# TOWN PLANNING

## A PROGRAM OF CIVIC PREPAREDNESS FOR VERMONT COMMUNITIES

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*by*

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Professor of Political Science
In Norwich University

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NORWICH UNIVERSITY STUDIES

Political Science Series—No. 2

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K. R. B. FLINT.

Northfield, Vermont, February 8, 1919.

*"The citizen who loves his city ***must in the present national crisis be keenly alive to the relation between local and national citizenship. The world wide feeling aroused by the destruction of the European cities promises well for a deeper sense of citizenship in the peaceful future, when men breathe freely and in gratitude for what is saved from the imminent and far-reaching peril of war.*

*"It is a good moment at which to study***our cities, not in slavery to antiquarian detail, but with understanding of the conditions governing their growth, determining or interfering with their shapeliness, bringing out disease or fortifying health."— New York Times, July* 29, 1917.

## INTRODUCTORY NOTE

The most indifferent observer must have noticed that every city, village, and cross-roads hamlet in Vermont has from one to a score or more of organizations and societies, supported by citizens of whom many are really eager to do something to promote the welfare of the community. But there is no team work on the part of these groups. Waste of energy and duplication of effort stand in the way of progress.

Much of this inefficiency can be eliminated by a well defined community plan, in the making of which all individuals and associations have a voice; and the growth of community spirit so manifest during the war would seem to make the time ripe for the adoption of a program of civic preparedness. Everywhere, experience has shown that such a plan does much to dispel antagonism between rural and municipal areas, and encourages the welding of village and farm into an inseparable social and economic unit. It is by visualizing the possibilities of cooperation that town pride is stimulated and local patriotism engendered.

The realization of this need for community organization has prompted the writer to attempt the presentation here, in briefest outline, of those basic principles in accordance with which efficient town building must be carried on. It has been impossible to do more in this bulletin than call attention to general needs, leaving details to be worked out in each community. The aim has been to arouse civic consciousness, to carry over into the days of peace that same unselfish neighborhood spirit which characterized the days of war.

## CONTENTS

## I—HISTORY OF TOWN PLANNING

**Town Planning Defined.**—Town planning may be defined as the science of designing towns with such vision of the future as to secure for their inhabitants the greatest possible degree of health, convenience, opportunity, and beauty of environment. There is no department of municipal administration which town planning, in its proper sense, does not embrace. The social life of a community, the health and safety of its inhabitants, the form of government, the character of its industries, the grouping of its public buildings, the laying out of its streets and sidewalks, the extent of its parks and play grounds—all these should be considered in a comprehensive town or city plan.

**The Planning of Ancient Cities.**—The planning of towns and cities is not entirely a modern idea. The port of Athens was laid out by the Greek architect and engineer, Hippodamus; and history informs us that certain areas of the city itself were planned with exceeding care with regard to the convenience of its 200,000 inhabitants. The reconstruction of Rome, following the burning of the city in 64 A. D., was in large measure in accordance with very definite plans, and it is interesting to note that, although Rome was entirely neglectful of private sanitation, she assiduously looked after the public health of the 800,000 people who thronged her narrow streets. The Romans were practical town builders, always taking into account local geography and varying their constuction accordingly. There was uniformity to this extent, however, that the cities of the empire were as a rule constructed in accordance with the plan of the castra, or military camp, while in the provincial cities there were usually two chief centers—the market and the forum—each located in a public square from which the principal streets radiated like spokes from a hub. The first writer on the art of city planning was a Roman, Vitruvius, an architect and engineer whose treatises were not without merit.

**Medieval Attempts at City Planning.**—With the exception of those cities which were within the influence of Rome, the municipalities of Medieval Europe developed without even the semblance of a plan, the predominant characteristic being the circular wall of defense within which was the fortified castle or citadel. With the end of the dark ages and the increase of trading activity, attempts were made to widen the streets and in other ways to make life more comfortable. With the

passing of the city wall, as a necessity for protection, the old masonry was in many cases torn down and the space which it occupied used for a circular street encompassing the old city area, traces of which are still preserved in the modern street plans of Antwerp, Cologne, and Vienna. But no attention was given to the water supply, the lighting system or any other municipal service. Even London, with its forty thousand inhabitants at the beginning of the sixteenth century, gave no heed to these matters.

**Modern Attempts.**—It was not until towards the close of the seventeenth century that there was formulated a truly comprehensive city plan which, had it been considered and followed, would have made the city on the Thames the prototype for other great cities of the world. This was Christopher Wren's plan for London, prepared by authority of the Crown after the great fire of 1665. The plan was not adopted, however, because of the howl which went up from the land-owners of the city against the taking of their property; and through all of the succeeding decades the British metropolis has been paying the price of inadequate planning and shortsighted policy. In America, in 1682, plans were made for the streets and public squares of William Penn's "Quaker City", and in 1807 a street commission was appointed by the authorities of New York City which adopted the gridiron system. A decade before this commission did its work President Washington had engaged Pierre L'Enfant, a French military engineer, to lay out the new national capital in the District of Columbia.

**Past Building Unscientific.**—But all these were instances of town planning in a very limited sense. In no case was there any semblance of thorough cummunity organization. It is a startling fact that the nineteenth century so remarkable for its economic progress, was so utterly delinquent in its attitude towards civic and social affairs. The reason was that the transformation of a vast frontier into a great world power so occupied the minds of the strong men of the nation that this side of progress was neglected. Men lost their civic consciousness as they went in pursuit of wealth and industrial leadership.

**Beginnings.**—The beginning of scientific town building was left for the twentieth century. Not until then was there any wide spread attempt to apply business methods and the saving grace of commonsense to the management of community affairs. That comprehensive town planning, not only in America but abroad, is a movement of very recent

years, is indicated by the following events and the years in which they happened:

1909. First conference on city planning in the United States, Washington, D. C.

1909. First systematic instruction in city planning, School of Landscape Architecture, Harvard University.

1909. First state legislation authorizing plan commissions, Wisconsin.

1909. First town planning act of Great Britain.

1910. First town planning conference in London.

1910. Berlin town planning exhibit.

1910. Publication of first town planning magazine—Town Planning Review—Edinburgh.

1912. First text book on city planning used in public schools, Chicago.

1913. First state legislation making mandatory plan commissions, Massachusetts.

1913. First charter containing mandatory provision for a plan commission, Cleveland, Ohio.

1913. First state conference on city planning, Boston.

1914. Canada establishes town planning bureau.

**The Spread of the Movement.**—Slow as the movement was in developing, the rapidity with which it has spread is nothing short of remarkable. In continental Europe, Great Britain, the Dominions, and especially in America, the last decade has been one of great activity in town and city planning. At the present time scores of municipalities are hard at work upon programs of civic preparedness, while other scores have made their plans and are already building in accordance with them. Some of the places which have planned for the future with already gratifying results are Springfield, Winchester and Billerica, Massachusetts; Montclair, Glenridge and Newark, New Jersey; Decatur, Georgia; Reading, Pennsylvania; and Emmetsburg, Iowa.

**Why Vermont Needs to Plan.**—Although, as shown in the preceding paragraphs, the town planning movement is receiving careful consideration in most American states, the cities and villages of Vermont have given the matter almost no attention. The most casual observer must note that the development of our villages is largely a matter of chance, and that the failure to plan for the future is proving to be both costly and inconvenient. During the next few decades many Vermont hamlets will become villages, and many villages good sized towns. The undeveloped water power of the state; its mines of talc, asbestos, and copper;

its quarries of slate, marble, and granite; its agricultural products; and with all these its unsurpassed scenic beauty, are a guarantee that the next few decades will witness a great growth. The responsibility rests squarely upon the people of today whether that growth shall be scientific and in the long run economic, or unscientific and costly. Hundreds spent today in planning will save thousands tomorrow in correcting. In the average Vermont community, industries are located by accident, streets are laid out as the need requires, and sewers are laid down with no thought of how they will fit with extensions of the sewerage system; a man builds a house, not knowing whether it will sometime be on a wart or in a ditch; the danger of fire is always present; trees are planted in haphazard fashion and the natural beauties marred —because there is no plan, no thought of the morrow.

## II—PRINCIPLES OF TOWN PLANNING

**Town Planning Not a Fad.**—Unfortunately there are to be found in every community a few individuals who are hostile to anything which is new and seems to be an interference with the old order of things. With them, any kind of originality is sin; and town planning is a pernicious fad. So to characterize true town planning is most unjust, since it aims at a solution of the problems of a community by the application of the same scientific methods that are employed in the development of a great industry. However it must be remembered that, although the general principles of town planning are the same for all places each community should act with an independence springing from the nature of its particular environment. If a town plan is to be worth the paper upon which it is charted it must have an individuality of its own, in harmony with its size and its geographic setting—the small village must not ape the city. Real town planning conducted on a scientific basis is not a fad.

**Town Planning and the Law.**—The cities and towns of Vermont can do much while waiting for legislation and yet the best civic effort in this direction will fail if there is a lack of proper authority, or a failure to secure a legal status for proposals concerning the physical betterment of our communities. It would be unwise for a municipal corporation to prepare a plan at considerable cost without first having obtained authority to carry it into execution, or without having given proper attention to the expense which the carrying out of such a plan would necessitate. Any scheme must stand or fall by the test of economic ex-

pediency. Real long term planning, therefore, should be carried on with the sanction of law. So general is the recognition of this fact that many states—notably California, Massachusetts, New Jersey, New York, Ohio, and Pennsylvania—are endeavoring through legislation to plan for their future growth. The Massachusetts law makes the establishment of planning boards mandatory for all towns and cities with a population in excess of ten thousand and optional for towns having a population less than ten thousand. [1] There are four distinct steps involved in the preparation of any practical town plan:

1. Making a preliminary survey to determine the area to be planned and securing a map of existing physical and sociological conditions.
2. Obtaining authority necessary to control the area while the plan is being prepared, so as to forestall attempts to thwart its execution.
3. Preparing the plan and securing legislative approval.
4. Putting the plan into operation after it has been approved.

One at all familiar with the nature of American government will realize at once that the order of procedure must be as indicated and that the first step only can be effectually taken without legislative action. This action can, of course, take the form of a special act for a particular community or a general enabling act. By making a list of existing state statutes and city ordinances or village by-laws, one can easily determine just how far a community can go within the limits of the law.

**Objects of the Town Plan.**—The immediate object of the town plan should be to insure an environment for the inhabitants which will be healthful and convenient. This having been accomplished, attention may be given to economic opportunity and beauty of environment. The order of purposes may be roughly grouped as follows:

1. Streets and transportation.
2. Water supply.
3. Housing inhabitants and industries.
4. Disposition of waste materials.
5. Protection against disaster.
6. Conveyance of food supplies, and of the materials and products of manufacturing.
7. Educational, cultural, and recreational facilities.

[1] Chapter 283, Acts of 1914

**Factors in the Plan.**—What are the factors which make a community plan? The lawyer, the engineer, the architect, the health officer—all have places in the making of the town plan. The lawyer must be consulted to determine what legally can be done. The location of factories, the laying out of streets and roads, the planning of water-supply and sewerage systems are the tasks of the engineer. The building architect is concerned with the hygienic conditions in factory and home, and the grouping of buildings with relation to the street; the landscape architect with the beautification of the town. The medical officer must cooperate with engineer and architect to safeguard the public health. Each has his function to perform at the request of the town planning board.

**The Wisdom of Borrowing.**—Many of the improvements considered in a town plan are not self-supporting. A comprehensive scheme of development necessitates not only the charting of a plan, but the acquisition of control over undeveloped property; and the question of financing the scheme becomes, therefore, one of considerable import. The method usually employed to meet extraordinary expenditures is through the exercise of the borrowing power. The great business corporation has never hesitated to assume a large debt in order to enlarge the field of its activities; and there is no good reason why the municipal corporation should hesitate to borrow in order to improve its position. But there is a principle connected with public borrowing which should always be borne in mind: future generations should not be called upon to pay for the thing which they cannot enjoy, and so the present generation should not blindly assume obligations without regard to meeting them as they become due. In Vermont the law provides that "a municipal corporation shall not incur an indebtedness for public improvements, which, with the previously contracted indebtedness, shall in the aggregate exceeed ten times the amount of the last grand list of such municipal corporation. Bonds or obligations given in excess of the limit authorized by this chapter and contrary to its provisions shall be void." [1] The practice of paying for public improvements by the levy of special assessments upon the owner of the property benefitted is based upon the principle "that those persons whose property has been clearly increased in market value by an improvement effected by the local authorities should especially contribute to the cost of such improvement." [2]

[1] General Laws of Vermont, Sec. 4082.

[2] Cooley on Taxation.

Wise improvements are never a burden upon any community but extravagance is without excuse. The municipal corporation, like the private corporation, must be guided by the saving grace of common sense.

**The Psychology of Accomplishment.**—Lack of civic imagination is the greatest obstacle in the way of well ordered Vermont communities. It is difficult for any one of us to visualize the possible results of planning. But the experience of other states shows that when a city or town is planned, that of itself supplies an incentive to growth. The plan tends to hold people, too, they will work for their community and be contented. No greater civic stimulus can be applied to the citizens than to hold before them a chart showing the possibilities of the future. This psychological factor cannot be ignored.

**Community Organization . Necessary.**—But efficient town planning presupposes community mobilization. Unless country and village can work together, unless all elements are willing to engage in team play, there can be no great accomplishment. To get results, the community must be organized.

## III—COMMUNITY ORGANIZATION

**Present Lack of Organization.**—As suggested in the foreword, every community in Vermont has from one to a score or more of organizations and societies composed of men and women who have the best interests of the community at heart, and are really anxious to accomplish something for the public welfare. But the absence of a plan results in duplication of effort and a sad waste of valuable energy. The different agencies do not have a particular work laid out for them to do, and consequently cannot act efficiently. We have observed all too frequently board of trade, village improvement society, church, grange and reading circle, working independently and jealously instead of cooperating for the common good.

**Linking Village and Farm.**—Perhaps the greatest need is the welding of village and farm into an inseparable economic unit. Pettv jealousies and misunderstandings have too long stood in the way of that close relationship which is essential to the prosperity of each. It would take no lengthy exposition to show how absolutely interdependent these areas are. The village is the natural trading center for the outlying

countryside and, as such, should do its utmost to win and retain the friendship of the farming class. To do otherwise is deliberately to drive trade away from the village store. The rural district, on the other hand, must look to the village for leadership in ideals—in civic consciousness; and, unless willing to cooperate, cannot expect to enjoy the benefits which naturally belong to it. This can be secured only through the town plan which takes as much into account the welfare of the country cross-roads as it does the village common. The man living at the four corners in the hills is as much a citizen as the president of the village corporation. There is no better way to interest people than to "get them in on a plan". It is shortsighted policy, for instance, when planning a parade for the purpose of stimulating interest in some campaign to fail to invite the country people to participate in the parade, and then later expect them to support the campaign. The more closely village and farm are drawn together, the stronger community spirit becomes. A town divided against itself cannot prosper.

**The Greater Vermont Association.**—Prior to 1912 there were three distinct efforts to form in this state an organization capable of leadership in the movement for a bigger and better Vermont: The Vermont Development Society (1897), The Vermont Improvement Association (1906) and The Vermont Board of Trade (1911). No one of these attempts was attended with much success, however, and on February 17, 1912, the fourth organization was created and given the name of The Greater Vermont Association. Since that day, this agency, altho confronted with many discouragements, has succeeded where the others failed and now gives promise of becoming a permanent state institution. Thru its efforts Vermont has already become more widely and favorably known. But a stream can rise no higher than its source—a state can be no greater than the several communities of which it is composed—and there is need in every township of an organization which can impress upon each individual the value of a cleaner, bigger, better town. If Vermont cities and towns catch the greater-community idea, there can be no question about a greater Vermont.

**The Community Association.**—The voters of Vermont have long had the habit of getting together at annual and special town meetings for the purpose of transacting such business of the town as is presented in the warning of the meeting. Such an institution is vital to demo-

cracy; but there are many matters of import which do not come within its jurisdiction and, as a consequence, never get a real public hearing. Inasmuch as community organization can never be effective unless questions concerning the community can be fairly and thoroughly discussed by all concerned, it is reasonable to believe that ifthere were in every city and town of this state an association, including in its membership every man, woman, and child within the limits of the township or municipality much might be accomplished towards civic unification. Such an association by enlightening public opinion, by fostering a neighborhood spirit, and by promoting cooperation between countryside and village would tend to impress upon each individual his or her responsibilities of citizenship. In the meetings of the association public thought would be crystallized, and, best of all, each person could have his say. For leadership the local organization could look to the Greater Vermont Association and for the sake of uniformity each community association would do well to adopt as a name the Greater.....Association. The officers might consist of a president, a secretary, and a treasurer. The president and the treasurer could be elected at the annual community meeting. The secretary, however, should be appointed by the community council.

**The Community Council.**—The community association would be too large and unwieldy to do more than discuss matters of public interest. Consequently the translation of thought into action must devolve upon a smaller body. And it is suggested that a community council be created to act as a clearing house through which the various organizations may cooperate in town building. It would in no sense be an additional organization, but an agency intended to promote team work on the part of existing groups. The composition of this council need not follow any hard and fast rule; but the experience of other places has shown that a well balanced body can be secured through the election of one member from each organization in the town, these representatives to choose three others from the community at large. The president of the community association should act as chairman of the council. As soon as possible after organization, the council should appoint a community secretary.

**The Community Secretary.**—A handicap to a movement of this sort will be the lack of a person who can give time and thought to the business of the community. In years to come our cities and towns will be doing many things which even now are undreamed of as community

activities; and some one will have to be officially selected to do the work and be supported out of public funds. The most natural person for this task is the principal of the school. Throughout Vermont the principal is employed only a part of the year and the salary which he receives is entirely inadquate. If he were made community secretary with "an-all-year-round job" and a corresponding increase in salary there would result a better type of teacher and a better type of school. Such a relationship between teacher and community would elevate the function of the teacher and make more plain the constructive and patriotic service which the school renders community, state, and nation. The nature of his work would be exacting and varied. As manager of the social center, secretary of the farmers' bureau, director of farm inventories and community surveys, to say nothing of the necessity of maintaining a public calendar of local meetings and events, he would become the kingpin of the neighborhood. The forerunner of this kind of work in Vermont has already appeared in Concord where the principal of the junior high school has been president of the milk producers' association.

**The Town Reference Bureau.**—At the high school, or in the public library, there should be a town reference bureau—an institution for the thorough study of conditions in the town—to which any citizen might go for the purpose of securing information concerning community problems; and in every schoolhouse and library in the township there should be a permanent town planning and development exhibit showing just what the town intends to accomplish.

**A Suggested Constitution.**—The following form of a constitution is suggested for the use of communities desiring to effect an organization:

**Article I—Name**

The name of this organization shall be the Greater.....Association.

**Article II—Object**

The object of this association shall be to coordinate the work of all existing organizations in the town of....., to encourage the discussion of community problems, and to prepare programs for community development.

**Article III—Membership**

All citizens of the town of.....shall be considered members of this association.

**Article IV—Officers**

The officers of this association shall consist of a president, a secretary, and a treasurer. The president and the treasurer shall be elected at the annual community meeting. The secretary shall be appointed by the community council.

**Article V—Council**

Each organization in the community shall elect one representative and these representatives, together with three representatives chosen by them from the community at large, shall constitute the community council, which shall have direction of all the affairs of the association and appoint the community secretary. The president of the community association shall act as chairman of the council.

**Article VI—Meetings**

The council shall meet every month during the year except the months of July and August; and meetings may be called at the direction of the chairman, or at the request of any five members of the council. The council shall arrange for an annual community meeting of the association to be held.....during ..... At this meeting reports shall be made upon the progress of the town and projects for the ensuing year discussed and voted upon. Such projects as are adopted shall become a part of the community program. Such matters as require legal action shall be inserted in the warning for the town meeting.

**Article VII—Amendments**

This constitution may be altered or amended by a two-thirds vote of the residents of the town of.....present at the annual community meeting.

**Taking Account of Stock.**—One of the very first things which a town should do is to take an account of stock. These are some of the questions which the community should ask itself in order to determine its assets and its liabilities:

How has nature endowed this town?
Are we making the most of the endowment?
What are the natural disadvantages?
Can these disadvantages be overcome?
Are our streets and roads what they ought to be?
Have we a village playground?
What are our farms producing?
Are our churches cooperating in social service?
How many children in this town do not receive religious instruction?
Is this town subject to epidemics?
Are summer visitors coming here?
Are our schools as good as they should be?
What are the shortcomings of our government?
What are our latent industries?
What institutions are hindering the moral welfare of this community?
Have we adequate fire protection?
Are our cemeteries well kept?
Is the railroad station in our town clean and well maintained?
Is the village common ugly or beautiful?

Have we a town forest?

Is our library serving us as it should?

Having taken its account of stock, knowing its advantages and disadvantages, its present accomplishments and its future possibilities, the town is then ready to plan for its future.

## IV—LOCAL GOVERNMENT

**Character of Local Government.**—In general it may be said that the duties of local government include the assessment and collection of taxes, the care of the poor, the construction and maintenance of roads and bridges, the support and administration of schools, the safeguarding of the public health, and the enforcement of law and order. Local officers, however, charged with the administration of any of these departments, cannot perform a single legal act without the authority of some state law—a fact too often overlooked by those who are over jealous of local privilege and view with alarm what seems to be an increase of state prerogative. State administration, however far centralized, represents only the unifying scheme of local government.

**The Town.**—There are in America two distinct types of rural local government—the county and the town. Wherever New England settlers have gone, there the township has had favor over other forms of local organization; wherever Southern pioneers have located, the county has invariably become the unit of local government. Unquestionably the township form has a distinct advantage in community organization as the town is in itself a natural community. On the other hand, as an administrative unit, it is coming to be regarded with disfavor. Many of the functions mentioned in the preceding paragraphs cannot be performed efficiently by a unit smaller than the state. Therefore Vermont, in common with the other New England states, while having in the town a unit admirably suited to community mobilization, has one ill adapted to the efficient administration of local government unless supervised by central authority.

**The City.**—The usual type of city government in America may be defined as a system resting upon the principle that legislative and administrative functions should be vested in different hands. From the chartering of New York, in 1686, throughout the colonial period, the form of municipal government was similar to that of the English borough. It consisted of council and mayor, the latter possessing no

special executive powers and merely acting as the presiding officer of the board. After the adoption of the Federal constitution, there followed a period in which municipalities very widely imitated the Federal plan by creating large bicameral councils.

It was most natural that this unwieldy method of administering city government should result in a division of responsibility and decentralization. During the closing years of the nineteenth century, there was in evidence a tendency to give more and more power to the mayor, vesting him with the right to appoint and the prerogative of the veto. There had been much good in centralization, but many evils crept in. The appointments of the mayor had to be ratified by the council; the ordinances of the council had to be approved by the mayor. Thus the interests of the city quite frequently were sacrificed upon the altar of "petty politics." This rather orthodox form of government was in existence during the period when most of Vermont cities were chartered; and in fact today is the prevailing type.

**Genesis of Commission Government.**—The genesis of city government by commission was the direct result of a great calamity. On September 8, 1900, a tidal wave of unusual magnitude swept over the city of Galveston, Texas, killing thousands of people and laying waste a vast area. In this crisis the city government—notorious for its corruption and inefficiency—went to pieces, and the Deep Water Committee, an organization of business men, stepped into the foreground and assumed the responsibilities of administraion. This group appointed a subcommittee, which, after dealing with the acute crisis, set itself to the task of establishing a government competent to attempt the reconstruction of the city. The upshot was a commission form of government created under a special charter which is in operation today. The salient characteristic was a board of five men empowered by the state to exercise at the same time the functions of ordinance making and administration. Ward lines have been abolished and the five commissioners are elected at large. One of the men elected, known as the mayor-president exercises a general oversight, presides at all meetings, and devotes at least six hours a day to the affairs of the city. He receives for his services $2,000 a year. Each of the other four commissioners has charge of some department of the public service. One assumes responsibility for the fire and police departments; another is commissioner of streets and public property; a third looks after the water supply and sewerage systems; the fourth is commissioner of finance and revenue. Each receives for his services $1200 a year. This com-

mission has nothing to do with the schools except lo levy and collect taxes. There is no provision for a referendum except in the issue of bonds; and the recall has no place. This, in briefest outline, is the form of the Galveston plan—the prototype of all commission government in America.

**Modification of the Galveston Plan.**—The spread of the Galveston idea was rapid. Neighboring cities in Texas observing the effect of commission government in Galveston, adopted the commission form. On March 29, 1907, the legislature of Iowa passed the first enabling act in the United States, permitting any city of over 25,000 inhabitants to adopt the commission form of government if approved by a majority of its voters. This law has since been so amended as to include all cities having a population of over seven thousand. Under this law Des Moines adopted commission government, but with such modifications as to deserve mention. The real contribution of Des Moines was the feature of direct legislation exercised through the agencies of the initiative, the referendum, and the recall. Since the adoption of the commission form of government by Galveston and the modification by Des Moines, the system has spread until today there are hundreds of American cities operating under it. The characteristics of the commission plan as revealed by the various special charters and the general acts may be summarized as follows:

1. Small number of officers constituting governing body.
2. Election of those officers at large.
3. Exercise of executive as well as legislative authority.
4. Assignment of each commissioner to the headship of a definite department.
5. Checks designed to assure direct popular control.

The usual number of commissioners is five. Some cities have three; and one city has nine. In no case, however, do general laws provide for a greater number than five. The term of office varies from a single year to six years; but terms of two and four years are the most common. Members are usually paid, the salaries ranging from a few hundred to several thousand dollars a year. Some municipalities require their commissioners to devote their entire time to the work of the city; others prescribe a limit; some make no specifications.

**The Commission-Manager Variation.**—Experience with the commission plan of government proved shortly that it had some inherent defects. Not infrequently rivalry among the commissioners, in which

the interests of their respective departments were placed above the greater interests of the city, prevented full measure of success. Then, too, there has always been serious objection to placing in the hands of a single body of men the power both to appropriate and expend public money. Even in the Vermont town it is the local legislature or town meeting, and not the board of selectmen, which makes the annual appropriations. Consequently, students of the problem began to look about for some way of so correcting the defects of pure commission government that its good points might to retained. The result was the so-called commission-manager plan, the characteristics of which are described by Richard S. Childs, Secretary of the National Short Ballot Organization as follows:

"The city-manager plan, or, as they more exactly call it in Dayton, the commission-manager plan, provides for a single elective board of directors, which may be called a commission or council. This commission receives nominal salaries or none (except, probably in very large cities) and the members give only part of their time to municipal work, and thus are left free to continue their private careers without interruption. Their functions are to hire and supervise an appointive chief executive called the city manager, who holds office at their pleasure; also to pass ordinances and to contribute to the city government the amateur and representative element. If, for example, the city manager proposes the municipal operation of the street car line, the commission will have the duty of examining the proposition, first to as its wisdom, and second as to whether such a move accords with public sentiment with which they, as representative native citizens having wide personal acquaintance throughout the city, are supposed to be familiar. If the decision is favorable to municipal operation, they have the further responsibility of seeing that the city manager is competent to handle the job and that he does handle it properly in the years that follow.

The city manager, as chief executive, holds universal appointive power over the administrative establishment. He is not necessarily a local resident. Supposedly he is an expert in matters of municipal administration. In small cities he should be a practical civil engineer, thereby making a separate city engineer unnecessary . In large cities broad executive experience would of course be a major requirement. The city manager's salary should be the largest in the city's service.

The logical exceptions to the appointive power of the city manager would be a civic service commission and an auditor. These would be appointive directly by the commission."

The commission-manager plan was first tried out in the little city of Sumter, South Carolina, in 1913. Exactly a year later Dayton, Ohio, faced with the problems of political and economic reconstruction following the great flood of the preceding spring, adopted the city manager plan. Since then its spread has been rapid until in October 1918, there were in the United States seventy-four cities operating under the commission-manager plan. Of this number but two are in New England —Auburn, Maine, and Waltham, Massachusetts. In both of these cities the plan went into operation in January 1918. Auburn is a city of

seventeen thousand inhabitants; and its manager, H. G. Otis, receives a salary of $3600. Waltham, the watch city of New England, has a population of thirty thousand; and its manager, Mr. Clarence A. Brigham, formerly the very successful manager of Norwood, Massachusetts, is paid a salary of $5,000. In addition to the seventy-four cities which have the pure commission-manager form, there are forty-eight communities which in one way or another employ a city manager. Norwood, Massachusetts is of this class; and, inasmuch as it is a pioneer in the movement, a description of its government may not be out of place.

**Norwood's Experiment.**—Norwood is a town about the size of Barre, Vermont. In 1914 a new charter, prepared by a special committee, was secured from the legislature and adopted by a popular vote. This charter went into effect in January 1915. According to its provisions, the town meeting as a local legislature remains the same; but as an electing body, its powers are curtailed. Five selectmen are elected, each for a term of three years. The only other elective officials are the town treasurer, the tax collector, two members annually to the school board, two trustees to the library, one member to the board of health, and one member to the finance commission. By the elimination of elected officials, the short ballot is possible, and the voters protect their rights through the recall. The selectmen are authorized by the charter to hire at a salary not to exceed $4,000 a town manager who holds office at their will. The powers conferred upon the manager are many. He conducts all departments voted upon by the selectmen; appoints and removes all chiefs of departments and subordinates, fixing their salaries and wages; recommends measures to the selectmen; keeps all public buildings in repair; purchases supplies for all departments; controls the fire and police departments; assumes the duties of the surveyor of highways, the sewer commissioners, the water commissioners, the municipal light board, the park commissioners and the tree warden; and is superintendent of all public works. The town's financial matters are placed in the hands of three men who are elected . This board prepares the annual budget which is presented to the voters at town meeting. It has authority to investigate; and the treasurer and collector of taxes must report to it. The administration of the school department, the library, and the department of health is carried on by boards as before. All the public buildings, however, are cared for by the town manager.

**Vermont's Town Manager Law.**—The General Assembly of the State of Vermont in 1917 passed an act which appears in the General Laws under Chapter 174. The provisions of the law are as follows:

**Definition**

**Sec. 4053. Town Construed.**—The word "town" as used in this chapter shall be construed not to include a city.

**Manager**

**Sec. 4054. Appointment.**—The selectmen of towns adopting the provisions of this chapter as herein provided, shall, forthwith thereafter, appoint a general town or municipal manager who may or may not be a resident of the town for which he is appointed.

**Sec. 4055. Qualifications; Authority of Selectmen.**—Such a manager shall be selected with special reference to his education, training and experience to perform the duties of such office and without reference to his political belief, and shall, in all matters, be subject to the direction and supervision and shall hold office at the will of such selectmen, who may, by majority vote, remove said manager at any time for cause.

**Sec. 4056. Oath; Bond.**—Before entering upon his duties said appointee shall be sworn to the faithful and impartial performance thereof, and shall execute a bond in favor of the town for the faithful performance of his duties, in such sum and with such surety or sureties as may be approved by the selectmen.

**Sec. 4057. General Authority.**—Subject to the additional or varied requirements of this chapter, said general manager shall have general supervision of the affairs of the town, be the administrative head of all departments of the town government and shall be responsible for the efficient administration thereof with in the scope conferred by this chapter.

**Sec. 4058. Powers and Duties in Particular.**—Said manager shall have authority and it shall be his duty:

I. To cause duties required of towns and town school districts, and not committed to the care of any particular officer, to be duly performed and executed.

II. To perform all duties now conferred by law upon the selectmen, except that he shall not prepare tax bills, draw orders, lay out highways, establish and lay out public parks, make assessments, award damages, act as member of board of civil authority nor make appointments to fill vacancies which the selectmen are now authorized by law to fill; but he shall, in all matters herein excepted, render the selectmen such assistance as they shall require.

III. To be general purchasing agent of the town and purchase all supplies for every department thereof; and purchases of supplies for departments over which said manager is not given control shall be made only upon requisition therefor by said departments.

IV. To have charge and supervision of all public town and school buildings and other town and school property and of all repairs thereon; and all building done by the town or town school district shall, unless otherwise specially voted, be done under his charge and supervision.

V. To perform all the duties now conferred by law upon the road commissioner of the town.

VI. To perform all duties now conferred by law upon the overseer of the poor of the town.

VII. To have charge, control and supervision of the following matters:

a. The police department, if any, and shall appoint and may remove the officers thereof and shall fix their salaries.

b. The fire department, if any, and shall appoint, fix the compensation of and may remove all officers and employees thereof.

c. The system of licenses, if any, not otherwise regulated by law.

d. The system of sewers and drainage, if any, except the making of assessments thereof.

e. The lighting of streets, highways and bridges.

f. The sprinkling of streets and highways, and laying of dust, except the making of assessments therefor.

g. The maintenance of parks and playgrounds.

**Sec. 4059. Same; Examination of Departments.**—Said manager or the selectmen may cause the affairs of any division or department under their control, or the conduct if any officer or employee thereof, to be examined and may compel the attendance of witnesses and the production of books, papers and other evidence. Said manager shall have access to all town books and papers for information necessary for the proper performance of his duties.

**Sec. 4060. Additional Duties.**—The powers, duties and liabilities imposed upon any other departments of the town or school district inconsistent with the provisions of this chapter shall be suspended and shall be conferred and imposed upon said manager, if appointed pursuant to the provisions of this chapter.

**Sec. 4061. Compensation, How Fixed.**—Said general manager shall receive such pay as may be fixed by the selectmen, unless otherwise specifically voted by the town.

**Operation of Chapter**

**Sec. 4062. How Elected.**—The provisions of this chapter shall not become operative in a town unless and until the same are approved and adopted by a majority of the legal voters of such a town present and voting at an annual or special meeting duly warned and holden as hereinafter provided.

**Sec. 4063. Petition; Warning.**—If voters, in number equal to four percent of the total vote cast for governor in said town at the last election, petition the selectmen therefor in writing, said selectmen shall cause to be inserted in the warning for the annual town meeting, or in the warning for a special town meeting which shall be called upon such petition, an article in substantially the following form: "To see if the town will vote to take advantage of the provisions of chapter one hundred and seventy-four of the General Laws, and authorize the selectmen to employ a general town or municipal manager."

**Sec. 4064. Restriction.**—A vote shall not be taken under the provisions of this chapter unless such article is inserted in the warning for such meeting.

**Sec. 4065. Revocation.**—A town that has adopted the provisions of this chapter may reject the same by a majority vote of the legal voters present and voting at an annual meeting provided, however, a proper article therefor is inserted in the warning for such meeting.

**Sec. 4118. As to a Municipal Manager.**—An incorporated village may avail itself of the provisions of chapter one hundred and seventy-four so far as applicable, if a majority of the voters thereof present and voting at any annual or special meeting so vote under a proper article in the warning therefor as in such chapter provided. The trustees of a village adopting the provisions of such chapter shall have the same powers in respect to the employment, direction, supervision, and discharge of municipal managers, and the fixings of their bonds and salaries as are therein conferred upon selectmen.

**What Shall Vermont Do.**—The enabling town manager law cited in the preceding paragraph is a well drawn statute. The only question is: will it work? There is not the slightest doubt that the Vermont city or town large enough to afford a manager of ability would find that the adoption of the commission-manager form of government would bring as satisfactory results as have attended its adoption by other communities. There is not the slightest doubt that some places which at first glance might seem altogether too small to afford a manager would, after all, find him to be a good investment. It is reasonable to believe, however, that most of our 247 units of local government are by far too small to support a town manager. In the list of seventy-four municipalities before referred to as having the pure commission-manager form of government there are but thirteen having a population less than five thousand, and as seven of the thirteen made the change during the last year, it is entirely problematical how many eventually will decide that their size warrants the continuance of the plan. The list also shows that the salaries paid the managers of these seventy-four cities range from $10,000 paid Louis E. Ash by Wichita, Kansas, (55,000) to the very meagre sum of $1400 paid the city managers of Montrose, Colorado, (4,500); Big Rapids, Michigan (5,200); and South Charleston, Ohio (1500). South Charleston is the smallest place in the United States having a city manager.

There is probably no question that Burlington, Rutland or Barre could, if they so desired, operate very successfully under the commission-manager plan. There is but little question that Montpelier, St. Albans, Brattleboro, Bellows Falls, St. Johnsbury, Newport, Bennington, Colchester and Springfield could work the plan. It is an open question, whether towns like Hardwick, Waterbury, Northfield, Brandon, Middlebury, Fair Haven, Lyndon, Poultney, Richford, Randolph, Barton and Woodstock would find it to advantage to employ the type of men with whom they would be satisfied. It is exceedingly doubtful about the many places having from fifteen hundred to two thousand inhabitants and for one to argue the town manager form of government in the 188 towns of Vermont which have less than fifteen hundred inhabitants would be akin to installing a large-scale production machine in a one-man shop. Commonsense must lead us to the conclusion that there are barely a dozen places in Vermont where the city manager plan would be fairly sure of success, with an open question about a score or so of others. But what of the great number which cannot utilize the town manager idea? Are they not entitled to a helping hand from the state? If we are to have the Greater Vermont, which we all so

much desire, it is imperative that our small Vermont towns, which so largely make up the fabric of the commonwealth, have the opportunity to improve the administration of their government as well as the larger places. They, too, need some planning, some attention, some advice. How shall it be secured?

**A State Department of Local Government.**—Our conclusions thus far seem to be: (1) that there are but few towns or cities in the state large enough to warrant their adoption of the manager plan; (2) that all the places in the state need, and in most cases would welcome, the counsel of the trained student of government. Here in Vermont today there is a crying need of a state department of municipal affairs or a local government board. Such a department, created for the purpose of helping towns in the administration of local government, would offer to them many advantages without any curtailment of local powers. With expert advice available from such a department, all cities and towns would be able to enjoy not only the advantages of consulting qualified men other than their own officials, without expense to the town but would be able to avoid the errors in local administration made in other places. [1] The problems of Vermont communities are in many respects similar, and it is unfortunate that one town must blindly make the same mistakes that other towns have made. Not the least of the advantages to be gained from a state department, exercising oversight regarding local expenditures and insisting on proper accounting and auditing would be the fact that the financial status of municipalities would be so improved as to make it possible to borrow money at a lower rate of interest because of the better security—surely there is no surrender of local liberty in the assurance that local accounts are checked up by some one outside the community. Such a department would insure:

1. A uniform system of municipal government with such modifications as local conditions demand.
2. The employment of skilled financial, engineering, medical, and legal advice upon all matters of local government.
3. The framing of by-laws on sound principle and not on local expediciency.
4. The proper control of local finance, municipal enterprise concern-

[1] As an alternative, the supervision of local government might be entrusted to existing state departments, thus avoiding what some would term top-heavy organization. It is the opinion of the writer, however, that greater efficiency would be secured through a separate department or bureau.

ing public utilities, public expenditure to relieve unemployment, etc.

5. The securing of cocperation between adjacent towns and cities.

**Planning a Function of Government.**—Whatever the form of local government may be, town or city planning is one of its functions. The community organization, discussed in the preceding section, comtemplates nothing beyond the mobilization of community forces for the purpose of meeting present needs. Long-term planning, on the other hand, presupposes a grant of authority from the state and, as town or city officers are necessarily occupied with duties of administration, should be placed in the hands of a special board or committee constituted in accordance with law. Working with the support and advice of a state department of municipal affairs, one can hardly overestimate the value of the contributions of such a board to the economic and ethical phases of community life.

**Personnel of the Board.**—The personnel of the town-planning board furnishes an opportunity for debate. Some communities are looking with favor upon a board of five composed of the first selectman or mayor, the president of the board of trade, the president of the community association, the town or city manager, and one citizen selected in town or city meeting. Others prefer to choose all members of the board in the town or city meeting. The latter method is probably the better one as it has the dignity of authority; yet it must be remembered that this cannot be done without a special charter or an enabling act. In the absence of charter or act, the membership of the board is of necessity confined to the heads of existing organizations. In either case, the town or city manager, if there is one, should be a member of the board. An essential factor in the success of a town planning board is length of service.

## V—STREETS AND ROADS.

**The Economy of Good Roads.**—Sixty years ago, Charles Sumner said: "The two greatest forces for the advancement of civilization are the schoolmaster and good roads." That utterance has lost none of its truthfulness with the years. During the great war the highways of France were as important as her armies; and there is no doubt but that America, profiting from the lesson, will soon inauguarate a mighty road building movement. Already it has been suggested that there should be in the United States at least three transcontinental systems

running from east to west, with intersecting north and south lines. Regardless of how Vermont may fit into this national program, she needs good roads for her own sake, and that right early. During the war it became necessary to curtail construction and to relax somewhat in maintenance, with the result that our highways, possessing almost no characteristics of permanency, have gone to pieces. Realizing the economy of good roads— whether viewed from the standpoint of agricultural development, industrial promotion, commercial activity, or social betterment—state leaders everywhere have been urging a system of improved highways for Vermont. No thinking person can argue against the need. The great question is—how shall Vermont meet that need?

**Fundamentals of Road Economics.**—So vitally important is the matter that the fundamental principles underlying sound road construction should be visualized by the Vermont public. Mr. J. E. Pennypacker, Chief of Road Economics, U. S. Office of Public Roads, writing in the *American City* for December 1914, lays down the following ten principles in road economics:

1. That all who share in the benefits of road improvement should share proportionately in the burdens.
2. That the degree of improvement should be proportionate to the traffic importance of the road improved.
3. That the rate of payment, or the rate of accumulation of the sinking fund on any public debt contracted for road improvement, should approximately equal the deterioration of the improvement.
4. That road building and maintenance comprise work requiring special qualifications on the part of those who direct it.
5. That responsibilities should be definite as to persons.
6. That continuous employment is more conducive to efficient service than intermittent and temporary employment.
7. That the specialists who direct road work should be appointed instead of elected; and they should hold office during efficiency instead of for a fixed term.
8. That no road is wholly permanent and that it requires continuous upkeep, for which financial and supervisory provisions must be made.
9. That cash is a much more satisfactory tax than is labor.
10. That all agencies at the disposal of the state, capable of use in works of public improvement should be so used, rather than in such commercial production as would conflict with private enterprises."

**Town a Poor Unit.**—This much seems certain—the town is not a proper unit for road building. Its operations are neither economical nor efficient. The town cannot afford to own the machinery necessary in modern road construction or maintenance, nor can it purchase materials to advantage. No one can doubt that it is entirely contrary to public welfare to have an otherwise good stretch of road fifty miles in length

spoiled by six miles of road running through a town too poor to maintain a passable highway. Good roads are a state wide necessity; and as such, should be constructed and maintained by the state.

**Classification of Streets and Roads.**—Streets and roads may be roughly grouped into the following five classes, arranged in the order of their importance:

1. Streets.
2. Inter-state trunk roads.
3. Intra-state trunk roads.
4. Post roads.
5. Rural roads.

It is not unlikely that the future will see inter-state trunk lines under the general supervision of the Federal government. As pointed out elsewhere, the intra-state road problem is one which the state, and not the town, should attempt to solve. But the commonwealth does not, as a rule, concern itself with city or village thoroughfares; and as these are, from the viewpoint of town planning, particularly important, they deserve in this connection special emphasis.

**Materials.**—There are many points to keep in mind when deciding upon the kind of material to be selected in street or road building. The amount and nature of the traffic which the street or road is likely to bear, the character of the district which it serves, the presence or absence of car tracks, the slope of the street or road—these are some of the many points to consider. Every street and road has its own particular requirements, and these ought in all cases to be determined scientifically by a carefully taken traffic census and valuation of the property served. Too frequently these basic principles are ignored; and streets and roads are built according to whim instead of science. The all-important thing is to determine what type of street or road the area can afford scientifically to install and maintain.

The following table shows the different materials commonly used in street and road construction arranged in their approximate order of initial cost:

1. Earth and gravel
2. Macadam (water bound)
3. Macadam (oil bound)
4 Macadam (bituminous)
5. Asphalt
6. Wood block

7. Stone block
8. Brick
9. Concrete

**Maintenance.**—There are two methods of keeping streets and roads in condition: the periodical repairing carried on generally once a year; and the patrol system of maintenance, which is constant in its operation. Maintenance is so frequently used to describe any kind of work done on highways that its particular meaning is often forgotten or ignored. There is put one precise meaning of the term, and that is: keeping the road in the particular condition in which it was left when finished in accordance with the accepted specifications. Real maintenance can be had only through continuous attention—the patrol system.

**The Width of Streets.**—The width of streets is important, not only from the viewpoint of convenience but from that of health as well, for a narrow street will neither permit sufficient air or sunlight. The next twenty years are certain to witness a great increase in the use of the motor vehicle in industry and trade, which will make almost imperative wider streets. Forsight in planning now will save thousands of dollars later. Hit or miss methods are out of date, and street widths should be standardized. In determining street widths, the following four facts should be kept in mind:

1. The width required for a "line of vehicles"—thus determining roadway units.
2. The width required for a "line of pedestrians"—thus determining sidewalk units.
3. The classification of the streets of a city or village according to the traffic requirements imposed upon them.
4. An estimate of the present and future traffic of the streets of any given class, the width necessary to meet that traffic, and then the standardization of that width.

In this connection William B. Munro, Professor of Municipal Government in Harvard University, says:

"The process of figuring out proper widths based on traffic zones may be roughly illustrated as follows. First comes the question as to whether street cars are to use the street. A double-track car line, with due clearance space, requires twenty feet. This calls for a special zone in the centre of the street. In highways that were laid out before the advent of the trolley there is no way of avoiding the use of the street car's zone by ordinary vehicles as well, but in a properly designed street it should rarely be necessary for vehicles to encroach upon a trolley right-of-way. In the second place, there should be one or more zones of vehicle traffic on each side of the car tracks. One such zone on either side adds sixteen feet (eight feet for each zone), thus requiring a street thirty-

six feet in width from curb to curb. Add to this, in the third place, the sidewalk on either side for pedestrians (say nine feet for each side-walk) and the total is fifty-four feet as the minimum for a street bearing two lines of track. With a single track forty-four feet would be the minimum. Sixteen additional feet must always be added for every additional zone of vehicle traffic. (eight feet on each side of the street), and the sidewalk allowance must also be increased in keeping with the amount of foot traffic. The principles may perhaps be more clearly summarized as follows: from curb to curb the street width should be determined in multiples of sixteen feet, with the addition of seven feet for each line of standing vehicles and ten feet for each line of car tracks; add to this the width of the sidewalks, including gutter space and strips for shade trees as may be desired, and the total will give the width of an efficient street so far as traffic requirements are concerned." [1]

**Boundary Lines and Street Grades.**—Nothing in town planning that has to do with streets is more important than the establishment of building lines so as to enable a town to make widenings when necessary. Then, too, it is exceedingly unfair to one who builds on a natural street line to find himself later on the top of a knoll or in the bottom of a ditch simply because through the failure of the municipality to establish grades, he did not know where to place his house. Too frequently, the builder is in jeopardy. One of the very first tasks undertaken by a town planning board should be to make such provision for the determination of grades that the man who wishes to erect a residence can do so with some assurance that its position is right with respect to the future street. Instead of following natural surfaces, street grades should be established when the street is laid out. Since the old records are obscure and often impossible to interpret, the streets should, in many cases, be resurveyed; and maps and plans showing the boundaries properly filed. Plainly enough, Vermont should have a law compelling cities and villages to establish building lines and street grades; and to mark them with enduring monuments.

**Street Improvements.**—It is only by means of long-term planning that street improvements can properly be made. For instance, if a street is to be paved, all reasonable future needs ought to be carefully considered. Every property owner should be required to replace water connections with heavy pipe; while all sewer connections should be reinforced, and new manholes put in so as to reduce the possibility of having to tear up the pavement within a year or so to provide for some after thought. Furthermore, connections should be made with the water mains and sewerage system for any public drinking fountains likely to be installed. In as much as there is a growing demand for more efficient street lighting systems, many of which call for wiring by means

[1] Principles of Municipal Administration, pp. 82-83.

of underground cables, the conduits, needless to say, should be placed before the paving is laid down.

**Sidewalks.**—It is a comparatively easy matter for people to see the folly of laying sidewalks by guess, after a few sad experiences (resulting from disregard for grades and alignment) have disfigured their community for a long period of years. It is not an easy matter, however, to convince them that such matters should always be in the hands of an engineer who realizes how really expensive careless sidewalk building is. A study of any of our villages makes plain the final economy which follows building walks true to street grades and the building line, if there be one. It is too often the case that the whim of some recalcitrant citizen spoils the appearance of the whole street. Frequently, the village trustees knowingly allow sidewalks to be built below or above grade to suit some individual's convenience. Sidewalks are to the village what collar and cuffs are to the man and the clean-cut appearance which a village has, as a result of good sidewalks, cannot be overestimated. The kind of material to be used in sidewalk construction is a question for each municipality to answer. All things considered, the granolithic walk, when properly laid, gives the best satisfaction. When it has not proved satisfactory, the reason has been almost invariably traceable to inferior materials and poor workmanship. [1]

## VI— PUBLIC HEALTH AND SAFETY.

**Importance of Conservation.**—The selective draft has laid bare the rather startling fact that nearly thirty per cent of America's young men were incapable of performing military service in the recent war because of physical defects. Among the children of school age the situation is even more deplorable. It is stated on good authority that of the 20,000,000 boys and girls in the public schools of the United States today seventy-five per cent have physical defects which are either preventable or remediable. Adenoids, diseased tonsils, malnutrition, imperfect teeth, weak spines, flat feet, disorders of sight and hearing—these are the handicaps under which the little folk are laboring. Statistics are available to show that this alarming condition is worse in the rural areas than in the city districts. The situation is particularly bad in Vermont. Dr. C. F. Dalton, Secretary of the State Board of Health,

[1] For state law regarding sidewalks see General Laws, Secs. 4569-4573.

in an address delivered last winter before the Vermont Conference of Social Work, speaking of the operation of the draft in Vermont, said:

"The first selective draft called for a quota of 1,049 men from Vermont. In order to supply this number it was necessary to examine 5,658 men and of these 2,862 or over 50 per cent were rejected as physically deficient. The largest number of rejections were on account of defective teeth, being 482 or 16.8 per cent. Defects of the feet were next, numbering 442 or 15.4 per cent, while 420 or 14.6 per cent, were found to be deficient in height, weight, or development. Defects of the circulation, mostly trouble with the heart or veins, were found in 358 cases, or 12 per cent; eye defects in 322 cases, or 11.2 per cent, and hernia in 285 cases or 10 per cent. Other causes for rejection were trouble with the nervous system, 4 per cent; chest difficulties, 3.4 per cent; rectal, 1.9 per cent; nose and throat 1.5 per cent; deafness, 1.9 per cent.

It will thus be seen that over 90 per cent of the rejections were due to causes which could have been prevented by the proper care and treatment. This is certainly a sad commentary on the American way of bringing up children. Never before have we had the opportunity to see ourselves as we are and to realize how we are actually wasting human lives and fostering a generation of defectives who could be brought up to the full standard of manhood by the proper methods of instruction and treatment. The lesson is so obvious that it should not be allowed to go unheeded. In fact, we have already begun in a small way to rectify some of the most glaring defects."

That we need a thorough system of instruction dealing with health problems rather than with disease, and showing that personal hygiene, physical and mental habits, food values, methods of avoiding communicable diseases, and responsibilities of parenthood, are matters of vital import to the individual, the community, the state, and the nation must be apparent to all. Surely this is a matter of public concern, and the commonwealth itself should have a right attitude regarding it. The health of the state's inhabitants is particularly the state's business and no opportunity should be lost to impress upon the public everywhere the need of health conservation. From school, and church, and lecture-hall, and motion picture house, the lessons of health instruction should be carried into the home, there to be applied in the art of right living.

**The State Board of Health.**—Foremost among the agencies striving for the conservation of health and the prevention of disease in Vermont is the State Board of Health. This board—created in 1886—consists of three members, two of whom are appointed by the governor with the advice and consent of the senate, while the third—the secretary of the board and its executive officer—is appointed by the governor and

the two members before mentioned. The duties of the board are outlined in Sec. 6197 of the General Laws of Vermont as follows:

"Said board shall take cognizance of the interests of the life and health of the inhabitants of the state, shall make or cause to be made sanitary investigations and inquiries respecting causes of disease, especially of epidemics, and the means of preventing the same, the sources of mortality and sickness and the effect of localities, employments, habits and circumstances of life on the public health; and, when requested, or when, in their opinion, it is necessary, shall advise with municipal officers in regard to drainage, water supply and sewerage of towns and villages and in regard to the erection, construction, heating, ventilation and sanitary arrangements of public buildings; and said board may compel the owners of such buildings to provide them with the necessary appliances and fire escapes for the safety of individuals who may be in such buildings, and said boards shall exercise the powers and authority imposed by law upon said board. Said board may, in its discretion, exercise all the powers and authority in each town and village, which is given to a local board of health; and said secretary may likewise exercise all the power and authority of a local health officer anywhere in the state."

The power of this board to act drastically for the purpose of suppressing epidemics has been twice exercised—in 1917 during the epidemic of infantile paralysis, and in 1918 during the influenza epidemic; and the law is now well established that this board can issue and enforce any orders necessary to safeguard the public health, the only question being that of necessity. Under its supervision and management is the state laboratory of hygiene, the use of which is free to the people of Vermont. This board, the guardian of public health in Vermont, is doing a constructive work and merits the backing of the entire population. Conditions in our cities and towns, however, are far from satisfactory because the general public is apathetic, legislation is inadequate, and the existing health laws are loosely administered in local communities by those who should be alert—the local health officers.

**Local Administration of Health Laws.**—The local administration of the laws safeguarding public health is vested in the town or city board of health. In towns, the board is composed of the selectmen and a health officer who is appointed by the State Board of Health for a term of three years. In cities, the organization differs from that of towns only in the fact that the aldermen act in the place of the selectmen. In both cities and towns the health officer is secretary and executive officer of the local board. As such he has authority to make sanitary inspections wherever, in his judgment, conditions exist which are a menace to the

public health and he is clothed with the legal right to enter any house or building for the purpose of making such inspection. Under the direction of the state board he inspects school houses and may institute and maintain quarantine for the purpose of checking contagious or infectious diseases. With the approval of the selectmen or the aldermen, as the case may be, he has the right to abate nuisances, a work which if thoroughly carried out would require no little of the health officer's time. The majority of our villages are unsewered, and in those which are, the system is by no means complete. Eternal vigilance is, therefore, necessary to protect health and prevent nuisances from neglected privies, bad cellar drainage, dumps, and stables within the limits of the village. Accordingly the local health officer's work is of paramount importance. He is the protector of the community's health, and as such, his responsibility is great. Because of this the health officer should, whenever possible be a physician and it is almost imperative that he have executive and organizing ability. Particularly is this true with regard to mobilizing the town to combat epidemics. The epidemic just experienced has shown the need of an efficient local organization of all the forces in the community and this organization should stand ready to be called into action at a moment's notice. An ounce of prevention is worth a pound of cure.

**The Water Supply.**—A municipal water supply should have three qualities. It should be safe, palatable, and of sufficient quantity. Strange as it may seem, many Vermont towns, located in the midst of mountain springs and natural reservoirs, are struggling along with a supply that is entirely inadequate as a means of fire protection and which, as drinking water, is a menace to the public health. Such towns should lose no time in planning for a modern water supply system because no community today can be regarded as up to date which lacks this very important public utility. Not only is it necessary for the health, safety, convenience and prosperity of its present inhabitants, but it is necessary in order to attract new business to the town, for a suitable water supply is one of the prime requisites in town advertising. Inasmuch as it is no more than fair that succeeding generations should in some measure bear the expense of the undertaking which is as much a benefit to them as to the generation which constructs it, any municipality is justified in issuing bonds for the purpose of securing for itself a modern water system. Concerning the inspection of municipal water supplies, the state law is entirely inadequate being optional where it

should be mandatory. Section 6197 of the General Laws provides among other things that the State Board of Health "when requested, or when, in their opinion, it is necessary, shall advise with municipal officers in regard to drainage, water supply and sewerage of towns and villages"; and Section 6209 mentions "chemical and bacteriological examination of water supplies" as one of the functions of the state laboratory of hygiene. It will be noticed, however, that water supply inspection in this state is a "may" or "shall upon request" proposition. With other states requiring municipalities, camps, colleges, hotels, boarding houses and all public places to submit to water inspection, Vermont is decidedly out of step. There should be compulsory inspection of all water supplies.

**The Milk Supply.**—Perhaps it is not extravagant to say that the milk supply is the greatest menace to the public health of Vermont cities and towns. The first step necessary in the safeguarding of this important food is the securing of a proper regulation or law governing the production and distribution of all milk sold in the community. Since, however, regulations are of no value unless enforced, the next step would be to devise proper means of enforcement. It should be illegal to sell milk from any cow or herd not passing the tuberculin test. Here, as in the water supply, the law is optional when it should be mandatory. Although the primary responsibility for pure milk rests with the milk man, yet to see that he meets that responsibility should be one of the important duties of the local health officer, and he should be clothed with the necessary legal authority to secure results.

**Waste Disposal—Sewage.**—The sewage disposal problem of every community demands its own special study. The strength of the sewage, the neighboring soil, the adjacent water courses, and many other factors enter into its solution. Complete purification is rarely possible, and seldom attempted. It should not be the aim of a municipality to transform its sewage by some magical process to pure water, but to remove its offensive qualities in order that it may do no harm so long as it is kept away from the sources of water supply. In this connection it may be stated that it is not often that proper sewage disposal is of itself a guarantee of a safe water supply. In town planning this should be the guiding principle: first, make the water supply safe; and then, so treat the sewage of a conmmunity that it will become in no way a nuisance.

There are many methods of sewage disposal; but this bulletin, dealing only with general principles, cannot discuss them in detail. Sedimenta-

tion and screening although often resorted to as means of purification, are, it should be remembered, no more than preliminary processes requiring further treatment, such as diluting in a large body of water, broad irrigation on land, treatment through contact beds or over sprinkling filters before purification is complete. These processes or modifications of them can be adapted successfully to local requirements by the sanitary engineer. In any event the difficult thing to secure is not satisfactory design; it is to secure effective operation of the plant after construction. The importance of a town's getting results from its sewage disposal system cannot be too strongly stressed.

The materials most commonly used in sewer construction are brick, stone, or concrete, for large conduits, and intrified clay tile for the smaller ones. If the sewer is to be over two feet in diameter, reinforced concrete is now regarded as the best material. If the land through which the sewer goes is likely to settle, iron is better than tile. It is not a difficult matter to estimate the proper size of sanitary sewers, the general rule being that the population of a district multiplied by one hundred and fifty will give about the number of gallons of sewage to be carried each day. Storm sewers, however, are difficult to estimate, demanding a careful study of local conditions. Needless to say, proper town planning requires a scientifically designed sewerage system capable of providing for future growth as well as the present needs. Its extension and maintenance should be particularly the business of the health officer, acting under skilled engineering advice; and upon the way in which he attends to this important matter depends in no small degree the health and happiness of the community.

**Waste Disposal—Garbage and Refuse.**—The irregular collection of garbage by private collectors and the promiscuous dumping about the town of waste rubbish, which mars the beauty of the whole community, furnish a real problem for the progressive village to solve. It is impossible in this bulletin to attempt any detailed discussion of methods of disposal. The problem must be attacked by each community. Suffice it to say that the establishment of a systematic collection service for gathering garbage, rubbish, and ashes is most desirable, even in the small town. In no other way have communities in other states succeeded in ridding themselves of the unpleasant and unsanitary conditions attendant upon the improper disposal of garbage and refuse. By solving this problem a long step is taken toward the solution of another one—the control of vermin and insects.

**Control of Vermin and Insects.**—The rat is generally considered as one of the most destructive agencies in the world. It is now pretty well known that this rodent lives upon exactly the same food as man and cooked in the same way. Therefor we should beware of leaving waste food about—just the kind which in the small village is thrown out promiscuously. *The Literary Digest* for November 16, 1918, contains the following summary of a paper written by Professor P. Chavigny and published in the *Revue Generale des Sciences*:

"Professor Chavigny describes and discusses the various methods used for destroying rats, and shows that the disappointing results obtained are due to neglect of the fact that multiplication of rats is simply the result of scattering human food within their reach. The essential step in controlling the rat invasions is to prevent the scattering about of remnants of food. For this purpose it is recommended that, where possible, all waste food should be collected and used for pigs. Where this is not possible the waste food should be thrown into pits and covered with earth before nightfall. Professor Chavigny proposes also that placards should be posted up saying that "he who sows fragments of food will reap a harvest of rats."

According to Professor Chavigny the rat neither stores food for winter not hibernates, and without cooked food will die from starvation in about forty-eight hours. He also points out that a single pair of rats is capable of producing twenty million descendants within three years.

The elimination of the mosquito is no longer guess work. Water must not be left standing in buckets or barrels; ditches must be drained and oiled. Experience indicates, however, that these precautions will not be taken by individuals. Public servants must act; and in the village, the health officer will do well to launch a campaign against the mosquito.

The extermination of the fly likewise can be promoted, but the work can be left more to individuals, as the breeding places of flies are less numerous than those of the mosquito.

**Health Inspection in the Schools.**—At present the laws of Vermont do not make health inspection in the schools compulsory. The sight and hearing of school children are now tested, in accordance with law by the teachers in the public schools, but the matter of health inspection is optional. Section 1313 of the General Laws provides that "the board of school directors shall appoint one or more medical inspectors for the school in the town district, provided the legal voters of said

district at the annual town meeting instruct said directors to do so. The compensation of such imspectors shall be fixed by said board and paid by such district." It will thus be seen that unless the initiative is taken by the voters no inspection can be made. As a consequence but few towns in Vermont have health inspection in their schools, no small contributing factor to the conditions which were mentioned in the first paragraph of this section. This is altogether too important a matter to leave to the caprice of individual communities, and legislation should make health inspection compulsory in every school in the state. Through private philanthropy a rural dental clinic, the first of its kind in the United States, was established about two years ago, and through this agency a particularly constructive work has been done by correcting the teeth defects of children in the country schools. This lessens in no degree, however, the need of compulsory health inspection. The state should be districted and provision made, not only for the proper examination by a health inspector of every child of school age in each district, but for the equally important health conservation work of the district nurse.

**District Nurse.**—The three fields of the district nurse's activity lie in school inspection, in the campaign against tuberculosis, and in the reduction of infant mortality. One of the greatest factors in combating contagious diseases is the teaching of personal hygiene, and in this the most efficient teacher is the visiting or district nurse. The lessons learned by the children from her are the connecting link between school and home, as the child really educates the mother by repeating the instruction received in the classroom. Her main value in the school is to detect cases of acute illness, which upon examination may prove contagious; and, by isolating them, prevent the spread of the disease. Then, too, where cases of physical defects are found by the medical inspector she can in her "follow up work" recommend them for treatment by a family physician, or in a hospital. Where these cases are treated in the home she can again lay emphasis upon personal hygiene. She can assist the physican in making health inspection in the school, record and classify each pupil's condition, and see that the physician's recommendations are carried out. In many cases she can, herself, make general examinations. In the campaign against tuberculosis her services are invaluable. Mary E. Lent well says:

"She can put the facts so strongly before the public that the state will finally be obliged to take measures to accomplish what she, herself, has been unable to do. She is able to unearth and expose to the public, conditions whose existence no one else could suspect. Her opportunities in this line are unlimited. She cannot stamp out

tuberculosis by teaching her patients, but she can do an enormously important work toward the same end by enlightening the general public in regard to the facts of the case and by interpreting for them the conditions that render futile the present efforts to eliminate the disease."

The first step in the prevention of tuberculosis is the discovery of cases. In her house to house visits the district nurse brings to light cases that have not been reported; and as soon as Vermont has institutions where these can be placed, her work in this direction will be of exceeding value. In the meantime her instruction as to the importance of air, sunlight, proper food, and danger of contagion is helpful to the patient while safeguarding those about him. In the reduction of infant mortality she plays an important part. The prenatal instruction given the mother does much to overcome the two greatest factors in infant mortality—ignorance and neglect. Her work is distinctly of a pastoral nature. By organizing mothers for civic work, by showing them proper methods of feeding and clothing children, by forming health crusade leagues, by calling and counseling discharged soldiers suffering from disease, and by organizing little mothers' clubs among the school girls, her influence in the home is greater than that of preacher, teacher or doctor.

**Comfort Stations.**—Although small municipalities more and more are providing in their plans for comfort stations, this is a project which should be most carefully considered before carried into execution. For example, Burlington should have a comfort station in the city square. There is a great need for it and the size of the city should warrant its proper maintenance. Very likely Barre, Rutland and other of the larger places in the state could safely undertake the establishment of these public conveniences. But it should be remembered that size alone is no criterion and a comfort station in a city of twenty thousand might prove to be a public nuisance, while one in a village of three thousand might be an exponent of civic progress. This, then, should be the guiding principle for any community—plan a comfort station only when it is sure to be maintained in a suitable manner. A comfort station uncared for is worse than none at all No devices, however elaborate or sanitary, are likely to give satisfactory service unless the installation is accompanied by an educational campaign and followed with unremitting care. Moveover, it is quite generally admitted that provision of towels and proper washing facilities is essential to the protection of the public health. Before building comfort stations, Vermont communities—even the larger cities—will do well to secure improved conditions in railroad station toilets and other public wash-rooms. The dis-

gusting conditions now so prevalent in these places are both unsanitary and immoral and all forces of public opinion should be arrayed against them. Public decency demands it. Here, indeed, economic considerations should give way to social welfare.

**Housing.**—The housing question in this state is not the serious one which it is in many commonwealths and yet it should not be passed over without mention. In spite of the fact that inadequate housing facilities very often prevent thriving cities and villages from grasping the full opportunities, Vermont's problem is one of home owning rather than of general housing; and the cooperative bank or building association is capable of rendering an excellent service in extending the social idea. The police power—the power of the state to regulate private rights in the interests of the public welfare—is constantly becoming more liberally construed; and, although generally regarded in the past as a matter of private concern, a town may well begin to give some thought to securing for all inhabitants sanitary homes and a pleasing environment. No Vermont community should have within its limits, a slum, even in the most restricted sense of that word. Wherever darkness and squalor tend to center, there the light of civic betterment should be focussed until they have been dispelled.

**Fire Prevention and Protection.**—A fire which it is possible to prevent is more than a private misfortune, it is a public calamity; and the most elaborate system of insurance can do no more than to distribute the loss as equitably as possible. While here in America much attention is paid to the fighting of fire, the countries of Europe place all emphasis upon fire prevention. That the European method is the saner one is shown by the following figures of fire loss in the United States and Canada, and in the principal European countries for the year 1911:

| | Losses per capita |
|---|---|
| United States and Canada | $2.62 |
| England | .53 |
| France | .81 |
| Germany | .21 |
| Italy | .31 |

This difference, so unfavorable to America, is due primarily to the fact that in Europe better methods of building construction are employed and fire laws and regulations are by far more rigid. In Berlin for instance, it is estimated that at least ninety-eight per cent of the buildings are of fire proof construction. In France the owner of a build-

ing is liable, whenever damage by fire results to others from his negligence; while the tenant in turn, is liable to the landlord for his carelessness. Any negligence which results in starting fire is severely penalized. The most casual study of our laws shows our lack of preparedness both in type of construction and fire hazard regulations. In 1917 fires in the United States destroyed $267,560,740 worth of property, of which eighty per cent was due to carelessness. In our own state the loss for the same year was $1,478,027.23. Such waste is nothing short of criminal and one of the next steps in public moralty will be the elimination of this omnipresent peril. There is need in our program of civic preparedness for a campaign of education for the purpose of impressing upon the general public the imperative need for guarding against the three factors in fire loss: the physical hazard, the occupational hazard, and the personal hazard. In Ohio, fire prevention is taught systematically in each grade of the public schools and the pupils are regularly examined. That it should be given an important place in our school curriculum can hardly be questioned. The work of fire prevention cannot be confined to a single community. It is state wide in character and therefore should be administered as a state function. Many commonwealths are so regarding it. In 1911, Pennsylvania created the office of fire marshal as a state department clothing it with authority to investigate the causes of fires and to enforce the laws relating to fire hazards. The fire marshal is appointed by the governor for a term of four years, and must devote all of his time to the duties of the office. Other states have taken steps in the same direction; and it is reasonable to believe that the creation of such a department or bureau in Vermont would result in greatly reducing fire loss in this state. Such a department should be a clearing house for complaints on hazardous conditions, possessing authority to inspect the fire protection facilities of all communities. [1]

**Police Administration.**—From the earliest times the preservation of life, liberty and property, has been recognized as the cardinal duty of any organized community. The proper performance of this duty is one of the great problems of our day; and if democracy is to succeed in the United States, there must be devised some means of establishing in every city and in every rural district a police force which will be efficient and at the same time command the respect of the people. Everywhere there is a growing conviction that police administration should

[1] Section 5507 of the General Laws makes the Insurance Commissioner Ex- Officio State Fire Marshal with power to investigate fire losses occurring within the state, Needless to say, this provision is entirely inadequate.

be placed upon a military basis, entirely free from political influence. The idea is also gaining ground that the policing of rural areas is best accomplished through the agency of a mounted state police force. Here in Vermont we have seen the county sheriff and town constable system break down too frequently to have great faith in it; and one who has observed the work of the Northwest Mounted Police, the Pennsylvania Constabulary, and the recently created New York State Troopers, can hardly deny that there is need in Vermont of a similar organization to prevent crime, detect and punish criminals and keep the peace generally. A policeman's usefulness is no greater than the authority back of him. If he represents the commonwealth he will be respected. If, on the other hand, his jurisdiction is his own neighborhood he is handicapped by the very nature of his environment. Many crimes are not thoroughly investigated because the local officer "hates to mix up in it." With state policemen it is different. They are free from local prejudice and are at liberty to enforce the law without fear or favor. In Pennsylvania where the state police have developed into an organization, which, without doubt, is the most efficient agency for law enforcement in rural regions that has yet been established anywhere, the knowledge that the state police will get the wrong doer sooner or later is in itself a deterrent of crime quite as strong as the presence of the men themselves. Such an organization would not interfere with local government because the enforcement of the law is not a matter of local discretion, police officers, even though appointed by the municipality, being considered agents of the state. This principle is well stated in the following court decision: "Police officers can in no sense be regarded as agents or servants of the city. Their duties are of a public nature. Their appointment is devolved on cities and towns by the legislature as a convenient mode of exercising a function of government." Nor should the matter of expense argue strongly against a mounted police for Vermont. Two hundred and thirty-two men efficiently patrol 47 000 square miles of rural New York, and in Pennsylvania a force of approximately the same size safeguards a stretch of countryside of equal magnitude. Vermont has an area of 9565 square miles and it is not unreasonable to believe that thirty men would be able to police the state in a thoroughly efficient manner. When it is recalled that the law enforcement cost the state $320,099 for the year ending June 30, 1918, no small portion of which can be traced directly to inefficient police administration, and that many criminals are never brought before the bar of

[1] Buttrick v. Lowell 1 Allen (Mass.) 172

justice, thereby inviting disrespect for law and order, the question may well be asked: "Is it not time for Vermont to have a mounted state police?"

## VII—AGRICULTURAL DEVELOPMENT

**Importance of Agriculture.**—The importance of agriculture in this state has long been recognized; and figures compiled from the monthly crop report issued by the United States department of agriculture, showing crop yields in Vermont for 1918, tend to emphasize this importance. The following table shows the estimated value of the nine principal crops raised in 1918, and the number of states reporting a larger yield an acre than did Vermont:

| Crop | Value | States reporting a larger yield |
|---|---|---|
| Corn | $2,907,000 | 10 |
| Oats | 3,801,000 | 7 |
| Rye | 35,000 | 1 |
| Wheat | 915,000 | 3 |
| Barley | 759,000 | 11 |
| Buckwheat | 470,000 | 0 |
| Potatoes | 4,664,000 | 11 |
| Hay | 21,043,000 | 23 |
| Apples | 1,402,000 | |
| Total value | $35,996,000 | |

Inasmuch as the dairy products of 1918 are estimated to have had a value of twenty two million dollars, and the maple sugar crop a value of two and a half millions it is probably safe to say that Vermont's agricultural products for 1918 were worth not less than sixty-one million dollars—a value greater than that represented by the gold produced in the three great gold producing areas ofAlaska, California, and Colorado.

**Agricultural Development in Vermont.**—The character of the program of agricultural development in this state is one which demands most earnest and careful thought. Some would so map it out as to appeal to the young man who is ambitious to do things on a large scale—the type which in the past has gone in such large numbers to other states. Others would so formulate it as to satisfy a man who wants an independent existence and is contented with a good living. It is a question of vital import, and cannot be answered without taking into consideration the topography of the state and the size of the farming unit.

**Topographical Characteristics.**—In the broad Champlain valley, along the Connecticut and in some portions of the narrower cross state river valleys, the land is comparatively level and easily tilled. Here the tractor can be used and general farming successfully conducted on a large scale. But on the steep hillsides and in the narrow valleys of crooked mountain streams, there are many farms which will never lend themselves to the most advantageous use of modern machinery. Here, it would seem, agriculture should be intensive in method; or else the land devoted to grazing or forestation purposes. Thus, the "lay of the land" favors two distinct kinds of agriculture in Vermont; but in many cases, the size of the present farming unit is ill adapted to either.

**The Size of the Farming Unit.**—We have inherited from those days when agriculture was carried on without elaborate machinery a standardized type of farm suited to hand cultivation by a farmer whose family usually contained a number of boys sufficient to solve the labor problem. But with the changed condition of today, the average farm in Vermont is, on the one hand, too large for the farmer to do the work alone; on the other hand, it is too small a unit to warrant the purchase of expensive modern farm machinery. Our farms should either be cut down to such a size that the farmer can carry on the farm himself by intensive methods; or else so enlarged as to make feasible large scale farming—the steep hillsides turned into grazing lands, and the meadows and more level hill farms devoted to general farming. Although the question of the size of the farm is primarily one of private profit which the Vermont farmer must answer for himself, the law maker and the economist can render valuable assistance by helping him to develop and use a sound system of farm accounting; and by keeping him informed upon changes in prices, wages and transportation charges to which the farm organization must adapt itself. It would seem, then, that the agricultural program may well include an appeal both to the young man who wishes to farm on a large scale and to him as well who wishes to farm in a small way or by intensive methods.

**Cooperation in Production.**—Much has been said of late regarding the benefits to be derived from co-operative farming; and it is encouraging to note that in many neighborhoods farmers are really working together for individual and community welfare. If it were possible for rural people to visualize the possibilities of co-operative effort both in the field of production and that of distribution, agricultural development in the state would be more rapid. Any kind of stock raising or

crop growing may be taken as an illustration to prove the point. Let us consider, for example, what could be accomplished by community co-operation in cattle raising. Today, in nine cases out of ten, the farmer who takes up the breeding of registered stock makes the fatal error of selecting some breed new to the community in order that he may "have something different from that of his neighbor." His efforts may be crowned with remarkable success; but, working alone, he cannot hope within his lifetime to do more than build up one individual herd of merit, to say nothing of his inability to make his community widely known as the home of a noted breed. When, for instance, the valuable sire outlives his usefulness in the herd and has to be sold in order to avoid inbreeding, his blood more likely than not goes to enrich the stock of another state. Whatever surplus animals the owner may have are likely to be scattered in a similar manner. When the man dies, or gives up farming, the herd is dispersed to the four corners of the earth; and the community as a stock raising center has gained nothing. Suppose, on the other hand, that the farmers of Randolph were to agree to concentrate their efforts upon improving the Ayrshire cow. Several expensive bulls could be bought; and when a sire's usefulness in one herd was ended, it could, by means of a temporary exchange for a neighboring farmer's bull, be crossed on another valuable strain of the same breed. Thus the work of the individual breeder is not lost but continues. The wider basis of selection would make possible more scientific breeding, and the enterprise would have continuity. This team work in live-stock breeding would, by keeping all valuable animals in the community, soon make the town widely known as the home of an excellent strain of Ayrshire cattle. The idea, extended in some measure to the state, might in time make Vermont world famous for its cattle. It is not impossible that it would result in the establishment of a new and distinct type of the dairy cow. There is the same opportunity for constructive co-operation in many other fields of production. The success of Aroostook County in potato growing could be duplicated in many localities in this state.

**Cooperation in Marketing.**—The work of the farmer is not complete until he has marketed the thing which he has raised or grown. It is not satisfactorily completed unless he receives a fair price for his product. Although the price paid the farmer is often entirely out of proportion to the retail price of the same article, the farmer himself is largely to blame. The use of inferior seed or stock, poor sorting, careless crating—these are some of the stumbling blocks which he puts in the way of

his own progress. Through co-operation, many of these evils could be corrected. Then, too, the transportation problem is one which the individual by himself is unable to solve. The larger shipper can get transportation facilities which are denied the small one; and, consequently, co-operative shipping ought to be the rule. These four steps should, therefore, always precede the actual selling of farm produce:

1. Improvement of the product.
2. Standardization of the product through grading.
3. Branding of the product.
4. Education of the consumer regarding the value of the product.

Connected with the State Department of Agriculture is a marketing agent who visits the principal markets at which Vermont produce is sent. He notes the condition of products at the time of their arrival, and makes recommendations to the manufacturing specialist concerning any defects which he may find. This agent is constantly on the lookout for markets for Vermont products, and assists producers in securing the highest possible prices. He also helps in the organization of co-operative creameries. That his work is of vital importance to the farmers of Vermont must be apparent to all.

**The Farm Bureau.**—At first a voluntary organization, maintained by private donations and small annual dues, the county farm bureau has developed into one of the great forces for agricultural improvement. In recognizing the value of this agency Vermont has been particularly in the forefront; and today every county in the state with the exception of two—Essex and Grand Isle— has a farm bureau. These are served in some measure by the agents in adjoining counties. The farm bureau should be a factor in any community organization and its projects ought to be conducted on a town basis, acceptable to the community.

**Agricultural Experiment Station.**—Connected with the University of Vermont and State Agricultural College is an experiment station maintained by the state for the purpose of promoting scientific and practical agriculture. This institution is in charge of a director and assistants who are required by law to perform the following specific duties:

"1. Make investigations relating to the ravages of insects and disseminate such information as may be advisable for their abatement;

II. Make investigations and experiments directed to the introduction and fostering of new agricultural industries adapted to the various climates and soils of the state, and especially of new fodder plants and feeding stuffs:

**III. Conduct the experiments on nutrition and growth of plants, with a view to ascertaining what fertilizers are best suited to the various crops of the state." [1]**

In so far as time and means permit the station makes, free of charge, analyses of all samples of fertilizers, soils, dairy products, feeding stuffs, butter substitutes, and seeds received from the residents of the state. It also distributes bulletins pertaining to its work. This station, supplemented by the work of the Vermont Agricultural Extension Service, is rendering a valuable service for the farmers of Vermont.

**The State Department of Agriculture.**—By an Act of the General Assembly of 1917, what formerly had been three distinct departments—agriculture, forestry, and live stock—were consolidated and brought under the control of the Commissioner of Agriculture, who is, by virtue of his office, state forester, and live stock commissioner as well. He is charged also with the administration of certain regulatory laws, such as the inspecting of nurseries, apiaries, and creameries; and the suppression of injurious insects.

The department promotes the agricultural interests of the state by holding farmers' meetings, and by distributing crop reports and bulletins. In co-operation with the Federal government, it employs a dairy manufacturing specialist, who devotes his time to the improvement of dairying—the most important industry in the state. In co-operation with the Federal government, it also employs a marketing agent, whose work was described in a preceding paragraph. By the dissemination of information regarding the building of milk houses, remodeling of dairy stables, and other buildings, the farmer is encouraged and assisted in bringing his plant up to a reasonably sanitary standard. Creameries are also assisted by the department in the installation of an accounting system which will enable them to conduct their affairs in accordance with sound business principles.

The live stock department has control of the eradication of contagious diseases which are dangerous to domestic animals; supervises the importation of horses and cattle in order to guard against the introduction of diseased animals; has charge of the eradication of tuberculosis; and has charge of the inspection of beef which is slaughtered for human consumption.

The forestry department has charge of the promotion of forestry in the state. It grows forest seedlings in its nurseries for distribution to the people of the state at cost; gives detailed information to land

[1] Sec. 459 of the General Laws of Vermont.

owners regarding reforestation and the proper management of timberlands; maintains a forest fire patrol for the purpose of protecting timbered areas; and practices modern forest methods upon those lands which have been purchased by the state.

## VIII—TOWN FORESTS

**The Lumber Problem in Vermont.**—In spite of the fact that approximately two thirds of the 9565 square miles in Vermont are classified as wood land, buyers of lumber are almost unanimous in the opinion that we are actually facing a lumber famine. This paradox is not particularly hard to understand. Thousands of acres are listed as wooded which have no commercial value, being covered with weed trees; while other thousands are periodically stripped for pulp purposes. In response to the note of warning so frequently sounded by the forestry department, many mill men and farmers have set themselves to the work of reforestation. Occasionally, too, a corporation has made extensive plantings. The situation continues, however, to be a serious one; and there is little hope that it can be much improved by individual effort. Human nature is against it. A reforested area cannot be expected to yield a net income in less than forty to sixty years, and the man of middle life is not likely to enjoy the fruit of his labor should he attempt to establish a regulated forest. For him the prospect of return is too remote—he cannot wait.

**The Town Forest a Solution.**—But a city or town can wait. The life of the community is not limited by the psalmist's "three score years and ten," and it is not impossible that the solution of this really serious state problem lies in the town or city forest. Because of this possibility, it is interesting to observe how this municipal experiment has worked in other places.

**The Town Forests of Europe.**—The town forest, although new in America, has for generations been an institution in many of the countries of Europe—at once a source of pleasure and of profit. As a rule, these European forests have been acquired by one of four ways: (a) taken over from deposed feudal lords; (b) taken from monasteries and convents by confiscation during religious upheavals; (c) secured as gifts in modern times from wealthy aristocrats; (d) purchased by the town and paid for by direct taxation. Though varying much in size, topography and manner of management, the civic, economic and social

dividends which they pay are, without exception, large. The town forest is best known in Switzerland, Germany and Sweden, although by no means confined to these countries. In Switzerland, it is estimated that seventy-two per cent of the total forest area is owned by the municipalities. The city forests of Zurich, Switzerland, earn approximately $30,000 a year. In Sweden, the little town of Orson stands out as a truly wonderful argument for the town forest. Less than forty years ago this town planted trees upon a considerable area of municipally owned land. Today the people of Orson pay no taxes or telephone fares, and are entitled to free street car service. This almost Utopian situation is due entirely to the foresight of the preceding generation which provided a heritage for their descendants by putting waste land to work. During the last thirty years, the municipal forest of this Swedish community has yielded a total income of over $5,000,000, and similar revenues in the future have been provided for by a painstaking system of replanting. In Germany, state, city and corporation forests are estimated to have a value of $1,500,000,000, every dollar of which represents a dividend paying investment. R. Ockel, in a widely quoted article published in *The Westminister Review*, says: "No less than 1500 German towns and villages have owned since the middle ages so much common land that their inhabitants pay no taxes. Five hundred of these villages derive so great a revenue from their lands as to enable them to pay every citizen on New Year's Day, a bonus of from $25 to $100 as his share in the surplus."

Perhaps the most interesting of European forests is that of Forbach, which yields an average net profit of $12.14 an acre. Harris A. Reynolds, Secretary of the Massachusetts Forestry Association, writing in *The American City* for October, 1914, gives the following graphic description of the Forbach forests:

"Forbach is a town of 1,900 people, situated in the Black Forest region in the state of Baden. It has a town forest of 1,482 acres, or about four-fifths of an acre per inhabitant. It is a clean, neat and industrious town, located on a small stream among the high hills. Everybody seems contented and happy. A large per cent of the people work in the forest all the year, or farm their little patches in the summer and work in the forest in the winter. Others are employed in wood working industries. The profits of the town forests pay all the communal taxes. A section of the forest is set aside as a reserve, which is used to meet extraordinary expenditures. When a new school house, a town hall or street is to be built, they simply cut enough timber from the reserve section of the forest to meet the cost. This reserve forest takes the place of bonds or sinking funds used by municipalities in this country."

**Town Forest of New England.**—The town forest notion has been adopted in some measure in American states—California, Connecti-

cut, Maryland, Massachusetts, New Hampshire, New Jersey, North Carolina, Ohio, Utah, and Virginia, having a considerable number of forests ranging in area from forty to twenty-five thousand acres. For the most part these forests are of the watershed type. It will be noticed that Connecticut, Massachusetts, and New Hampshire are the New England states having town forests; and New Hampshire, according to Professor Toumey, Director of the Yale Forestry School, leads the list with fourteen forests varying in size from forty to eighteen hundred acres. Because of the fact that New Hampshire is our neighbor state, the location, size and character of these woodlands may be of interest:

| | | | | | |
|---|---|---|---|---|---|
| Newington | Town Forest | 200 | Hanover and Dartmouth College | | 1000 |
| Keene | Town Forest | 1800 | Easton | | 100 |
| Manchester | Watershed | 400 | Milan | | 100 |
| Franklin | Town Forest | 155 | Richmond | | 100 |
| Concord | Watershed | 400 | Jeffrey | | 500 |
| Newbury | Watershed | 250 | Gilsum | | 76 |
| Nashua | Watershed | 50 | | | |
| Littleton | Watershed | 40 | | | |

In Vermont the municipal forest idea has gained little headway. Every town in the commonwealth owns one or more school lots upon which a small annual rent is realized.

Bellows Falls, Montpelier, Morrisville, and Rutland own wooded areas, some of which are now being given attention. However, it can hardly be said that there is such a thing as a regulated town forest in this state. Now, the average Vermont township has five thousand acres of waste land. If this were converted into a town forest which yielded only three dollars an acre net profit annually, seventy-five years hence the town's tax would be reduced to nothing.

**Important Local Industry.**—A town forest in any Vermont community would prove to be an important local industry of a wholesome sort. The Swiss city of Zurich employs one man for every thirty-three acres of its forests. Probably American methods will be less intensive than European, but it is not unreasonable to assume that employment would be provided for at least one man in properly caring for a mature town forest. Furthermore, the very nature of lumbering puts a premium on winter labor; and the additional force could well be recruited from the delinquent and dependent classes who are employed during the summer months on farms or highways. In times of industrial depression also, this profitable utilization by the larger places of Vermont of those who otherwise would be dependents cannot be too strongly emphasized. Such provision for temporary dependents would have its distinct

sociological value aside from dollars and cents, as it would supply an economic existence free from any taint of pauperism. Wood-using industries might also be attracted to the town.

**Protection to Watersheds.**—As a protection to the watersheds and from floods, the value of the town forest cannot be overestimated. There is no little satisfaction in knowing that one's drinking water comes from the very heart of a forest area. And so upon the watershed the forest serves the double purpose of protecting the water supply and yielding a valuable crop of lumber from land which otherwise would be wasted.

**Recreational Value.**—It is difficult to imagine the wholesome effect of a town forest upon the life of a community. At first glance, it might seem that the small villages and cities of Vermont, surrounded by a broad expanse of countryside, would find little attraction in a town forest. Reflection upon the matter must make plain, however, that in a majority of villages it is no easy task to get into a deep forest without trespassing unless one travels a considerable distance. The town forest would be a veritable wild park, a noble play ground in which men, women and children could really "commune with nature." Doubtless it would appeal to scores of people as the formal park does not; and everyone who visited it would take in his little degree of ownership a civic pride which would count for self respect and good citizenship. That it would foster true community spirit, none can deny.

**A Profitable Investment.**—From the experience of European countries it is evident that the town forest is a profitable investment, the average annual net profit being about five dollars an acre. Starting without experience, it may be a long time before Vermont could realize such a large return. Perhaps we cannot hope to be handed a check instead of a tax bill, as are the residents of Orson; but, aside from the direct yield of the forest, there is no doubt that the tax rate would be reduced. Take the case of any Vermont Community where there is idle land. Let it be assumed that some years ago this area was covered with spruce (a stand of ten thousand feet an acre, and worth seven dollars a thousand on the stump) and that the listers placed a value upon it of fifty dollars an acre. The owner cuts the lumber and puts the money which he receives for it into intangibles or nontaxable property, as is frequently the case. The land grows up to weed trees of no commercial value—gray birch, alder, scrub-oak, and bird cherry. Here is a tract of land which is worthless so long as these weed trees remain thereon as timber

of the right sort cannot get a start. Therefore, the land is assessed on a value of five dollars an acre and the tax which was levied on the other forty-five now has to be made up by distributing it over the other taxable property in the town. Nevertheless, the owner must not be too severely blamed for this situation. He has the indisputable right to convert his woodland into cash; and he cannot, as can the municipality, cut judiciously each year. Nor can he be expected to reforest with much enthusiasm, since returns on his planting will be collected by following generations. It is not too much to hope that the small town of Vermont could wipe out taxation.

**An Inexpensive Undertaking.**—No community need hesitate to establish a town forest because of the expense of the undertaking. If the problem is attacked with thoughtfulness and business sense, its proper solution is assured. Within easy access of nearly every village there are acres of waste land which can be purchased at a cost of from one dollar to three dollars an acre. In many cases five hundred dollars would purchase a tract of one hundred acres supporting much desirable young growth, while five thousand dollars would secure to the community for all time an area of one thousand acres—a town forest of no mean proportions. To this initial cost must be added an equal sum for planting and profitless improvement cuttings. Such a forest, upon maturing, would yield to the municipality a yearly net profit of two thousand dollars, two fifths the original cost.

The Vermont laws now authorize towns to create municipal forests.[1] There should be placed upon our statutes a law making it possible for any city or town to issue bonds for the purpose of acquiring and developing municipal forests, the payments being distributed over a period of thirty to fifty years. It is a sound principle that public improvements—whether temporary or permanent—should be paid for by the generation which is to enjoy them. Inasmuch as the town forest is a heritage for future generations, the expense of its establishment should in part be borne by them. Long before the last payment, profitable cuts could be made.

**Community Tree Planting.**—Once the community has the land, the forestation might be done without great cost. The state forestry department would hold itself in readiness to furnish towns with seedlings from the state forests, while the preparation of the land and the planting could largely be accomplished by community bees, the social

[1] General Laws of Vermont, Secs. 485-488.

value of which can hardly be estimated. Then, indeed, arbor day would have a meaning. Imagine how the community spirit would be quickened by a tree planting day in which pupils from village and country schools with fathers and mothers and citizens generally, each planted for the future. All this with appropriate exercises. The following account of such an event in Walpole, Massachusetts, is given by Mr. Charles S. Bird:

"In Walpole, Mass., in 1916 Mr. George A. Plimpton of Walpole presented to the town a 58 acre lot of land, which with property already owned by the town, amounting to about 100 acres in all, was set aside by a vote of the town of Walpole as a town forest. Five hundred dollars was appropriated for planting. In 1914 the Town Planning Committee prepared a plan for development of a town forest, and under the direction of the Massachusetts Forestry Department the land was cleared and made ready for the planting. On May 5th, Arbor Week, the first acre of this forest was planted by the school children of the town. The occasion was marked by public exercises, attended by over 2,000 citizens. After the exercises, in which the Governor of the State, the State Forester, and the officials of the town were represented, the children marched to the grounds, which had been previously plotted and made ready for planting. Each boy and girl, over 900 in all, planted one five year old tree, under the direction of the town forester and assistants. A stone monument has been erected to commemorate the event."

To stimulate interest in the community forest idea, the American Forestry Association has established a town forest contest offering to plant for the city or town which meets the contest requirements and obtains the highest number of points, fifty acres of town property to three year old white pine transplants, one thousand trees to the acre.

## IX—INDUSTRY AND TRADE

**Place of Industry in the Town Plan.**—Industry is of prime importance in a town plan. Civic improvement and community development can be secured only through that material prosperity which comes from the advancement of manufacturing and commerce. In this state every city and village needs new industries. But they must be of the right sort—industries which will contribute something to the town besides the pay envelope—and they can be obtained only through an industrial and economic program, which in turn is an integral part of the greater community program. The day is past when "factory grabbing" and "bonus giving" are in favor with good business. Progressive men everywhere are coming to realize that industrial or commercial development demands a coordination of every element of town or city life. Permanent economic prosperity comes only as a result of team work and community spirit.

**The Functions of a Board of Trade.**—What are the functions of a board of trade? First of all, the board of trade should co-operate with the municipal authorities and with other organizations in the town to promote the general welfare. A decade from now it will be exceptional to find a commercial organization which does not play a prominent part in the town planning movement because it will realize that progressive manufacturers are not content with fine mechanical equipment or unusual power privileges, but are looking as well for locations in which their employees will have healthful surroundings, where children will have good educational opportunities, where the whole environment will contribute to the contentment of the working-man and his family—a contented workman is an efficient workman. Then, too, the board of trade should make a particular study of how best to promote the prosperity of those industries already located in the town; for, plainly enough, if community conditions are such that the established business becomes dissatisfied and moves away, there can be but little to attract new enterprises. With civic consciousness aroused, with the prosperity of industries assured, the board of trade may then focus its attention upon the problem of securing for the community new industries of the right sort.

**The Industrial Survey.**—The first step taken by a board of trade to attract new business to the town should be to prepare an industrial survey showing what the community assets are as a place where business can be conducted with profit and efficiency, and where the laborer can live comfortably and in contentment. Every available factory site should be card indexed; and each card should give detailed information regarding the price, size, ownership, location, transportation facilities, and other facts concerning the property in question.

**Selection of Industries.**—The next step should determine the character of the industries which would be most desirable for the town from the broad viewpoint of general community prosperity. Nothing more unfortunate could happen to a high grade town than to have a low grade industry locate within its borders. The demoralizing effect of this would be noticed at once in the lowered standards of the whole community. Needless to say, all plans should be formulated with the idea of attracting such new industries as are not now represented in the business activities of the town; and all the industries should be thought of, not as separate units, but as departments in one great industrial organization.

**Zoning of Industries.**—The villages of Vermont have suffered irreparably because of the lack of attention to zoning industries. Every town plan should prescribe districts where industries may locate. Not only is this desirable from the aesthetic viewpoint, but it is equally desirable from an industrial viewpoint. There should be well defined industrial, commercial and residential areas. Otherwise, the confusion of interests, which is so utterly regrettable, will be continued through the next decade to the shame and sorrow of all. Church and garage, public library and cobbler's shop, residence and blacksmith shop should no longer be side by side. There may be some cost, some sacrifice; but so there has always been with things worth while.

**Community Industries.**—More and more, towns are promoting prosperity through the medium of municipally owned factories. Vermonters do not have to travel far to find a good example of this novel kind of industry. The town of Littleton, N. H., with a population according to the 1910 census of 4069, has a unique chapter in its quite remarkable story of town betterment. In spite of a law in New Hampshire forbidding towns to engage in manufacturing or other strictly commercial business not connected with municipal activities, Littleton today owns several factories, and some valuable tracts of land, which later will be devoted to profitable municipal use. The idea was conceived by a leading citizen that there is no power that can prevent a group of men from entering into any business activity which does not injure or contravene the wishes of anyone directly concerned, or does not infringe upon rights defined by state or national laws. With these limitations, it was believed that what the voters agreed to—this the town could do. This rather novel principle presupposes that there must be no constitutional objectors in the town. With this fact established, the restriction imposed by state laws as to the uses to which the taxpayer's money shall be put are in large measure removed. The theory is, that if every individual taxpayer agrees to a specified use of the money raised, no one can object. In Littleton, the voter's consent to purchasing or erecting industrial plants is assumed negatively. If, after ninety days notice of intent, no voter takes legal steps to frustrate the intention expressed by a majority of voters at a legal town meeting, the project is carried into effect. Objection from one voter, however, expressed in an injunction, would deal a death blow to the whole scheme. Littleton has purchased or erected three factories, which have been leased to large responsible firms, and have proved to be successful investments bringing several hundred workers into the town as resident property

owners and taxpayers. The value of the Littleton illustration lies in showing what unity of spirit can accomplish. One voter could have trigged the wheel.

**Turning Wages into Local Trade.**—If there is any one thing needed in Vermont today, it is a closer relationship between the village merchant and those who should be his natural clients—the farmer and the village wage earner. The village should be the trading center for the country-side. The dollars of the community should be kept circulating at home. But unfortunately, instead of cooperating, the farmer grumbles at the high prices of the village merchant and sends out of town for his necessities and his luxuries; while the merchant in turn, curses the mail order house and those who purchase from it. Trade relations are full of bitterness when they should be friendly. What are the fundamental causes of this jealousy, and how can they be eliminated?

It is easy enough to advocate the trade at home philosophy, but this fundamental economic principle must be kept in mind: *The buyer is always alert for the cheapest market.* And the fact remains that a large majority of village merchants, while crying down the mail order business, are making little or no study of how to sell cheaper, or how to attract the purchaser. It is interesting to note the large number of store keepers in a large number of towns who buy advertising space in the local paper, allowing the same announcement to go for weeks and weeks unchanged. It is not infrequent to see an advertisement for Thanksgiving running over into January—money worse than wasted, because it is public acknowledgment of business inefficiency. The buyer does not need to look in the village newspaper to find out that John Doe, is located next to the station, nor is he primarily interested in this fact. What he is vitally interested in, and what he would like to know, is what John Doe has to offer in the way of an attractive bargain. Merchants must make a study of the psychology of advertising, overhaul their systems of buying and selling, and do their utmost to promote a feeling of friendship between retailer and consumer because, next to a low price, friendship is the greatest selling force.

One very potent reason for high prices in many of our Vermont villages is the fact that the number of retail merchants is far greater than the economics of retailing warrants. Too many communities are overstocked with stores. When this is the case, one of two things is inevitable: either the unneeded stores will be driven out of business by the law of natural competition; or else, through artificial high prices, all will for a period of years remain in the field at the community's expense.

Again, there is the evil of the credit business. Here is the situation in the case of the typical village credit store. The credit purchaser is not only allowed, but encouraged, to run a bill over a long period of time. Whenever he makes a payment, he is treated with candy and cigars, and, if the bill is settled in full, a liberal discount is made. Not infrequently, he leaves town with a bill unpaid, or, if remaining in town evades payment. On the other hand, the cash purchaser pays the same prices; receives no candy or cigars; is given no liberal discount because there is no bill to settle, and is denied the privilege of leaving an unpaid account. The credit system with its many "deadbeats" makes it impossible for the merchant to take his discounts; and so the vicious circle is run again. It is inevitable that under such a system as this the strictly cash buyer will trade with the mail order house. Many credit buyers will also do the same when they have the cash, and when they do not, they fall back on the local merchant's ledger or credit slip. If dollars are to be spent at home, Vermont boards of trade and merchants' associations must make efforts to attract them at home. If the trade at home philosophy is to win over any community, village and country must become friends—must understand each other. Vermont retailers should leave no stone unturned to help the farmers, to make them feel that the village is their center as much as that of the people who live within it. Until this comes about, the farmer's money will go to mail order houses.

## X—SOCIAL LIFE OF THE COMMUNITY

**The Social Side of Man.**—The entire structure of society rests upon the axiom that the normal man craves the companionship of his fellows. Although every individual has his own personality, which stands apart from that of every other being, the development of that personality is dependent upon the environment which limits his activities. Because of this fact, that the welfare of the individual is in such large measure determined by his relations with his fellowmen, too much attention cannot be given to the socializing agencies of any community.

**The Newspaper.**—A potent force in community development is the town newspaper. It is the medium through which people of village and countryside alike secure information upon all matters of vital import and merits a greater moral support from public spirited citizens than it commonly receives. It is rare to find a newspaper editor, even in the small Vermont village, who is not the most energetic "booster" and

preacher of optimism in the place. A town planning movement should make the fullest use of this consolidating agency and secure for it the heartiest community support.

**The Pageant.**—When the study of local history, blended with prophetic ambition for the future, is expressed by the town pageant the problem of getting rural people together is in large measure solved. Every valley of Vermont is rich in history and tradition—the stuff of which pageants are made—and the retrospective aged, as well as the imaginative youth are always eager to visualize the dramatized ideals and characteristics of the community in which they live. There have been some notably successful pageants in this state. Hartford, Thetford, Bennington, Brattleboro, St. Johnsbury and Wallingford are among the towns which have expended the money and effort necessary to bring their scattered villages and hamlets together for the purpose of living over historic events and dreaming of new conditions.[1] Without exception the investment has proved to be a good one whether viewed from an economic, a civic, or a social viewpoint. Surely no town planning committee can afford to overlook the pageant as a unifying agency.

**The Municipal Theatre.**—The municipal theatre is also a factor in community amalgamation. For the larger places of Vermont—towns of five thousand or over—no study of mental recreation is thoroughgoing which does not consider the utilization of this institution for the purpose of civic betterment. Although the idea is comparatively new in America, municipal theatres are now operated in many cities and villages with notable success. Among the number are Concordia, Kansas, Hennessey, Oklahoma; Pittsfield, Massachusetts; Red Wing, Minnesota; and Grinnell, Iowa, a town of five thousand inhabitants. The motion picture house is the people's theatre. Aside from its purely entertaining features, its value as an educating medium is very great. During the World War, church and state, army and navy, have recognized the possibilities of patriotic unification through drama; and there is every reason why the theatre should be incorporated as a necessary part in any program of civic preparedness. As suggested in a preceding paragraph many of our communities have been closely knit together by means of a festival, old home week celebration, or pageant, and then the drama has been abandoned at the very moment

[1] For a graphic account of these pageants see the Vermonter Vol. 17 pp. 476, 400' 500, 548.

when it should have been continued. On the other hand pageants held at too frequent intervals are exhausting. But almost any village hall or school house can readily be adapted for use as a community theatre, and during the summer months any convenient rustic spot could be utilized for open air dramatics.

**The Village Playground.**—The importance of the village playground is coming to be recognized more and more. At first glance it would seem that the Vermont village of two or three thousand inhabitants, surrounded by countryside and open spaces, would have little need of a playground for the children of the community. The truth is, however, that with open spaces on every hand there is but little opportunity for wholesome play without infringing upon the rights of others. This fact has led scores of American villages to make provisions for playgrounds. A combined athletic field and playground should provide ample space for baseball, football, tennis, basketball and a suitable place for gymnastic apparatus. It is maintained by playground designers that a total area of four acres, three for baseball and football, one-half for tennis courts, and one-half for basketball and gymnasium equipment is sufficient for this purpose. As the most desirable locations in the average town are rarely worth more than $500 an acre, the necessary space could be purchased for $2000. For an additional $2000 simple equipment could be secured, making a total expenditure not exceeding $4000. To one who has seen the salutary influence of the community playgrounds upon the little folk of the neighborhood no great argument is needed to show that the investment is worth while. Certainly every schoolhouse, in village or country, should be surrounded by grounds sufficiently ample to lend themselves readily to artistic treatment; at the same time furnishing play grounds for the children and attractive picnic grounds for the adults in the community. The playground is as important as the school-building itself.

**Parks.**—Because they contribute directly not only to the health of the community, but to its real estate value as well, parks are no longer thought of as mere assets of beauty, and no town plan is carefully thought out which fails to provide for their acquisition and development. Vermonters, however, have been exceedingly thoughtless concerning the endowment of their cities and villages with these recreation centers which return such large social dividends, with the result that many communities have no parks at all; others have potential spaces which have not been developed; while comparatively few have ade-

quate well cared for areas. The stimulus of a town plan is needed which will show the important part which the park plays in turning leisure into recreation and which will place the whole matter of park development in the hands of the proper agency in the community organization. Some states have encouraged towns to undertake the laying out of parks through the passage of laws providing for park loans for a term of thirty or more years, and the idea is worthy of consideration in our own state.[1] Another feasible method is the acquisition of park propperty by lease. By this plan the property is taken over on a lease and payments, including interest, are made annually. Final conveyance of the property to the municipality is made upon the payment of the last installment. Once the land is secured, a live community would find no difficulty in developing the property by a series of community bees.

**The Community Hike.**--Another socializing agency of great value is the community hike or picnic. This outdoor 'get together" is particularly appropriate for Vermonters—inhabitants of "America's noble playground." In summer or in winter people of all ages get keen enjoyment by going as a crowd, into the very heart of the hills, and during the winter of 1918 a community snow-shoe club afforded the people of Northfield an abundance of healthful recreation while strengthening community spirit. In the case of this club there was no formal organization, no great expense. The movement was started by a self appointed committee, which talked the plan over with others who seemed interested, and, after determining upon the date for the first trip, placed the following notice in the post office and about the village square:

"Snowshoe hike tonight. Everybody out. Coffee will be served at the bonfire. Each person should take a cup, sandwiches and a nickel."

About thirty-five persons went on the first trip and, although the mercury was much below zero, they so thoroughly enjoyed it that a committee was then and there elected to plan for a second hike. During the winter seven or eight of these trips were taken. In some instances a fire was built in a sheltered spot, where coffee was made and the lunches eaten. At other times some hospitable farmer opened his house so that the party could make coffee upon the kitchen range, and eat their lunches. The attendance was quite remarkable. On one occasion, seventy-five men, women and children took the trip. Some were past fifty years of age; others were barely ten; many were foreigners. This outing club

[1] See Massachusetts Acts of 1913, Chapter 719, Section 5.

was so popular that it will be continued this winter; and it is hoped that an inexpensive community hut or lodge will be built in which the lunches may be prepared.

**The Community House.**—The community house as a social center, supplementing schoolhouse and town hall, is not a new idea in Vermont; and the vital part which this institution is now playing in the social life of Bennington, Burlington, Hartland, Rutland and other places should be a convincing argument for its extension to other communities. Now that the World War is over and the soldiers are returning to their homes, town after town will start a movement for the erection of a suitable memorial expressing the debt which the community owes to those of its citizens who left their firesides and all that was dear to them to vanquish autocracy. Can a more suitable monument be erected by any Vermont city or town than a neighborhood or community house—a democratic institution dedicated to those who fought for the preservation of democracy? Interesting in this connection is the action of Catasauqua, Pennsylvania, a steel and cement manufacturing town of eight thousand inhabitants. The following quotation from *The Outlook* for January 1, 1919, describes the plan:

"A town meeting was called to consider what form the memorial to the sons of Catasauqua who served in the war should take. The meeting hall was crowded, and no New England town meeting was ever more representative. Bankers and ironworkers, preachers and puddlers from the furnaces, cement burners and laborers, mingled with women who had rolled bandages for the Red Cross and thought of sons across the seas. The question was propounded for discussion: "Shall we have a monument or a memorial house which will be a real community center?" and the memorial house won by a majority so large that the votes for the monument were not even counted.

This is the plan they will follow. Every man, woman and child in the community is asked to become a share-holder in the Memorial Society by making a subscription of one, two, three, four, or five cents weekly for a period of five years. With this they will build a house costing in the neighborhood of $125,000 containing an auditorium, recreation rooms, gymnasium, and swimming pool. There will also be a room for permanent records of the war with a bronze tablet containing the roster of soldier sons. It will be managed by a Board of Governors chosen by the subscribers, and the property will be held by a Board of Trustees chosen for life. It is proposed to make it the center of the community life in every way. The auditorium will have gatherings where every public question may be discussed. Here also on Thanksgiving Day or on other National occasions the churches of the community will gather for united worship. Lecture courses of all sorts have a place in the plan. The gymnasium will afford facilities for dances of a better type than those found in the usual dance-halls. But most of all it will be a place peculiarly for the soldier who comes back, where he can gather with his comrades and recount the tale that America will never tire of hearing—of Chateau Thierry and the Argonne. This place will be his, erected to his honor, and because it is his and because he and his comrades are naturally going to lead the com-

munity in the coming years, just as his grandfather did after he came from the Civil War, so more and more the community life will center about the Memorial House.

Catasauqua might have inflicted another monstrosity on the world, but instead it has given it a breeding-place for a better and more intelligent democracy. And what better memorial could there be for the men who made the world safe for democracy?"

**The Church.**—Any attempt to harness the religious life of a community to a plan would be most unfortunate. The Church, however, is a powerful socializing agency, and, irrespective of creed, is capable of strengthening the moral fibre of the neighborhood. Therefore the social activities of the Church should be given an important part in any town plan. If, for instance, the churches of a city or township were asked to assume the responsibility for searching out those in need of cheer and comfort—the disabled soldier, the bedridden invalid, the crippled child, the grief stricken parent, the homesick foreigner—the writer is optimistic enough to believe that they would respond to this opportunity for rendering this finest type of Christian service. If, in this program of civic preparedness, priest and pastor can co-operate to build up the "morale" of the neighborhood in the same splendid way in which they worked together to put cheer into the souls of men upon the battlefield; and if they are assured of the same generous community support in the days of peace which attended their war time efforts, no one need doubt the ability of the Church to execute its part of the town building program.

**The Public School.**—Changes, interesting and fundamental, have crept into American social life of late. The saloon, the village grocery store and the post office are no longer the neighborhood social centers which once they were. Here in Vermont the old forces have slowly disintegrated and that greatest of all socializing agencies, the public school, is coming more and more to be the all important community center. The school house should be the people's house and any town or city which proposes either to erect a new one or to remodel an old structure should keep as much in mind the community uses to which the building may be put as the internal needs of class-room instruction. There is almost no limit to the character of the social activities which can be carried on in a properly planned school house during evening hours when the plant otherwise would be idle. The modern school building, in order fully to serve the neighborhood, should be so planned as to include the following very essential facilities:

1. An assembly room, which, outside of school hours can be used for social games, folk dances, gymnastics, dinner parties, mass meetings and community sings.

2. Class rooms so arranged that they may be used for the departmental activities of the community center—night schools, domestic science classes, checker and pool tournaments, musical clubs, etc., as well as for regular recitation purposes.

3. A library and reading room, which can also be utilized as a neighborhood club room. The Vermont Free Public Library Commission is always glad to send out circulating libraries upon the application of three citizens who will agree to be responsible for the books and to pay the cost of transportation both ways. If the school directors and the superintendent of schools sign the application, the cost for transporting a school library may be paid from the town school funds.[1] These traveling libraries, together with such books as the school might purchase, would assure any community of a literary center. For its spiritual value in creating good cheer, a fireplace should be built into this room whenever possible.

4. A kitchen and store-room to be used for household economics and in preparing community dinners.

5. A workshop, which can be used by vocational night classes and by the men of the neighborhood. The possession by a junior high school of simple pipe fitting tools, which can be purchased for about ten dollars, would make it possible for farmers to do their own simple plumbing and to install hot and cold water in their homes, the value of which from the housewife's point of view is hard to overestimate.

For the rural school, a properly planned one room building is particularly desirable. By using some one of the many types of movable furniture now on the market, practically all of the floor space can be freed on occasion. The room would thus become readily available for grange-meetings—in fact for meetings of all sorts—and would, if anything, be more effective for school purposes.

Beginnings have already been made along the lines suggested. The little village of Waitsfield has a school building admirably arranged for community work. At North Troy last winter there was a farmers' class which met at the school house and learned the principles of spraying. At Montgomery Center the principal of the junior high school tested soils for the farmers and in many other ways was helpful in the agricultural program. Today the farmer may have his milk tested at any one of the junior high schools in the state. The social value of music in the rural school is also coming to be recognized and state and local community are co-operating to extend the use of the phonograph, the

[1] General Laws of Vermont, Sec. 1457.

school buying the machine and the state furnishing the records. The state law now requires that plans for proposed school buildings shall be approved by the state board of health in order to insure sanitary conditions.[1] The approval of the department of education should also be required by law to secure the proper facilities for meeting the social needs of the community.

It is to be hoped that the day is not far distant when the school buildings of Vermont will be equipped with voting devices to be used not only in connection with the school curriculum as a means of giving practice in exercising the suffrage right, but also in the regular elections. The school house should be the community's polling place. By holding elections on Saturdays—when the plant would otherwise be idle—such use of the school building would save the state a large sum of money each year. Yet economy is not the principal reason for installing the ballot box in the school house. The American ballot box is the symbol of our democracy and when constructed with architectural dignity, its presence in the schools would be an every day reminder of the responsibilities of citizenship.

## XI—TOWN BEAUTIFICATION

**Linking of Art and Utility.**—Utility is of paramount importance in town building—convenience should always have precedence over beauty. Yet an aesthetic environment contributes not a little to the real moral fibre of community life; and consequently town planning should aim, in so far as is practicable, at the linking of art with utility.

**Individuality.**—Towns, like men and women, have character. Therefore, one of the fundamental aims in planning for their futures should be to make the most of those natural or artificial features which make a favorable impression, and to eradicate or at least subordinate those which create an unfavorable impression. As a person is remembered by some distinguishing quality, so is a community. One does not easily forget Boston because of its crooked streets, or Portland because of its beautiful harbor. Not every place in Vermont is equally favored by nature or by art in this respect; but there are latent possibilities in all, capable of transforming a drab, monotonous, uninteresting village into a community with a character. The outstanding characteristic of the little city of Newport is the lakeside with its peaceful rural setting. Chester is

[1] General Laws of Vermont, Secs. 6200-6201.

best remembered by its churches, stores, and dwellings of stone; Newbury, by its roomy square, its monuments and its historic setting; Waterbury, because of its proximity to the two great mountain peaks—Mansfield to the north and Camels Hump to the south; Barre, for its quarries of granite; Brandon, by the width of its streets; Bennington, by the massive monument which symbolizes so much of Vermont's history; and Burlington, by its beautiful lake and mountain scenery. Any plan for the future of any of these communities should take these traditional and natural advantages of location and landscape into consideration. Inasmuch as each community has a different physical setting, no detailed directions concerning treatment can be given in this bulletin. Specific recommendations must come from the landscape architect or from the town planning board.

**Angles and Intersections.**—Perhaps the greatest opportunity which the Vermont town has to make itself more pleasing to the eye, with comparatively little expense, lies in giving attention to street intersections. It is the exception, rather than the rule, to find any town giving thought to this small but important matter. All too frequently, the angles formed by the junction of two streets are unsightly weed beds, distressing to the eye when they might be transformed into veritable garden spots. In Woodstock, the local improvement society—a permanent institution in the civic life of the town—has assumed the responsibility of caring for these places. The society employs a man who devotes his entire time to this work, which does so much toward making Woodstock one of the best groomed towns in the state. In every community, this work of beautification should be assigned definitely by the council or the town planning board to the unit most naturally fitted to carry it on. In towns where there is no improvement society, the work might be undertaken by the women's clubs.

**Street Tree Planting.**—There is need in every community of a program of tree planting along the streets. Not only is this true with regard to thoroughfares where no trees have been set, but it applies with equal force to replacement. Unless the park effect is aimed at there ought to be on a long street, an alignment of trees of the same species. This work should be an important part of any town plan; and, where the community is well organized with a committee for each kind of work, it can be carried on efficiently with little hardship.. Where there is no such thorough organization the situation can be safeguarded through the village by-laws by prohibiting planting without proper supervision.

**Neighborhood Lawn Planning.**—The look of one's house, of one's yard, is really the concern of other people. Individual freedom can be carried too far. The neighbors of the street, the whole town, the multitude of travelers who pass by, are entitled to some consideration. If the neighbors on the street could pool their front yards in order to make that street a place of beauty, they would become better neighbors as a result of their co-operation. Mr. Harold A. Capen, former president of the American Society of Landscape Architects, states in *The Independent* for January 5, 1918, this fundamental principle:

"There are two ways, generally speaking, to get the best from each place individually and make it contribute most to the general good, the looks of the block and the impression of the town. One is to correlate the front lawns, to treat them in effect, as one; the other is to separate the front lawns, and correlate the division lines."

The best opinion seems to be that, when lots are divided, the agency employed should be the same. If this plan were followed, the treatment of each lot could be individual. But a dozen and one varieties of separation—here a bank, there a hedge, there a fence,— jar the eye, Such lot division, the result of jealous individualism, causes an aesthetic loss to the community.

**Street Fixtures.**—Here a leaning telephone or electric light pole, there an ugly street sign tacked upon a tree or the corner of a building—these are characteristic blemishes marring the beauty of many towns. The proper marking of streets, the numbering of houses, and, when possible, the removal of poles and wires from the streets, not only adds to the beauty of a place, but also makes for efficiency. It can be argued that few cities and towns in Vermont are large enough to warrant this expense. As a matter of fact, there are in this state no less than twenty-five towns having a population of more than three thousand inhabitants and it may be of interest to these communities to know what Emmetsburg, Iowa, a city of less than three thousand inhabitants, has accomplished in this direction. The following paragraph, taken from the report of the Emmetsburg City Plan Commission, well describes the results of its efforts:

"The city planners in their report recommended that all poles and wires be removed from the business streets at as early a date as possible, and that this improvement be extended throughout the residence district as soon as practicable. Accordingly, the city council at one of its meetings early this spring ordered the removal of all poles from paved streets. This takes the poles out of the entire business district and from the civic center and the streets leading to the railroad stations. The electric light, telephone and telegraph companies were duly notified and the work of removing the poles was soon well under way. The telephone company put its lines in underground conduits of a permanent nature under the pavement, while the telegraph and electric

light companies have perfected an arrangement by which all their service is distributed through alleys without enroaching on any of the business streets. In this connection the city council has also passed an ordinance prohibiting any sign posts or any posts or obstructions on the sidewalks. As the main streets have 60-foot pavement, with 20-foot sidewalks on each side, the electrolier posts being the only ornament, the effect will be both spacious and pleasing."

The experience of this little city thus far has been that this beautification—one of the features of a comprehensive plan—has been worth while.

**Regulation of Bill Boards.**—Although the billboard and advertising nuisance has not yet become prevalent in Vermont it is gaining headway here. All the forces of public opinion should be arrayed against it to the end that the natural beauty of Vermont may not be marred.

**Care of Cemeteries**. —The summary of life is in the cemetery, with the memories of the dead. Yet it is to be doubted if there is anywhere to be found a more depressing influence than the neglected village graveyard. It reacts most unhappily upon the residents of the community, and leaves upon the mind of the visitor an impression which is not easily erased. On the other hand, the well kept cemetery—such as is found in Brandon—is an evidence of civic thoughtfulness which has a real moral value. Out of respect for those who are sleeping the eternal sleep within the town they helped to build, out of respect for the opinion of those who visit our villages and cities, out of respect for ourselves, should we not provide for at least a decent maintenance of the community necropolis—the city of the dead?

**Private Benefaction.**—Without doubt, the town planning movement in Vermont will stimulate private giving for the purpose of town beautification. Many localities in the state have been recipients of hospitals, libraries, and town halls from wealthy erstwhile Vermonters. If a town has a civic spirit and a plan for growth, the money will be forthcoming. Unique among gifts to Vermont communities is that of the late Harvey Judevine, who provided for a bequest of $20,000 for the purpose specified in the will, of beautifying Concord, a town in Essex County, having about one thousand inhabitants. By the terms of the will a part of the money is left to the cemetery association for the purpose of buying shrubs and beautifying the grounds; part is left to the village to set out shade trees, plant shrubbery, lay and repair sidewalks, and to beautify the town generally. There is also a sum left for the improvement of the Essex County Grammar School, of which the junior high school is now a part.

**The Value of a Campaign.**—A campaign in the interest of town beautification will accomplish much; but it must be conducted reasonably, as a forced enthusiasm is valueless. If placed in the hands of a committee acting under the town planning board, however, it would undoubtedly stimulate interest in town betterment. A great deal of help can always be secured from the pupils in the public schools. Contests also work well. There should, in addition, be an educational campaign concerning repairing and building. In this work there are social gains which cannot be measured. When people co-operate for the purpose of beautifying their community, they become better neighbors and better friends: when the civic spirit grows, the neighborly spirit grows.

## XII—WHERE YOUR COMMUNITY CAN GET HELP

Communities which wish to make a study of town planning will undoubtedly be glad to avail themselves of every assistance. Following is a list of publications which may prove helpful, and of agencies which stand ready to serve in an advisory way:

### HISTORY AND PRINCIPLES OF TOWN PLANNING

Sources from which advice or information may be obtained:

American Civic Association, Union Trust Building, Washington, D. C.
American Society of Civil Engineers, 220 W. 57th Street, New York.
American Society of Landscape Architects, Sibley Block, Rochester, N. Y.
National Conference on City Planning, Flavel Shurtleff, Secretary, 19 Congress street, Boston.
National Municipal League, North American Building, Philadelphia.
Reference Bureau of the American City Magazine, 87 Nassau Street, New York.

### BOOKS

Howe, Frederick C. *The Modern American City.* New York, 1914.
Nolen, John *Replanning Small Cities.* New York, 1912.
Robinson, Charles M. *City Planning.* G. F. Putnam & Sons, New York, 1916.
Zueblin, Charles, *American Municipal Progress.* Macmillan Co., New York, 1916.

### PERIODICALS

*American City*, monthly New York.
*The City Plan*, quarterly, Boston (official organ of the National Conference on City Planning.)
*Municipal Engineering*, monthly, Indianapolis, Indiana.
*Town Development*, monthly, 118 Nassau Street, New York.

### COMMUNITY ORGANIZATION

Sources from which advice or information may be obtained:

American Civic Association, Union Trust Building, Washington, D. C.
The Farm Bureau of your County.
The Greater Vermont Association, James P. Taylor, Secretary, Burlington.
U. S. Department of Agriculture, Washington, D. C.

University of Vermont and State Agricultural College, Extension Service, Burlington.
Vermont Department of Agriculture, Montpelier.

BOOKS

Anderson, W. L. *The Country Town.* Baker & Taylor Co., New York.
Bird, Charles S. Jr., *Town Planning for Small Communities.* D. Appleton & Co., New York, 1917.
Butterfield, K. L. *Chapters in Rural Progress.* University of Chicago Press, Chicago.
Morgan, E. L., *Mobilizing the Rural Community.* Massachusetts Agricultural College, Amherest, Massachusetts.

## LOCAL GOVERNMENT

Sources from which advice or information may be obtained:

American Civic Association, Union Trust Building, Washington, D. C.
Bureau of Municipal Research, New York.
City Managers' Association, Springfield, Ohio.
National Short Ballot Association, 383 Fourth Avenue, New York.
Norwich University, Department of Political Science, Northfield.
Vermont Tax Department, Montpelier.

BOOKS

James, Herman G. *What is the City Manager Plan?* University of Texas 1917.
Munro, W. Bennett. *The Government of American Cities.* Macmillan Co., New York.

PERIODICALS

*American City*, monthly, New York.
*The National Municipal Review*, monthly, Philadelphia.

## STREETS AND ROADS

Sources from which advice or information may be obtained:

American Highway Association, Washington, D. C.
American Society of Civil Engineers, 220 W. 57th Street, New York.
Norwich University, Department of Civil Engineering, Northfield.
U. S. Department of Agriculture, Office of Public Roads, Washington, D. C.
Vermont Highway Department, Montpelier.
Vermont Society of Engineers, George A. Reed, Secretary, Montpelier.

BOOKS

Baker, Ira O. *Construction and Care of Earth Roads.* Univerity of Illinois, Urbana.
*Good Roads Year Book.* American Highway Association, Washington, D. C.
Robinson, Charles M. *Width and Arrangement of Streets.* McGraw Hill Co., New York, 1911.
*The Value of Durable Roads.* Twelfth annual report of the Board of County Road Commissioners of Wayne County, Michigan(Stresses the fact that concrete roads gave entire satisfaction in meeting the severe test of increased highway tonnage caused by war activities. (Write to Elmer G. Rice, Secretary.)

## PUBLIC HEALTH AND SAFETY

Sources from which advice or information may be obtained:

American Public Health Association, Washington, D. C.
Vermont Association for Prevention of Tuberculosis, H. W. Slocum, Secretary, Burlington.
Vermont State Board of Health, Burlington.

BOOKS

Allen, William H. *Civics and Health.* Boston 1909.

MacNutt, J. S. *A Manual for Health Officers.* J. Wiley & Sons, New York, 1915.

Rosenau, Milton J. *Preventive Medicine and Hygiene.* (With a chapter on Sewage and Garbage by George C. Whipple) D. Appleton & Co., New York, 1916.

Sedgwick, W. T. *Principles of Sanitary Science and the Public Health.* Macmillan Co. New York, 1902.

*Influenza Bulletin.* American Public Health Association, 126 Massachusetts Avenue, Boston. (A working program based upon papers and committee reports presented at the meeting of the American Public Health Association in Chicago, December 9-12, 1918. The bulletin suggests numerous plans for preventing the spread of influenza and summarizes the important administrative measures for meeting epidemic conditions.)

## AGRICULTURAL DEVELOPMENT

Sources from which advice or information may be obtained:

American Forestry Association, Washington, D. C.
The Farm Bureau of your county.
U. S. Department of Agriculture, Washington, D. C.
University of Vermont and State Agricultural College, Burlington.
Vermont State Department of Agriculture, Montpelier.
Vermont State Grange.

BOOKS

Carver, T. N. *Principles of Rural Economics.* Ginn & Co., New York.

Reynolds, Harris A. *Town Forests.* American City, New York, Oct. 1914.

Powell, G. Harold, *Cooperation in Agriculture.* Macmillan Co., New York.

U. S. Forest Service, Publications. Department of Agriculture, Washington, D. C.

Warren, G. F. *Farm Management.* Macmillan Co., New York.

Weld, L. H. D. *Marketing Farm Products.* Macmillan Co., New York.

## INDUSTRY AND TRADE

Sources from which advice or information may be obtained:

Chamber of Commerce, Boston.
Chamber of Commerce of the United States, Washington, D. C.
Greater Vermont Association, James P. Taylor, Secretary, Burlington.
U. S. Department of Commerce, Bureau of Standards, Washington D. C.
U. S. Department of Agriculture, Office of Markets, Washington, D. C.

BOOKS

Calkins, E. E., *The Business of Advertising.* D. Appleton & Co., New York, 1915.

Neystrom, Paul E. *Retail Store Management.* D. Appleton & Co., New York, 1915.

Price, George M. *The Modern Factory.* Wiley & Co., New York, 1915.

Shaw, A. W. *Some Problems of Market Distribution.* Harvard University, Cambridge 1914.

PERIODICALS

*American City,* monthly, Nassau Street, New York.

*Nation's Business,* monthly, Chamber of Commerce, Washington, D. C.

*System,* monthly, New York.

## SOCIAL LIFE OF THE COMMUNITY

Sources from which advice or information may be obtained:

American Civic Association, Union Trust Building, Washington, D. C.
The Department of Recreation, Russell Sage Foundation, 103 East 22nd Street, New York.
The Playground Association of America, 1 Madison Avenue, New York.
Department of Interior, Bureau of Education, Washington, D. C.
University of Vermont and State Agricultural College, Extension Service, Burlington.
Vermont Conference of Social Work, A. R. Gifford, Secretary, Burlington.
Vermont State Department of Education, Montpelier.
Vermont Free Public Library Commission, Montpelier.

### BOOKS

Carver, T. N., *Organization of a Rural Community.* Bulletin of U. S. Department of Agriculture, Washington, D. C.
Farwell, Parris T. *Village Improvement.* New York, 1913.
Field and Nearing. *Community Civics.* Macmillan Co., New York, 1915.
Groves, E. R. *Using the Resources of the Country Church.* Association Press, New York 1917.
Mackey, Constance D. *Patriotic Drama in Your Town.* Henry Holt & Co., New York, 1918.
Perry, C. A. *The Unused Recreation Resources of the Average Community.* Russell Sage Foundation, New York.
Stern, Renee B. *Neighborhood Entertainments.* New York, 1914.
Tarbell, Mary A. *The Village Library.* Massachusetts Civic League, Boston.

## TOWN BEAUTIFICATION

Sources from which advice or information may be obtained:

American Civic Association, Union Trust Building, Washington, D. C.
American Society of Landscape Architects, Sibley Block, Rochester, N. Y.
Reference Bureau of the American City Magazine, 87 Nassau Street, New York.
National Municipal League, North American Building, Philadelphia.

### BOOKS

Ayers, M. C. *The Town Beautiful.* Boston, 1906.
Kemp, Edward. *Landscape Gardening.* J. Wiley and Sons, New York, 1911.
Major, H. D. *Trees, Shrubs, Vines, and Where to Plant Them.* University of Illinois. Agricultural Department Circular 135.
Parker, G. A. *Development of Public Grounds in Cities and Villages.* Clemenson Agricultural College, Extension Work, Columbia, South Carolina, 1905.

### PERIODICALS

*American City*, monthly, New York.
*The City Plan*, quarterly, (Official organ of the National Conference on City Planning).
*Landscape Architecture*, quarterly, Harrisburg, Pa.
*Town Development*, monthly, 118 Nassau Street, New York.