiveness does not go with slovenly conditions.

City Gateways. In medieval times cities were walled and had their gateways through which friendly visitors might enter. The modern city has no such gateways; nevertheless, the term serves to designate the conditions surrounding one's entrance into a community.

Railroads. To most of our inland cities the advantages and charm of a waterfront approach is denied, and to such communities the railroad has constituted the chief medium of approach. Each town and city throughout the land, for that matter, may well consider the railroad gateway. What are the stranger's first impressions of the average community as he enters it on a railroad train? Commonly the panorama is anything but pleasing. Under typical conditions private property developments have turned their backs on railroad right-of-ways—and backyards, even if not actually neglected, seldom present an attractive prospect.

It is hard to suggest any universal remedy for this situation—the relative positions of railroad and private developments are seldom changed after once established. Every community should make certain, however, that where attractive conditions cannot be presented to the traveler as he enters the city, the panorama is at least characterized by neatness and orderliness.

Mason City's railroads do not pass through the heart of the city; much of their right-of-way is through undeveloped land. Partly for this reason there is less of depressing conditions put before the traveler than might otherwise be the case. Many conditions could be improved, however, and this phase of the suggested clean-up campaign certainly should not be overlooked.

Highways. Our highways are rapidly increasing in their relative traffic importance. The popularity of the automobile has caused highway traffic to increase in volume by leaps and bounds—so rapidly, in fact, that the improvement of the highways has lagged far behind the demand.

Every community should recognize this growing importance of its highways, and should do all that is possible to make these gateways attractive to the visitor. Certainly cities and towns located on important highways have an exceptional opportunity to impress the cross-country traveler favorably by an attractive treatment of the highway entrances through which he must pass. Mason City, with several such highways, will do well to study this problem carefully. At least one local civic organization has considered it in a limited way, but no comprehensive plan seems to have materialized. Aside from the clean-up of unsightly conditions that must come first, there should be something done to give a distinct character and individuality to the community. This sort of thing has not been standardized—in fact, it should not be; the highway tourist will not be impressed by a monotonous succession of similarly-treated gateways. There is plenty of room for the application of local good taste and

ingenuity. The entrance treatment may vary from the simple 'welcome' sign, ordinarily erected at the limits of a city, to well-thought-out developments, perhaps of the whole route throughout the municipality.

Air-Lines. No one with a normal supply of imagination can question the inevitable commercial development of air routes for the transportation of passengers and goods, as well as a wide personal use of aerial travel. The traveler by air is afforded an unusual opportunity to study the attractiveness of a community in a broad way; his viewpoint is not restricted to a certain strip of a city's territory. This means that to dress up a community to appear well from the air nothing less than a comprehensive improvement program would suffice. At and near the air terminals of the future, however, will air-way passengers get their first intimate glimpses of a community. In such districts there will be the same problems of giving the stranger a good first impression of the community.

Use of Planting. After Mason City has cleaned up, when neat, orderly, and sanitary conditions prevail throughout its broad area, there will still exist many conditions that are not attractive—many structures that are ugly and unfortunately prominent. Certainly it is worth while to suggest that much can be accomplished by the judicious use of planting materials in softening, or even 'planting out' such unsightly features. The people of the middle-west might be said to be only just waking up to the possibilities of home and community beautification through the medium of planting. Most towns have plenty of trees, but many a small community may be found where the effective use of vines and shrubbery seems unappreciated, if not actually unknown. The landscape designer has much educational work to do.

The principles of effective planting are not many or difficult to grasp, and the range of planting materials in Iowa is amply varied. From the Extension Service at Iowa State College any individual or civic organization may obtain helpful suggestions and information on any phase of landscape work. There is no good reason why the communities of Iowa should not be notable for the charm that they may readily acquire through a liberal use of the native beauty nature offers in her growing things.

Municipal Bridges. Where a community is cut through by streams, as in Mason City, the erection of bridges is at once a problem and an opportunity. It is a problem chiefly because suitable bridges are expensive and because traffic demands more crossings as the community grows. It is an opportunity because the bridges of a community constitute one of the few types of architecture truly civic in character. The bridges of a city may readily be made an outstanding civic feature.

No one can study the bridges built in America in recent years without coming to the conclusion that the engineer and the archi-

tect are combining their abilities in the creation of bridges of artistic merit. Before the unlimited possibilities of concrete construction were placed at their disposal, the bridges commonly erected by our municipalities were hardly examples of civic beauty.

While there is apt to be a financial saving in accepting a structure designed with economy and utility as primary considerations, the people in the average community prefer the more attractive types of construction suitable to civic structures and are usually willing to pay the difference involved in securing an artistic bridge. It will be well to recall the comment of the late Professor Robinson that "while the purpose of the bridge is utilitarian, there is no other structure in the city that has greater permanence, or as great a

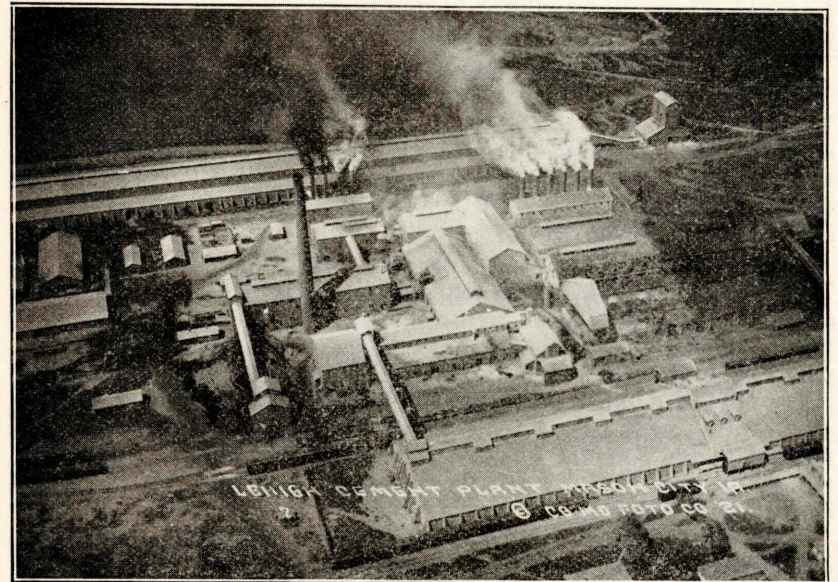


Fig. 69. The plant of the Lehigh Portland Cement Company.

prominence, for good or ill. There is nothing that should be built with more consideration for the artistic result."

Mason City is to be congratulated on the appearance of most of the bridges that have been erected at its central crossings of Lime Creek and Willow Creek. The views reproduced in Fig. 57 are typical of the concrete bridges now in Mason City. There are eleven stream crossings within the city limits, one of these being merely a foot-bridge of temporary construction. An adequate bridge is needed at this point, as well as at certain other points where even a preliminary study of traffic demands indicates much loss of time due to a lack of convenient stream crossings (Fig. 58).

Several of the bridges near the outskirts of the city are demanding replacement. This work is already well begun by the completion of the new concrete bridge at the main eastern gateway of the city.

Street Trees. Shade trees on city streets may not be an actual necessity, but there are certainly many good reasons why their presence is desirable. Suitable trees certainly improve the appearance of a street, in fact they are apt "to constitute its chief claim for beauty." By thus adding to the attractiveness of the neighborhood, near-by property values are increased. A little study of the appearance of typical residence streets with and without street trees is sufficient to convince the average individual as to the truth of this statement. Where streets possess suitable trees, there is an added interest and dignity that intensifies by contrast the barren and artificial appearance of unplanted streets.

Shade trees, aside from their attractiveness and restful effect, undoubtedly contribute to the general healthfulness of a community. Their summer shade not only protects from the direct rays of the sun, but also prevents much of the reflected heat that would be thrown back from sidewalk and pavement surfaces. It is only the thoughtless individual who does not value and, in a measure, reverence every beautiful tree.

City Conditions. The life of a street tree is apt to be a hard one. That such trees often attain mature and symmetrical growth is but another manifestation of nature's adaptiveness. Compared with trees growing in the open, soil conditions are often poor, the exposed ground area is usually insufficient, surface moisture is materially curtailed, heat is reflected from pavements and buildings, smoke, dust, and fumes are present overhead, illuminating gas is present in the soil, the chances for mechanical injury to branches, trunk, and roots are all greatly increased, and adequate protection is often sadly lacking.

With these unfavorable conditions apt to be encountered in various combinations, it should be manifest that only suitable varieties should be planted. Many of the trees planted by private property owners are entirely unsuited to the conditions under which they must grow. For this reason the results are apt to be unsatisfactory—a misguided and wasteful expenditure of money, time, and effort, as well as a loss of growing time. Each community should, for reasons of efficiency and better-appearing results, standardize on a few tree varieties suited to local needs and conditions.

Tree Survey. The building up and the maintenance of a satisfactory system of street trees throughout a community demands efficient planning. Planning of this sort cannot be done without definite information as to existing conditions. The best way to obtain such knowledge of local conditions is to carry out a tree survey—sometimes called a 'tree census.' This undertaking, however,

should be more than a simple enumeration by kinds, streets, etc. It should record the species, size, condition, and definite location of each tree.

As an aid in getting some work of this sort started in Mason City, a set of "Instructions for Surveying Parties" (see Supplement) was prepared and furnished, along with blank forms for recording the information concerning the trees in each block. One of these survey sheets has been reproduced (Fig. 59) as filled in, together with certain instructions furnished to the surveying parties.

While conditions in Mason City did not seem to permit of or to warrant the making of a complete tree survey throughout all its streets, under the personal leadership of certain ladies of the Civic League and the active cooperation of a number of the members of the local Boy Scouts, a careful survey was made of several miles of streets in various parts of the city. The work done was ample to demonstrate in a general way the existing conditions and needs throughout the community.

The information obtained from a tree survey should be made generally available locally by means of graphical presentation. The street-tree condition throughout the whole city area can be clearly shown on large-scale map sheets. Combinations of colored map-pins, symbols, figures, and letters can be made to represent the species, condition, size, and location of each street tree in the city, as well as the details of any proposed improvements.

Existing Conditions. A glance at the aerial photograph of the central portion of Mason City's area (Fig. 60) will leave the impression that this community has many fine trees. In fact, it has been said that there are enough street trees in Mason City if they were but properly arranged. As in most communities there are streets without proper planting, and there are streets that are overplanted. Then there are, far too commonly, streets on which the tree planting is irregular—mixed varieties, mixed sizes, and irregularities in the spacing. Only in a few new additions (and even there for stretches of only a few blocks) can there be found streets both sides of which are planted with the same kind of tree. Even in some of these cases the choice of variety has been unfortunate.

Only a few of the many photographs of the street-tree conditions in Mason City have been reproduced (Fig. 61), and these hardly serve to give a comprehensive idea of local conditions. If taken as representative, however, they are enough to show that Mason City needs to give careful consideration to the building up and maintenance of its system of street trees. Satisfactory results cannot be attained if this matter is left to the individual whims of the various property owners. Effectiveness in street design demands a high degree of unity, rather than a display of mixed initiative. Uniformity cannot be attained unless the matter of caring for the trees of a

community is put under a definite authority free to develop a proper plan and policy.

Many of Mason City's trees have suffered through severe and unskillful pruning. Much of this damage is unnecessary. There are times, of course, when public improvements (particularly pole lines) seem to necessitate the topping or the clearing away of large branches of a row of street trees. It is illuminating, however, to compare the conditions found where the utility companies cut and slash with a free hand to other communities where a reasonable control over their operations is exercised. The average company, how-



Fig. 70. Looking northwest over the north-central portion of Mason City. The meat-packing plant of J. E. Decker & Sons occupies the foreground, while the plant of the Northwestern States Portland Cement Company is shown in the upper-right part of the picture.

ever, may be assumed to be in sympathy with the attractive development of each community it serves and willing to cooperate in working out ways to avoid the sacrifice of valuable trees.

Legal Authority. While all cities and towns in Iowa have the general power to "improve, and repair streets, highways, avenues, alleys, public grounds . . . within their limits" (Sec. 5938, Code of 1924), it is generally believed that this general grant of authority does not cover the matter of tree planting and care as a detail of street improvement. With practically no exception, the smaller municipalities leave this activity to the private initiative of

the property owners. Entirely aside from the relatively poor results secured by the exercise of this policy when contrasted to the possibilities attainable with the trees under central control, it seems fair to point out the community value of well-planted city streets and the justification of having a portion of the cost of such work to come from the general fund.

To commission and special-charter cities having populations of 25,000 or over, definite authority is given by law to assume control of all street planting. As Mason City will soon come into this classification, the Code section (6608) applying is quoted. Similar authority should be given to all cities and towns.

"Cities now or hereafter having a population of twenty-five thousand or over and organized under this chapter (326) shall have power by ordinance to take and assume charge, custody, and control of all trees and shrubbery upon the public streets, and to plant, prune, care for, and maintain all trees and shrubbery upon the public streets in such manner as not to interfere with public travel and to pay for the same out of the general fund or to provide by ordinance for assessing the cost thereof upon the lots and parcels of land in front of which trees or shrubbery are planted and removed. No power shall exist to remove other than dead, damaged or unsightly trees and shrubbery. The carrying into effect of the provisions of any ordinance enacted hereunder shall be vested in the department of parks and public property."

This authority will give Mason City full opportunity to put the problem of building up and caring for its street trees on a sound basis. Then, with the information given by an accurate comprehensive tree survey at hand and the backing of a carefully-drawn ordinance, the local tree warden will have full opportunity to develop the street-tree system that Mason City should have.

Street Lighting. Adequate street lighting is not a luxury; it is a real necessity. Its cost is relatively low, and it is justifiable from a strictly economic standpoint. Adequate street lighting increases public safety, helping the police and fire departments; it facilitates the safe movement of street traffic; it permits the reading of street-name and traffic signs, as well as house numbers; it encourages evening traffic and such business interests as depend on evening patronage; it increases property values; it contributes greatly to the general comfort and convenience of the public; and it constitutes a distinct civic asset to any community.

The street-lightning problem is one that involves conditions that are constantly changing. The speeding up of street traffic due to the universal adoption of motor-driven vehicles, has demanded better street lighting, and the rapid increase in the efficiency of lighting equipment has encouraged the change. Present tendencies seem to be toward even better illumination, involving the employment of more powerful illuminating units even more closely spaced.

The solution of the street-lighting problem involves the consideration of such illumination conditions as glare, silhouette illumination, direct illumination, and the general appearance of the lighting unit by day and night. These all depend on the height of the lighting units, their spacing, their illuminating power, their arrangement, and the kind of reflectors employed.

"Street-lighting improvement schemes should be carried out under a comprehensive program co-ordinated with and included in city zoning plans. . . . In past years the usual practice has been to confine street-lighting improvements to limited areas. . . . The work of so-called improvement districts may be made valuable if regulated under a general improvement plan; but without centralized leadership the result is haphazard patchwork." The carrying out of a comprehensive program tends to reduce the cost of an adequate street-lighting system.

Ornamental street lighting, employing the one-light, lantern-type post, is fast coming to be considered the standard, while the overhead unit with mast-arm or center suspension from wooden poles is coming to be regarded as a temporary or make-shift measure. The arc light is fast losing ground, while the incandescent lamp may even now be regarded as the standard. More attention is being given to the design of the lamp posts, and cluster-posts are installed much less frequently than formerly.

With the exception of a few blocks, the streets of Mason City are provided with fairly adequate lighting. Suspended arcs are used throughout most of the residence areas, with curb lamps on well-proportioned concrete standards (Fig. 62) used throughout the newer installations. This design is better in appearance than the cast-iron cluster standards* also illustrated.

Street Details. There are numerous details in street design that have much to do with the appearance of the streets of a city, and after all, it is largely on the appearance of its streets that the stranger must base his estimate of the civic progressiveness of the community.

Street-Name Signs.† Certainly the clear and systematic designation of street names is a necessary detail in street equipment. Street-name signs should be legible, durable, attractive in appearance, and of low cost. Such signs should be placed on standard supports, depending on the location. In residential districts the best solution is a neat, strong, and yet not too expensive post, carefully placed in the parking area at the street intersection so that the pedestrian, the street-car passenger, and the automobile passenger can readily

*Some 250 new concrete posts are now replacing old standards throughout the business districts. An installation of concrete standards is being tried out in one residential district.

†See "Street-Name Signs," Bulletin No. 20, Engineering Extension Department, Iowa State College, Ames, Iowa.

read them. In business districts such signs may be supported from suitable brackets supported on existing trolley or lighting poles.

The type of street-name sign used generally throughout Mason City's residence districts is satisfactory (Fig. 62). There are some signs and standards, however, that are in need of repair, while there are numerous street corners where there are no signs.

House Numbers. Closely allied to the problem of clearly indicating the names of streets is that of clearly designating the numbers of buildings. There are many methods of showing these numbers, but no one is the best under all conditions. Every building, however, should carry a street number, and it should be of such a nature and in such a position that it is easily found and read. There are

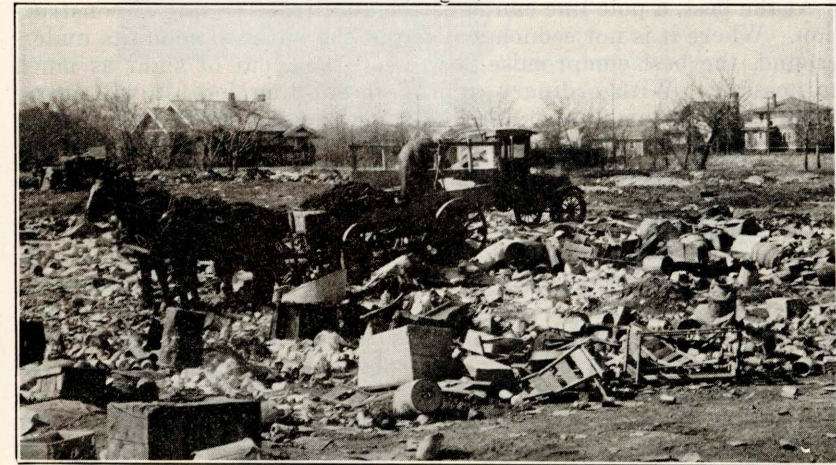


Fig. 71. A Mason City dumping ground, not far from choice residence properties.

quite a number of residences and business houses in Mason City that do not carry their numbers. A careful check-up should be made of these discrepancies with a view to correcting this condition.

Sidewalk Encroachments. Every town should resist the natural tendency to clutter up the curb lines with obstructions. Much simplification is sometimes possible through combining several conveniences on one post. Gasoline pumps, air connections, barber poles, show cases, bulletin boards, and similar features should not be permitted to occupy such positions. Strictly speaking such things are not entitled to any sidewalk space at all, and Mason City will do well to get rid of all such obstructions.

Of a more permanent and serious sort are the sidewalk obstructions found throughout many business districts next to the abutting buildings. Common among these are steps, stairways, area-ways,

and projecting architectural features. Mason City has its share of such encroachments (Fig. 63). All of them obstruct and thus limit the flow of pedestrian traffic on the sidewalks. Certain of them constitute a potential danger to pedestrians, and are thus a community liability.

Poles and Wires. Aside from the injury to street trees mentioned elsewhere, the existence of complicated systems of poles and wires is unsightly and a real danger in fires and in storms. These and other considerations usually result in placing most wires underground—at least throughout business districts. Certainly no progressive town wants pole lines on its main business streets* any more than the property owners on an attractive residence street want pole lines in front of their dwellings.

At the best, a pole line can never be an attractive sort of construction. Where it is not economical to put the wires in conduits underground, the best compromise is to keep them out of sight as much as possible. With ordinary depths of building lots, it will prove nearly as economical to run the pole lines through the alleys or along rear lot-lines as in the front parkings. There is much less tree damage where this plan is employed, and better-appearing streets certainly result.

Outdoor Advertising. Outdoor advertising may have much to do with the appearance of a community. While the courts are only beginning to recognize it as such, some forms of outdoor advertising are a practical nuisance—offending the eyes just as thoroughly as a disagreeable odor offends the nostrils. There are, of course, various classes of outdoor advertising, even of what are ordinarily referred to as “billboards.” The tendency of the leaders in this form of advertising is decidedly away from the conditions that offend the lover of the beautiful in town and country. Most of the miscellaneous small signs variously designated as “snipes,” “daubs,” “1x2s,” etc., are gradually falling into disrepute with advertisers, who are coming to sense something of the disapproval of the public. No one is inspired to buy goods by signs crudely painted on some beauty spot (Fig. 64).

Those interested in studying the trend in billboards should consider carefully the regulations governing the activities of the organization known as the National Poster Advertising Association. The high standard set for their ‘poster panels,’ their placing, and for the posters themselves leads one to feel that this industry is cooperating with, rather than combating, the forces backing civic improvement.

While it is well established that a reasonable control over the location and structure of billboards can be exercised by a municipality by ordinance, the logical method of controlling the activities of the

*Many pole lines throughout Mason City’s business district are being removed.

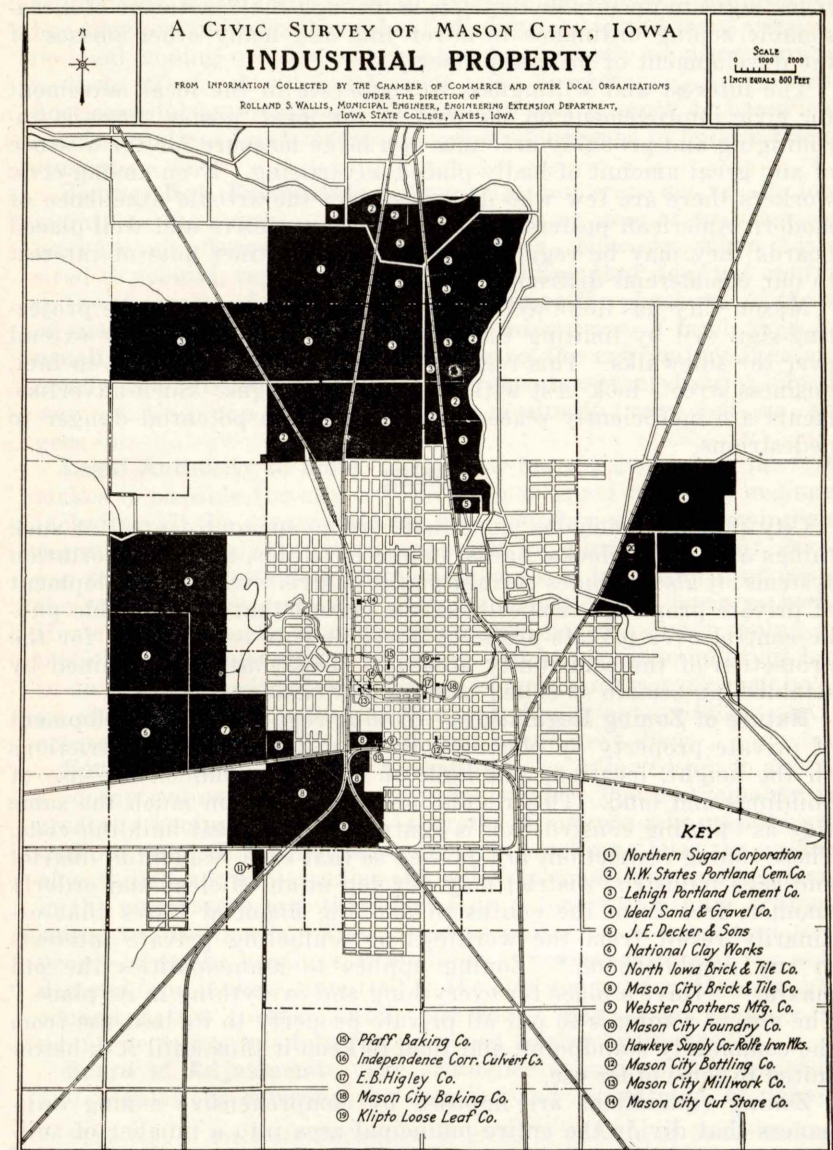


Fig. 72. The land holdings of Mason City's industries.

wayward advertiser who wishes to erect billboards or other advertising signs in unsuitable districts is through the enactment of a reasonable zoning ordinance to cover this and many other phases of the development of private property.

The interest and willingness to cooperate in the local movement for civic improvement on the part of the local 'poster' firms is encouraging and probably accounts in a large measure for the absence of any great amount of badly-placed advertising. Even among civic workers there are few who do not admire the artistic excellence of modern American posters. Exhibited on attractive and well-placed boards they may be regarded as adding a distinct note of interest to our commercial districts.

Mason City has done well to put a reasonable curb on the projecting-sign evil by limiting the distance that such signs may extend over the sidewalks. This regulation should not be relaxed—in fact, business streets look best without projecting signs. Such advertisements are inefficiently placed and constitute a potential danger to pedestrians.

Zoning

City planning includes more than the layout and control of such things as streets, blocks, parks, public buildings, and transportation systems; it also includes certain public control over the development of private property. Experience has proved that a reasonable public control over private-property developments is necessary for the protection of the community at large. This control is obtained by establishing certain so-called 'zoning' restrictions.

Nature of Zoning Regulations. Zoning regulates the development of private property by placing suitable and reasonable restrictions on the height, location, and bulk of buildings, and on the use of buildings and land. This regulation is exercised in much the same way as building construction is controlled by a local building code. These zoning restrictions are devised so that each residential district and each industrial district may develop in an efficient and orderly manner, free from the confusion and the financial losses that ordinarily result from the workings of conflicting private interests in any neighborhood.* Zoning applies to municipalities the old maxim: "Have a place for everything and everything in its place." The aim of zoning is to put all private property to its best use from the community standpoint, and then to keep it thus until it is better suited to some other use.

Zoning restrictions are imposed by comprehensive zoning ordinances that divide the entire municipal area into a number of suitable types of zoning districts, and assign each of the various sorts of

*A more complete statement of the advantages of zoning may be found in "Zoning for Iowa Cities and Towns," Bulletin 52, Engineering Extension Department, Iowa State College, Ames, Iowa.

zoning districts to particular uses and types of occupancy. The regulations in different types of districts may be entirely different, but they are uniform throughout all districts of the same class. To be legal, zoning ordinances must not be arbitrary or discriminatory in their effect. A valid ordinance must be reasonable in its classifications and applications. This means that it must be based on a careful study of local conditions and tendencies as to building development.

Zoning Not Retroactive. Zoning is not retroactive—it looks mainly to the future. Existing buildings or uses of buildings and land are not affected by such an ordinance. However, when it is desired to rebuild, repair, or enlarge a building that does not conform to the character of the district, or to change the character of the use of such building or of any non-conforming tract of land, then it is usually required that such changes bring the non-conformities more nearly into agreement with the requirements of that district. In this way existing non-conformities are gradually remedied as time goes on.

Legal Authority to Zone. Iowa now has a state zoning law* that makes it possible for any city or town to enact a zoning ordinance including all the area within the city boundaries. No growing community is so small that it cannot profit by taking this step. Zoning can prevent unsuitable buildings and uses of land, and thus protect the attractiveness and value of existing homes and business houses. Home ownership can thus be encouraged, because under zoning protection the average citizen no longer will be afraid to build his home in an undeveloped district. Under a good zoning ordinance he can go ahead with the assurance that no damaging building can be erected or no unsuitable use of land occur next door.

Zoning Procedure.† The procedure to be followed out in securing a zoning ordinance is comparatively simple. The municipality first creates a zoning commission—a group of citizens who usually serve without pay. This commission (usually working under the guidance of a skilled adviser) studies the existing conditions and tendencies in the community and then draws up a tentative zoning ordinance suited to local needs. This tentative ordinance is submitted to the people at public hearings, is modified as necessary to suit the public demand, and is then submitted to the city council for adoption. The council (after further public hearings) may adopt, modify and adopt, or refuse to adopt the proposed zoning ordinance.

Board of Adjustment. The ordinance should contain provisions and regulations covering the creation and operations of what is

*The text of the state zoning law is given in Bulletin 52 of the Engineering Extension Department, Iowa State College, Ames, Iowa.

†This topic is more fully discussed in "Zoning Procedure for Iowa Municipalities," Bulletin 65 of the Engineering Extension Department, Iowa State College, Ames, Iowa.

termed a "board of adjustment." The function of this board is to hear individual appeals from persons aggrieved at the working of the ordinance as it applies to their property. In individual cases this board has certain authority to adjust technicalities and small difficulties (where the good of the community is not thus affected) so that substantial justice may be done.

The board of adjustment has proved a very valuable method of caring for the many exceptional cases bound to come up under any zoning ordinance. Where the decision of the board of adjustment is not satisfactory to the individual, the appeal may be taken into court. Experience indicates, however, that most of the appeals can be satisfactorily settled by the board of adjustment.

Amending Zoning Regulations. While a zoning ordinance will prevent rapid changes in the character of any district, it should not be thought that zoning places a community in a sort of rigid mold, thus limiting its growth for all time. Towns grow and times change. While those entrusted with the drafting of a comprehensive zoning plan for a community should provide for future growth and developments to the best of their judgment, no group of men can hope to foresee the nature and the extent of local property development for any very long period into the future. For this reason, and because technical errors are apt to creep into any complicated ordinance, such ordinances must provide for future changes in their provisions and in the boundaries of the zoning districts thus established.

On the other hand, much of the value of a zoning ordinance lies in its permanency. If its regulations were changed too often, the resulting confusion and unfairness to existing developments might easily be worse than the conditions that might prevail if no such restrictions existed. For this reason the state zoning law makes amendments rather difficult to obtain unless the majority of the property-owners who would be affected are in favor of the proposed change in the existing regulations.

Mason City Needs Zoning. It is safe to contend that any community, large or small, would be benefited by the existence of a well-drawn local zoning ordinance. Certainly the need is manifest in the case of such a rapidly-growing town as Mason City. Without the mutual protection afforded by zoning regulations, the present rapid growth can hardly fail to create many unsatisfactory conditions in the development of private property, together with the economic losses that go along with these mistakes. The sooner a representative zoning commission can be appointed and put to work on an investigation of local conditions the better, because such a commission will not be able to correct existing mistakes—and more such mistakes are being made continually.

Mason City is an industrial community and, as such, should strive to encourage conditions that will secure an ample and stable supply of labor so attractive to industries. Home ownership under favorable conditions results in contented and efficient workingmen; and home ownership will tend to increase if the home investments of these men are given the reasonable protection that zoning regulations provide. In a sense zoning is "a poor man's law," in that it gives him something of the property protection that the more fortunate citizen ordinarily has secured through private contracts and the purchase of highly-restricted property.

Zoning Survey Progress. Inasmuch as a definite procedure is outlined by the state zoning law, a complete zoning survey has not been made. This survey and its analysis are set forth as functions of the zoning commission, which must be appointed before a local zoning ordinance can be prepared.

Considerable data have been obtained, however, that will prove of great value to the commission when appointed. Through the courtesy of the local office of the Iowa Insurance Service Bureau and the drafting department and certain students of the High school, complete copies of the valuable property maps of the Bureau have been made and checked. These maps, thirty-five in number, cover the built-up portions of Mason City in great detail, as well as the property of the larger industries. They show accurately the location, size, type, and use of every structure, as well as all property lines. This means that much of the usual work of such a survey is already done.

As a definite result of the work of the real-estate committee, a large survey map (not reproduced) has been prepared which shows by color gradations the property values on a front-foot basis throughout the city. This, along with most of the other study maps (see Supplement) will prove of material value to the zoning commission in its study of local conditions and tendencies.

Work of Zoning Commission. Zoning is but one phase of town planning. Before a zoning commission can intelligently prepare a comprehensive zoning ordinance, it must make a series of investigations that are really city-planning studies. In order that these investigations may be of greater thoroughness and of permanent value it seems wise that the zoning commission also be appointed as a permanent city-planning commission* as is permitted by state law. Thus its policies and the results of its labors will be continued through a permanent planning organization that will continue to work for the good of Mason City.

*Since this was written, Iowa has obtained a law giving to all cities and towns definite power to create city-plan commissions. The text of this law is given in "City-Planning Procedure for Iowa Municipalities," Bulletin 74 of the Engineering Extension Department, Iowa State College, Ames, Iowa.

Public Nuisances

Public nuisances affect city planning only as they may spoil the enjoyment that rightfully should follow the carrying out of a well-thought-out and comprehensive plan. Practically no nuisance condition is necessary. While doing away with disagreeable conditions usually costs money, there are often times when the change is justifiable from a strictly economic standpoint.

Smoke. The production of dense smoke is a nuisance of this sort. Not only will the doing away with a smoke nuisance save much cleaning expense, but even the producer of the smoke will profit by the abatement. Smoke is simply an evidence of inefficient combustion of fuel, and fuel costs money. It is therefore no particular hardship for a municipality to impose a penalty for the continued production of dense smoke. Cities of 15,000 population have authority by state law (Sec. 5741, Code of 1924) to regulate this nuisance.

Mason City has two or three hotels, two hospitals, and two school heating-plants that contribute materially to the volume of smoke produced by the many kilns of the brick and tile plants to the southwest (Fig. 66), and to the stacks of the cement plants to the northwest (Figs. 68 and 69).

Odor. Certain industries are commonly regarded as nuisances due to the production of certain disagreeable odors. Mason City has but one such industry of appreciable proportions—the meat-packing plant (Fig. 70) in the northeast portion of the city. While it is possible to reduce appreciably the odors about plants of this character, it is hardly reasonable to expect that such a plant, even under ideal conditions, could ever be operated so that it would not injure the surrounding districts somewhat for residential use. From the community standpoint the location of this plant is unfortunate, as its presence cannot but tend to retard property development in the vicinity.

Much of the bad condition about the plant is due to difficulties in handling the liquid wastes from the plant. With the sewage-treatment plant as recently enlarged in operation, it may be possible to improve this condition materially. When the packing company has done all that can reasonably be required towards abating this nuisance, nothing remains but for the community to shape its development so as to make the best of the matter.

Dust. The creation of large quantities of any sort of dust unquestionably constitutes a neighborhood nuisance. As has been pointed out under the topic of "Housing," the dust from the cement plants in quality and amount certainly creates a disagreeable and unhealthy condition in the vicinity of the plants. Except for the industrial housing nearby, however, the effect on the residence portion of Mason City is not particularly serious. While strong unfa-

vorable winds sometimes carry the dust south to the center of the city, the prevailing winds usually carry the dust away from the built-up portion of the city.

It seems to be admitted that a material reduction could be made in the amount of cement dust set free, perhaps at a profit to the company. Certainly these possibilities should be thoroughly investigated by the community. The industries of Mason City depend largely on her natural resources, the location of which cannot be changed. To such an extent as it can be done, consistent with the proper development of these industries, Mason City should strive to maintain the best and most attractive living conditions possible under the circumstances.

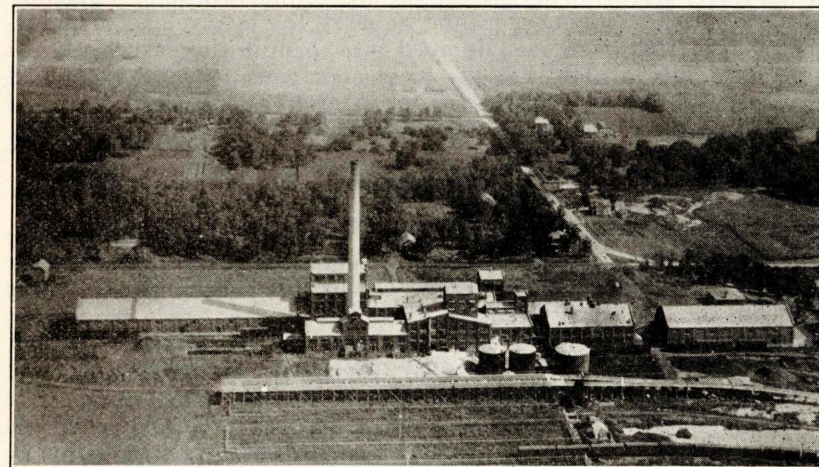


Fig. 73. The plant of the Northern Sugar Corporation.

Unightly Places. The quality of unsightliness is a relative one. Conditions that are tolerated in one community might be considered intolerable in another place differently situated. Unsightliness is apt, however, to be an outward manifestation of bad sanitary conditions; usually filth breeds disease. Then, too, slovenly cities are not attractive cities; no community can afford to create a bad impression on its visitors or to lose the pride of its own citizens in its general attractiveness.

The survey committee that studied local nuisance conditions tabulated a long list—too long a list—of unsightly places that existed in Mason City. Without specific mention, these included several dumping grounds (Fig. 71), many examples of littered premises, and a large number of dilapidated barns, sheds, and dwellings. The

remedy for these conditions* is merely that of a vigorous house-cleaning, backed up by a suitable public-health ordinance. Then such conditions should be discouraged by regular inspection, followed by prompt and decisive handling of those offenders who show no interest in maintaining their premises in a neat and clean condition.

Stream Pollution. The streams of Mason City have encouraged the location of certain industrial plants on its banks, the wastes from which have been allowed to pollute the waters to such an extent as to create nuisance conditions. In this matter of stream pollution there have been three principal offenders, the meat-packing plant, the beet-sugar plant, and the gas works. For some time the cleaning up of the local streams has been actively agitated along with the general state-wide movement for stream purification. Certainly the local streams cannot continue to carry the heavy load of industrial wastes that have been dumped into them in the past years. It is encouraging to note that the local managements of these industries seem willing to cooperate in the exceedingly important project of reclaiming the streams for the people of Mason City.

Industries

Industrial enterprise is the backbone of much community growth, and its encouragement is, therefore, fundamental to the economic advancement of the community. The city plan must, for the most part, accept established industrial districts as they exist; the purely esthetic considerations of the plan must be subordinated to the practical requirements of industrial efficiency. The efficient lay-out of future industrial districts can well be an important phase of a city plan for an industrial community, modern planning in which the pooling of individual interests is made to return mutual gains in convenience and economy.

Local Industries. Mason City's industries are varied. The locations and the firm names of the more important ones are shown on the survey map reproduced as Fig. 72. The larger plants include two for the manufacture of portland cement (Fig. 68 and 69) that produce about five per cent of the cement output of the United States; a beet-sugar factory (Fig. 73), producing up to 40 million pounds annually; nine brick and tile plants (Fig. 66 and 67) that produce more than one-third of Iowa's output of drain and building tile; one of the largest independent meat-packing plants (Fig. 70) in the country; as well as what is said to be the largest sand and gravel plant in the state. Something of the volume of Mason City's industries may be gained from the fact that 62,650 carloads of Mason City freight were handled in 1922, the outbound exceeding the inbound by approximately 4,000 carloads.

*Many of these conditions have been remedied.

To its industries Mason City furnishes the advantages of good railroad service, paved highways, a rich agricultural region, and an unusual local wealth of natural resources. In return, its industries have given greater stability and prosperity to the business conditions in the community. Its rapid and steady growth must be largely credited to the expansion of its industries.

On the other hand, Mason City's industries are giving rise to some of its most serious problems. Its physical growth is cut off or interrupted on practically all sides by industrial holdings of large areas of land (Fig. 72); its streams have long been polluted by industrial wastes of various sorts; its air is polluted with odors and smoke; its moral and health conditions are lowered by the living standards of many of its foreign-born industrial workers; its sanitary and housing problems are largely among these industrial workers; its gently rolling topography is being defaced by the ugly depressions left by the industries that depend on the local geological deposits for their raw materials. Such conditions are not peculiar to Mason City—practically every industrial city must pay for its supremacy in some such way.

Fortunately the local industries are managed by men sincerely concerned about the future welfare of Mason City. Their apparent willingness to cooperate to the extent of their abilities for the advancement of the community is full of promise for the future. Mason City still retains much and can obtain more that will offset its industrial atmosphere. With the cooperation of its industries it bids fair to become a very attractive industrial city.

Many interesting data have been assembled relative to the local industries, their location, holdings, employees, and output—information that would be out of place in a preliminary report. Most interesting, for example, is the study map (not reproduced) prepared by the committee on industries and which shows the distribution of the places of residence of all the employees of the larger industries. All these data will be of material value to those entrusted with the planning of the future physical growth of the community.

Carrying Out the City Plan

This survey report is in no sense a city plan for Mason City. It merely looks forward to the near future when Mason City, along with many other Iowa communities, will be working out a comprehensive city plan as a guide to its future growth. It should be pointed out that the mere possession of such a plan is of little value if it is not carried out in a logical and systematic manner.

Permanent Planning Organization. The building of a city has frequently been likened to the erection of some large structure, but there is one fundamental difference. There eventually comes a time when the structure may be said to be complete, but in the

case of city building there can hardly be any such thing as completing the job. It can never be truly said that a city plan is finished, because such a plan must be continually subject to the various changes, modifications, and additions necessitated from time to time by community growth and changing conditions.

City planning, then, should be regarded as a 'life' job for any community. Every progressive city and town should have its permanent city-plan commission organized and equipped to prepare, to perfect, and to perpetuate the city plan—to see that it is kept a live issue through changing city administrations, and that it is kept in conformity with modern ideas of municipal progress. By a law* recently passed (Chap. 117, 41st G. A.) by the Iowa legislature, every city or town in Iowa is authorized to create and maintain a city-plan commission, whose duty it is to prepare a comprehensive plan for the development of the community, as well as to pass upon each proposed municipal improvement in an advisory capacity to the city council.

Work of City-Plan Commissions. The work of a city-plan commission may be divided into two general periods—before and after the preparation and adoption of an official city plan. The objectives throughout the first period are chiefly (1) to educate the public and the municipal administration to understand and to support the merits of a comprehensive city plan for the community, (2) to prepare the best comprehensive plan possible to fit local conditions, and (3) to establish a program of procedure by which the plan may be carried out.

The second period may be described as one of construction and maintenance—of the perpetuation and realization of the plan. The importance of this phase of its activities has already been emphasized. The commission should, to the best of its ability, (1) keep the plan alive through changing municipal administrations by employing all the feasible publicity devices, (2) study and report on the details of all proposed plats and public improvements, (3) modify the plan from time to time to meet the demands of city growth and the changing conditions of the times, (4) cooperate with each municipal department in planning for future improvements, (5) exercise eternal vigilance against material departures from the accepted plan, and (6) keep in close touch at all times with local developments with a view to advancing the execution of the plan in some detail at every opportunity.

Program of Procedure. As has been stated, one of the important duties of a city-plan commission is the preparation of a definite program of procedure for the carrying out of the city plan. The

*See "City-Planning Procedure for Iowa Municipalities," Bulletin 74 of the Engineering Extension Department, Iowa State College, Ames, Iowa. This publication contains the text of the recently-enacted city-plan commission law.

chief value of a city plan, in fact, is the recognition it compels of the need of taking certain consecutive steps in the accomplishing of comprehensive projects. These steps must be carefully worked out on the basis of urgency and financial expediency. The value of working according to a definite efficient program lies in the greater economy and better results over those obtainable through an ill-considered sequence of improvements. Practical financing

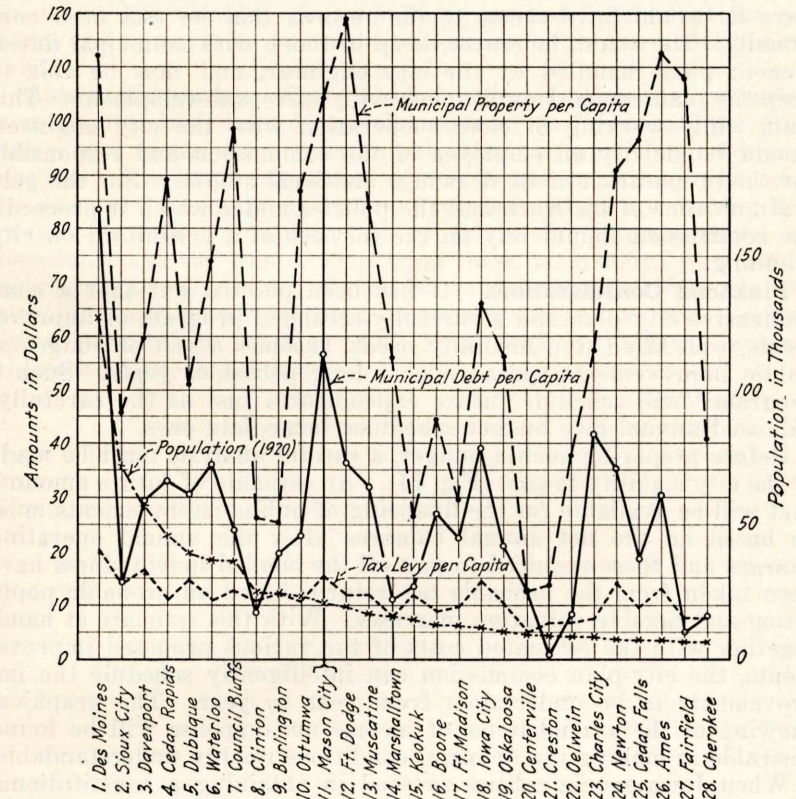


Fig. 74. A graphical comparison of municipal property, municipal debt, and the tax levy per capita for 28 Iowa cities, based on the 1923 Report on Municipal Finances.

demands consideration of the condition of the community—its ability to pay for an extended series of improvements.

Planning Organization. A city-plan commission cannot make substantial progress without funds. Even though the members give freely of their time, many technical studies are necessary and many drawings must be made. This demands the services of those versed in city planning, as well as of draftsmen and of clerks. All this

assistance must cost money. In city planning, as in any other sort of planning work, money is spent in devising the best ways of doing things—in short, of saving money.

The sort of organization that should be established by a city-plan commission depends on the size of the community. In a small city (and this may be taken to include Mason City) the commission will do well to employ a draftsman familiar with city-planning problems and methods, and establish him in the office of the city engineer. Here he would have access to the records that he will need continually. He would, moreover, keep in touch with municipal development plans handled by the city engineer, and thus be able to keep the plan commission in touch with current developments. This man, while working in close cooperation with the city engineer, should be strictly an employee of the commission and responsible for the preparation of its drawings and local studies. For the general guidance of his work and the policies under which it proceeds, the commission should rely on the services of a consultant on city planning.

Financial Considerations. It has been pointed out that a comprehensive city plan and a carefully-arranged program of improvements, well fitted to community needs, becomes a sort of budget of public improvements spread over a long period of years. Such a program "will schedule future expenditures just as the carefully-balanced annual city budget schedules immediate ones."

Before preparing such a budget, a careful analysis must be made of the city's ability to pay (Fig. 74). An estimate of future amounts that will be available for the financing of public improvements must be based on the net annual balances after the annual operating charges and those required to pay off the bonded indebtedness have been taken from the probable tax returns based on probable population and taxable valuation increases. With this estimate at hand, together with the estimated costs of the various proposed improvements, the city-plan commission can intelligently schedule the improvements to be undertaken from year to year. The graphical showing of the annual items of income and expense will be found desirable in making the financial conditions readily understandable.

When Iowa municipalities succeed in obtaining a constitutional amendment permitting excess condemnation, including the right to replat and resell any excess takings, the direct and indirect returns to the municipality from such an improvement as the opening of a new street may be materially increased.

The present-day tendency is to take every advantage of paying at least a part of the cost of most public improvements by levying local assessments wherever special benefits accrue due to the improvements. In fact, the recent rapid increase that has generally been made in city tax rates points to the necessity of developing municipal revenues other than direct taxation on real-estate. The

following paragraph sums up the view on this point of the National Municipal League committee on sources of revenue:

"Undoubtedly (1) genuine regulatory licenses, (2) charges which compensate the city for special services rendered, (3) fees for privileges, and (4) fines should be increased to meet the new costs and the shrunken value of the dollar, but the levying of so-called business taxes on every profession or type of activity that can be found in the dictionary, especially with the types of gradation commonly in use, is undesirable. A much fairer method is to adopt the personal and business income taxes recommended in the model tax system."

Aids in Financing. There are a number of plans that in various communities have been found of assistance in increasing the financial power of the community in obtaining the public improvements desired. A scientific appraisal of real-estate valuations will result in desirable equalization of tax burdens, and is apt to result in greater taxable valuations. In all plans for improvements, the possibilities in the way of increasing these valuations by improving neighborhood conditions should be kept in mind. Not only will city planning benefit blighted or slum districts, but city planning (and particularly zoning) will have such an effect generally throughout the community.

V. STATUS OF CITY PLANNING IN MASON CITY

Throughout this report there has been an interweaving of threads of discussion, some of which pertain to Mason City in particular, but most of which apply to Iowa towns and cities generally. It seems well, therefore, to devote a few paragraphs here to the present status of city planning in Mason City.

What Is Accomplished. Certain things have been accomplished in Mason City looking toward the preparation of a comprehensive city plan for the community. The merits of the planning idea have been given considerable general publicity, and the local and commercial organizations now seem united in backing the idea of a city plan for Mason City.

The preliminary survey, while it still needs rounding out in certain particulars, may be regarded as completed. This report has been based on the results of this survey, and, while certain data will eventually need amplification, much valuable information on local conditions has been collected that could not be given in detail—many maps and sketches have been made that could not be reproduced. When Mason City's planning organization is created, a valuable collection of data will be ready for its use. Most of the data maps are in suitable form for use as a public exhibit, and this use is recommended as a good means of securing public interest in local conditions and possibilities.

What Is to Be Done. The first action that should be taken is the appointment of a city-plan commission made up of capable, public-spirited citizens. The work of such a commission has been outlined in another publication.* In order that work may be begun promptly on zoning studies, the city-plan commission should be appointed to serve temporarily as a zoning commission, in accordance with the provisions of the zoning law of Iowa. In due time the work of this group should result in a comprehensive city plan and a carefully-drawn program of procedure suited to the needs and resources of the community.

Conditions Favorable. As far as Mason City is concerned, the purpose of the civic survey might be summed up as the securing of a permanent planning organization for this community. Conditions seem favorable for obtaining this result. The 41st General Assembly has passed the legislation needed to authorize the appointment of a plan commission, the public-spirited citizens of Mason City want the advantages of city planning (particularly zoning) for their community, and the city has an administration decidedly favorable to

*"City-Planning Procedure for Cities and Towns," Bulletin 74 of the Engineering Extension Department, Iowa State College, Ames, Iowa.

the city-planning idea. The early appointment of a city-plan and zoning commission seems assured.†

Local Possibilities. Mason City is full of possibilities for the making of an efficient and attractive community. It is growing rapidly; it may be said to be in a transition period between the overgrown town and the small city. The next decade or two will undoubtedly witness many changes. An early adoption of city-planning principles and ideals can be counted on to secure an efficient, healthful, and attractive growth that will make Mason City a model industrial community.

†As this report goes to press word comes that the City Commissioners have passed an ordinance providing for the creation of a zoning and city-plan commission for Mason City.



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