NOTES ON CITY GOVERNMENT IN ST. LOUIS.

ST. LOUIS, in more than one sense, must be accorded a central place in the series of great American towns. It is not only central by virtue of its geographical situation, but it is also more typically American than any other of our large communities, by reason of the blending of the several American types of population. The process of assimilation has been more complete than in the Northwestern towns, and distinctions of race and class are less sharp than in most Eastern cities. St. Louis is comparatively an old community. It has succeeded fairly well in reducing New Englanders, Virginians, New Yorkers, men from the Gulf States, Kentuckians, Northwesterners, Missourians, the Illinois contingent, the Texans, and the Irish and Germans as well, into a body of progressive yet conservative Americans, to which each element has contributed something, while losing the sharp edges of its own eccentricities. There results a community that is typically American, and more completely representative of our whole country, such as it is, than any other one of the dozen largest American cities. It also happens that St. Louis is the most satisfactory exponent of what may be called the distinctively American system of city government that the country affords on any similar scale of magnitude.

If the analogy of our National and State organizations is to be followed at all in municipal government, it ought to be followed so intelligently and logically as to retain the merits along with the complications and inconveniences. This is what the St. Louis system, more than any other in the country, has succeeded in doing. The one great achievement for which St. Louis is to be praised is the completeness with which it has won its liberty, and stands for the principle of municipal home rule. It is entitled to be called a «free city.» Even its charter was not made for it and conferred upon it by the legislature, or by any State agency, but was made by a local body of citizens elected for that purpose, and was then adopted by the voters of St. Louis at a special election.

HOW ST. LOUIS ACHIEVED HOME RULE.

THIS was in 1876. The State of Missouri had been holding a constitutional convention, and the convention had found itself face to face with the problem how to deal with the government of Missouri's chief municipality. Much confusion had arisen from the illogical and overlapping dual government of the county of St. Louis and the city of St. Louis. The county debt was a large and growing one, while the city debt was in the same process of extravagant increase. A rough-and-ready method for the limitation of local indebtedness was fixed upon by the convention. It was ordained in the State constitution that such local debts should not become greater in the aggregate than five per cent. of the assessed valuation of local property. As regards St. Louis, it was provided that the city and county governments might, if they chose, agree to hold a special election in order to choose thirteen men, who should be empowered (1) to draw up a scheme for the entire separation of the city from the county, and (2) to draft a charter for the reconstituted city. This program was carried out. The scheme of separation greatly increased the municipal area, and fixed the bounds now existing. County buildings, with other county property inside the limits of the city, were all transferred to the municipality, and in return the city assumed the entire county debt.

The popular house of the Municipal Assembly, known as the House of Delegates, was made to consist of twenty-eight members, one from each ward, elected for two years, all retiring together. The upper chamber of the Assembly, known as the Council, was to consist of thirteen members, elected for four-year terms on a general city ticket. The president of the Council was to be specifically elected to that position. Of the remaining twelve members six were to retire every two years. The municipal elections were ordered to be held in April, and were thus kept distinct from State and National elections, which occur in November. The mayor was to be elected for a term of four years, and other general officers, to be elected at large for four-year

terms, were as follows: controller, auditor, treasurer, register, collector, recorder of deeds, inspector of weights and measures, sheriff, coroner, president of Board of Assessors, and president of the Board of Public Improvements.

ASSESSMENT AND PUBLIC WORKS.

THE assessment of property for purposes of taxation is deemed in every American city one of the municipal functions most vitally affecting the municipal corporation on the one hand and the individual citizen on the other. The St. Louis plan provides for the election by all the voters, for each quadrennial period, of the president of the Board of Assessors. The Municipal Assembly lays out the town into a number of assessment districts, and for each district an assessor is appointed by the mayor, and confirmed by the Council. At present the number of districts is nine. The assessors do their work under the absolute direction of the president of the Board of Assessors, who maintains a large office, with numerous deputies, draftsmen, and clerks, all of whom he is authorized to appoint, subject only to the approval of the mayor. Having directed the whole work of annual reassessment of property, and obtained results as uniform as possible, the president of the board acts as president of the Board of Equalization, his fellow-members of that board being four real-estate owners of the city, who must have lived in St. Louis at least ten years, and who derive their appointments from the concurrent action of the judges of the Circuit Court. Thus the delicate business of finding the yearly tax-basis is satisfactorily safeguarded, and it is sufficient to say that the collection, care, and disbursement of the public revenue is also managed upon an orderly and well-devised system.

The Board of Public Improvements is a body of very exceptional importance, and one which, in the St. Louis plan of municipal administration, holds an altogether peculiar place. The president of this board, like that of the Board of Assessors, is popularly elected. He has general executive oversight of public buildings, street improvements, and public works of all kinds. His associates in the Board of Public Improvements are five officials, known as the Street Commissioner, the Sewer Commissioner, the Water Commissioner, the Harbor and Wharf Commissioner, and the Park Commissioner. These five are appointed for four-year terms by the mayor, subject to the confirmation of the Council. Each commissioner is at the head of the working department indicated by his title, and each one appoints the entire body of subordinate officials employed in his department, subject only to the approbation of the mayor.

This Board of Public Improvements, acting through its president, lets all contracts for public work, subject to the final approval of the mayor and the Council, and takes full charge of street openings, the extension of paving, sewerage, or water-supply, and all kindred matters. The existing membership is of high character and ability, and the general reputation of the board for the twenty years of the working of the present charter seems to have been high. Thus the Municipal Assembly is ready to leave matters of detail very largely to the judgment of this expert board.

THE MUNICIPAL CIVIL SERVICE.

AMONG other appointive officers, in addition to the five department heads and the district assessors already specified, are the city counselor, the superintendents of the workhouse, the house of refuge, and the fire and police telegraph system, two police justices, a board of charity commissioners, a public library board, a commissioner of supplies, and an assessor of water-rates. These are all named directly by the mayor, and all of them are subject to confirmation by the Council; that is to say, the upper branch of the Municipal Assembly. The host of minor office-holders are, under the charter, subject to appointment and removal by the heads of their respective departments, the mayor alone having power to interpose an objection.

As to the question of civil-service reform, no merit system has yet been adopted either by the State of Missouri or by the city of St. Louis. A change of administration always means, ultimately, a very large change in the body of office-holders. The present administration of St. Louis is strongly Republican. Every one of the thirteen members of the Council is a Republican, and twenty-four of the twenty-eight members of the House of Delegates belong to that party. The mayor is one of the leading members of his party in the State. Mayor C. P. Walbridge, who came to St. Louis perhaps twenty years ago fresh from the law school at Ann Arbor, entered upon his public career through a term or two in the House of Delegates. Subsequently he was elected president of the Council, serving four years in that capacity. In the spring of 1893 he was elected mayor, and his term will expire next year.

An interesting feature of the St. Louis charter is its requirement that the mayor shall not make appointments (except to fill vacancies) until the beginning of his third year. Thus, under Mayor Walbridge's administration, the Democratic heads of departments held over until the spring of 1895, when a sweeping change was made, and Republicans were installed in most of the desirable places. Mr. Walbridge's appointments in general, so far as I have been able to judge, will bear close inspection. Mr. Holman, the water commissioner, was very properly reappointed. Mr. Stone, the new harbor and wharf commissioner, had been engaged in educational work for many years, had served in the House of Delegates, and confers honor upon the municipal administration of St. Louis. Mr. Saunders, the mayor's representative on the Board of Election and Registration Commissioners, is a journalist of high character and qualifications. The health commissioner in turn enjoys a high reputation. The Library Board is admirably constituted, and others of Mr. Walbridge's appointees merit similar indorsement.

THE MUNICIPAL PARLIAMENT.

IT is highly instructive to note the great difference in the personnel of the House of Delegates, elected on the ward system, and of the Council, composed of men elected at large. The present Council has for its president Mr. Charles Nagel, a lawyer, a man of education and culture, and a citizen of high standing, who enjoys the confidence of the community. One of the members of the Council is Mr. Halsey S. Ives, who is known throughout the country for his services as the efficient director of the Fine Arts Department of the Columbian Exposition; and he is at once the head of art education in St. Louis, and a citizen well versed in public affairs. Other members of the Council are gentlemen of repute and character. The integrity and general intelligence of the Council are not often very seriously questioned. There have been times, under the present charter, when the group of men in the upper branch of the Municipal Assembly would have done credit to any legislative body in the land.

While pleasant things may be said touching the capacity and character of some individual members of the House of Delegates, the impression that the body, as a whole, makes upon the visitor is that of a very ordinary, in fact, a very unprepossessing group.

Both the House of Delegates and the Council meet regularly two evenings every week. The members also have a large amount of committee work to do, and thus the city affairs absorb a great deal of their time and attention. Their compensation is only three hundred dollars a year. I have the impression that it would be better if the compensation were either made much larger or else abolished altogether. If considerably larger it might stimulate a better class of men to seek election to the House of Delegates, while if abolished it might keep some undesirable candidates out of the field.

Except as a training-school for young politicians, I do not think the House of Delegates serves any useful purpose. If it were abolished altogether, and if the Council were then considerably enlarged, members of the Council serving for six years instead of four, and one third of the body retiring every two years, all members as at present being elected at large, St. Louis would, in my opinion, have not only a simpler, but also a much better plan of municipal government.

When the worst has been said about the Municipal Assembly of St. Louis, it remains true that it is a body of altogether as high character and ability as the legislature of the State of Missouri. The great boon which the charter confers lies in the fact that so far as city affairs are concerned the Assembly is a fully empowered deliberative body. Many hundreds of bills affecting the city of New York are introduced into the legislature at Albany at every annual session. The very matters dealt with in these bills are, for the most part, the kind of matters that in St. Louis are under constant discussion in the Municipal Assembly, which has full authority to deal with them. Such discussion is with open doors, and the daily papers are always represented by their regular reporters. Inasmuch as there is no dispensing with the deliberative function in the conduct of the Municipal affairs of a great city, it is always an advantage to have that function exercised (1) by men expressly selected for that purpose, and (2) under the immediate observation of the people concerned.

HOW ST. LOUIS ACQUIRED GOOD STREETS.

THROUGH most of its history St. Louis had been unpleasantly but distinctly famous for its mud. For the better part of a century, visitors whose published notes of travel included some account of St. Louis had not failed to dwell upon the frightful condition of the streets in wet weather. The original mud was clayey, clinging, and bottomless.

There came a period of macadamized roads made from the broken limestone of the region. This limestone is very soft, and on streets where traffic is heavy it is quickly ground into a white dust, which no amount of sprinkling can keep wholly down in summer, and which in winter and the rainy period forms a deep, splashy mud. In the earlier days of the Nicholson pavement experiments St. Louis tried, to a limited extent, the substitution of that style of wooden-block roadway for the limestone macadam. But the wooden blocks were laid upon temporary and improper foundations, and soon became worse than the streets they had replaced. Thus St. Louis could not claim a single well-paved street.

It was characteristic of this solid, conservative town, with its mercantile motives, that its business men finally awoke to a realizing sense of the fact that well-paved streets are a sound investment, and that conversely there comes a time in the business growth of a large town when bad streets are too positively detrimental to be longer tolerated. Their point of view was that of the property owner. They determined that the heavy expense of reconstruction must be borne by the owners of abutting property. They came to the conclusion that, for down-town business streets, there was only one kind of pavement which the experience of the world had found to be virtually indestructible under all climatic conditions. This was a pavement of granite blocks, placed upon a solid concrete foundation. The sentiment of the responsible business community in favor of the reconstruction of St. Louis streets on this plan was recognized by the city government, and the new policy was entered upon in the year 1882.

Reports of the Public Works Department show that there are now nearly fifty miles of streets paved with granite block. Quite recently the policy has been adopted of paving the down-town alleys with vitrified brick. In some of the best residence neighborhoods well-laid asphalt streets are found, and it is probable that the use of asphalt will increase rapidly. The success of vitrified brick leads to the opinion that it may become largely used for roadways in residence districts in the early future. Outside the central districts macadam roads still prevail. Sidewalks, curbstones, and gutters in St. Louis are now very generally made of artificial stone, locally known as granitoid.

The definite policy as regards the finances of street-paving continues to be the assessment of the cost against the owners of adjacent property. Where there are street-car lines the cost to property-owners is reduced, by virtue of provisions in the municipal charter and city ordinances, which require the street-car company to pave and maintain the roadway between rails, between the lines of trackage, and for a foot beyond the outside rails. Adjacent property is assessed according to linear frontage, no account being made of buildings and improvements. It is provided, however, that the cost of paving must not exceed twenty-five per cent. of the assessed value of the parcels of ground against which the charge is made. Evidently this provision delays the paving of streets in parts of the town where property has a comparatively low valuation.

THE MAZE OF OVERHEAD WIRES.

UNTIL a very recent period a stranger in the St. Louis thoroughfares was annoyed by the absence of street names on the corners. A few scarcely legible, much battered tin signs were found at rare intervals nailed to telegraph poles, but otherwise the stranger was without guidance. One of the incidental benefits accruing to St. Louis from the selection of that city for the Republican Presidential Convention took form in an ordinance —pushed through the Municipal Assembly in February—authorizing the Board of Public Improvements to select a satisfactory style of street signs, and appropriating money for their erection, at the earliest possible date. The visitors at the convention, therefore, will have no occasion to criticize the lack of street signs; but they will, therefore, be the more at liberty to observe and criticize the one remaining disgrace of the streets of St. Louis. No other great city in the whole world now permits electric wires to be strung overhead in the central business streets.

This abuse has reached almost intolerable dimensions in St. Louis. I have myself counted, at various street intersections in the heart of the best business districts of St. Louis, as many as fourteen poles grouped within a few feet of the four corners. And this does not include lamp-posts or the standards supporting the new street signs. An elevated railway could scarcely fill up or overshadow a street more entirely than do the poles and wires of the electric companies on a great thoroughfare like Pine street, for example. These poles range in size from the iron ones that support the trolley-wires of the electric street-railway system to the huge masts that carry the telephone and telegraph wires.

Every one acknowledges that these poles should be abolished, and that the wires should

be placed under the sidewalks or roadways; the subject is under perennial debate in the Municipal Assembly. But the public authority seems to lack the stern resolution necessary to force so many conflicting corporations into agreement upon one harmonious plan. Every company naturally desires an independent right to tear up street-paving or sidewalks, and to bury its own wires at its own time and in its own way. Each one insists upon quoting the privileges it has succeeded in obtaining in some other city, and demands that St. Louis be not one whit less indulgent.

HOW THE ELECTRIC TROLLEY HAS TRANSFORMED THE CITY.

FOR the present, and perhaps for many years to come, the overhead trolley-wire is expected to remain as it is. If the trolley has some objections, it stands, nevertheless, for an agency which is transforming St. Louis in a manner that causes conservative old residents to rub their eyes in bewildered surprise. The schemes of separation which made St. Louis a free city entirely independent of St. Louis County in the year 1876 very greatly increased the municipal boundaries. The county generously conceded land enough for the future growth of a great city. The new limits included an area somewhat exceeding sixty square miles. The actual town—as closely built and occupied by at least ninety per cent. of the population—was in those days well within an area of twelve or fifteen square miles. In the succeeding decade and a half the street system was gradually extending, and the penumbral fringes were duly widening, while the mule-car lines penetrated a little farther northward, westward, and southwestward. Some great park spaces had been reserved outside the old city limits before the act of divorce between city and county, and these spaces were included within the new city limits. The population was slowly creeping out toward these desirable pleasure-grounds, but the rapid development of the outer zone of the municipal area was awaiting the advent of a system of improved transit.

The electric trolley was found to be the system best adapted to the situation. Two or three comparatively short cable-lines had been constructed, but otherwise the leisurely mule-car was in universal vogue. The last mule disappeared in the early days of the present year (1896) from the solitary line which had continued to use animal power. With its substantial beginnings going back scarcely further than 1890, the trolley system of St. Louis inside of the municipal limits now traverses about two hundred and fifty miles of streets, and has a trackage (double track being reduced to terms of single track) of three hundred and fifty or perhaps four hundred miles. This is regarded in St. Louis, and I believe justly, as a more complete and extensive electric-transit system than any other large city possesses. The municipal charter provides that no one line may have exclusive use of trackage on a central thoroughfare, but that, under reasonable terms and regulations, other lines must be permitted to pass their cars over the same tracks. A considerable number of street-railway companies in St. Louis operate their cars under distinct and separate franchises, and in the heart of the town the cars of several different companies will be found on the same streets.

In their dealings with the city government the street-railway companies have come off very easy victors. The old mule-lines were readily invested with the new and very valuable trolley privileges, and in most cases they were given twenty-five-year franchise extensions, upon terms which allow the city treasury a frivolously small compensation for privileges possessing an enormous cash value.

PLAN OF THE TOWN—HOUSING OF THE PEOPLE.

THE original town of St. Louis was founded within an outward bend of the Mississippi River, and of course lay close upon the bank. The river's great curve, which gives the city a crescent front, extends a number of miles northward and southward from the spot originally chosen as the site of the town. Taking an area about two miles square as constituting the old town,—that is to say, taking two miles of central river-front with the district extending two miles westward,—one will find the new Union Station at the precise center of this area. The great steel bridge spans the river at the central point, and a railroad tunnel extends from the end of the bridge to the colossal station a mile westward. Now, if a curve be drawn with a radius of five miles from the Union Station, the resulting line will very nearly coincide with the limits of the municipal area. The city, however, owns another strip of land on the river-front to the northward, and a corresponding strip at the extreme southern limit, which give a total river-frontage of eighteen miles. Although a good many corners have to be turned, the trolley system manages to radiate from the central district to the outlying parts, some-

what as the principal veins of a big leaf distribute themselves. In fact, the physical structure of St. Louis strikingly resembles the configuration of certain broad, fan-shaped leaves, the great steel bridge serving for the stem.

As the city spreads outward at the circumference, it extends skyward at the center. In no other city of the world, New York and Chicago alone excepted, has the construction of great iron-framed commercial edifices since 1890 been so extensive, or wrought so much of change, as in St. Louis. It seems likely that the city not many years hence will be face to face with the new problem—how to accommodate the street traffic pouring into the small district of sky-scrapers from the great outlying districts of well-scattered cottages and villas. Such are the transformations that the trolley is working in St. Louis. It is producing like effects in many another town, but perhaps no other great city so well serves to illustrate the entire process.

The most important public buildings in St. Louis are the Post-office, the Court-house, the High School, the new City Hall, the Exposition Building, and the Union Railway Station. Not one of them is so situated as to have its architectural qualities enhanced by a spacious approach. If they could have been made to front upon open squares, or, with other public buildings, such as museums, theaters, and hotels, could have been grouped about one or more central spaces, the effect would have been much improved, while a more distinct articulation would thus have been given to the whole city.

In the acquisition of great terminal freight-yards, the railway companies have displaced much of the old house property in the narrow, close-built streets lying near the river, both northward and southward from the central bridge. This fact is a fortunate one; for the districts appropriated by the railways had contained much of the most decayed and unwholesome tenement-house property in St. Louis. Thus the operations of the railway companies near the river—concurring with the new expansion of the suburbs made possible by the development of transit lines—have assisted in the outward movement of the population.

The development of St. Louis as a manufacturing city has been swift and prosperous. Great factories lie, for the most part, southward from the business center, although many of them have also spread northward. Various industries, moreover, remain within the confines of the district which is chiefly given over to office-buildings, financial institutions, wholesale houses, and large retail establishments. Formerly the factories lay, for the most part, outside the area principally occupied by the homes of working-people. The recent tendency has been to build workingmen's homes outside the circle of the factories. The building and loan associations, of which there are a great number in St. Louis, seem to have played an important part in the new housing movement, while the real-estate companies, with the facilities which they have offered for the purchase of small houses on the instalment plan, have also, doubtless, made it possible for thousands of mechanics and employed men of small incomes to own their own homes.

To the visitor wholly unfamiliar with St. Louis, or acquainted with it only as it was ten years ago, nothing appears more striking than the array of fine homes in the great central-western district, and in the newer districts in the vicinity of the large parks. The typical home of the well-to-do St. Louis family of to-day is a large, square brick mansion standing detached in a small but attractive environment of yard room. There is much variety in architectural details, and great magnificence in many of the newest houses. The prevailing material for large houses as well as for small is a bright and cheerful red brick; but yellow or cream-colored brick has become popular of late, and many beautiful houses in the western suburbs have been built with that material. Frame-houses in St. Louis are comparatively rare. Particularly characteristic of these newer parts of the city are the many so-called «places.» These consist, usually, of one short private street with an ornamental entrance at each end, lined with a double row of attractive mansions, harmonious in general style and symmetrically arranged, with carefully kept lawns, without fences, and with considerable attention to parkway and landscape details.

PUBLIC LIGHTING AND THE SMOKE NUISANCE.

THE pleasures of life in St. Louis would be much enhanced if the smoke nuisance could be totally abated. Soft coal is the fuel of the place, and it is mined in exhaustless quantities only a few miles away on the Illinois side of the river. It is said that no city of equal size has so cheap and abundant a coal-supply at so short a distance from its gates.

It has been suggested by Mr. N. O. Nelson that instead of transporting the coal from the mines, there should be erected in immediate

proximity to the Illinois coal-pits a great plant,—consuming the slack and waste coal, which can be had for next to nothing,—which could generate electrical energy, to be transmitted by wire to St. Louis, sufficient to furnish a complete supply of electrical heat, whether for warming buildings or driving machinery. No other city of magnitude, as Mr. Nelson assures me, is so favorably situated for this grand electrical solution of the fuel problem. Heat, power, and illumination might thus, through electrical transmission, be supplied from the Illinois coal-fields without transporting the coal any appreciable distance from the mouth of the mine. The smoke nuisance would thus disappear of itself.

The use of electricity for lighting purposes has already made great progress in St. Louis, two large companies being engaged in the business, one of which deals principally in lighting by the arc system, and the other by the incandescent. Gas is still used in a limited portion of the city for street lighting, while in outlying quarters gasolene lamps are found; but for almost the entire city of St. Louis electric street-lights have been adopted. The latest statistics show some noteworthy facts. Nearly five hundred miles of streets are lighted by electricity, and the city contracts for about two thousand five hundred arc-lights and about three thousand incandescent lamps.

It is probable that the city a few years ago, at a time when the public-lighting contract was about to expire, would have erected an electric-lighting establishment of its own, but for the fact that the constitutional limit placed upon its aggregate indebtedness did not permit the sale of bonds in order to make the initial investment. It was thought that the city would have to accept bids of about $125 per light per annum from the existing electrical companies. But, quite unexpectedly to every one, a new bidder made his appearance, who secured the contract for $74.95 per light. Under the new award the city's lighting bill dropped from $318,000 in 1890 to $211,000 in 1891. Expansion of suburbs has brought it up to nearly $400,000 for this year.

WATER-SUPPLY IN THE MISSISSIPPI VALLEY.

FEW persons realize the magnitude of the task involved in pumping out of the Mississippi River, and distributing with sufficient pressure throughout a great town like St. Louis, as much water as the population demands for all purposes. The St. Louis Water Department has now an engineering plant which, for power and perfection of pumping machinery, is not surpassed anywhere in the world. Quite recently the intake has been removed from a point only a little above the present center of the river-front to the extreme upper limits of the municipal jurisdiction.

Until the new water-plant was finished in 1893 at « Chain of Rocks » (as the new water-works locality is called) the plant was not large enough to permit proper settling, and so the water at times was distributed to the homes of citizens without any diminution of its muddy ingredients. The new plant provides six great settling-basins, each one of which is 670 feet long by 400 feet wide, with a working depth of 11 feet. All these basins have been in use the past year, although not quite finished. Five basins are in service at a time, one being always cut off to undergo, in its turn, the process of cleansing. Each basin is cleaned out when the sediment has accumulated to the depth of about one foot. At times the water carries as much as 4 pounds of sediment for 1000 pounds of water. During the fiscal year of 1895 the cleansing of these settling-basins removed 356,000 cubic yards of dense mud.

FILTERING THE MISSISSIPPI-MISSOURI FLUID.

HAVING completed the settling-basins, it is now the intention of the Water Department to adopt a scheme for complete filtration, and then proceed gradually to put the scheme into effect. The difficulties in the way of filtration are excessive and peculiar. In recent years what is called natural filtration—through layers of sand and broken stone in filter-beds—has been developed to the point of brilliant success in various European cities. The most recent triumph has been the completion of the huge sand-filtration plant at Hamburg, which not only makes the muddy Elbe water as crystal, but also removes disease germs, and is an invulnerable bulwark against cholera epidemics. But if the Hamburg system were adopted at St. Louis, the filter-basins would have to be very much larger and more numerous, on account of the far muddier character of the Mississippi as compared with the Elbe. When, in the late winter, the Mississippi breaks up, the regular concomitants are heavy rains, a rise in the stream, and a roiled and muddy condition of the water. This is the very time when the filters must be working well; otherwise the city would be served with an intolerably muddy supply. But it is obvious that open filter-beds would be so affected by ice and cold that in these very

times of emergency they would be working badly or not at all.

So much for the difficulties of winter. But the summer difficulties are hardly less serious. For a period of eight or ten weeks the heat of the sun at St. Louis is very powerful. Vegetable organisms are developed in still and shallow water with amazing rapidity. The usual depth of water in the open filter-beds of Europe is about three feet. Mr. Holman, the water commissioner and chief engineer of the department at St. Louis, believes that Hamburg's splendid series of open filter-basins would be impossible at St. Louis in extremely cold weather, and equally so in extremely hot weather. In the summer, he avers, the water would spoil while in the very process of filtration, and the filter-beds would become as objectionable as a stagnant pond. He does not, however, despair of finding a successful method of mechanical filtration. He wisely insists that the great settling-basins, in the first place, must be made to do the largest possible amount of work. To this end, he is convinced that a chemical coagulant should be mixed with the water as it is pumped into the settling-basins, in order to assist in the precipitation of solid matters. He believes that much the larger part of the five per cent. which now fails to settle at the bottom of these beds would thus be carried down with the ninety-five per cent. that already settles, taking the greater part of the bacteria down with the sediment. There are several chemical substances that would do the work. Mr. Holman remarks that the substance used must not only be absolutely harmless, but also something against which there can be no popular prejudice.

I have not scrupled to dwell at length upon this question of the water-supply, because the problems involved concern not St. Louis alone, but scores of other prosperous towns and cities situated along the banks of fifteen or twenty thousand miles of Mississippi Valley river-courses, in fifteen or more great States. If St. Louis, by the year 1900, shall have succeeded in solving this difficult problem, these other towns and cities will not rest content until their water also has been purified from the visual, mechanical, chemical, and bacteriological points of view; and this will mean a great forward step in civilization and municipal progress. I regard the St. Louis plans, therefore, as possessing an immense significance. Their accomplishment will mean as much for American municipal progress as the mountain supplies of Glasgow, Vienna, or Munich have signified in Europe, or as the recent bacteriological success of water-filtration has signified at Hamburg, Berlin, and elsewhere in Germany. Mr. Holman, who is at once the administrative and the engineering head of the Water Department, has been in full charge since 1887, and has been connected with the department since 1877. He has been retained in office under different administrations, and his efficient management of this great department illustrates the value of permanence in responsible public positions, when once the right man is in the right place.

The Water Department of St. Louis is so conducted as to be financially self-sustaining. The water-rates are not complained of as unreasonably high, but they suffice to pay operating expenses, and also to pay for all extensions of the plant. The new works have been paid for out of the water revenues, and the proposed filtration-plant, which must cost several hundred thousand dollars, will in like manner be constructed out of surplus current receipts.

Fifty years hence sewage purification, or sewage-farms, may come into general use in the Mississippi Valley, as in British and Continental cities; but the present generation and its immediate successor will use the Mississippi as a sewage-canal.

Those towns and cities that must obtain their water from the same river into which they discharge their sewage will come to rely upon filtration. It is still an open question whether the completion of the gigantic project by which the sewage of Chicago is to be diverted from Lake Michigan to the Mississippi River will or will not appreciably affect the purity of the water-supply at St. Louis. It is asserted at Chicago that the sewage will be diluted with such a volume of fresh water, sweeping from Lake Michigan through the new drainage-canal, as to diminish rather than increase the sewage taint of the Mississippi River. Inasmuch as St. Louis pours its own great volume of sewage into the Mississippi, to the possible detriment of the towns farther down stream, it can hardly complain of similar pollution on the part of cities to the north. As to the city's sewerage in detail, the system is an exceptionally complete one, everything in the situation favoring easy and thorough drainage.

GARBAGE AS A SOURCE OF WEALTH.

If, indeed, St. Louis continues to pour the effluent of a great city's sewers into the Mississippi, it may at least claim to have relieved the river of another form of waste, which, in

point of fact, was much more offensive than sewage. Until recently the garbage of the city was dumped into the river, to the extreme disgust and annoyance of people living on the banks for a long distance below. Large quantities of domestic garbage floated down to certain shoals where, at bends in the river, huge garbage reefs were formed. The offensiveness of these reefs in the hot season can better be imagined than described.

Garbage is collected and disposed of in St. Louis by the employment of a private contractor; but it does not go into the river, and very little of it remains at back doors and alley gates. The reason for a transformation almost magical lies in the radical change of motive on the part of the contractor. For, be it said, a simple invention, applying a well-known chemical principle, has now made possible on purely commercial grounds an advanced step in American municipal housekeeping that neither public spirit, the sanitary motive, nor yet the demands of a fastidious civilization, had sufficed to effect. In Europe they have been willing, at a heavy expense to the taxpayers, to make a scrupulous collection and disposition of garbage part of the task of good municipal government. But in the United States, it would seem, we are destined to find our solution of the garbage problem through the eagerness of private companies for money-making municipal franchises.

Some years ago a well-known inventor perfected and patented a chemical process for the extraction of animal fats from garbage. This system has made it profitable to build large factories for garbage treatment, and in several American cities companies have been formed which have obtained an exclusive contract for the collection and disposal of garbage and dead animals for a term of years. These local companies use the patented processes by virtue of a royalty arrangement. St. Louis was by no means the first American city to adopt this system, but the plant of the St. Louis Sanitary Company, which employs the Merz processes, is much the largest and most perfect of its kind in the world. The system, therefore, as exhibited in the concrete at St. Louis, deserves some description.

The principal station of the sanitary company is a marvelous factory which has cost nearly half a million dollars, and which is situated near the river, in a general region of heavy manufactures, in the far southern part of the city. The garbage-wagons drive from the street into the building on an upper floor, the works having been constructed against the side of a steep bank. The material is emptied into storage tanks, whence it passes into a row of huge steel cylinders, called driers. These tanks are surrounded by hot steam-coils, and a revolving rake within each cylinder keeps the garbage in constant motion. In about six hours, under a steam pressure of 300° F., the material is entirely dry. About ninety per cent. in weight has been evaporated away as simple water.

The material that remains looks like dried coffee-grounds, and has an odor hard to describe, but not offensive. The oils and fats are all retained in this residue, inasmuch as such substances do not volatilize at a lower temperature than 550°. After the needful six hours of drying, the cylinder doors are thrown open, the whirling rakes push out the brown, dried garbage, it falls into a long receiving-box, and a huge continuous screw turning in the box conveys the material to a row of upright tanks full of petroleum naphtha. The naphtha is heated by steam, and the garbage remains immersed in these tanks for an hour. In that time the grease has been absorbed by the naphtha, which is then drawn off into another tank, leaving the unabsorbed residuum of garbage behind. On the average, 98½ per cent. of the grease has been absorbed and retained by the naphtha. Naphtha and benzine, as is well known, volatilize rapidly and easily at a low temperature. It is, therefore, a simple matter, by the use of hot steam-coils, to vaporize the benzine and leave the grease behind. The benzine is caught and condensed, and is not in the least injured. Thus the same benzine (naphtha as a cheaper equivalent being commonly used) is employed over and over again, a slight percentage, of course, disappearing as leakage.

The grease is practically pure, and an entirely legitimate article of commerce. In its brown and crude form it is sold to the candle-makers and soap-makers, at whose hands it undergoes certain processes of refining and bleaching. There is a large and constant demand for it, and it is a very profitable commodity. There remains to be accounted for the residuum of garbage from which the grease has been extracted—a material of about the consistency of ashes, with a color, however, like chicory, and a smell that suggests licorice. This substance is destined for use as a fertilizer on the tobacco- and cotton-fields of the South; but it is not rich enough in ammonia and phosphates to be marketable without a further treatment, and is mixed with other substances, and sells at a good

price—once nine dollars a ton, now about six dollars.

Besides what it receives per ton for collecting the garbage, the company's contract gives it $60,000 a year from the city treasury for its services in disposing of the waste. The company would probably protest strongly that it could not afford to collect the garbage and carry on its business without the payments which it receives from the city treasury. It is not a question that can be intelligently discussed by an observer not minutely versed in all phases of the subject; but I have formed the opinion, through the assurance of experts, that if the city itself should undertake the direct management of the garbage system, with a competent director at the head of the department, the business could readily be made self-sustaining.

STREET CLEANING AND SPRINKLING.

STREET sweepings continue to be dumped into the river. In Europe they have some value as a fertilizer for market-gardens, but in America they are not worth enough to pay the cost of transportation. So far as they consist of sand, clay, and earthy particles, they can be cast into the river without making an appreciable increase of the earthy material that the great brown stream is always carrying. Street sprinkling in a hot and dusty city like St. Louis through the warm season is a matter of great moment. The difference between satisfactory and unsatisfactory sprinkling in summer bears upon the comfort and well-being of the population far more seriously than the difference between good and bad street sweeping and cleansing through the colder half of the year. In St. Louis the sprinkling is done by contract, the city being divided into sixty or more sprinkling districts, in each one of which the contract is let by separate bids. The water is freely supplied by the municipal Water Department. The population is so seriously concerned in this matter that public opinion demands, and therefore receives, an exceedingly efficient service.

POLICE, EXCISE, AND ELECTION BOARDS.

SEVERAL matters of local administration in St. Louis have never been brought under the control of the municipal authorities. One of these is the Police Department. Previous to the adoption of the charter of 1876 there had been established a so-called metropolitan police system for St. Louis, under a board of commissioners appointed by the governor of the State. This system has been retained, the mayor, however, serving as an ex-officio member of the board. Whatever temporary advantages it may have possessed twenty-five years ago, I am not able to discover any sound reason for the system at the present time. The people of St. Louis, who pay all the expenses of their police system, should have power, either by direct election or by appointment of the mayor, to designate their own police commissioners. The actual police administration, however, does not seem to meet with very severe criticism at the hands of the community. The present chief of police has held his position for a long time, and is commended as an officer of efficiency and integrity. The system of bribery and corruption which had grown up so appallingly in the New York police force is not believed to exist to any very serious extent in St. Louis. Gambling seems to be suppressed so far as any open violations of the law are concerned, but no attempt is made to enforce the Sunday-closing law against saloons, or to suppress disorderly houses. Nor is there any pretense of a Sunday-closing policy, and no liquor-seller in St. Louis would for a moment think it necessary to pay regular protection money to the police for a privilege that is freely accorded to all saloon-keepers.

The Excise Department is also under State rather than municipal control. There are about two thousand licensed saloons in St. Louis, the scale of license fees varying in accordance with the drinks sold. A beer license costs much less than a full license, which includes distilled liquors. The average fee is about five hundred dollars, and the total income from liquor licenses approaches a million dollars. Part of this money goes to the State treasury and part to the city.

Election and registration matters also come under the control of a department that is subject to the State rather than to the municipality. A recent State law has thoroughly modernized the registration system of St. Louis, and the administration of the law has been placed in charge of a commission, two members of which are appointed by the governor of the State, and one by the mayor of the city. It has been the duty of this commission to make a house-to-house canvass of the entire city, in order thoroughly to rearrange the registration lists, which were very seriously defective. The new commission seems to have done its work with commendable care and accuracy. It has made an enrolment of about 140,000 men entitled to vote

in the forthcoming State and national elections. This enrolment would seem fully to justify the estimate of the directory, which claims considerably more than 600,000 people for St. Louis.

THE HEALTH DEPARTMENT.

THE charter of 1876 provided for the organization of a Board of Health, the principal member of which should be a health commissioner, who should be a duly qualified physician, appointed by the mayor like other heads of departments. This commissioner, the mayor, and one police commissioner are ex-officio members of the Health Board, and two appointed physicians of the city complete the group. Besides ordinary sanitary administration, the Health Department has oversight of the city hospitals, the St. Louis Insane Asylum, and the Poor-house. Under a chief sanitary officer, it exploits a force of inspectors. It maintains a modest chemical and bacteriological laboratory. It has a staff of disinfecting agents. It may be said to contain substantially all of the factors and agencies which belong to the best modern municipal health departments. No fault need be found with the theoretical organization of the department, nor with the intelligence at its head. But the sweeping criticism may be passed that public opinion has not yet demanded a health service by any means adequate to the needs of a great civilized community, so far as equipment and resources are concerned. The ordinary hospitals are not equal to the necessities of the situation, and a great modern municipal hospital for epidemic diseases is a crying necessity. Food inspection ought to be provided for upon a far more thorough scale, and the Health Department ought to have a largely increased force of inspectors, with a far more summary authority for the prevention or remedy of ordinary nuisances.

One interesting innovation is entitled to mention and praise. This is the use of a trolley-car specially built and fitted up for ambulance purposes, officered by agents of the Board of Health, having right of way over the entire trolley system of the city, making regular calls at designated hours in different parts of the town, and transporting patients to the various hospitals, asylums, and other institutions which come under the superintendence of the health authorities. The annual death-rate of St. Louis is about sixteen per thousand of the population, which is a favorable rate in comparison with other large American cities. But the rate could be made decidedly lower, and thousands of cases of illness could be prevented, by moderately increased grants of public money, in furtherance of the earnest and intelligent recommendations of the health commissioner.

PARKS AND PLEASURE GROUNDS.

ST. LOUIS is sadly lacking in a supply of small parks, playgrounds, and open spaces in the more central portions of the city. Nor has it by any means availed itself of opportunities which might readily have been seized for the appropriation of large portions of its attractive river-front for park purposes. It possesses eighteen miles of river-front, two or three miles of which are taken up by the public steamboat-landings. The failure of the city to reserve river parks and to construct river boulevards must surprise every visitor who studies the ground-plan of the town.

Within the city limits on the west side of the town is the great Forest Park, containing 1375 acres, which several trolley-lines render quickly available for most of the inhabitants of the city, and which is one of the noteworthy parks of the world. Carondelet Park contains 180 acres, and is the pleasure-resort of the people of the southernmost portion of St. Louis, who live in what was formerly the separate town of Carondelet. O'Fallon Park, with 150 acres, holds a corresponding place on the north side of the town. Lying a little beyond O'Fallon Park are the two great cemetery tracts, «Bellefontaine» and «Calvary.» Somewhat nearer the center of the town, on the north side, is the famous St. Louis Fair-ground, with about 100 acres. A little way southwestward from the heart of the city is the Missouri Botanical Garden, better known as Shaw's Garden, containing 50 acres, immediately adjoining which is the Tower Grove Park, with 267 acres, both of these magnificently planted and improved pleasure-grounds having been given to the city by the late Henry Shaw. The most central city park of any size is the Lafayette, containing 30 acres. Somewhat larger, and a little farther west, is the Compton Hill Park, which contains a large storage reservoir of the Water Department. Such are the principal pleasure-grounds of St. Louis, and most of them were acquired as the result of a movement in 1874 and 1875. The multiplication of small parks, and the appropriation of portions of the river-front, ought to become a recognized municipal policy.

THE SCHOOLS AND THE PUBLIC LIBRARY.

FOR many years past no department of municipal life in St. Louis has had a wider or better fame than that of the public schools. The great personal reputation of Dr. William T. Harris—now United States Commissioner of Education, and for a long term of years superintendent of the St. Louis schools—naturally attracted attention to the educational system of the city. St. Louis was held up as an example, because it was the first of our large towns to ingraft the kindergarten upon the public-school system, while its primary and grammar schools were carefully and philosophically graded, its high-school department a matter of just local pride, and its normal department for the training of its own teachers an excellent crowning edifice to the system. The present efficient superintendent, Dr. Soldan, was formerly the principal of the normal department, and served for a long time as the head of the High School.

The school system is under control of the Public School Board, which was formerly, in accordance with the charter of 1876, composed of one member elected from each of the twenty-eight wards. But in 1887 the charter provision was changed in such a manner as to unite two adjoining wards into one school election district, and each of these districts now elects one member of the board. In addition to these fourteen members, the new arrangement provides for the election of seven members at large on a general city ticket.

What for many years remained a school library has been metamorphosed into the new municipal Free Public Library, which entered upon its career a year or two ago. The new arrangement provides for a library board, appointed by the mayor; and Mr. Walbridge has shown admirable tact and judgment in bringing together for the first board a group of citizens at once representative, influential, and thoroughly in sympathy with the idea of a great free library as the center of the town's popular educational life. The growth of the institution has been very rapid, and its actual use is increasing at a remarkable rate. The library board has this year selected and purchased a site for a separate public library building. Funds are not available for the immediate erection of such a building, but there will be no changing of the broad and far-sighted policy that the library board has adopted. In Mr. Frederick M. Crunden, the public librarian, St. Louis possesses one of the most highly accomplished library administrators in the world. No municipal art gallery is to be found in St. Louis, but the Art Museum, of which Mr. Halsey S. Ives is the director, and which with its connected art school forms a branch of the Washington University, is an institution which has entered deeply into the best life of the community. The manual-training school of Washington University, under Professor Woodward's management, has long been famous for its admirable methods, and it holds an essential place in the city's educational system; while the university itself, though not under municipal control, in fact crowns the school facilities of the town with its literary, scientific, and professional courses.

Albert Shaw.

JUDITH.

FLOWER of youth, in the ancient frame—
Maid of the mettlesome lip and eye,
Lightly wearing the fateful name,
And the rakish beaver of days gone by!
Pink of fashion! Yet this is she
That once, through midnight forest and fen,
Guided the horsemen of «old Santee,»
And rode to the death with Marion's men.

Rare the picture that decks the wall;
Rare and dainty, in life, below,
My century-later belle of the ball,
Mocking the beauty of long ago.
If now the summons should come to ride,
Through such a darkness as brooded then,
How would it please you to serve as guide?
And where, ah, where were Marion's men?

False the logic that breeds the fear.
Buds will blossom, and pipes will play.
So it was in that early year;
So shall it be till the world is gray.
But the petted darling, if need shall be,
As swift to the saddle will vault again;
And those that follow will ride as free
As ever of old rode Marion's men.

William Young.