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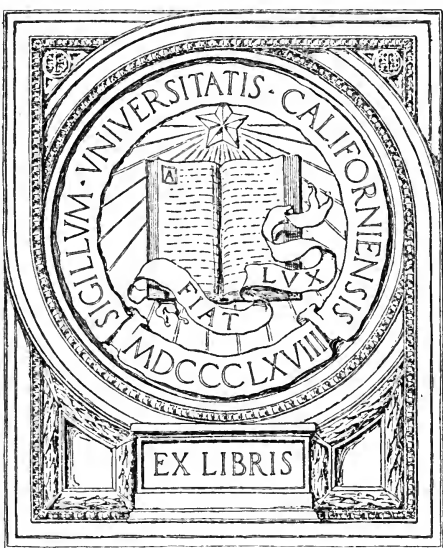
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REPORT

ON

Housing and Living Conditions in the Neglected Sections of Richmond, Virginia

PREPARED BY

GUSTAVUS A. WEBER, Secretary

Society for the Betterment of Housing and Living Conditions in
Richmond

Richmond, Va.

Whittet & Shepperson, Printers

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**Society for the Betterment of Housing and
Living Conditions in Richmond**

(Incorporated June 4, 1913)

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Preface

The Society for the Betterment of Housing and Living Conditions in Richmond was organized on June 7, 1912. On November 15th, the Executive Committee of the Society appointed Mr. Gustavus A. Weber, of Washington, D. C., Executive Secretary of the Society. On December 21st, the Executive Secretary made a report to the Executive Committee giving the results of a preliminary study made by him of housing and living conditions in Richmond. On January 6, 1913, the Executive Committee appointed committees on Investigation, Publicity, Law-Enforcement, Legislation, and Organization. The work of the Committee on Organization resulted in a plan of permanent organization, which was presented at a meeting of the Board of Directors, and also immediately after at a meeting of the Society held on February 20th. At the latter meeting this plan of organization, with slight modifications, was adopted by the Society, and officers were elected and committees appointed under the new constitution. The Society was incorporated on June 4, 1913.

The present report consists of returns made by volunteers who conducted a house to house investigation in selected sections of the city, the results of personal observations made by the Secretary, an analysis of the laws, regulations and ordinances affecting the housing and living conditions in Richmond, and a discussion of the measures that, in the opinion of the Committees on Investigation and Law Enforcement, are needed to bring about a better condition.

The data presented as a result of the house to house investigation were collected in typical districts in different sections of the city. The work was begun February 13, 1913, and closed on April 30, 1913, a period of eleven weeks.

In selecting the districts to be studied it was deemed advisable to confine the inquiry to sections of the city where the usual family income does not exceed \$15 per week. Such districts were selected in many different parts of the city, and the selection was made in such a way as to cover as far as possible, in their proper

proportion, a sufficient number of typical white and negro families, in order that the result of the inquiry would be fairly representative of the housing and living conditions of all the people of these classes living in Richmond.

In all 682 dwellings were inspected. A card, a fac-simile of which is shown in the Appendix, was filled out for each family, but not all the facts indicated on the card were ascertained in every case.

The personal observations made by the Secretary consisted of a preliminary survey covering a little over a month, in which he visited every street and alley in the neglected sections, and on several occasions accompanied the chief sanitary inspector of the Richmond Department of Health on house-to-house inspections. The Secretary also visited many of the homes studied when starting the various investigators on their work.

Through the courtesy of the Richmond Board of Health, the Building Inspector, the Superintendent of Street Cleaning, the City Engineer, and the Director of the U. S. Census Bureau, the Secretary was enabled to obtain some of the statistical and other data presented in this report.

In the consideration of the measures for the improvement of the housing and living conditions, the Committee on Law Enforcement directed the Secretary to make a careful examination of the City Code, and of copies of regulations on file in the various city departments, an analysis of which appears in the report. While this committee presents a long list of remedial measures, it is not intended that all these measures should be striven for at once by the Society. Such an attempt would be inexpedient. The recommendations cover a program of activities for better housing and living conditions to be undertaken gradually in such order and at such times as the Society may deem advisable and opportune.

The Society is indebted to the persons who have assisted in the collection of the data presented in this report, and to Dr. Ennion G. Williams, Miss Eloise Johnston and Miss Elizabeth Cocke who provided the illustrations. Special acknowledgment is due to Mr. Georges M. Weber, who did nearly one-third of the field work, and also rendered material aid in the preparation of the report.

GUSTAVUS A. WEBER,

*Secretary, Society for the Betterment of Housing
and Living Conditions in Richmond*

Richmond, Va., October 31, 1913.

Introduction

While the housing and living conditions of the people in the neglected sections of Richmond are bad enough to demand the serious attention of all the citizens, the problem of their amelioration is not as difficult or as hopeless as the conditions in the crowded sections of larger cities where the tenement house evil had taken root and had begun to bear the fruits of disease, immorality and crime, before public attention was called to the need for remedial legislation.

Richmond, Virginia, is at present in a transitional stage. It is becoming a large city, perhaps the future metropolis of the South. With this growth come civic problems and responsibilities which its citizens have never faced before. To meet these problems and to solve them intelligently we must profit by the experience of other cities—their successes and failures. Fortunately for Richmond, its transition is taking place at a time when public interest in civic and social betterment throughout the world is at its height, and when organizations and experts everywhere are giving their attention to its various problems.

Perhaps the most important problem of the rapidly growing city is the housing of its working people. The Rt. Honorable James Bryce, late British Ambassador to the United States, in a speech made before the National Housing Association in Philadelphia last year, said: "Whatever you are trying to accomplish for the benefit of the poorer classes leads you, by one path and another, to the housing problem. The place in which a man or a woman dwells is vital to the character of the man or woman. To begin with, there is the consideration of health and of all that follows from bad health. Depressed vitality is a most fruitful cause of intemperance. Bad housing is one of the direct causes of that evil. Cleanliness is not only a condition for health, it is a condition for self-respect. It is a condition for the elevation of the whole life of the man or woman, that he or she should be able to feel that they are living with a standard to maintain, with an ideal to live up to, something to respect."

Rev. Luther E. Lovejoy, late of the Detroit (Mich.) Housing Commission, characterized bad housing as consisting of "houses

that are poorly lighted, unventilated, damp, imperfectly drained, exposed to undue fire peril, in bad repair, vermin-infected, disease-infected, with unclean surroundings, with insufficient water supply, without toilet accommodations adequate for comfort, cleanliness or privacy, with defective plumbing, with overcrowded rooms, and with cellar tenements."

All of these conditions, without exception, have been found to exist in Richmond, and will be dealt with at length in the various chapters of the report. Concerning the results of bad housing, Dr. Lovejoy declared that such houses are "dangerous to moral and physical health, social and personal, and promote industrial inefficiency, inebriety, dependence, poverty, disease, death, juvenile delinquency, debased citizenship, vice and crime and degeneracy of race." There is no doubt in the minds of those who participated in the Richmond housing investigation that the living conditions found in some of the neglected localities here give evidence of the truth of this last assertion of Dr. Lovejoy. Nevertheless the housing and living conditions of the people in the neglected sections of Richmond are not so bad as to cause any alarm, or to justify the statement, sometimes made, that they are worse than in almost any other city in the country.

Death Rate.—While Richmond in 1911 had, according to the U. S. Census Bureau, the second highest death rate of the fifty leading cities in the United States, an examination of the death rate from preventable diseases in Richmond, as published in the annual reports of the Health Department of the City of Richmond, shows a remarkable reduction in recent years.

Land Crowding.—The statement has often been made, and frequently published, that there is a greater density of population in Richmond than in almost any other city. It is true, as shown on page 21 that, by dividing the total population by the total area, we find that for Richmond the quotient is greater than in most other cities. This, however, does not necessarily show a condition of over-crowding in Richmond. There is perhaps less vacant land in the form of large unimproved private tracts within the city limits of Richmond than there is in most of the other cities. The only land crowding which exists, however, in Richmond is found in the large fashionable apartment houses and in some of the tenement houses along east Main Street and Seventeenth, Eighteenth, and Nineteenth Streets north of that thoroughfare, where frequently the houses occupy all or nearly all of the lot space.

Owing to the large blocks in some sections of Richmond, the lots are so deep that much land space is taken up in large back yards that might well be shortened. In such cases, if minor

streets were run through the blocks the building frontage would be doubled, and by building shallow two-story houses, two or at most three rooms deep, there would be plenty of air and light and model conditions could be maintained. This would avert the alley house evil and would also remove the necessity for the tenement house, which will otherwise arise in time as the city grows. It is believed that, with a proper use of the ground, a sufficient number of dwellings could be built within convenient distance of the industrial sections to accommodate all of the working people in Richmond. On the whole, if the private land space in Richmond were economically utilized, the actual population within the present city limits of Richmond could be very materially increased without necessarily over-crowding.

Room Crowding.—There is, however, some room-crowding, which is dangerous to health and most conducive to immorality, due mainly to a lack of sufficient living accommodations. Thus of 1,170 bed-rooms for which the number of occupants was reported, there were eight rooms in each of which seven persons crowded together at night; thirteen rooms in each of which six persons slept; forty-one rooms, five persons each; eighty-six rooms, four persons each; 212 rooms, three persons each. In the remaining 810 bed-rooms there was no room crowding.

Housing Accommodations.—According to the U. S. Census returns the provision of dwelling houses has more than kept pace with the increased population. Thus while the population of Richmond increased from 85,050 in 1900, to 127,628 in 1910, or 50 per cent., and the number of families from 17,845 to 26,914, or 51 per cent., the number of dwelling houses has increased from 14,201 in 1900, to 22,205, or 56 per cent. What the relation between these figures is in any particular part of Richmond cannot be ascertained, because the boundaries of the city wards were changed during this decade and the available figures by wards are not comparable. The increase in the number of dwellings has been mainly in the sections of the city where the wealthy people and those of moderate means live, namely, those whose annual family incomes are above \$1,200 per year. In the sections which came within the scope of the investigation, out of a total of 517 buildings only thirty-six were reported as being new, that is, houses apparently built within the past ten years. Of 520 houses of which the condition of repairs was reported, 157 or 30 per cent. needed no repairs whatever, 244 or 47 per cent. needed some repairs, while 119 or 23 per cent. were in such condition of repair as to be practically unfit for habitation.

An examination of the building permits issued by the Building Inspector of the City of Richmond shows that during the five

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years ending December 31, 1912, 2,213 dwelling houses (exclusive of dwelling houses with stores or shops) were constructed in this city. Of these buildings considerably over one-half were constructed at a cost which placed them beyond the reach of the average clerk, salesman, or wage-worker who constitute the bulk of the population of Richmond. This is shown on pages 28 and 29.

Building Material.—Of 546 houses visited and for which returns were made by investigators, 118 were built of brick, 23 were of brick and frame, and 405, or 74 per cent. were of frame. According to the records of the Building Inspector, of the 22,083 dwelling houses in the entire City of Richmond on December 31, 1912, 13,543, or about 60 per cent., were of frame construction.

Water and Toilet Facilities.—Very few of the houses visited had running water within the dwellings, a still smaller number had interior water closets, while bath tubs appeared to be almost unknown in the sections visited. Some houses had wells, and some had no water supply at all. About one-tenth of the houses visited had dry closets. In some cases where water facilities had been installed, the water was found turned off on account of the non-payment of the water rent, an evil which could be avoided if the burden of paying the water rent were placed upon the landlord instead of the tenant. Where water closets were found, the plumbing conditions were often very bad, some defect, either in the nature of an insufficient flow, continual flow, or no flow at all, broken tank chain, leaking tank, stopped up bowl, etc., being found in about one-fourth of the water closets used by the white families, and nearly one-half of those used by the negroes which were visited.

Rents.—The working people visited paid in general less rent than their family incomes justified. Thus while the average wage worker in an American city pays about 15 to 25 per cent. of the family income for rent, the white families in the sections studied in Richmond from whom the information could be obtained, paid, on an average, about 11 per cent., and the negroes 14½ per cent. of their family income for rent. While this is true, it must be stated that the dwellings visited were not, as a rule, worth more than the rents paid for them, many being worth much less, a considerable number being unfit for human habitation. In the few good houses that were found, the rents were high for the accommodations furnished. It is evident that if better housing accommodations were available, the wage-workers, both white and negro, now living in hovels, would be able and willing to pay higher rents.

Modern Dwellings.—The greatest need of Richmond at the present time is the building of modern dwellings to replace the

thousands of ramshackle houses that are unfit to live in. What is needed most of all by both the white and colored population, are dwellings renting from \$6 to \$12 per month, although there appears also to be a great demand for dwellings renting for from \$12 to \$20 per month. If new houses were built in sufficient numbers, and if many of the old houses were repaired and properly managed, the worst of the present housing evils in Richmond would be eliminated.

There are, however, other serious housing evils in Richmond, of which some are now felt and others will become more and more apparent as the city grows larger, and ought to be dealt with before it is too late to prevent serious harm in the future.

Housing Laws.—There are no regulations concerning land crowding. An apartment or tenement house may cover every square foot of the lot on which it is built, leaving no yard or court for light or ventilation, and it may be built to any height. There are no restrictions concerning the size of rooms in such houses, no provision for lighting and ventilating halls, or for adequacy of the water supply and of water closet accommodations.

In dwelling houses of three or less families there are no requirements whatever concerning light or ventilation, and a landlord may provide as many dark rooms as he chooses.

A housing law should be enacted which will limit the lot space that may be built upon, make provision for ample light, ventilation, water and toilet facilities, prevent over-crowding and secure privacy for the tenants. It should apply not only to new houses, but also to old houses when altered, and to such an extent to existing houses as will not involve too great a hardship upon the owners.

Nothing is so essential to the efficiency and the healthy physical development of the people as a plentiful supply of fresh air and sunshine. Over-crowding of rooms at night is not only detrimental physically, but it frequently involves the promiscuous mixing of sexes with its consequent incentive to vice. Privacy, especially in the use of toilet facilities, is merely a requirement of civilization. An absence of it is barbarism. In Richmond, cases have been found where as many as six families use one water closet. Furthermore, we cannot expect people to keep their bodies and their homes clean if they must expend a great part of their energies carrying water from a neighboring yard or a street pump a block away. We must install the city water in every house, and, if possible, in the apartment where it is used. There are places in Richmond where people must carry water a distance of a block or more from a well or spring.

As stated above, perhaps the most difficult housing problem in Richmond is the presence of ramshackle wooden houses that are mere shelters unfit to live in. Richmond has many, one may say, thousands of these houses. Several hundreds of such houses were condemned in the last few years by the Building Inspector because they were structurally unsafe. However, houses may be regarded as structurally safe and yet may be unfit for habitation on account of their decay, bad repair and general unsanitary condition. These also should be condemned and destroyed. Unless they are condemned as unfit for habitation, not only will they continue to be a menace to health, but it will be difficult to replace them by new model houses because their present rental value is too high to permit their purchase, destruction and replacement on a paying basis.

Yards, Alleys and Streets.—The condition of back yards, lots, alleys and streets in the neglected sections, constitutes a very conspicuous feature of the housing problem in Richmond.

An extensive survey of practically all of the streets and alleys of Richmond, made by the Secretary before the inauguration of the "Clean-up Campaign" on May 5th to 18th, disclosed conditions about as bad as could be found anywhere. There was scarcely a street for a distance of a block or two that was not found littered more or less with paper and other rubbish. Some of the streets and alleys in the poorer sections, especially where the negroes live, appeared as though they had never been cleaned. The habit of throwing all kinds of rubbish in the yards, lots, streets and alleys, appears to be universal. The educational campaign for a cleaner city conducted by this Society, with the aid of the newspapers, and in co-operation with the city officials, had a marked effect, and during the clean-up period nearly every back yard and alley, particularly in the neglected sections of the city, was cleaned up. Since then, however, the old habit has been resumed.

There is no doubt that the forces of the Health and Street Cleaning Departments are insufficient to deal with this problem. They should be materially increased. But the evil is not only a matter of inadequate service. Ignorance and carelessness on the part of the householders and business men are largely responsible. When the poorer people are untidy it is usually because they do not have sufficient time and facilities for keeping clean, or because they know no better and need education. The others are untidy because they are often extremely careless and because they fail to look adequately after the condition of their premises. The filthy rubbish-littered cellars and back yards are not confined to the neglected sections of the city. They are com-

mon along the most fashionable streets. The employees of many business houses litter the streets, alleys and vacant spaces in their vicinity with paper and rubbish, and their employers, while they have to step over the litter on their way to their offices, do not think of prohibiting this carelessness. Householders permit their servants to neglect to put the garbage and ashes where they can be collected, and then complain to the Street Cleaning Department that the collectors do not carry them away. In a modern city it is unwise to leave the entire responsibility for the cleanliness of a household in the hands of the servants. Their work should be carefully supervised and the kitchens, cellars, and back yards frequently visited by the householders if the premises are to be kept clean and sanitary. Likewise, a business man should give some thought to the cleanliness of his establishment and its environment. For those who have no regard for civic cleanliness, stringent laws should be enacted and enforced.

Sewerage and Water.—While splendid work has been done in recent years in the extension of the sewerage system and the water mains in Richmond, there are still a considerable number of streets, some of which are lined with habitations, which have no water mains and sewers. According to the records of the City Health Department there were, in September, 1913, about 1,200 houses that cannot be connected with the sewers, and hence the people who live in them must be content with the objectionable dry closets. The work of extending the water mains and sewers ought to go on as rapidly as possible, so that every dwelling house within the present city limits will have water and sewer connection. In this work of extension, the inhabited streets should be given precedence over those where the land is unimproved and where much of it is merely held for speculation.

Street and Alley Improvement.—The same remarks apply to street and alley improvement. Of approximately 200 miles of streets in the City of Richmond, only 70 are paved, and of 190 miles of alleys, only 20 miles are paved, according to the records of the Street Cleaning Department. Of the unpaved streets and alleys, many are in the most densely settled sections of the city, where also there are many miles of sidewalks which have never been paved.

Dumps.—There should be better police supervision over the dumps which are in close proximity to dwelling houses. These often become the depositories for garbage, dead animals, paper and other perishable rubbish. Some of the dumps are so high above the surrounding property that, during heavy rains, the

filth is washed into the neighboring yards and dwellings. The existing dumps which are in close proximity to dwellings should be raked of all combustible rubbish, which should be burned, and the dumping of combustible rubbish and all dumping above the street level within the city limits should be prohibited.

Open Sewer.—Few cities would tolerate an open sewer like Shockoe Creek. This polluted creek flows close to a thickly settled section of the city, some houses being almost on the water's edge. In places, the creek overflows in rainy weather, leaving stagnant pools of filthy water which remain for days and weeks. No arguments should be needed to secure an immediate appropriation for the conversion of this creek into an underground sewer.

Dusty Streets.—Another bad condition, and one which can be easily remedied, is that of dusty streets. The paved streets are sprinkled by the Street Cleaning Department whenever swept, and the street car companies are required to sprinkle between and a short distance beyond the tracks, but the rest, and by far the greater part of the street area, receives no such treatment except when undertaken at private expense. The street sprinkling should be done by the municipal government, and all streets should be either oiled or sprinkled as often as is necessary to lay the dust.

Smoke.—The smoke nuisance should also receive attention. It is claimed that the most recent types of smoke consumers are not only effective in consuming smoke, but that they also effect an economy in the use of fuel. An ordinance should be passed requiring smoke consumers to be installed wherever large quantities of bituminous coal are consumed.

Model Houses.—Aside from the necessity for the education of the people and the enactment and enforcement of remedial legislation, as outlined above, there is a need for the organization of housing improvement enterprises which will not only build, rent and sell new houses on the many acres of available lots within as well as without the present city limits, but which will also purchase and renovate existing houses and manage all on a humane though strictly business basis. The way in which many houses are being neglected by owners who draw rents from them is a disgrace to the city of Richmond. The experience of other cities, notably, Boston, New York, Philadelphia, Washington, Cincinnati, Albany, etc., show that with proper expert management model housing enterprises can provide comfortable homes for their tenants, set a good example of construction and business management for other landlords to follow, and demonstrate to legislators that proper housing regulations are

not oppressive. At the same time they offer an opportunity for the profitable investment of capital.

In conclusion, the problem of the betterment of housing and living conditions in Richmond can be effectively dealt with (1) by arousing public sentiment and appealing to civic pride, so that citizens may do their part in keeping the streets, alleys, back yards and other exposed places clean and free from rubbish; (2) by enacting and enforcing model housing laws and better regulations for the maintenance of clean streets and alleys and the removal and disposal of rubbish; (3) by making liberal appropriations for the completion of the water and sewerage systems, the extension of the street paving, and for the enforcement of housing, street cleaning and other sanitary laws and regulations; (4) by providing proper and adequate housing accommodations for the working people.

PART I.

Report of the Survey

CHAPTER I.

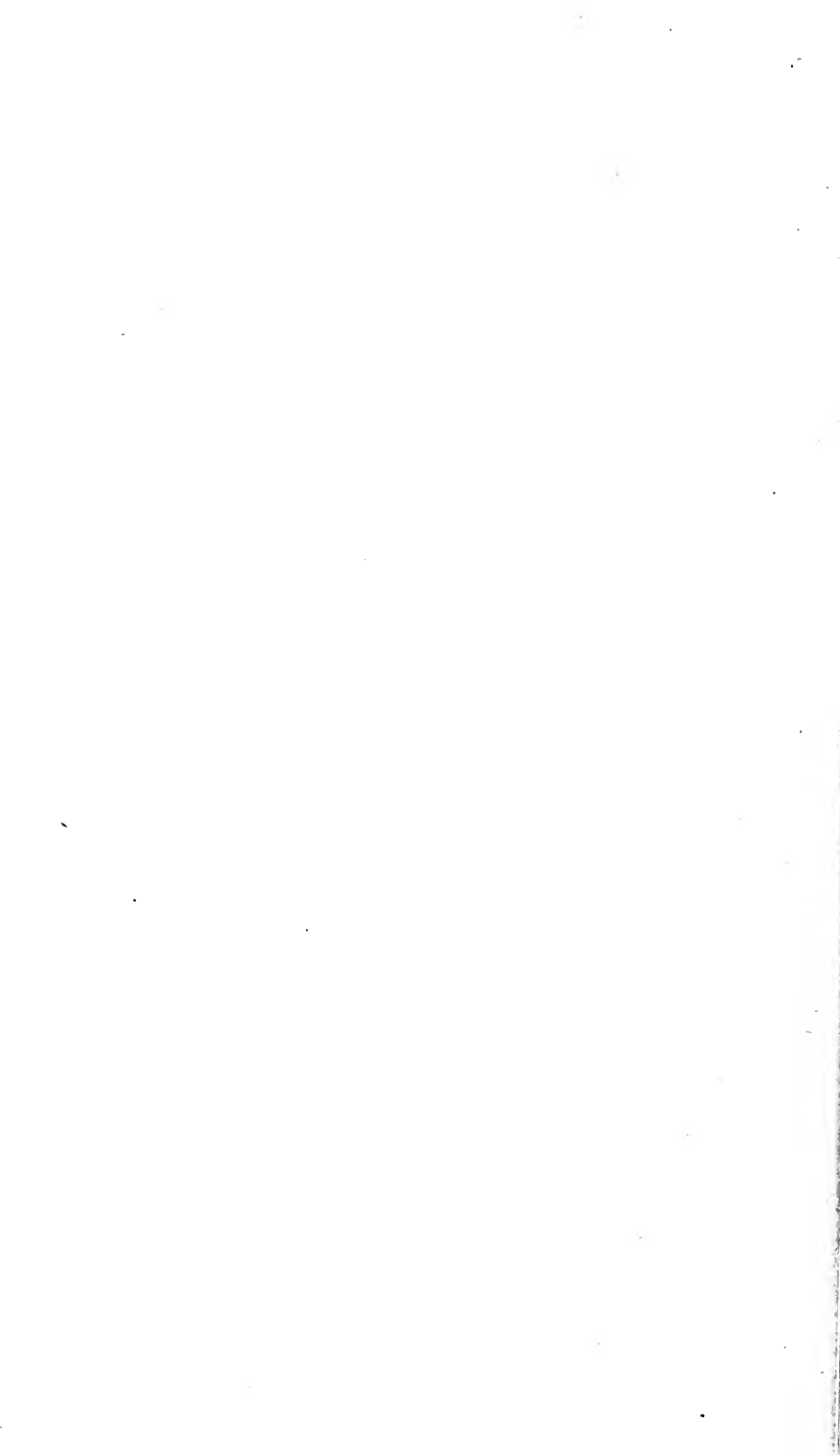
LAND CROWDING.

There is very little land crowding in Richmond at the present time. Aside from the fashionable apartment houses, built for from two to forty families, and the tenement houses in the section between Seventeenth and Nineteenth, Main and Venable Streets and along East Main Street, the "tenement evil" has scarcely been felt in Richmond. In the latter section, the tenement houses are mostly two and three stories high, and house from two to five families each, some being occupied by large households consisting not only of members of the immediate families, but in many cases also of boarders and lodgers. The occupants are largely foreigners and negroes. The houses were not originally built for tenement houses, but were in most cases adapted for such use without the provision of any such light, ventilation, plumbing, privacy, etc., as modern tenement house laws require. Many of these houses are dark, poorly ventilated, and extremely filthy and dilapidated. They are among the very lowest types of habitations covered by the investigation, and emphasize the need for tenement house legislation in Richmond. But even here, the number of persons per acre is small when compared with the congested sections of most large cities.

Aside from the above-mentioned sections of Richmond, there are very few apartment or tenement houses, and comparatively few have been constructed in the past five years. Thus of a total of 2,213 dwelling houses constructed during the years 1908 to 1912 inclusive, according to the records of the City Building Inspector, only 56, or $2\frac{1}{2}$ per cent., were built for three or more families. Of the 546 buildings included in the Society's investigation, 449, or 82 per cent., were one-family houses; 85 were two-family houses, and 8 were houses occupied by three or more families.



These two illustrations show vacant land space in the northwest section, within a mile of the heart of the city and very near a growing manufacturing district, a section where it is claimed that the population is congested. There is room crowding in many of these houses, but not on account of a lack of land space.



There is, as a rule, more or less yard space with each dwelling, nearly all houses having rear yards and many having front and side yards also. The following statement shows the extent to which the houses visited were provided with yards:

Houses Having	Houses Occupied by		Total
	White Families	Negro Families	
Front yards only	5	6	11
Side yards only	1	3	4
Rear yards only	116	131	247
Front and side yards .....	...	6	6
Front and rear yards	75	119	194
Side and rear yards	7	13	20
Front, side and rear yards.....	18	20	38
	<hr/>	<hr/>	<hr/>
	222	298	520

It is a remarkable fact, that, taken as a whole, the average number of persons to a dwelling house in the sections visited was smaller than the average number per dwelling in the city as a whole. Thus in the houses studied there were on an average 5.4 white persons and 4.9 negroes per house. The average number of persons per house in the entire city in 1910, according to the U. S. Census returns, was 5.7.

Even this average of 5.7 persons per dwelling house, for the city as a whole, is less than the average of the ten cities in the United States most nearly the size of Richmond. This is shown in the following statement compiled from the U. S. Census returns for 1910:

	Population	Occupied Dwellings	Families	Persons to a Dwelling	Persons to a Family
Syracuse, N. Y.....	137,249	23,200	31,551	5.9	4.4
New Haven, Conn....	133,605	17,466	29,271	7.6	4.6
Birmingham, Ala.	132,685	26,989	31,050	4.9	4.3
Memphis, Tenn.	131,105	26,710	31,154	4.9	4.2
Scranton, Pa.	129,867	22,143	26,312	5.9	4.9
Richmond, Va.	127,629	22,205	26,914	5.7	4.7
Paterson, N. J.....	125,600	15,812	27,978	7.9	4.5
Omaha, Neb.	124,096	23,657	26,359	5.2	4.7
Fall River, Mass.....	119,295	10,962	24,378	10.9	4.9
Dayton, Ohio	116,577	26,692	28,370	4.4	4.1
Grand Rapids, Mich...	112,571	23,432	26,925	4.8	4.2

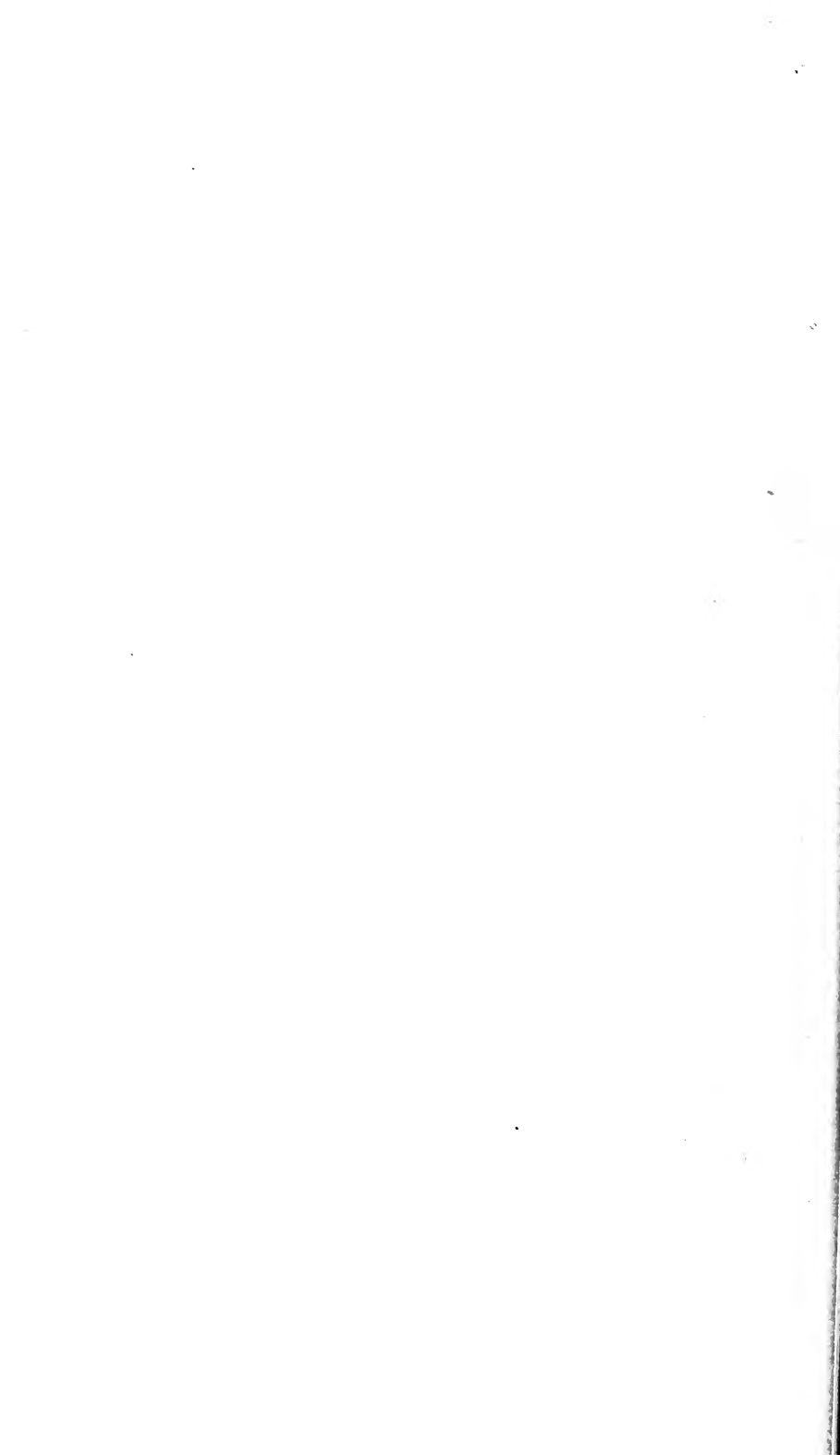
There is a tendency at the present time in Richmond, however, to build houses of two families each, as is shown by the statistics of dwelling houses constructed during the past five years compiled from the records of the Inspector of Buildings. Of the 2,213 dwelling houses built in the past five years (exclusive of houses built for stores and dwellings), 1,637, or about 74 per cent., were built for one apartment only; while 520, or 23½ per cent., were built for two apartments each. Of the remainder, 32 were built for three apartments; 11 for four apartments; 1 for five apartments; 4 for six apartments; 1 for seven apartments; 3 for eight apartments; 1 for nine apartments; 2 for ten apartments; and 1 for forty apartments. While a considerable proportion of the two apartment dwellings were for the wage-earning class, the larger apartment houses were mainly built for high-priced dwellings. The fact, however, that there were some three, four and five apartment houses of the cheaper grade built in recent years, shows the need of some tenement regulations if Richmond desires to avoid the tenement house evil, which has become such a serious problem in other larger cities.

There is much unoccupied land space within the city limits in the form of vacant lots, in fact, whole squares, particularly in the southwest and northeast sections, which is admirably adapted for working people's homes and which ought to be so utilized. Furthermore, the city of Richmond has a small total area when compared with other cities of similar size, and there ought to be much land outside the present limits, but still easily accessible, cheap enough to allow for the provision of decent housing accommodations.

The following statement, compiled from the U. S. Census returns for 1910, shows the total population and land area and the population per acre of each of the fifty leading cities in the United States:



These two illustrations show vacant land space in the northwest section, within a mile of the heart of the city and very near a growing manufacturing district, a section where it is claimed that the population is congested. There is room crowding in many of these houses, but not on account of a lack of land space.



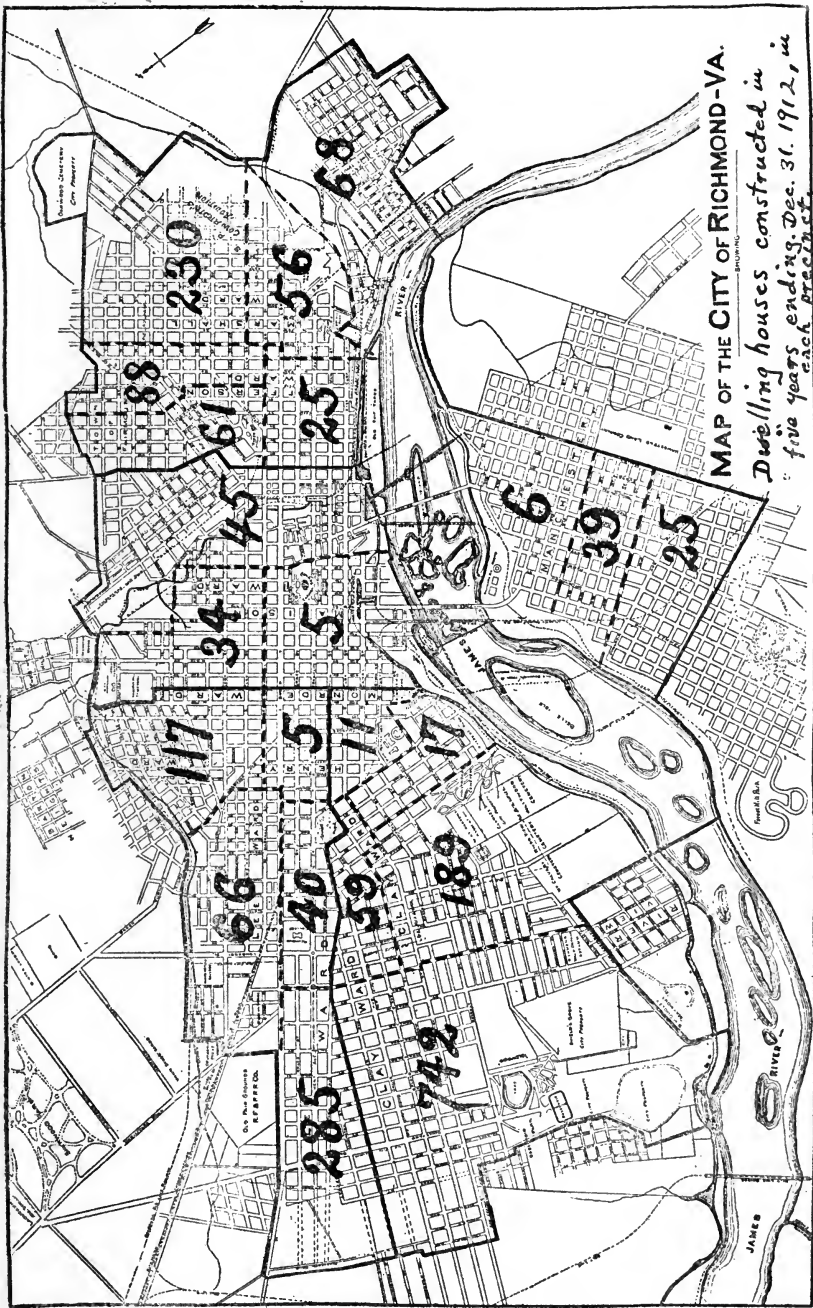
Population and Area of Fifty Largest Cities in the United States

[From U. S. Census Report on Financial Statistics of Cities, 1910.]

FIFTY LEADING CITIES.		Population in 1910.	Land area (acres) in 1910.	Population per acre of land area in 1910.	FIFTY LEADING CITIES.		Population in 1910.	Land area (acres) in 1910.	Population per acre of land area in 1910.
1.	New York, N. Y.	4,766,883	183,555	26	26.	St. Paul, Minn.	214,744	33,388	6
2.	Chicago, Illinois	2,185,283	117,793	19	27.	Denver, Colorado	213,381	37,028	7
3.	Philadelphia, Pa.	1,549,008	83,340	19	28.	Portland, Oregon	207,214	30,975	7
4.	St. Louis, Mo.	687,029	39,277	17	29.	Columbus, Ohio	181,511	13,018	14
5.	Boston, Mass.	670,585	24,743	27	30.	Toledo, Ohio	168,497	16,026	11
6.	Cleveland, Ohio	560,663	29,209	19	31.	Atlanta, Georgia	154,839	16,428	9
7.	Baltimore, Md.	558,485	19,290	29	32.	Oakland, Cal.	150,174	29,248	5
8.	Pittsburgh, Pa.	533,905	26,511	20	33.	Worcester, Mass.	145,986	23,683	6
9.	Detroit, Michigan	465,766	26,103	18	34.	Syracuse, N. Y.	137,249	11,083	12
10.	Buffalo, N. Y.	423,715	24,791	17	35.	New Haven, Conn.	133,605	11,460	12
11.	San Francisco, Cal.	416,912	29,760	14	36.	Birmingham, Ala.	132,685	30,881	4
12.	Milwaukee, Wis.	373,857	14,586	26	37.	Memphis, Tenn.	131,105	11,760	11
13.	Cincinnati, Ohio	363,591	31,893	11	38.	Scranton, Pa.	129,867	12,362	11
14.	Newark, N. J.	347,469	14,826	23	39.	Richmond, Va.	127,628	6,388	20
15.	New Orleans, La.	339,075			40.	Faterson, N. J.	125,600	5,357	23
16.	Washington, D. C.	331,069	38,408	9	41.	Omaha, Nebraska	124,096	15,400	8
17.	Los Angeles, Cal.	319,198	63,480	5	42.	Fall River, Mass.	119,295	21,723	5
18.	Minneapolis, Minn.	301,408	32,069	9	43.	Dayton, Ohio	116,577	10,061	12
19.	Jersey City, N. J.	267,779	8,320	32	44.	Grand Rapids, Mich.	112,571	10,731	10
20.	Kansas City, Missouri	248,381	37,443	7	45.	Nashville, Tenn.	110,364	10,982	10
21.	Seattle, Washington	237,194	36,162	7	46.	Lowell, Mass.	106,294	8,308	13
22.	Indianapolis, Ind.	233,650	21,130	11	47.	Cambridge, Mass.	104,839	4,014	26
23.	Providence, R. I.	224,326	11,352	20	48.	Spokane, Washington	104,402	23,539	4
24.	Louisville, Ky.	223,928	13,230	17	49.	Bridgeport, Conn.	102,054	7,906	13
25.	Rochester, N. Y.	218,149	12,876	17	50.	Albany, N. Y.	100,253	6,914	15

It will be observed that only eight of these fifty cities had a smaller area in proportion to their population than Richmond. This, however, does not necessarily mean that there is land crowding in Richmond, but only that most other cities have extended their limits so as to include a larger amount of unimproved land.

If the city limits could be extended so as to give to a larger territory suitable for working people's homes the advantages of municipal government, such as streets, sewers, water mains, police and fire protection, street railway service, etc., and if at the same time the price of land in such newly annexed territory were kept sufficiently low to make the building of model houses for working people financially practicable, such annexation would be of immense benefit from the housing point of view. The extension of municipalized territory under those conditions would increase the possibilities on the part of the working people of obtaining such ideal home conditions as detached one-family houses, with sufficient rooms for privacy and comfort, and with adequate land space for play and for the cultivation of flowers and vegetables. There is no logical reason why hundreds of acres of splendid vacant land, both within and without the present city limits within easy access to the industrial sections of the city, should lie idle from year to year when thousands of our working people are compelled to live in two and three-room hovels. If this vacant land were available for cheap homes for working people, and if stringent building and sanitary laws were enacted and enforced, it would soon become unprofitable for landlords to own houses which are unfit for habitation.



MAP OF THE CITY OF RICHMOND-VA.

Dwelling houses constructed in five years ending Dec. 31, 1912, in each precinct.

285
742

117

66

40

59

17

88

230

61

25

56

68

34

45

5

5

6

39

25

189

17

JAMES RIVER

FRANKLIN

RIVER

Old New River Ferry

New River Ferry





CHAPTER II.

ROOM CROWDING.

While there is but little land crowding in Richmond, there is considerable room crowding, due in part to a lack of sufficient housing accommodations for the working people, and, to some extent, to the absence of a proper appreciation of the requirements of decent living on the part of the occupants.

The crowding together, especially in bed rooms, is one of the very worst evils of bad housing. Where three or more people sleep in one bed room, especially when the windows are closed, as is often the case among the poorer people, the air soon becomes foul and unfit to breathe, and the physical condition of the occupants is seriously impaired. The effect is particularly bad upon children who, through lack of sufficient pure air, not only develop weak lungs, but also are otherwise weakened and stunted physically and mentally as well.

Where children and adults of both sexes are crowded together in one bed-room, especially when some of the occupants are not members of the immediate family, as is frequently the case, the over-crowding becomes a serious moral problem, for such a condition cannot exist without depriving the occupants, especially the children, of all sense of modesty. Perhaps the greater part of the sexual immorality which exists among the very poor is due to the lack of privacy in the homes.

The 546 houses covered by the investigation were occupied by 645 families including about 2,800 people. The average negro family consisted of four persons, and the average white family of five persons, the average for all families studied being 4.3 persons per family. This figure is lower than the average size per family in Richmond as a whole in 1910, 4.7 persons, as shown by the U. S. Census returns.

The families studied occupied on an average three and one-half rooms per family, which, after allowing for the kitchen, leaves about one room for every two persons for living and sleeping purposes. Every dwelling, no matter how poor the occupants, should have at least one bed-room for every two occupants, besides a kitchen and a living-room.

A study of the occupancy of bed-rooms shows that of 1,170 bed-rooms covered by the investigation, 8 were occupied at night by seven persons each, 13 by six persons, 41 by five per-

sons, 86 by four persons, and 212 by three persons each, this over-crowding of bed-rooms being more common among the whites than among the negroes studied.

The following statement compiled from the returns of this investigation show the condition of room occupancy for the white and negro dwellings studied.

Size of Apartment or Dwelling	White Families	Negro Families	All Families
One room	9	18	27
Two rooms	29	94	123
Three rooms	62	134	196
Four rooms	53	82	135
Five rooms..	51	14	65
Six rooms	31	16	47
Seven rooms	9	6	15
Eight rooms	1	5	6
Nine rooms	1	1	2
	246	370	616
Average number of rooms per family	4.0	3.2	3.5

In the next table, the returns concerning 619 families are grouped according to size of family:

Size of Family (Including Boarders)	White Families	Negro Families	Both Races
One person	11	23	34
Two persons	21	86	107
Three persons	37	65	102
Four persons	41	70	111
Five persons	56	50	106
Six persons	29	41	70
Seven persons	18	20	38
Eight persons	17	8	25
Nine persons	10	4	14
Ten persons	3	3	6
Eleven persons	0	1	1
Twelve persons	2	1	3
Thirteen persons	1	1	2
	246	373	619
Average number of persons per family	4.9	3.8	4.3

The next table shows the returns concerning 1,170 bed-rooms grouped according to the number of occupants per bed-room at night:

Occupants per Bed-Room at Night	Bed-Rooms		Total
	White	Negro	
One person	100	183	283
Two persons	200	327	527
Three persons	106	106	212
Four persons	50	36	86
Five persons	22	19	41
Six persons	9	4	13
Seven persons	3	5	8
	<hr/>	<hr/>	<hr/>
	490	680	1,170
Average number of occupants per bed-room	2.5	2.1	2.3

CHAPTER III.

HOUSING ACCOMMODATIONS.

One of the greatest needs of the City of Richmond as disclosed by this investigation, is a sufficient number of modern houses for its working people, that is, for the large group of citizens who cannot afford to pay a rental of over \$20 per month. According to the U. S. Census returns the population of Richmond increased from 80,050 in 1900 to 127,628 in 1910, or 50 per cent. During the same period the number of families increased from 17,845 to 26,914, or 51 per cent., and the number of dwelling houses increased from 14,201 to 22,205, or 56 per cent.

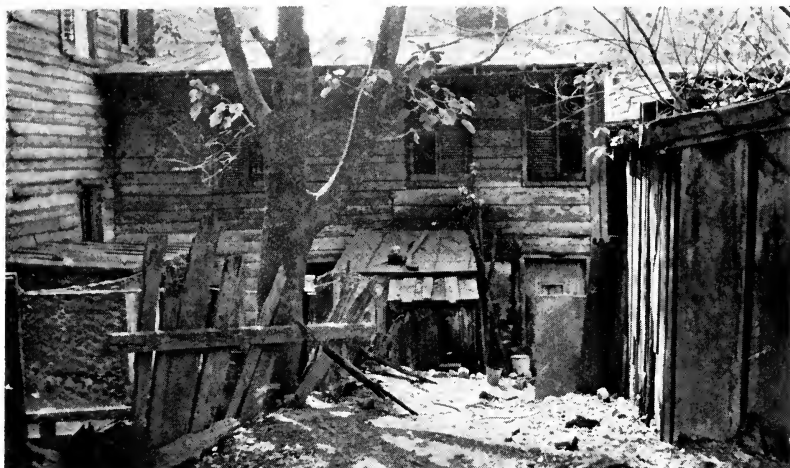
This is shown in the following statement obtained from the U. S. Census Bureau:

Population, Number of Families, and Number of Occupied Dwellings in Richmond, Va., in 1910, by Wards.

Wards	Population	Number of Occupied Dwellings	Persons per Dwelling	Number of Families	Persons per Family
Clay	22,550	3,992	5.6	4,539	5.0
Henry	14,999	2,389	6.3	3,145	4.8
Jefferson	16,196	2,910	5.6	3,475	4.7
Lee	16,297	2,882	5.7	3,484	4.7
Madison	14,630	2,415	6.1	3,189	4.6
Marshall	18,021	3,469	5.2	3,959	4.7
Monroe	14,565	2,258	6.5	3,110	4.7
Washington ..	10,370	1,890	5.5	2,113	4.9
Total	127,628	22,205	5.7	26,914	4.7

In 1900 the figures returned for the wards as they existed at that time were as follows:

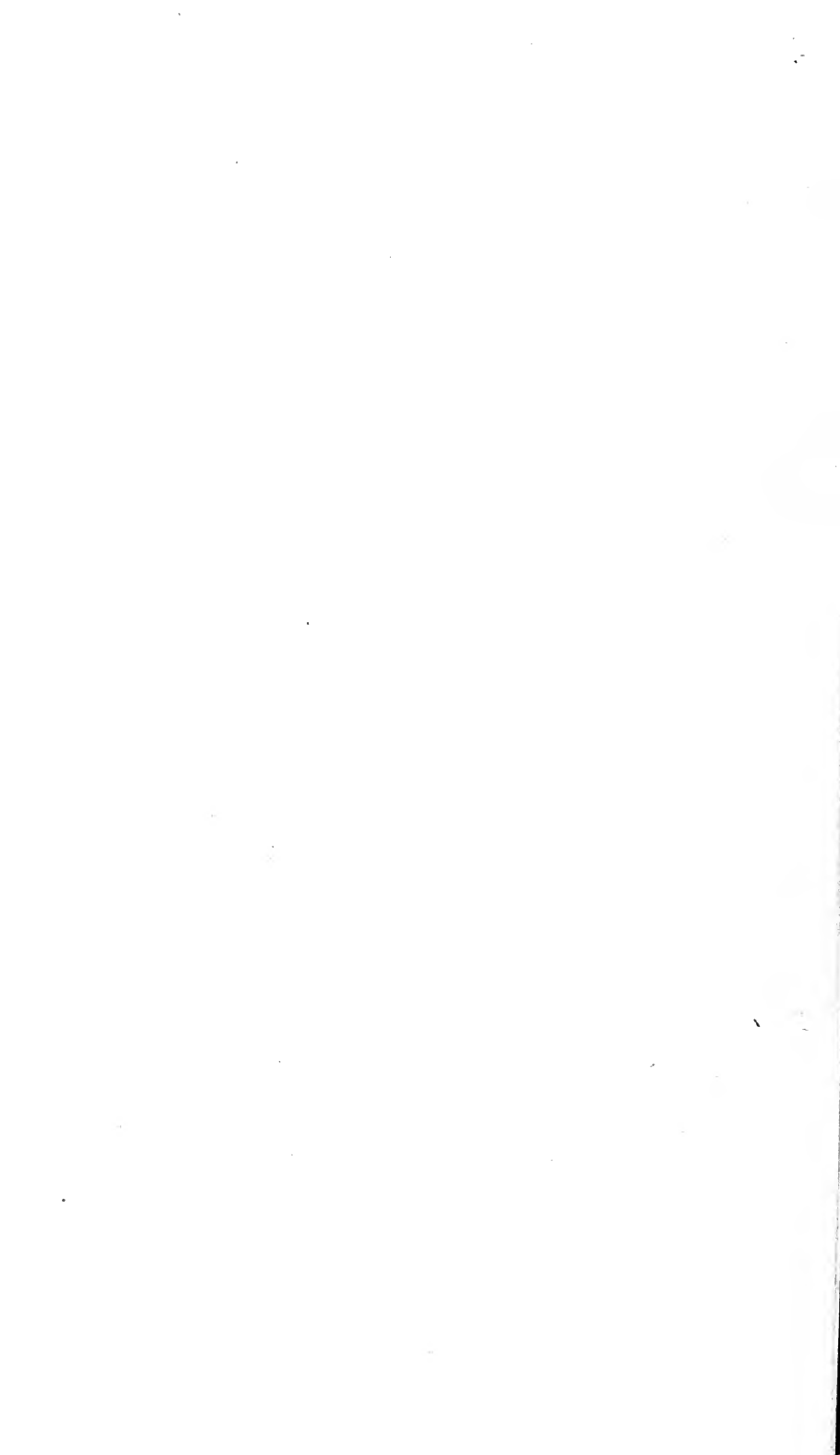
Clay	22,133	3,851	5.8	4,518	4.9
Jackson	18,713	3,279	5.7	4,219	4.4
Jefferson	8,817	1,529	5.8	2,053	4.3
Madison	8,005	1,174	6.8	1,584	5.1
Marshall	13,584	2,405	5.6	2,805	4.8
Monroe	13,798	1,963	6.5	2,666	5.2
Total	85,050	14,201	6.0	17,845	4.8



A dilapidated house occupied by white people in the Church Hill section. This and many other houses in the vicinity are unfit for habitation.



A cheap-grade working man's house in the white section of Fulton. Many of these houses could be made comfortable and attractive if painted and repaired.



Lack of Good Accommodations.—An examination of the 2,213 building permits for dwelling houses (exclusive of houses with stores or shops) issued by the Building Inspector of the City of Richmond during the five years ending December 31, 1912, shows that 32 houses were constructed at an estimated cost of less than \$500 each; 202 at an estimated cost of \$500 to \$999; 272 at \$1,000 to \$1,499; 225 at \$1,500 to \$1,999; and 1,482, or about two-thirds, at an estimated cost of \$2,000 and over, exclusive of the price of land.

In every American city, of which Richmond is no exception, the great mass of the people consists of the skilled and unskilled wage workers, clerks and salesmen, whose average family income does not enable them to pay more than \$20 per month for rent. A very considerable number cannot pay more than half that amount. In order to yield a fair revenue on a real estate investment, allowing for taxes, repairs, depreciation of building, cost of rent collection, vacancies, etc., a dwelling should bring a gross annual rental of about 10 per cent. of the total investment. On this basis, a one-family dwelling, in order to be accessible to the average wage-worker or clerk must not cost over \$2,500, including the price of land, or say, \$2,000 for the building alone. Of 1,637 one-family dwellings constructed in five years in Richmond, only 596, or a little over one-third, were constructed at a cost of less than \$2,000, that is, were within the reach of the average clerk or wage-worker. The remaining two-thirds of the new one-family houses were either for people earning higher salaries or for those who had to deprive themselves of other necessities of decent living or keep boarders or lodgers, in order to pay their rents.

Of the 520 two-family dwelling houses constructed in five years, 257 cost less than \$4,000 to construct, or, in other words, less than one-half were of a cheap enough grade to be accessible to the average clerk or working man. Of the 56 remaining buildings constructed for three or more apartments each, only 15, or about one-fourth were built at a low enough cost to be so accessible. The above figures, it must be remembered, include buildings used for dwelling purposes only, and do not include those used for both business and dwelling purposes.

This statement, compiled from the official records of the City Building Department, shows beyond dispute that, in the wonderful building operations which have been going on during the past five years, the great mass of the working people have been lamentably overlooked.

The following table and map show the number of new dwellings for which building permits were issued during the past five calendar years, grouped according to the number of apartments, value and location of each:

Dwelling Houses Built in Richmond, Va., During Five Years, Ending Dec. 31, 1912

Character and Cost of Building	Clay Ward					Lee Ward					Madison Ward					Jefferson Ward					Total							
	Precinct					Precinct					Precinct					Precinct												
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5		6						
Houses of One Apartment	7	40	1	1	1	1	9	1	1	6	2	2	1	1	3	2	2	3	1	1	6	2	1	16	2	3	3	29
\$ 500 to \$ 999	28	11	1	1	1	1	17	3	1	12	3	3	1	1	1	3	3	1	1	1	3	2	20	16	2	3	15	171
1,000 " 1,499	41	9	4	4	1	11	3	5	2	12	17	6	2	3	2	5	6	1	1	1	3	1	13	18	3	1	17	225
1,500 " 1,999	9	8	3	6	2	3	6	2	1	7	2	2	1	1	1	4	4	1	1	1	10	1	14	26	22	10	8	171
2,000 " 2,499	5	2	1	1	1	2	2	3	3	12	1	1	1	2	2	1	1	1	1	1	7	1	6	9	43	7	1	174
2,500 " 2,999	1	1	1	1	1	2	2	2	1	3	3	1	1	2	1	2	2	2	2	2	5	1	7	3	21	5	1	108
3,000 " 3,499	1	3	2	1	1	1	1	1	4	5	1	3	1	1	1	2	2	2	3	2	2	2	7	3	7	2	2	88
3,500 " 3,999	4	2	2	2	1	4	17	1	1	17	1	1	1	2	2	2	2	2	2	3	3	2	7	2	2	3	2	88
4,000 " 4,499	4	2	2	2	1	1	17	1	1	2	2	2	1	2	2	2	2	2	1	2	2	2	3	2	2	3	2	80
4,500 " 4,999	8	2	2	2	1	1	24	1	1	2	1	1	1	2	2	1	1	1	1	1	1	1	2	1	1	2	2	116
5,000 " 5,499	4	1	1	1	1	3	61	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	82
5,500 " 5,999	9	3	1	1	1	2	20	23	1	1	6	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	128
6,000 " 6,499	3	3	3	2	1	3	26	11	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	58
6,500 " 6,999	7	1	1	1	1	7	7	11	2	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	48
7,000 " 7,499	2	1	1	1	1	1	2	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
7,500 " 7,999	3	1	1	1	1	3	3	4	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
8,000 and over	19	1	1	1	1	64	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
Total.....	37	124	11	555	6	34	247	3	64	20	2	32	6	35	25	15	50	77	168	44	47	1,637						
Houses of Two Apartments	3	1	3	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2
\$ 500 to \$ 999	14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	31
1,000 " 1,499	16	1	1	1	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	47
1,500 " 1,999	12	1	1	1	1	8	3	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	52
2,000 " 2,499	3	1	1	1	1	7	2	3	3	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	56
2,500 " 2,999	2	1	1	1	1	1	5	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	31
3,000 " 3,499	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
3,500 " 3,999	3	1	1	1	1	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	14
4,000 " 4,499	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4,500 " 4,999	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
5,000 " 5,499	3	1	1	1	1	3	16	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	51
5,500 " 5,999	3	1	1	1	1	1	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	26
6,000 " 6,499	6	1	1	1	1	9	24	3	1	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	39
6,500 " 6,999	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12
7,000 " 7,499	5	1	1	1	1	8	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8
7,500 " 7,999	46	3	3	3	3	19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8
8,000 and over	5	1	1	1	1	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8
Total.....	20	61	4	173	1	32	247	1	46	11	3	13	0	4	4	7	24	31	62	11	20	520						

This lack of new building constructions for the working people is confirmed by the investigation made by this Society, which shows that in the selected districts where working people live, very few new houses were found. Thus, of 517 dwelling houses occupied by from one to five families each, 36, or 7 per cent., were reported as being new—that is, apparently built within the past ten years.

Dilapidation.—Most of the houses visited were more or less out of repair. Only 157 out of a total of 520, or 30 per cent., were reported to be in good condition, while 244, or 47 per cent., needed some repairs, and 119, or 23 per cent., were in a bad condition of repair, many being absolutely unfit for human habitation. In 122 cases the roofs leaked, causing damp walls and ceilings in the living and sleeping rooms. The proportion of dilapidated and unfit houses was very much greater among the negroes than among the whites, notwithstanding the fact that the former paid more rent per room than the latter.

The following statement gives this information in detail for the white and negro habitations:

Age of Building	Houses Occupied by		All Houses
	White Families	Negro Families	
New buildings	11	25	36
Old buildings	203	278	481
Total	214	303	517
Repair of Building			
Good	88	69	157
Fair	103	141	244
Bad	30	89	119
Total	221	299	520
Condition of Roof			
Good	172	187	359
Leaking	36	86	122
Total reporting	208	273	481

Character of Dwellings.—The prevailing type of dwellings occupied by the families visited is the old two-story frame house, built either singly or in rows, each house being built for one family, although frequently used by two or more. The houses visited usually contained two, three and four rooms each. Very few of the buildings have water and toilet facilities within the houses or apartments, as is shown in the next chapter. The negro families mostly occupied two and three-room dwellings, and the white



Negro dwellings in the neglected sections of Richmond. These are unfit for habitation.



families three and four-room dwellings. Otherwise there is not very much difference between the character of the habitations of the whites and negroes in the sections studied, except that the former are, as a rule, in a better condition of repair.

Of 546 houses for which returns were made, 405 were of frame, 118 were of brick, and 23 were of both wood and brick construction. With regard to height, 108 were one-story, 425 were two-story, and 13 were three-story houses.

Nearly all the houses in the sections studied were situated on the street front, there being comparatively few rear or alley houses in Richmond.

Of the 546 houses visited, 449, or 82 per cent. were occupied by one family each; 85 by two families; and the remaining 12 by three or more families.

The following statement gives in detail the results of the investigation with regard to the character of 546 houses visited:

Brick Houses Occupied by	White Families	Negro Families	Total
One family each	54	31	85
Two families	10	14	24
Three families	3	3	6
Four families	0	2	2
Five families	0	1	1
Total	67	51	118

Brick and Frame Houses Occupied by	White Families	Negro Families	Total
One family each	6	14	20
Two families	1	1	2
Three families	0	1	1
Total	7	16	23

Frame Houses Occupied by	White Families	Negro Families	Total
One family each	151	193	344
Two families	10	49	59
Three families	1	1	2
Total	162	243	405

Houses of	White Families	Negro Families	Total
One story	33	75	108
Two stories	196	229	425
Three stories	7	6	13
Total	236	310	520

CHAPTER IV.

WATER SUPPLY AND TOILET FACILITIES.

Very few of the houses covered by the investigation had water and plumbing arrangements within the buildings; a still smaller number had interior water closets, and only 13 had bathtubs. Some of the houses had no water supply at all.

Water Supply.—Of a total of 539 houses for which returns were made concerning the water supply, 358, or 66 per cent., had city water in the yards; 119, or 22 per cent., had water within the houses, usually in the kitchens; 2 houses had wells; 45 houses had neither wells nor city water; and 15 houses had plumbing facilities in the yards, but the water had been turned off at the time of the visit because the tenants had failed to pay the water tax. Forty-two of the houses having no water supply and no plumbing facilities were occupied by negroes, who, in some cases had to carry their water a distance of as much as a city block.

Toilet Facilities.—Of 515 houses for which returns were made concerning toilet facilities, 468 had water closets and 47 had dry closets. Fifty-one of the water closets were within buildings, all the others, as well as the dry closets, being in the yards.

Wherever water closets or dry closets were installed in yards, one closet usually served all the families in the house or the group of houses having one yard in common. Thus cases were found where one toilet was used by as many as four, five, and six families.

In the cases where the water had been turned off on account of the non-payment of the water tax, some of the families continued to use the water closets, pouring water into the bowls occasionally; in some cases the occupants resumed the use of dry closets which had been discarded; in some instances they used their neighbors' toilets; and in one case the tenants emptied the refuse in the shrubbery on a vacant lot.

While in most cases the water closets were provided with flush tanks, about one-third of the toilets were flushed directly from the supply pipes. In a number of cases the flow was insufficient to clean the bowls, and the tenants either had to pour in water or allow the same to stop up. In one-fifth of the water closets reported upon, the plumbing under the seat was enclosed



Dilapidated houses along the Shockoe valley. The upper picture shows the Confederate Museum in the background.



in wooden casings, the plumbing being open in all other cases. All water closets installed in recent years, however, were of the modern, open, flush-tank type, as the plumbing regulations require.

In general, the condition of the plumbing in the water closets was bad, there being some defect, such as an insufficient flow or no flow at all, broken chains, leaking tanks, stopped up or leaking pipes, broken bowls, continuous flow, etc., in nearly one-half of the water closets used by the negroes, and in about one-fourth of those used by the white families visited. With regard to the plumbing, as with the bad condition of repair of the houses, the tenants generally stated that the agents and landlords paid no attention to their complaints. Ninety-six closets were reported dirty and 53 filthy.

Of the 47 dry closets in use, in 10 the boxes were found to be leaking; in 18 there were either no screens or the screens were ineffective, and 12 were reported in a dirty or filthy condition.

The following statement gives a summary of the returns, for 537 houses, concerning the water supply:

Hydrants in Yards, each used by	White Families	Negro Families	Total
One family	142	128	270
Two families	20	54	74
Three families	0	9	9
Four families	0	1	1
Five families	0	3	3
Six families	0	1	1
	<hr/>	<hr/>	<hr/>
Total	162	196	358

Hydrants in Buildings, each used by	White Families	Negro Families	Total
One family	53	61	114
Two families	1	3	4
Three families	1	0	1
	<hr/>	<hr/>	<hr/>
Total	55	64	119

Hydrants in Yards, but Water turned off, intended for the use of	White Families	Negro Families	Total
One family	8	5	13
Two families	1	0	1
Three families	1	0	1
	<hr/>	<hr/>	<hr/>
Total	10	5	15

No Water Supply in Houses Occupied by	White Families	Negro Families	Total
One family	3	37	40
Two families	0	5	5
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Total	3	42	45

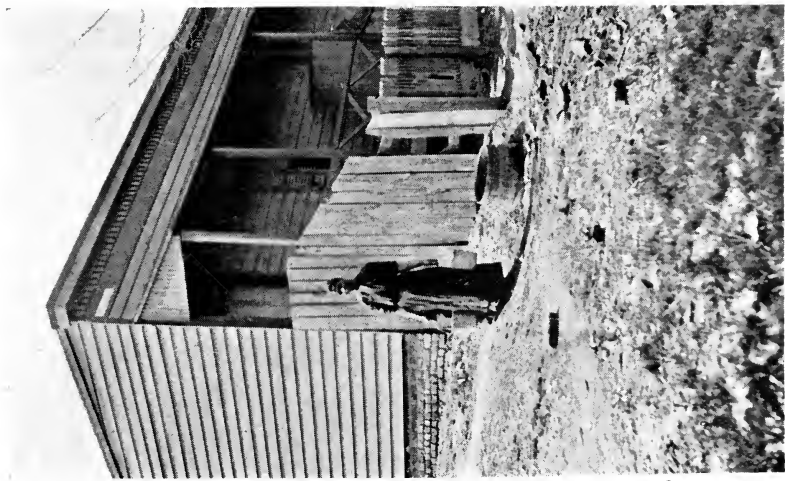
The next table gives the returns, for 514 houses, concerning toilet facilities:

Water Closets in Yards, each used by	White Families	Negro Families	Total
One family	179	146	325
Two families	24	56	80
Three families	3	4	7
Four families	1	0	1
Five families	1	1	2
Six families	0	1	1
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Total	208	208	416

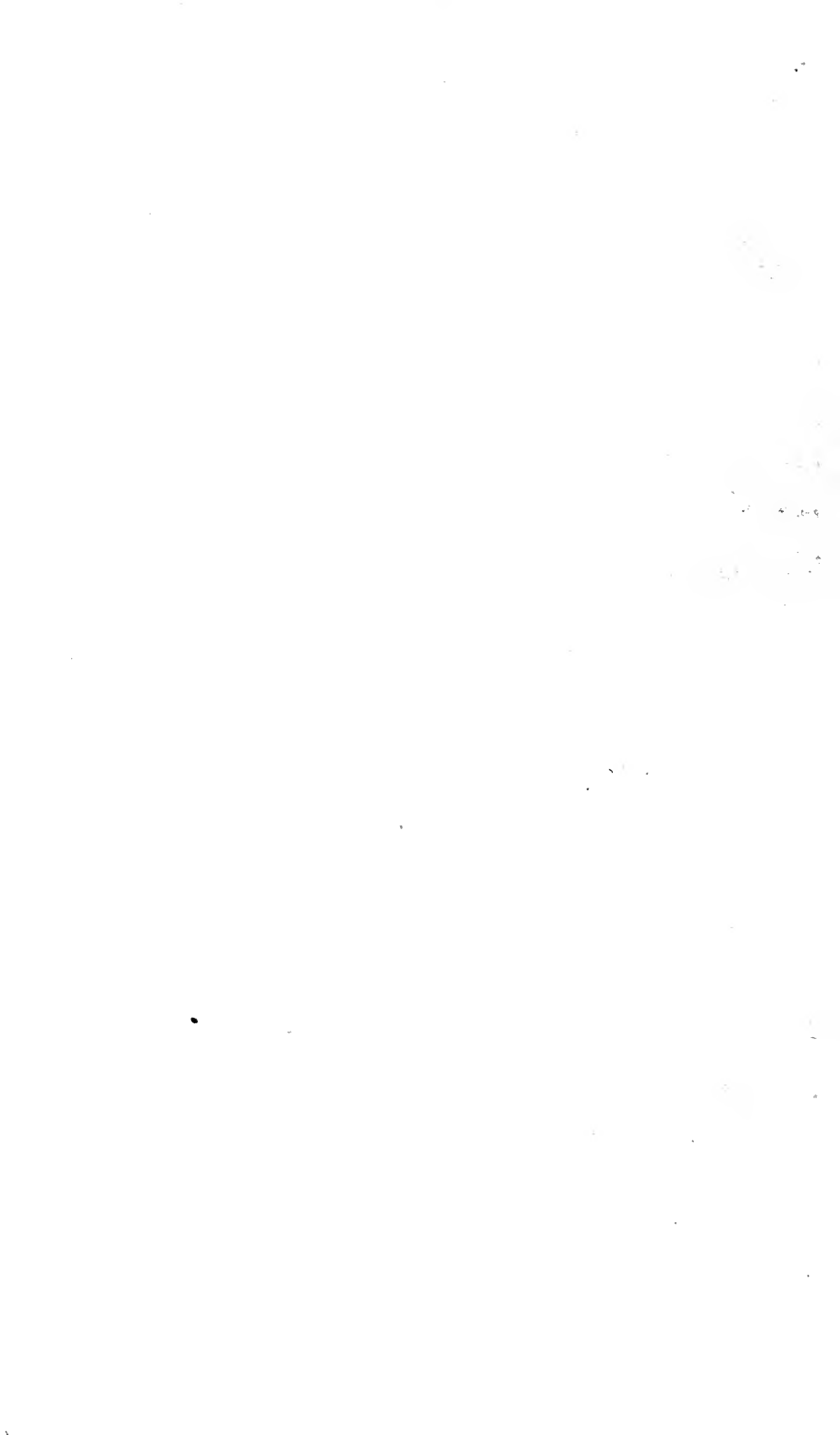
Water Closets in Build- ings, used by	White Families	Negro Families	Total
One family	14	35	49
Two families	0	2	2
	<hr/>	<hr/>	<hr/>
Total	14	37	51

Dry Closets in Yards, each used by	White Families	Negro Families	Total
One family	5	32	37
Two families	1	7	8
Three families	0	2	2
	<hr/>	<hr/>	<hr/>
Total	6	41	47

	White Families	Negro Families	Total
Water closets provided with flush tanks.....	117	141	258
Water closets not pro- vided with flush tanks..	75	41	116
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Total	192	182	374



The picture on the left shows a spring, that on the right, a well. These constitute, in each case, the only water supply for about twenty families.



	White Families	Negro Families	Total
Water closet plumbing open	145	142	287
Water closet plumbing enclosed	34	43	77
Total	179	185	366

	White Families	Negro Families	Total
Water closet plumbing defective	42	78	120
Water closet plumbing not defective	130	83	213
Total	173	161	333

	White Families	Negro Families	Total
Water closet drains stop- ped up	14	17	31
Water closet drains not stopped up	147	37	184
Total	161	54	215

CHAPTER V.

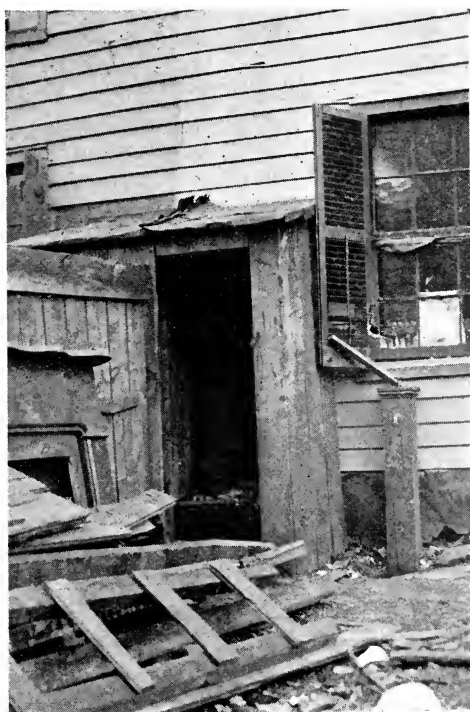
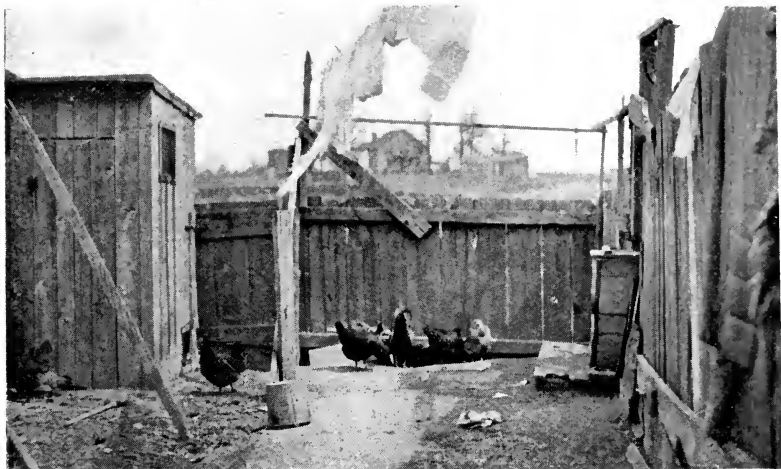
THE OCCUPANTS.

Family Income.—In planning this investigation, the aim has been to cover localities where the family income of the people does not exceed \$15 per week. It was found, however, that families having much larger incomes sometimes live in these localities and under the same general conditions as the poorer people. These are either shop keepers who carry on business with the people among whom they live; skilled workers who are extravagant in their personal expenditures, usually for drink; persons who prefer to live in such environments when they can afford to live in other localities; or persons who are forced to live there because there are no accommodations available elsewhere.

Statistics concerning the family income were obtained from 109 white and 229 negro families, the latter being more willing to give information of this character. The average yearly income per white family responding was \$731.86, and the average yearly income of a negro family was \$516.23. By family income is meant, for the purposes of this study, the income of the head of the family, plus moneys received from other members of the family and boarders and lodgers, and contributed to the household fund. The average yearly income of the head of the family alone was \$589.58 in the case of the white wage earners, and \$369.52 in the case of the negroes.

In only 36 per cent. of the families was the family income derived from the head of the family alone, the proportion being higher in the case of the white families (44 per cent.) than in the case of the negroes (31 per cent.). In other words, the wives and boarders contributed in a much larger degree toward the family income in the case of the negroes than in the case of the white families. The proportion of negro families in which the wife contributed to the family income was particularly large. On the other hand, the proportion of families which derived a part of the family income from the children, appears to be greater among the white than among the negro families.

Boarders.—Among boarders were included in this study, all persons who were not members of the immediate family, and even children were regarded as boarders when married and living with their husbands or wives with their parents. Of 615 families making reply to the inquiry concerning the composition



Toilet facilities in the neglected sections. The upper picture shows a dry closet close to a well. The lower picture shows a filthy water closet.

of the family, 205, or one-third, kept boarders. In 100 cases the boarders were related to the head of the family, in 95 cases the boarders were not so related, and in 10 cases the families had both related and unrelated boarders.

The number of boarders in a family ranged all the way from one to eight, although in about one-half of the cases the families had but one boarder each. Of the white families, 67 per cent., and of the negro families, 60 per cent. had no boarders.

Rents Paid.—Considering the amount of rent paid for a given land space in the sections studied, the ground on which the working people's homes stand does not yield nearly as great a revenue to the owners as it would if the same ground were economically utilized. Furthermore, the working people of both races in the sections studied, could afford to pay more rent if proper accommodations were furnished them. This is especially true of the white people.

The amount of rent paid was ascertained in the case of 484 families, of whom 186 were white and 298 were negroes. The white families reporting paid an average of \$6.75 per month per dwelling, or \$1.80 per room, while the negro families paid an average of \$6.27 per month per dwelling, or \$2.08 per room. It will thus be observed that the negroes pay \$0.28 per room, or 14 per cent. more than the white families, or a difference of \$0.84 for a three-room dwelling, the negro accommodations being, as a rule, inferior, from the standpoint of plumbing, age, and repair, to those of the white families.

The prevailing types of three and four-room dwellings occupied by white families rented for \$5.00, \$6.00 and \$7.00 each per month. The prevailing types of negro dwellings of two and three rooms each likewise rented for from \$5.00 to \$7.00 per month. That the families covered by this investigation could afford to pay higher rents if better accommodations were furnished them, is shown by the figures of family income. According to returns made for families from whom both the rents paid and the family income were ascertained, the average white family paid 11.2 per cent. and the average negro family 14.5 per cent. of the family income for rent. Working people in the chief industrial centers of the country ordinarily pay from 15 to 25 per cent. of their family income for rent. On the basis of 20 per cent., therefore, the average white family studied could pay a monthly rental of \$5.00 more, and the average negro family \$2.00 more, provided suitable accommodations were furnished them in place of their present neglected dwellings. It should be emphasized, however, that the present dwellings of the families studied are not, as a rule, worth the rents paid for them, many being unfit for human habitation.

In the comparatively few instances where new, comfortable houses were found in the districts studied, the rents were high and the occupants paid a much larger proportion of their family incomes for rent.

The relation between the average rents paid and the average income of the heads of families (exclusive of all other income) was 13.9 per cent. in the case of white, and 20.2 in the case of negro occupants.

Home Ownership.—Of 226 white families making returns concerning home ownership, 23, or about 10 per cent. owned their homes, the rest paying rent. Of 337 negro families, 30, or about 9 per cent. owned their homes. In nearly all cases, both among the white and negro families, the houses owned by the occupants were in good repair, the plumbing was in order, and the premises were clean.

Following is a summary statement of the returns concerning the economic condition of the families studied:

Monthly Rentals Paid by White and Negro Families (186 White and 298 Negro Families).

Rooms per Dwelling	Monthly Rents Exclusive of Water Tax			
	White Families		Negro Families	
	Average per Dwelling	Average per Room	Average per Dwelling	Average per Room
One room.....	\$ 2.29	\$2.29	\$2.14	\$2.14
Two rooms.....	4.70	2.35	4.55	2.28
Three rooms.....	5.76	1.92	6.17	2.06
Four rooms.....	7.14	1.78	8.15	2.04
Five rooms.....	8.05	1.61	8.83	1.77
Six rooms.....	10.27	1.71	....	....
Average rent per family	6.75	1.80	6.27	2.08

Annual Income and Rents Paid by White and Negro Families (109 White and 229 Negro Families).

	White Families	Negro Families
Average yearly income per family.....	\$731.86	\$516.23
Average yearly income per head of family..	589.58	369.52
Average yearly rent, exclusive of water tax,	81.98	74.81
Per cent. of family income paid for rent...	11.2	14.5
Per cent. of income of head of family paid for rent	13.9	20.2



White and negro children living in some of the districts covered by the report.



Source of Family Income
(231 White and 362 Negro Families).

	White Families	Negro Families
Head of family only.....	101	112
Head and wife.....	8	66
Head and children.....	53	44
Head, wife and children.....	8	15
Children only.....	12	7
Wife and children.....	1	0
Boarders only.....	0	1
Head and boarders.....	28	83
Wife and boarders.....	1	0
Head, wife and boarders.....	0	17
Head, children and boarders.....	10	12
Head, wife, children and boarders.....	1	2
Children and boarders.....	8	3
Total	231	362

Boarders and Lodgers in Private Families
(245 White and 370 Negro Families).

	White	Negro	Both Races
Families having neither boarders nor lodgers	178	232	410
Families having related boarders or lodgers	32	68	100
Families having unrelated boarders or lodgers	33	62	95
Families having both related and unrelated boarders or lodgers.....	2	8	10
Total	245	370	615

Occupations.—About one-third of the 251 white male adult wage earners whose occupations were reported, were either factory hands or day laborers, the remainder being engaged in 73 different occupations, a considerable number being in skilled occupations such as barbers, boiler makers, carpenters, engineers, machinists, molders, painters, plumbers, steam fitters, tailors, etc. There were also some grocers, liquor dealers, fruit and vegetable vendors, salesmen and clerks among the number.

Of 376 male negro adult wage earners, about two-thirds were day laborers, factory hands, drivers and teamsters and porters, the remainder being engaged in 67 different skilled and unskilled and professional trades. The skilled workers were mostly barbers, blacksmiths, carpenters, chauffeurs, concrete workers, lathers, machinists, and plasterers. There were also some butlers, cooks, janitors, and waiters, and a number of clergymen among the occupants.

Two-thirds of the 83 white female adult wage earners were factory hands, most of the remaining one-third being dress-makers, seamstresses and laundresses. Of the negro female adult workers about one-half were laundresses, one-third were cooks, maids, and other domestic servants, and the remainder were mostly seamstresses and factory hands.

The white and negro male children under 18 years of age were mostly factory hands and laborers, while of the female wage-earning children the whites were nearly all factory hands, and the negroes were mostly domestic servants. It is interesting to note in this connection that of the 88 white children and the 99 negro children between the ages of 14 and 17 inclusive, of the families visited, 56 per cent. of the white children, and 35 per cent. of the negro children were engaged in gainful occupations.

Illiteracy.—A large degree of illiteracy was found both among the white and negro families visited. Of a total of 789 white persons 9 years of age and over, 71, or 9.0 per cent. were illiterate, and of a total of 1,100 negroes, 228, or 20.7 were unable either to read or write. The proportion of illiterates was slightly higher among the females than among the males in each of the two races. It was higher among adults than among children. Of the illiterate whites, 56, or 79 per cent. were native Americans, and 15, or 21 per cent., were foreign born. Forty-six of the 56 native white illiterates were born in Virginia.

According to the U. S. Census returns for 1910, the proportion of illiterates in the entire City of Richmond was 1.3 per cent. in the case of the whites, and 19.6 per cent. among the negroes.

Following is a summary statement of the facts ascertained concerning illiteracy among the persons visited during the investigation:

Persons able to read and write	White	Negro	Both Races
Males, 18 years of age and over.....	241	306	547
Females, 18 years of age and over....	252	359	611
Males, 9 to 17 years of age.....	84	79	163
Females, 9 to 17 years of age.....	109	93	202
Total	686	837	1,523

Persons able to read, but not to write	White	Negro	Both Races
Males, 18 years of age and over.....	12	10	22
Females, 18 years of age and over....	19	23	42
Males, 9 to 17 years of age.....	1	2	3
Females, 9 to 17 years of age.....	0	0	0
Total	32	35	67

Persons unable to read or write	White	Negro	Both Races
Males, 18 years of age and over.....	27	87	114
Females, 18 years of age and over....	35	123	158
Males, 9 to 17 years of age.....	6	15	21
Females, 9 to 17 years of age.....	3	3	6
Total	71	228	299

Per cent. of Illiterates	White	Negro	Both Races
Males, 18 years of age and over.....	10	22	17
Females, 18 years of age and over....	11	24	19
Males, 9 to 17 years of age.....	7	16	11
Females, 9 to 17 years of age.....	3	3	3
Total	9	21	16

CHAPTER VI.

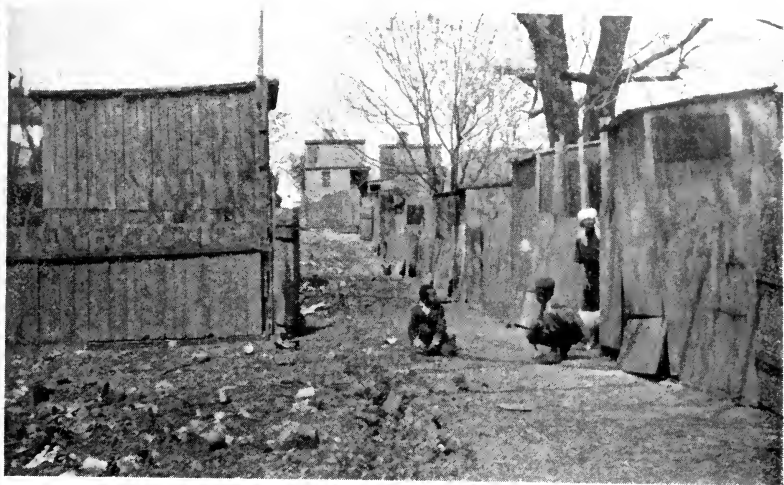
STREETS, ALLEYS, AND YARDS.

A survey of practically all the streets and alleys and of several thousand back yards made by the secretary of the society before the inauguration of the "clean-up" campaign, disclosed conditions about as bad as could be found in any city. There was scarcely a street for a distance of a block or two that was not littered with more or less paper and other rubbish, except, of course, for a few hours after the streets had been cleaned. Some of the streets and alleys in the poorer sections, particularly where the negroes live, appeared as though they had never been cleaned.

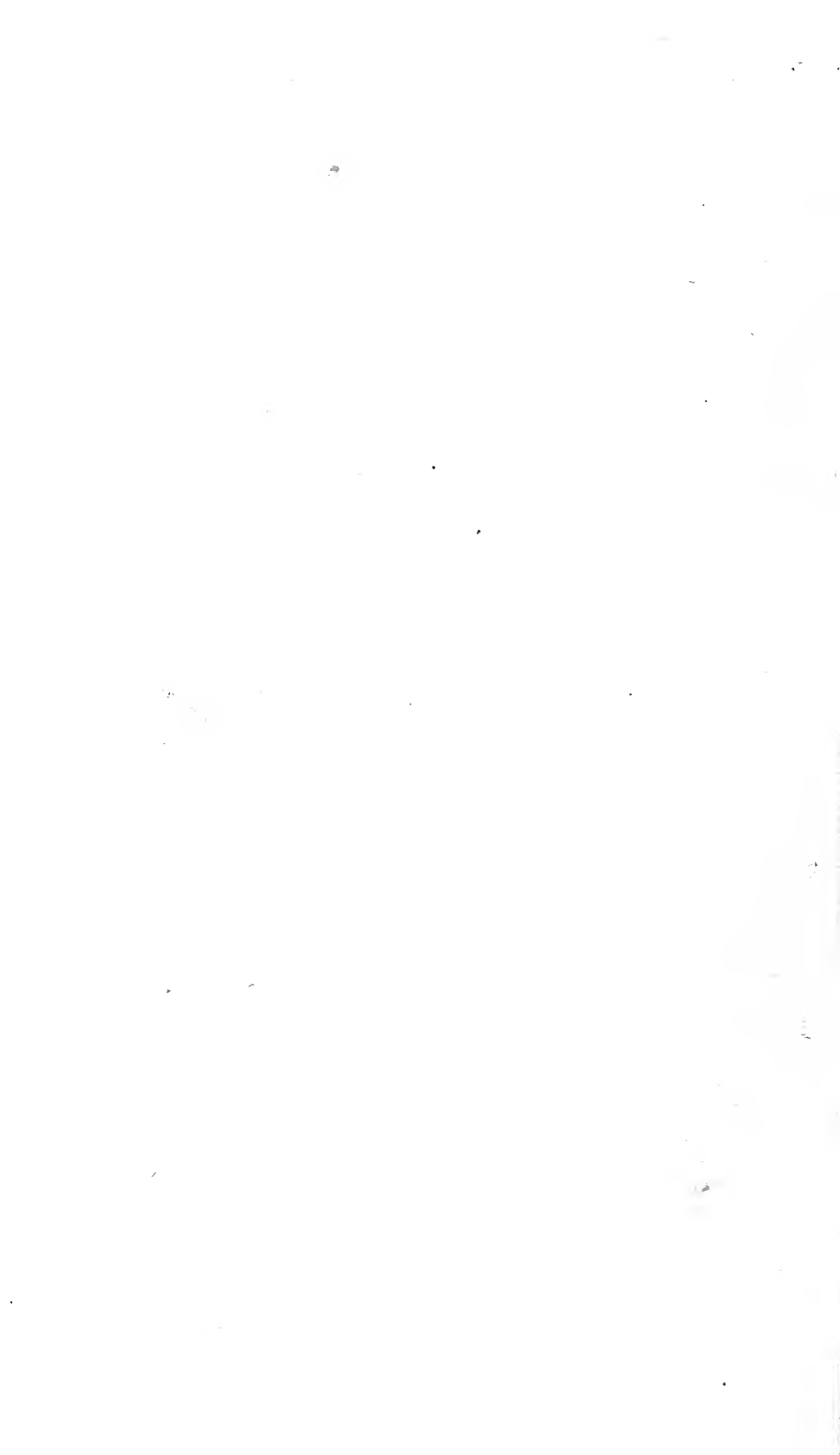
Condition of Streets.—The habit of throwing rubbish on the streets seems to be universal in Richmond. People may be seen at any time deliberately throwing whole newspapers, wrapping paper, torn letters, paper boxes and other discarded articles on the streets and sidewalks; circulars are scattered broadcast; employees of many business houses when unpacking goods cases habitually throw the paper and packing materials in the streets and alleys or place them in unsuitable receptacles where a moderate wind can blow them about. Children, too, following the example of their elders, tear up paper and scatter it about on the streets.

Not infrequently people in cleaning their yards and sidewalks sweep paper and other rubbish on the streets soon after they have been cleaned by the city employees, when they could just as well have done it a little earlier. Besides, paper and larger pieces of rubbish could at such times be picked up and placed in proper receptacles without much additional labor.

Very often—one might almost say usually—in front of stores and other business houses and under vendors' wagons where fruit and vegetables are sold and handled, the trade refuse is thrown on the streets and in the alleys where it sometimes remains, becomes putrid, and furnishes food for swarms of flies. Cases have been observed where this process of littering the streets with garbage was resumed immediately after the streets were cleaned and while the carts of the Street Cleaning Department were still in sight. This happens most conspicuously in the down-town district, where the wholesale commission houses



Two alleys in the neglected sections, the upper one in the northwest, the lower, in the Shockoe valley.



are, and in the vicinity of the markets, but also in other parts of the city where fruits and vegetables are sold.

Another source of uncleanness is the overloading of carts and wagons with earth, ashes, garbage and other refuse, and the use of unsuitable vehicles, resulting in the dropping of their contents upon the streets. Such carts and wagons are frequently seen on the principal thoroughfares, leaving trails of dirt and refuse behind them.

The presence of many unpaved streets in close proximity to those that are paved, especially in sections where there is much traffic, results in the carrying of mud and dust from the one to the other, and no amount of work by the Street Cleaning Department can keep the latter clean.

An examination of the annual reports of the Superintendent of the Street Cleaning Department shows that year after year he has called attention to these difficulties, but apparently without effect. Under such circumstances the most efficient street cleaning service that could be created could not keep the streets and alleys clean.

Refuse.—Similar difficulties confront the Street Cleaning Department with reference to the collection of garbage, ashes and other refuse. Visits made to thousands of back yards in all parts of the city show that but a small proportion of the people in Richmond use suitable receptacles for their household and trade refuse, and even where they have them, they are often careless in their use. Every conceivable kind of receptacle has been found for the deposit of garbage, including paper bags, cartons, baskets, sauce pans, beer cases, broken barrels, packing boxes, and even piano cases. In the Fulton section, in the old Jackson Ward and some other localities, garbage and other perishable household and trade waste have been found in considerable quantities on vacant lots, the people in some cases claiming that they never see a garbage collector, and that this is the only way in which they can dispose of their refuse.

Ashes were most frequently found deposited in boxes, barrels and cases, some of the latter being too heavy for half a dozen men to lift. The barrels were usually defective, so that when handled it was impossible for the collectors to avoid dropping some of their contents into the yards and alleys. Sometimes, mountains of ashes mixed here and there with garbage, were found in the back yards, even in the fashionable sections of the city.

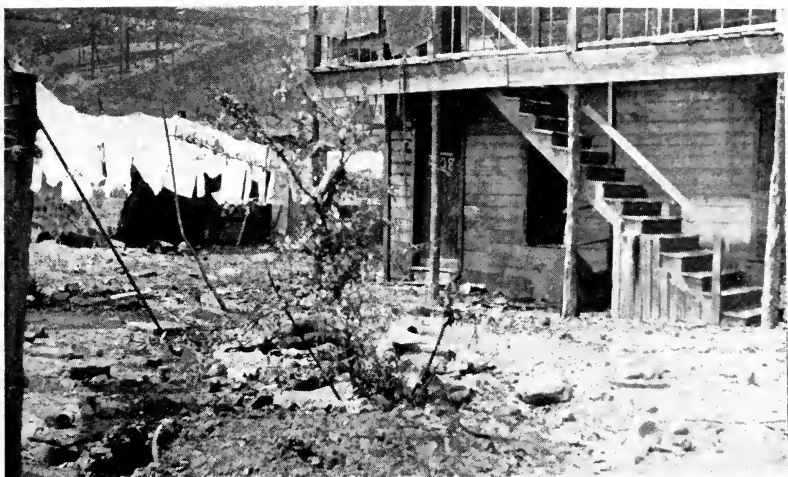
The practice of mixing combustile with non-combustible refuse appears also to be common in Richmond, especially the mixing of ashes, paper, rags, old shoes, etc., but not infrequently

garbage also. The result is that all this perishable rubbish is carried to the dumps, which are mostly in close proximity to the dwellings of the working people, where it becomes putrid, breeds flies, rats and other vermin, and thus becomes a menace to health and a most offensive nuisance to the neighborhoods. Furthermore, these dumps are picked over by swarms of poor people, who fill their bags with the pickings and thus carry more or less of this putrid matter back into their homes. Sometimes the refuse on the dumps takes fire, and then for days and weeks the people in their vicinity must submit to the smoke and noxious fumes, and, at times, even their houses are jeopardized by these fires.

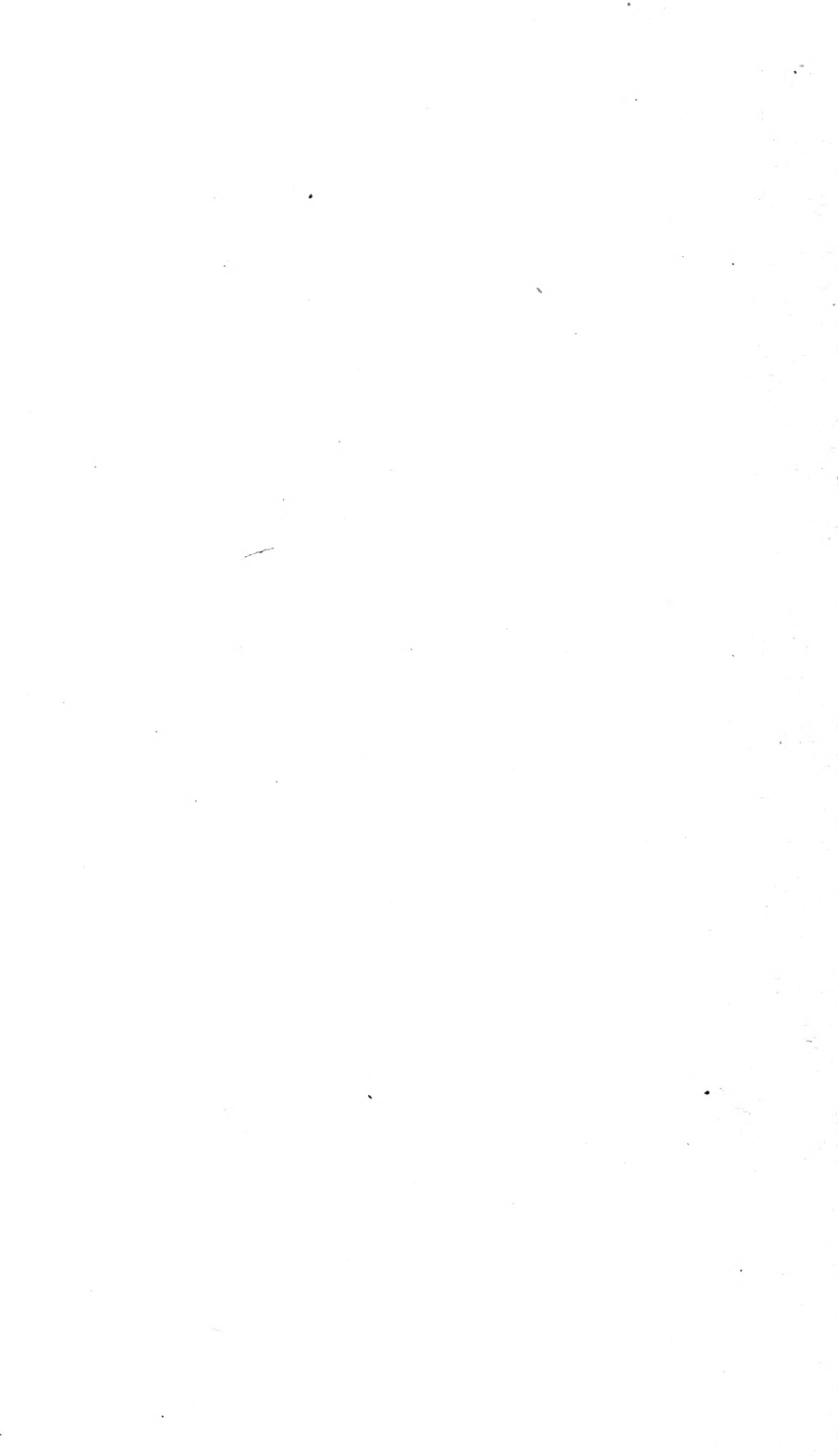
Back Yards.—Besides the personal observations of the Secretary as outlined above, the investigators engaged upon the house-to-house survey of the housing and living conditions noted on their cards, among other facts, information concerning the condition of the back yards. Of 450 yards observed by these investigators, 179 were reported fairly free from rubbish, 216 had some rubbish scattered about, while 55 were badly littered with rubbish of all kinds. The general condition of 168 of these yards was reported as dirty, and 85 filthy. Stagnant water was reported in 54 of the yards observed.

All of these conditions need the careful attention of the citizens. Some of them can be corrected or avoided by the enforcement of existing laws, but some cannot. Unless public opinion is aroused to the necessity of keeping the yards and lots clean, exercising greater care in the use of sufficient and proper receptacles, separating combustible from non-combustible refuse, and properly placing these receptacles so that they may always be easily accessible to the collectors, the Street Cleaning Department cannot deal with the refuse problem as it should be dealt with, and no amount of increase in its efficiency will enable it to do so. If the refuse is properly placed in the receptacles and if the collections are regularly made by the Street Cleaning Department, there will be no occasion for rubbish-littered yards.

Garbage Receptacles.—Of 457 cases for which returns were made by investigators concerning garbage receptacles, 278 families were reported to have receptacles of some kind, while 179 had no receptacles whatever for garbage. Of the latter, 27 families reported that they burn the garbage; 34, that the garbage is fed to the chickens and other animals; 2, that the garbage is carried to the country; 8, that it is thrown in the yards; 12, that it is thrown on the dumps; 3, that it is given away; and 11 householders reported that the garbage is thrown on the neighboring lots.



Two filthy back yards in the neglected sections of Richmond.



Ash Receptacles.—Returns concerning ash receptacles were made in the case of 418 families. Of these, 289 had receptacles and 129 had none. Of the latter, 7 families reported that they use the ashes for filling wells and other depressions; 22, that the ashes are thrown in the yards; 16, that they are thrown on the dumps; and 12, that they are thrown on vacant lots.

Stables.—In 32 cases stables were found on the premises visited, all but two of which were of wood construction. Returns concerning the material of the floor were made in 22 cases, and of these, 17 stables had earth floors, three had floors of wood, one had a concrete floor, and one had a brick floor. The condition with regard to cleanliness was reported in 24 cases, 10 stables being found to be clean, 9 dirty, and 5 filthy.

Animals.—One hundred of the families visited kept chickens on their premises, 88 kept dogs, 4 kept pigeons, 4 rabbits, 2 goats, and 1 kept a cow.

Other Outouses.—Of 373 premises concerning which returns were made of the condition of fuel sheds, 258 had sheds which were reported clean, 76 dirty, and 41 filthy. Poultry houses were reported clean in 36 cases, dirty in 14 cases, and filthy in 9 cases.

PART II.

Legislation

CHAPTER VII.

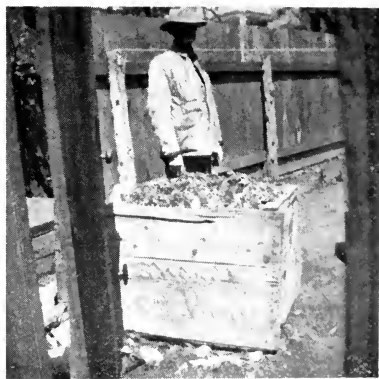
BUILDING REGULATIONS.

In order to determine what remedial legislation may be needed to ameliorate the housing and living conditions in Richmond, it was necessary to make a careful examination of the City Code, copies of regulations on file in the various city departments, etc.

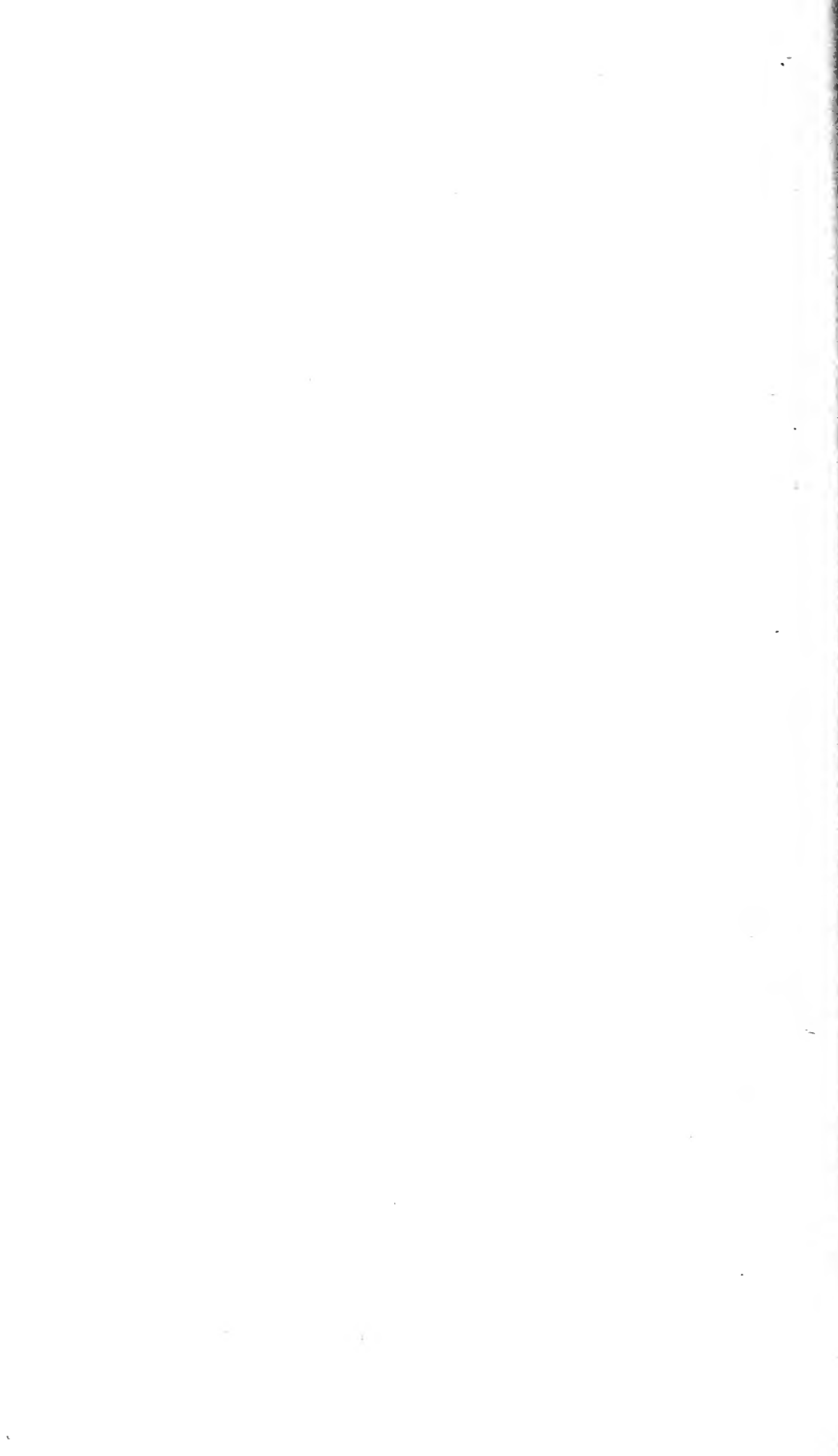
There are but few dwelling or tenement house laws other than general health and plumbing regulations and building regulations enacted to secure structural safety which apply to buildings generally. Only such of these as are of special interest in this study are considered here. Following is a brief statement of such laws and regulations at present in force, together with such suggestions for their amendment or for new legislation as is deemed advisable by the Committee on Law Enforcement.

The building laws and ordinances are made by the City Council, and are enforced by a Building Inspector, elected by the Administrative Board, who has power to make general rules and regulations concerning the construction, maintenance, repair, or removal of walls, buildings, or other structures, not inconsistent with the Building Code. He may modify the provisions of the Building Code in exceptional cases where there are practical difficulties in the way of carrying out the strict letter of the Code. He is required to report to the Police Justice violations of the Building Code and Regulations. (Chap. LIX., secs. 1 and 2.)

The following are definitions of building terms used in the Richmond Building Code:



The above are illustrations of an alley and three back yards in one of the most fashionable residence sections of Richmond. The lower right hand picture shows the kind of receptacles that are sometimes used for ashes and garbage. The upper right hand picture shows a city employce picking up a heap of refuse that had been dumped in an alley.



DEFINITIONS.

Building.—Any structure having a roof, whether with or without one or more enclosing walls, is considered to come within the operations of the Building Code. (Chap. LX., sec. 2.)

Private Dwelling.—This means any building which is intended or designed for, or used as, the home or residence of not more than three separate and distinct families or households, and in which not more than ten (10) rooms shall be used for the accommodation of boarders, and no part of which structure is used as a store or for any business purpose. (Chap. LX., sec. 7.)

Two or more such dwellings may be connected on each story when used for boarding purposes, provided the halls and stairs of each are left unaltered. (Chap. LX., sec. 7.)

Apartment or Tenement House.—This includes every building three or more stories in height which is intended or designed for or used as the home or residence of more than three families. (Chap. LX., sec. 8.)

Lodging House.—This includes any house or building or portion thereof in which persons are harbored or lodged for hire for a single night or less than a week at a time, or any part of which is let for any person to sleep in, for any term less than a week.

Hotel.—A hotel is a building, or part thereof, intended, designed or used for supplying food and shelter to residents or guests and having a general public dining-room or a cafe, or both, and containing also more than fifteen (15) sleeping rooms above the first story. (Chap. LX., sec. 10.)

Apartment Hotel.—This includes every hotel in which apartments are rented or are intended or designed to be rented in suite, and for terms not less than one (1) month and in which there are no kitchens, dining-rooms, or serving rooms within the apartments, but where a common dining-room is provided for the use of the tenants. (Chap. LX., sec. 10.)

Office Building.—An office building is a building which is divided into rooms above the first story and intended and used for office purposes, and of which no part is used for living purposes, excepting by the janitor and his family. (Chap. LX., sec. 11.)

Frame Building.—This means (1) buildings or structures of which the exterior walls or a portion thereof, are constructed of wood; (2) buildings sheathed with boards and partially or entirely covered with four inches of brick or stone; (3) wood frames covered with metal, whether the frames are sheathed or not with boards. (Chap. LX., sec. 12.)

Basement and Cellar.—A basement is that portion of a building the floor of which is below the curb level at the center of the front of the building, more than one foot, and not more than three-fourths of the height of said portion measuring from floor to ceiling.

A cellar is the lowest portion of a building, the floor of which is below the curb level at the center of the front of the building, more than three-fourths of the height of said portion measuring from the floor to the ceiling. (Chap. LX., sec. 34.)

TENEMENT AND APARTMENT HOUSES.

As shown in the definition of a tenement or apartment house, it is a building three or more stories high which is intended or designed for, or is used, as the home or residence of more than three families. If the building is not more than two stories high, or if it is intended or designed for or used by less than four families, it is a private dwelling, and the apartment or tenement house regulations do not apply to it.

The usual standard of what constitutes a tenement or apartment house is three or more families, and some tenement house laws set the figures at two families. The provision of the Richmond Code that it must be over two stories high to constitute a tenement or apartment house should be eliminated. The evil conditions which make it expedient to legislate specially for tenement or apartment houses exist in two-story houses just as well as in houses of three or more stories. The definition suggested by Mr. Lawrence Veiller in a recent work* is recommended, namely, "a tenement house is any house or building, or portion thereof, which is rented, leased, let or hired out, to be occupied, or is occupied, or is intended, arranged or designed to be occupied as the home or residence of three families or more living independently of each other, and doing their cooking upon the premises, and having a common right in the hall, stairways, yard, cellar, water closets or privies or some of them, and includes apartment houses and flat houses."

* "A Model Tenement House Law," by Lawrence Veiller, 1910.



This shows one of the unsightly dumps along Shockoc Creek, near the heart of the city. These dumps are close to, and in some cases touch the working people's homes.



This picture shows some of the objects that are regularly thrown upon the dumps.

SAFETY, LIGHT AND VENTILATION.

Height of Building.—Buildings, unless fireproof, are not permitted to be erected in Richmond to a greater height than sixty-five feet. (Chap. LX., sec. 29.)

For tenement or apartment houses, a better standard would be a maximum height of three stories for all non-fire proof buildings.

Thickness of Walls.—For dwellings or apartment houses, twenty-seven feet or less in width between bearing walls or bearings, the minimum thickness of all independent surrounding and dividing walls in the same, carrying the load of floors and roofs, must be in accordance with the following table, but no party wall may be less than thirteen inches in thickness throughout its entire height.

Dwelling House Class—Brick Walls (Minimum Thickness in Inches).

Height	Basement		Stories									
	Stone	Brick or Concrete	1	2	3	4	5	6	7	8	9	10
One story.....	16	13	9	..	..	..	..	..	..	..	..	..
Two stories.....	20	13	13	9	..	..	..	..	..	..	..	..
Three stories.....	20	13	13	13	9	..	..	..	..	..	..	..
Four stories.....	20	18	13	13	13	13	..	..	..	..	..	..
Five stories.....	20	18	13	13	13	13	13	..	..	..	..	..
Six stories.....	24	22	18	13	13	13	13	13	..	..	..	..
Seven stories.....	24	22	18	18	13	13	13	13	13	..	..	..
Eight stories.....	28	27	22	18	18	18	18	13	13	13	..	..
Nine stories.....	28	27	22	22	18	18	18	18	13	13	13	..
Ten stories.....	32	31	27	22	22	22	18	18	18	18	13	13

(Chap. LX., sec. 30-a.)

This provision appears to be entirely satisfactory.

Common Halls and Staircases.—The only regulations in the Richmond Code concerning halls and stairs in tenement houses are such as provide for safety in case of fire. (Chap. LX., sec. 50.)

There is no provision for lighting or ventilating common halls in tenement or apartment houses. To insure ample light and ventilation in halls and stairways, there should be at least one window of sufficient dimensions at each story, opening directly upon the outer air. Dark halls in tenement houses are not only storage places for filth and rubbish and breeding places for disease germs, but, being used in common by the tenants, they are conducive to immorality.

In existing tenement or apartment houses where the halls and stairs do not have windows to the outer air and it is impracticable to provide such windows, or where they are lighted and ventilated by courts too small in size to admit sufficient daylight, artificial light should be required during the day time on each floor in the hallway near the stairs. All common halls in tenement houses should be lighted at night.

Lighting and Ventilation of Rooms.—The only provision in the Building Code concerning lighting and ventilation of dwellings or tenement houses, is a paragraph which provides that "In every apartment or tenement house hereafter erected, every room, except water-closet compartments, bath rooms, and storage rooms shall have at least one window opening directly upon the street, or upon a yard or court." (Chap. LX., sec. 50.)

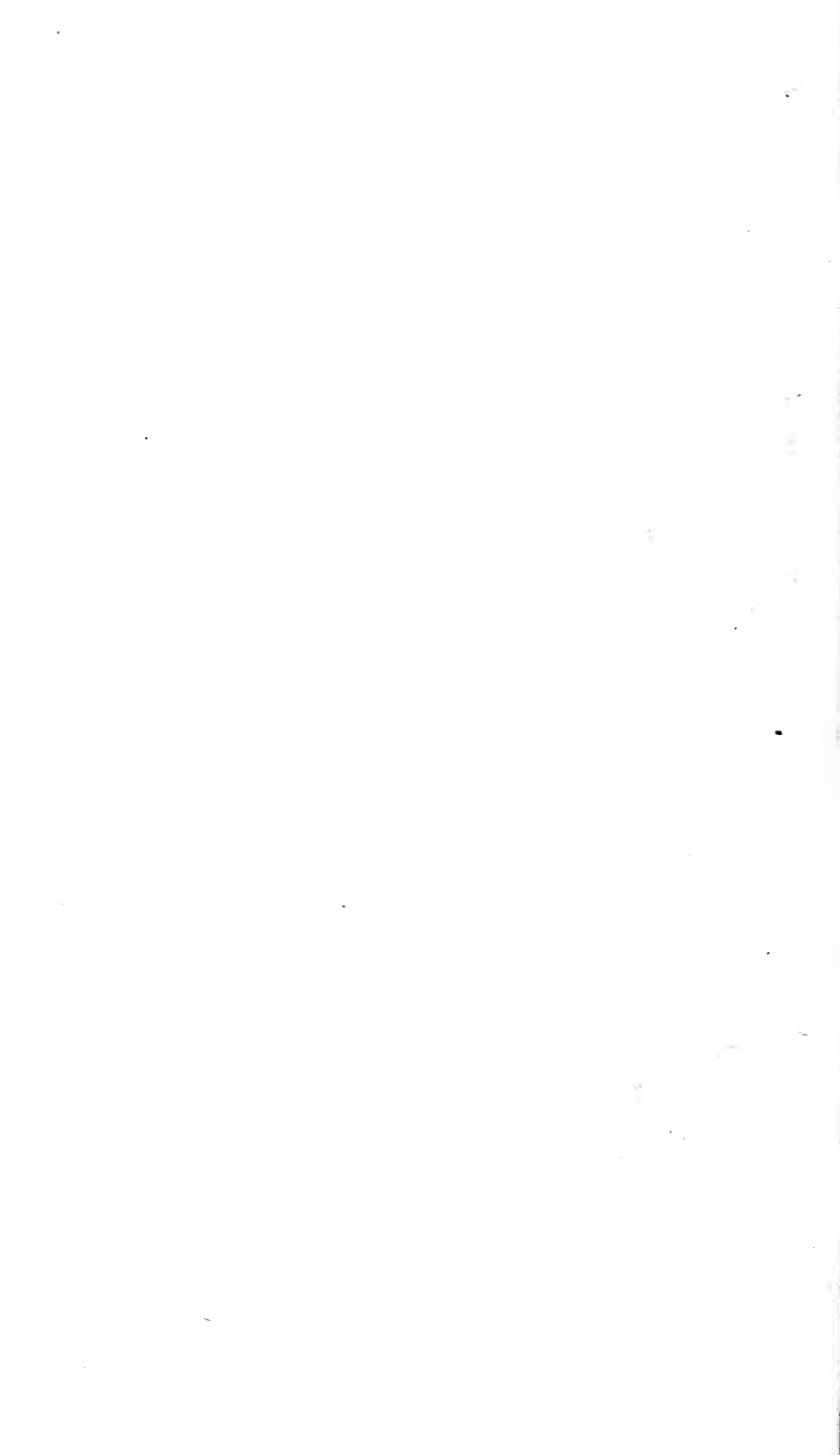
It will be observed that this provision concerning dark rooms does not apply to all dwellings houses, but only to apartment or tenement houses; that is, buildings over two stories in height intended or designed for or used as the homes of more than three families. In other words, if the building is "intended or designed for or used by" one, two or three families, dark rooms, that is, rooms without outside windows, may be provided even in new buildings. Dark rooms, wherever they exist, whether in small dwellings or large tenement houses, are detrimental to health, are apt to become filthy, and act as breeding places for tuberculosis and other disease germs.

Lighting and Ventilation of Water Closets.—There is a provision in the Richmond Building Code that water closets must not be located in any sleeping apartment, nor in any room or apartment which has not direct communication with the external air, either by a window or air-shaft having an area to the open air at least four square feet. (Chap. XXV., sec. 76.)

Water Closets, Adequacy, Location and Size.—The Richmond Building Code makes no provision for adequate water closet facilities in private dwellings or in tenement or apartment houses. In fact, the only provision for privacy of any kind is in requiring separate water closets for females in large office buildings and factories. Cases have been found where six families in Richmond use one water closet.



The upper picture shows the dump-pickers at work. The lower picture shows a boy returning from the dumps loaded with the pickings which he probably emptied and sorted in the yard under the clothes. This family, like many other such families, takes in washing.



While it might be too much of a hardship to require a landlord to install a separate water closet in each apartment of a tenement house, he should be required to install at least one closet for every two families or apartments. Water closets should not be permitted to be installed in cellars of tenement houses, unless it is not practicable to have them elsewhere, as in the case of stores on the ground floor, or when the janitor's apartment is located in the cellar, and then should it be permitted only under the most careful regulation, so as to insure adequate light, ventilation, cleanliness, and privacy.

Water closet compartments in dwelling or tenement houses should be at least three feet wide, and should be enclosed with partitions extending to the ceiling. Water closets intended for the use of two or more families should have water-proof floors.

Fire Escapes.—There is no provision of law requiring fire escapes to be placed on tenement or apartment houses. The law which now applies to hotels, apartment hotels, lodging houses, etc. (Chap. LX., sec. 75), should be made to apply with some modifications to tenement houses also.

Alterations.—No existing tenement house ought to be permitted to be altered, and no private dwelling house should be converted into a tenement or apartment house in such a way that the alterations or conversion will diminish the light and ventilation of the rooms, water closet compartments, halls or stairs, or the dimensions of the rooms below the requirements recommended for new tenement houses.

Basement and Cellar Rooms.—There is no provision in the Building Code of Richmond prohibiting or regulating the use of cellars and basements for living purposes. The use of such rooms for living or sleeping purposes should be prohibited unless the ceilings are at least seven feet above the floor and two and one-half feet above the curb level, the walls and floors damp-proof and water-proof, and the window space sufficient to furnish the necessary light and ventilation. In new buildings the ceilings should be at least nine feet high and four and one-half feet above the curb level to permit the occupancy of basements or cellars for such purposes.

ADDITIONAL BUILDING REGULATIONS NEEDED.

Notwithstanding the importance of light and ventilation as a matter of health and decency, there are no other provisions concerning them in the Richmond Building Code.

Building Space.—There is no provision limiting the proportion of ground space which may be built upon. The builder of a private dwelling, apartment or tenement house may, if he desires, cover the entire space of his lot, leaving no yard or court space for light or ventilation. Outside the fire limits, a space of at least ten feet must be left between frame buildings, but this is for the prevention of the spread of fire and is not a regulation for light and ventilation.

Modern building laws require that a certain percentage of every lot must be left vacant for light and ventilation. In the modern tenement house law proposed by Mr. Lawrence Veiller, not more than eighty per cent. of a corner lot, and not more than sixty per cent. of any other lot may be built upon. A yard space is always required in modern building laws, extending across the entire width of the lot, the minimum depth of the yard to be proportionate to the height of the building.

Courts.—The Richmond regulations do not define a yard or court, and therefore any space, no matter how narrow, may be construed to be a yard or court, and the provision requiring outside windows in tenement or apartment houses may, therefore, be without material effect where the yard or court is too small to admit sufficient light and ventilation.

All modern building laws define courts and require that they be of certain dimensions in proportion to the height of the building. In Mr. Veiller's proposed model law, the width of a court may not be less than twelve feet in any part for a building forty-eight feet in height, the minimum width permitted being increased and decreased by one foot respectively, for every twelve feet above and below a height of forty-eight feet. Courts which are entirely enclosed should be required to have air intakes at the bottom not less than three feet wide and seven feet high. These intakes are necessary to renew the air in the inner courts.

Size of Rooms.—The Richmond Building Code makes no provision concerning the size of rooms in dwellings. Such a provision is necessary in order to insure sufficient breathing space, especially in sleeping rooms. The tendency among builders, especially of the cheaper grade of tenement houses, is to make the rooms smaller and smaller. In a model building law, provision should be made that there be at least one room in each apartment which has not less than 150 square feet of floor space, and that no other room should have less than ninety square feet of floor space; also that no room should be less than nine feet high in every part.

Alley Houses.—As certain sections of a city become densely populated, there arises the danger of crowding houses into nar-

row alleys and courts, a practice which in Washington, D. C., constitutes the most serious housing problem. A few such houses were recently built in Richmond.

A law should be enacted prohibiting the building of private dwellings and tenement houses and the conversion of other buildings into such houses on streets or alleys less than twenty feet wide.

Houses Unfit for Habitation.—There is a law in the Building Code providing, that upon it being represented to the police justice by any citizen, city officer, police officer, or other building inspector, that any building or part of any building, staging or other structure in the city of Richmond is dangerous or unsafe by reason of dilapidation or otherwise to persons passing upon the streets, alleys, or other public places or to persons on private property, he may, after proper court proceedings, require the owner or occupant either to remove the same or to repair and put the same in a safe condition within a specified time. (Chap. LX., sec. 95.)

If there is actual and immediate danger of any building or part thereof falling so as to endanger life or property, the Building Inspector is required to cause the necessary work to be done to make it safe until the proper proceedings can be taken, and he may require the immediate removal of the occupants of such building which may be endangered. (Chap. LX., sec. 97.)

Unless a house is structurally unsafe, it may be unfit for habitation in every other way on account of age, neglect, decay, poor ventilation, etc., and yet nothing can be done to require its vacation. Many such houses exist in Richmond. A board of condemnation, such as exists in Washington, D. C., should be provided for, with power to condemn and order the repair or destruction of any house which may be unfit for habitation.

CHAPTER VIII.

SANITARY REGULATIONS.

The sanitary regulations of the City of Richmond are made by the City Council and the Board of Health. The City Council usually enacts specific ordinances for the protection of the health of the residents, and the Board of Health prescribes rules and regulations for their enforcement. Sometimes the City Council, by an enabling act, gives special authority to the Board of Health to make certain regulations.

DEPARTMENT OF HEALTH.

Board of Health.—The Board of Health consists of five members, three of whom must be physicians. They are elected by the City Council in joint session. The terms of office are for three years, the terms of two, one and two members respectively, expiring each year. The members receive no compensation. They appoint the Chief Health Officer and the subordinate officers of the City Health Department. (Chap. XXV., secs. 1, 2, 3a.)

The Board of Health is the governing power of the Health Department of the City of Richmond; they suggest to the Council such measures as they think fit, to preserve the health of the city, and are required to make annual reports of their proceedings. They are invested with police authority and are empowered to prescribe rules and regulations for the prevention of disease, or for carrying out the provisions of the ordinances of the City Council pertaining to the public health. All the powers of the Board of Health are derived from the City Council. The Board of Health is required to make an annual report to the Mayor. (Chap. XXV., secs. 4, 5, 6.)

The following subordinate officers are appointed by the Board of Health to serve for a term of two years: a medical inspector, a city bacteriologist, a plumbing inspector, a fumigator, a food inspector, a clerk of the Health Department, a registrar of vital statistics, a stenographer, and six sanitary officers. Most of these officers are invested with police powers. (Chap. XXV., secs, 3a and 42.)



This picture shows a pool of stagnant water, the overflow from the open sewer, Shockoe Creek. This pool is usually covered with a green scum and emits foul odors. It is within one-third of a mile of the State Capitol and within a stone's throw of negro habitations.



This shows stagnant water in one of the neglected but inhabited streets. A dump is shown in the distance.

The Chief Health Officer.—The Chief Health Officer is appointed by the City Board of Health for a term of two years. He is required to devote his entire time to the duties of his office. He is invested with police power, has immediate charge of the current work of the City Health Department, and is required to report to the police justice all offenses against the Health regulations of the city. (Chap. XXV., secs. 3a. (1), 6.)

CLEANLINESS OF BUILDINGS AND PREMISES.

The City Health Department appears to have ample authority to require all buildings and private premises to be kept in a sanitary condition and to inspect the same, and no new legislation will probably be needed for this purpose. The plumbing regulations likewise appear to be adequate. With its present force of inspectors it is impossible, however, to discover all the violations of the sanitary regulations.

Dirt, Etc., on Premises.—No person is allowed to have or to suffer any noxious, unwholesome or offensive matter, stagnant water, or nuisance of any kind, in any house or cellar, or upon any other private property owned or occupied by him, a fine of \$1 to \$20 being provided for violation of this ordinance. If it is due to a want of proper drainage, the occupier is not fined if he notifies the owner. If the latter fails to abate the nuisance, he is liable to a fine of from \$10 to \$50. (Chap. XXVII., sec. 4.) The police justice may, furthermore, order the removal of the nuisance within a specified time, and if it continues after that time he may impose a fine of from \$10 to \$20 per day during its subsequent continuance, and he may cause the nuisance to be abated at the cost of the person offending. (Chap. XXVII., sec. 15.) If the property of a non-resident is subject to be covered by stagnant water, or other unwholesome substances accumulate there, the ground may be filled up, raised or drained, and the substance covered up or removed by order of the City Council, after notice to the representative of the owner, or in his absence, by advertisement, and the amount may be recovered by distress and sale as in the case of non-payment of taxes. (Chap. XXVII., secs. 4 and 15.)

Depositing Filth on Private Premises.—It is prohibited under penalty of a fine of from \$1 to \$20 for any person to put or cause to be put into any cellar or house or upon any other private property not owned or occupied by him, any filth or nuisance of any kind. (Chap. XXVII., sec. 2.)

Storage of Rags and Pickings from Dumps.—There is no law

specifically prohibiting the storage of rags or perishable or combustible material in dwelling houses. An ordinance is desirable prohibiting the carrying of pickings, other than coal and non-combustible materials, from the dumps into private dwelling houses.

Offensive Trades.—There is no law specifically prohibiting the carrying on of offensive trades in dwelling houses, but in case such a trade is found to be injurious to health the Health Department has general powers to abate the nuisance.

Throwing or Placing Medicine or Merchandise on Private Premises.—The throwing or placing of samples or sample packages of medicine or merchandise of any description whatever in any yard, hall, porch, doorway or vestibule of any residence, boarding or apartment house is prohibited under penalty of a fine of from \$2 to \$10. (Chap. XXVII., sec. 36.)

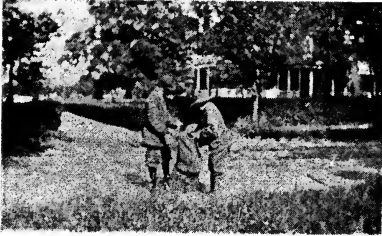
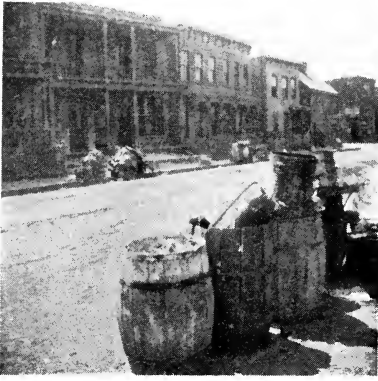
Smoke Nuisance.—There is no provision of law for the prevention of smoke. The experience in other cities has been that the installation of the latest type of smoke consumers has not only prevented the dense volumes of smoke, such as we now have in Richmond, but it has proven economical to the establishments which used such smoke consumers. An ordinance should be enacted requiring smoke consumers to be installed in all places where bituminous coal is used in large quantities.

WATER SUPPLY.

The Council Committee on Water determines, when, upon the application of a property owner or owners, a water main may be run in a street or alley on which such property abuts. Whenever such a main is introduced, the property owners must make connection within thirty days, and construct on their premises, if a sewer is adjacent, at least one closet suitably connected with the water and sewer pipe. An owner or occupant failing to comply is liable to a fine of from \$2 to \$10 for each day's failure. (Chap. XXXI., secs. 9 and 30.)

Wells.—The use of wells, other than artesian wells, is not permitted where city water connections can be made, and they must be closed up when their use is no longer permitted.

Adequacy of Water Supply.—There is no specification concerning the adequacy of the hydrants for the use of the tenants. Cases have been found where as many as six families use one hydrant. In tenement or apartment houses there ought to be a sink with hydrant in each tenement or apartment, or at least on



The upper and lower pictures show piles of refuse awaiting the collectors after "clean-up day." The two middle pictures show boy scouts at work in the suburbs of Richmond on "clean-up" day.

each floor. In smaller houses there should be at least one hydrant for every three families.

Water Rates.—The practice appears to be for the tenant to pay the water tax, and if he refuses to pay, the water is turned off. In that case, the Water Department notifies the City Health Department of its action and the latter orders the tenant to have the water supply renewed. The burden of paying for the water should be definitely placed upon the landlord, and he should be prohibited from permitting his property to be occupied for dwelling purposes unless the water is turned on.

PLUMBING.

The existing plumbing regulations appear to be adequate. Occasionally antiquated closets and bath tubs were found, but it would perhaps be too great a hardship upon the landlords to require the installation of new apparatus where the old are functioning fairly well. Modern plumbing is at present required in all new buildings and wherever the old appliances have to be replaced.

Water Closets.—Every water closet within a dwelling must be either an enamelled iron or earthenware siphon jet closet, or washout closet with trap and vent, to be supplied from a tank or cistern through a flush pipe not less than $1\frac{1}{4}$ inches internal diameter. Inspectors may, where conditions are favorable, grant special permits for the use of flushing rim hoppers with reservoirs in the basements, cellars and exposed places. (Chap. XXV., sec. 74.)

All closets in yards must be frost-proof and supplied with anti-freezing valves, reservoirs, flushing rim bowls, and flush pipe not less than $1\frac{1}{4}$ inches internal diameter. (Chap. XXV., sec. 74.)

Dry Closets.—Dry closets are permitted only where city water mains and sewers are inaccessible. The manner of their construction and screening is carefully specified in the regulations of the Health Department, copies of which are distributed to all premises where dry closets are located. Upon complaint of any citizen, or information given by a police officer to the police justice, that a privy is so placed as to be offensive, he may, upon summons returned and executed against the owner, order such privy to be removed.

The boxes are emptied by a contractor employed by the Board of Health, but the fees for this service are collected from the occupants of the premises, the rates of which are fixed by city

ordinance. The boxes must in all cases be emptied regardless of whether the contractor can collect the fees or not. (Chap. II., sec. 5.)

The regulations concerning dry closets appear to be adequate to insure the best condition possible where dry closets must exist, provided the regulations are enforced. The system of emptying the boxes, however, is wrong. The burden of removing the contents of the boxes should be either upon the municipality as a whole or upon the landlord. As it is, the contractor has no recourse in case the tenants are unable to pay, and in consequence, he must necessarily allow for such losses when he fixes the price in bidding for the contract. If the burden were upon the landlord, the contractor or the municipality could recover in every case.

PREVENTION OF COMMUNICABLE DISEASES.

Every physician practicing in Richmond who attends a patient affected with small-pox or varioloid, cholera, scarlet or yellow fever, diphtheria, measles, pulmonary or laryngeal tuberculosis or typhoid fever, is required to report to the Board of Health in writing within twenty-four hours the name and location of the patient, and his recovery or death from such disease. A penalty of \$10 for every twenty-four hours is fixed for failure to report. (Chap. XXV., sec. 95.)

When cases of small-pox, varioloid, diphtheria, scarlet fever or measles are reported, the Chief Health Officer is required to have cards placed within or without the premises where the case exists, in a conspicuous place, stating the name of the disease and such words of precaution as he may deem necessary. The Board of Health may, if deemed proper, extend the operation of this ordinance, both with regard to reporting and to placarding, to other diseases. (Chap. XXV., sec. 96.)

CHAPTER IX.

REGULATION OF CLEANLINESS OF STREETS AND ALLEYS, AND REFUSE REMOVAL.

The Superintendent of the Street Cleaning Department is elected by the City Council for a term of two years. His duties are to take charge of, manage and direct, under the direction of the Administrative Board, the cleaning of the streets and the removal of the garbage and ashes, and for this purpose he can employ and discharge laborers, drivers and hostlers. He is also required to abate nuisances in streets, alleys and lanes. He reports annually to the Mayor. (Chap. XLI., secs. 1 to 3.)

STREETS AND ALLEYS.

Placing Ashes, Dirt, Rubbish, Etc., in Streets.—Any person may carry from his lot or put in a street or public alley, or any part of the carriageway nearest to the gutter or drain, ashes, dirt, or rubbish; provided the same be free from offensive matter and be removed by him from said street or alley within twenty-four hours; or if one of the Committee on Streets for the ward in which said lot is, shall, in writing, allow a longer time for the removal, then within such time as may be allowed. (Chap. XXVII., sec. 24.)

This provision is out of date and should be repealed. No one should be permitted to deposit any ashes, dirt, rubbish or other substance on a public street, except in case of an emergency, and then only by special permission of the Street Cleaning Department.

If any filth, rubbish, ashes, dirt or other things be carried from a lot or place and put in a street or public alley, or if any nuisance or obstruction be put or caused to be put or to remain therein, without being authorized by the city ordinances, the offender is liable to a fine of from \$1 to \$10 for the first day, and from \$2 to \$20 for subsequent days. (Chap. XXVII., sec. 25.)

Removal of Ashes, Dirt, Rubbish, Etc., from Streets.—Every person occupying a house or a lot is required to remove, or to give notice to the City Engineer or to a police officer of any filth,

rubbish, ashes, dirt, stones, or other things, or any nuisance or obstruction not authorized above, which may be put on that half of the street or alley next to and opposite his house and lot. For failure to remove or report the same he is liable to a fine not exceeding \$10 for each day of such failure. (Chap. XXVII., sec. 26.)

Sidewalks to be Swept.—Tenants, occupants or owners of any house, store or other building used for mercantile or manufacturing purposes, or as a place of amusement, on the front or side of which the sidewalk is paved, are required to sweep such sidewalk once in twenty-four hours, such sweeping to be done between 7 P. M. and 8 A. M. A penalty of from \$2 to \$10 is provided for violation of this ordinance, recoverable before the Police Justice. (Ordinance approved May 20, 1911.) It is suggested that Saturday to Sunday be excepted.

Expectorating or Throwing Fruit Skins on Sidewalks, Etc.—It is unlawful to expectorate upon, or throw fruit skins or peelings on the sidewalks, or floors of street cars, public elevators, or public halls. The penalty for violation is \$5. (Chap. XXVII., sec. 21; Chap. XXVII., sec. 4.)

Dropping Filth, Etc., on Streets, or Alleys, or Dumping Same.—If a person employs any other person than an appointee of the City Council to remove any filth or nuisance from any house or lot, or any other place, and such person wastes the same in the street or alley, or puts or causes the same to be put into the James River within the city limits or upon the private property of another, he is liable to a fine of from \$2 to \$20. (Chap. XXVII., sec. 3.)

Snow on Sidewalks.—Tenants or occupants or, in their absence, owners or persons in charge of buildings or lots bordering on streets, lanes, courts, squares, or public places where there are paved footways or sidewalks, are required to remove snow fallen in the daytime within six hours, and if fallen in the nighttime, before noon of the following day. The penalty for violation is from \$2 to \$10 the first day, and from \$1 to \$10 for each subsequent day that the snow remains on the footway or sidewalk. (Chap. XXVII., sec. 28.)

Streets, Gutters or Drains.—Every person occupying a house or lot is required, as far as such lot extends, to cause the paved gutter or drain in a street or public alley opposite thereto, to be constantly kept open and free from obstruction. The penalty for violation is from \$1 to \$10 for the first day, and from \$2 to \$20 for each subsequent day. (Chap. XXVII., sec. 23.) This ordinance is antiquated and should be repealed.

Street Sprinkling.—The street car companies are required by ordinance to sprinkle the streets along the lines of their railways each day except when wet from rain-fall or snow, the sprinkling to extend over the road-bed occupied by the rails and between them and six feet outside the outer rails. Paved streets are sprinkled whenever swept. In all other cases the streets are never sprinkled except at private expense. The result is that whenever there has been no rain-fall for a few days, the whole atmosphere of the city is charged with dust, and when the wind blows, dense volumes sweep over the streets and into the houses. Appropriation should be made to enable the Street Cleaning Department to sprinkle or oil every street in the central and the more densely populated sections of the city daily, except when wet from rain-fall or snow.

Littering Streets.—There are no provisions prohibiting the throwing of paper on streets and sidewalks or in alleys, or the distributing of dodgers broadcast, and there are no receptacles for paper, fruit skins and other trash along the streets. Such provisions should be made, and they, as well as the existing regulations, should be rigidly enforced by the Police Department, and a sufficient number of receptacles should be provided for paper and trash. This would go a long way toward securing cleaner streets and alleys. On the other hand, an adequate street cleaning service should be provided.

Unpaved Streets.—Owing to the many unpaved streets which intersect those that are paved, much of the dirt is carried by the horses and wagons from the unpaved to the paved streets, and it is consequently very difficult to keep the latter clean. There are many miles of unpaved streets, sidewalks and alleys within half an hour's walking distance from the heart of the city, particularly between Broad Street and the northern city limits, even though the streets are lined on both sides by habitations which have existed for many years. On the other hand, there are many well paved streets and alleys in other more distant sections of the city where vacant lots predominate. In appropriating money for street improvements the preference should be given to the more accessible and more densely populated sections of the city, regardless of the character of the people who live there.

The following extracts from the last annual report of the Superintendent of the Street Cleaning Department illustrates some of the difficulties encountered by that officer:

“The department is much annoyed by the storekeepers and careless pedestrians making a public dumping ground of the

streets of the city. The streets are regarded by these people as a receptacle for store sweepings, packing materials of all kinds, waste paper and fruit parings, to say nothing of the trade refuse which is left to be taken care of by the department.

"It is very discouraging to see a street that has just been cleaned, littered with trash, paper and refuse, within an hour thereafter. It is manifestly impracticable as well as beyond the financial capacity of any community to have street cleaners always on hand to receive the rubbish swept off the sidewalks or thrown in the streets, dependent upon the convenience of each house or storekeeper.

"Leaking and broken carts are used by contractors, with the result that many of the most important thoroughfares are constantly littered with broken bricks, sand and clay, notwithstanding that all of this is prohibited by law."

GARBAGE, ASHES AND RUBBISH DISPOSAL.

Receptacles.—Housekeepers are required to deposit their garbage in water-tight vessels, each having a capacity not to exceed thirty-two gallons, and these must be placed on the premises where they are most accessible to the garbage collectors. Garbage and ashes must be kept in separate vessels. Ashes and other rubbish, whether combustible or not, need not be separated. The garbage receptacles may be made of any material, provided they are water-tight, and any kind of box, barrel, or other receptacle may be used for ashes and other rubbish. (Chap. XLI., secs. 12 and 14.)

The city ordinances should be so amended as to require a complete separation of (1) garbage and combustible or perishable refuse, and (2) ashes and other non-combustible refuse. The garbage and ash receptacles should be made of metal, and the garbage cans should be provided with tight-fitting covers. All the combustible refuse as well as the garbage should be cremated. The other refuse should be dumped, but it would be advisable to make some other disposition of the tin cans and other discarded receptacles which fill up with water and become the breeding places for mosquitoes. While the house-flies are nearly all bred in stables, one of their chief sources of food supply is the open garbage can. Furthermore, open garbage cans are accessible to dogs and cats, which frequently upset them and otherwise scatter their contents about. Ashes should be placed in metal cans as a protection against fire.

Removal of Refuse.—It is evident that the Street Cleaning Department, with its present force and as it is now constituted,

is unable to deal with the street cleaning and garbage removal problem. In a communication to a member of the City Council, the Superintendent gave an estimate that it would require an additional appropriation of over \$26,000 to carry out the provisions of a proposed ordinance approved by the Committee on Legislation of this society in accordance with the above suggestions. The proper removal of the garbage and other rubbish and the cleanliness of the streets and alleys is of such vital importance to a city that no expense should be spared to do it. In order to do this work economically, however, it is necessary to employ only able-bodied men to do the manual labor, and these should be so disposed and supervised that there is no waste of time and labor. Likewise, there ought to be no favoritism shown either to individuals or to localities, but the garbage and other refuse collections should be uniform and regular. Many complaints were made during the investigation by householders in some sections, particularly in Fulton, on Oregon Hill, in the Shockoe Valley, and west of Brook Avenue, between Leigh and Catharine Streets, that the collections of ashes and garbage are infrequent and irregular. The same complaints were made regarding the cleaning of streets in those sections. This was given as the reason for the practice, as shown in the first part of this report, which is not uncommon, for tenants living near the dumps to carry not only ashes and rubbish but also garbage and other perishable matter to the dumps, or to throw them on neighboring vacant lots.

The Dumps.—The dumps which line the south banks of Bacon's Quarter Branch and Shockoe Creek would be harmless if the material dumped consisted only of earth, ashes, and other imperishable matter. They would merely constitute an unsightly approach to the city, defacing a landscape which would otherwise be picturesque. But these dumps appear to be utilized as depositories for everything imaginable. Most conspicuous of all are the paper and the tin cans, while, here and there, upon closer inspection may be found deposits of garbage, rags, dead animals, and even fecal matter. The dumps sometimes tower high above the surrounding dwellings, so that on rainy days the water runs down from them, carrying the dirt and filth into the neighboring yards and under the houses. The dumping of paper, rags, and perishable matter of every kind should be prohibited, and the police authorities should see to it that no such dumping is done.

Police Supervision.—The City Code provides that police officers are required to report all nuisances and obstructions on streets and alleys, private premises, drains, gutters, etc., and

that the Chief of Police should "explore all the streets and alleys of the city at least twice each month and give information and prosecute for violations of laws." (Chap. LVIII., sec. 4.)

While this provision concerning the Chief of Police is obsolete and impracticable, there is no reason why the police officers should not be on the alert for violations of law concerning the condition of streets, alleys, yards, vacant lots, etc.

Conclusion.—With an adequate force of competent employees in the service of the Health and Street Cleaning Departments, with better regulations as indicated above, and with a proper spirit of civic pride and devotion to duty on the part of the citizens, and especially the public officers, there is no reason why Richmond cannot be made one of the cleanest and most healthful cities in the United States.

APPENDICES

APPENDIX I.

Following is a fac-simile of the card used by investigators in their house-to-house study of the housing and living conditions:

SOCIETY FOR THE BETTERMENT OF THE HOUSING AND LIVING CONDITIONS IN RICHMOND

Street _____ No. _____ Investigator _____ Date _____ 1913

BUILDING	ENVIRONMENT	DWELLING OR APARTMENT
<p>1 Use of building: Dwellings or Apartments; No. Stores; No. Workshops; No.</p> <p>2 Materials: _____ Yd. _____ Al.</p> <p>3 Location: St. _____</p> <p>4 Stories: No. _____</p> <p>5 Sifted: Yes _____ No _____</p> <p>6 Basement: Cellar _____</p> <p>(a) Vent. _____ Storage _____ Living _____ Sleeping _____ Store _____</p> <p>(b) Material of: Workshop _____ Floor _____ Walls _____ Ceilings _____</p> <p>(c) Condition: C. _____ D. _____ F. _____</p> <p>Rubbish: N. _____ S. _____ M. _____</p> <p>Damp _____ Water _____ Yes _____ Dry _____ No _____</p> <p>(d) Ventilated: No. _____ Wanted: Yes _____ No _____</p> <p>Windows: No. _____ No openings for light or ventilation.</p> <p>7 Repair of building: G. _____ Fr. _____ B. _____</p> <p>8 Building: New _____ Old _____</p> <p>9 Fire escapes: No. _____</p> <p>10 Halls and stairs: No. _____ Entrance from Frt. _____ S. _____ R. _____ Condition: C. _____ D. _____ F. _____ Repair: G. _____ Fr. _____ B. _____</p> <p>Ventilated and lighted by: Windows: No. _____ Skylights, No. _____ No light or ventilation.</p> <p>11 Outside stairs: No. _____ Leaking _____</p> <p>12 Rooms: _____</p> <p>13 Distance to nearest building on: Right _____ ft.; Left _____ ft.</p>	<p>22 Yard or court: Front _____ Rear _____ Side _____ Paved with _____ Grass _____ Trees _____ Garden _____ Rubbish: N. _____ S. _____ M. _____ Stagnant water: N. _____ S. _____ M. _____ Condition: C. _____ D. _____ F. _____</p> <p>23 Dry closets: Closets: No. _____ Distance from house _____ ft. Distance from well _____ ft. Families using: No. _____ Box tight _____ Leaking _____ Full _____ Overflowing _____ Screened: Yes _____ No _____ Condition: C. _____ D. _____ F. _____</p> <p>24 Stables on premises: No. _____ Material _____ Occupied by: Horses or mules: No. _____ Cows or Oxen: No. _____ Other animals _____ No. _____ Distance from house _____ ft. Distance from well _____ ft. Material of floor _____ Condition: C. _____ D. _____ F. _____</p> <p>25 Other outhouses: No. and uses _____ Material _____ Distance from house _____ ft. Condition: C. _____ D. _____ F. _____</p> <p>26 Animals on premises: Kind and No. of each _____ Where kept _____ Covered: Yes _____ No _____ Material _____ Adequate: Yes _____ No _____ Rubbish: No. _____ Covered: Yes _____ No _____ Adequate: Yes _____ No _____</p> <p>27 Receptacles for: Garbage: No. _____ Covered: Yes _____ No _____ Ashes: No. _____ Covered: Yes _____ No _____ Adequate: Yes _____ No _____ Rubbish: No. _____ Covered: Yes _____ No _____ Adequate: Yes _____ No _____</p>	<p>28 Story _____ Rear _____ Apartment _____ 29 Front _____ 30 Rooms: No. _____</p> <p>31 Use of each room _____ 32 No. of occupants _____ 33 No. of outside windows _____</p> <p>34 Condition of rooms: C. _____ D. _____ F. _____</p> <p>35 Repair of walls and ceilings: G. _____ Fr. _____ B. _____</p> <p>36 Repair of floors: G. _____ Fr. _____ B. _____</p> <p>37 Wall paper: C. _____ D. _____ F. _____</p> <p>38 Sinks with running water in apartment: No. _____ Location _____ Plumbing open _____ Encl. _____ Defective: Yes _____ No _____ Stopped up: Yes _____ No _____ Condition: C. _____ D. _____ F. _____</p> <p>39 Water closets in apartment: No. _____ Location _____ Ventilated: Yes _____ No _____ Plumbing open _____ Encl. _____ Flush tanks: Yes _____ No _____ Plumbing open _____ Encl. _____ Defective: Yes _____ No _____ Stopped up: Yes _____ No _____ Condition: C. _____ D. _____ F. _____</p> <p>40 Bath tubs: Location _____ Used for other than bathing purposes: Yes _____ No _____ Plumbing open _____ Encl. _____ Defective: Yes _____ No _____ Trapped: Yes _____ No _____ Condition: C. _____ D. _____ F. _____</p> <p>41 Lot: Frontage _____ ft. Depth _____ ft. 43 Approximate Value of Land \$ _____</p> <p>44 Assessed Value \$ _____ 45 Owned by _____</p> <p>46 Agent _____ 47 Take Photographs of House _____ Yard _____ Dry Closet _____ Well _____ Rooms _____</p>

THE HOUSEHOLD

48 Members of Household	49 Sex	50 Age	51 Race	52 Nationality	53 Occupation	54 Days Sick in Past 12 Months	55 Nature of Sickness	56 Able to		57 Remarks
								Read	Write	

58 Family Income: Average weekly earnings of head of family \$ Total weekly family income from all sources \$ 59 Rent: Payment per month \$
 or per week \$ 60 House Owned by Occupant Fully paid for: Yes No Total cost \$ Amount still due \$

61 Deaths in Dwelling or Apartment during past 12 months: No Causes
 62 Remarks:

APPENDIX II.

NOTES MADE BY INVESTIGATORS.

Following are some of the comments made by the investigators concerning the people and premises visited. They are reproduced because they give a human touch to the cold facts reported in collective form in the various chapters of the report:

White Families.

"The sink in the kitchen leaks, and there is a hole in the floor next to it one-half a foot square where filth accumulates and where rats come in. The kitchen floor is weak and full of holes."

"The plaster in the kitchen is very dirty and there are several holes in it letting in the cold air in winter, the floors are shaky, and the house is said to be about eighty years old. Ashes and filth are deposited on a lot about twenty feet away."

"Occupant said that the first time she has ever seen a garbage man was yesterday. The plaster on the walls is weak and dirty, and the building looks as if a heavy wind would blow it down."

"The garbage and ash men never come. The dry closet was cleaned only once since October (1912). It is not screened, and is in a dirty condition."

"The dry closet was emptied twice since October (1912). It leaks and is almost full. Four of the six little children have had typhoid fever within the past year. The garbage and ashes have not been emptied in months."

"The house is in a dilapidated condition, the plaster is broken and is falling down. There are cracks through to the outside, and the roof leaks. No repairs have been made for over two years. In this house lives a family with six children, the oldest being a girl who works in a tobacco factory."

"This dwelling has a store in front and the floor leading from it to the living rooms is weak, loose, and is falling in. It is quite dangerous, especially as there are five little children in the family."

"This is a fearfully dilapidated place. The porch leaks, the plaster is falling down in the kitchen, and the air comes through the walls so that it is very cold in winter. There are no locks on the doors. The flooring next to the back door is giving way. The sink in the kitchen is very old and rusty."

"The drain pipe is out of order. A big hole where the rats come in and dirt accumulates is under the sink in the kitchen. In the dining-room and in the hall at every touch the plaster falls down under the wall paper, which is peeling off. The flue from the kitchen is open on the second floor, and the tenant had to put tin up to keep out smoke and prevent fire."

"The wall paper is patched up by the tenant all over the house, the rear steps are broken down, the drain is stopped up, the porch roof leaks and water stands under the house after every rain. The agent will make no repairs."

"During every rain the water comes through the roof. The wall paper is coming down and the house is damp. Here in four rooms lives a family with five little children."

"This house has been condemned as being structurally unsafe, and yet it is occupied by a family of a man and wife and three small children, aged 2, 4 and 8 years who live in two filthy, dilapidated rooms. The plaster on the walls and ceilings is coming down and there is stagnant water in the areaway. The husband is an incessant drunkard."

"The water closet is often out of order. The plaster is out in several places. The floors in the four rooms sink down in the middle. This family has five children, aged from two to seven years, four of whom seem to be suffering with colds."

"The water closet leaks and water runs down into the ground in the rear. The garbage man comes around about once every four weeks."

"The fence is all broken up and rather dangerous for the two little children when playing. The front room in the basement is used for a kitchen, while the back is full of rubbish. The toilet is defective so that the occupants use the one next door. In the kitchen the plaster is falling down from the walls and ceiling. The garbage man comes about once in three weeks."

"This house is very old and dilapidated, the plaster being in a fearful condition, the porch is shaky and dangerous, the water pipe is burst and the water turned off and the cellar cannot be used on account of its dampness."

"Bricks along-side of the hearth in the front room and in the

kitchen are caving in. The water closet pipe leaks so that the contents often go on the ground instead of in the sewer. A very unpleasant odor was present. The roof of the back porch leaks, and the plaster on the second floor is coming down."

"In this house live thirteen filthy foreigners who cannot speak English, six of whom sleep in one room. Of the six, four are the children, ranging in age from two to ten years, of the woman who appears to be head of the household. The rest are boarders. Filth is dominant everywhere."

"This is a very pathetic case of a family of six children ranging from three to twenty-one years of age, three girls and three boys, all exceptionally handsome. The mother, a very thin, frail woman, had been raised in a good family and well educated, but, marrying a man who has been an inveterate drunkard, she has fallen into poverty. The water in the toilet is running continually, portions of the plaster of the ceiling have fallen, and the walls are dirty. The husband uses most of the income for drink, the wife relying upon the two oldest children for support."

"The water has not been turned on in eighteen months."

"In this basement are two rooms occupied by one man and two women. When visited, one of the the women was raving with delirium tremens. The condition of the rooms was dirty, filthy, and disorderly."

"The water closet is nailed up, as it is stopped up and the plumbing defective. The water is turned off, the occupants using a spring across the street. The wall plaster is falling down all over the house and very dirty, while the floor near the stove in the kitchen is dangerous to walk on."

"The water closet is under the steps in the hall, and both the closet and sink are leaking."

"This poor woman, with four children, aged from two to thirteen years, has been deserted by her husband. She keeps a cow and chickens and sells milk, butter and eggs. The house is one story high, has three rooms, and is in a bad condition. There is stagnant water under the house. The woman had typhoid fever for three months. She keeps herself and premises clean."

"The occupants keep a mule under the house in the fuel room."

"Husband and wife are both inebriates. A son of twenty-one and a daughter of fourteen years of age are the main support. The woman takes in washing sometimes, but frequently solicits alms.

The home conditions seem unfit for the young daughter. The house is in bad repair and the rooms are dirty."

"This house has two rooms and a detached kitchen, and is occupied by three families. One family downstairs consists of a husband and wife who eat, live and sleep in this room, which is filthy. The husband and wife composing the family which rented the kitchen and upstairs room, live, eat and sleep in the kitchen in the yard and sub-let the upstairs room to a woman boarder with two girls aged five and eight years, the woman being away at work during the day. This woman earns \$5 per week, of which she pays the couple who live in the kitchen \$4 per week for room and board and for the care of the children. The wife of the man in the room downstairs has consumption and the mother with her two little girls must pass through this room in order to reach her room upstairs. The wife of the man who lives in the kitchen has catarrh, while the man recently had chicken-pox. The children, however, appeared to be in good health. The kitchen where the one couple live and sleep and the two families eat has only one window."

"These people are very poor and sickly. The walls and ceilings are in bad repair. The husband is a molder, earning \$9 per week. He pays \$6 per month for rent. He was ill with blood poisoning for four weeks recently, the wife had a fever, the oldest daughter, age four years, had diphtheria, and the baby had pneumonia."

"After rains, the water stands in the yard and under the house. The kitchen wall is in such condition that it caught fire twice. The repair of the house and walls is generally bad. The family income is \$10 per week and the house rent \$6 per month. One child had pneumonia recently. The man, wife and five children, seven in all, sleep in one room, although the house has three rooms."

"The husband, wife and six children, aged from fourteen months to sixteen years, occupy three dirty, ill-smelling rooms. The four oldest children are girls, the oldest, of sixteen, working in a factory. Six persons sleep in one bed-room and two in the kitchen."

Negro Families.

"The water for the hydrant and closet is turned off, and the latter is not used. The night soil is carried out in a bucket and emptied in the bushes on a vacant lot."

"The water for the hydrant and closet is turned off. The latter is out of order and has a broken seat. A portion of the ceiling is loose and may fall at any time."

"There is much rubbish in the back yard, and about ten receptacles filled with it, which the collectors appear to have overlooked. The water closet does not flush."

"Two houses are occupied by one woman who keeps a boarding house. Of nine rooms, five are occupied by two boarders each. The kitchen floor is irregular, caves in, and is weak. Two rooms on the first floor have low ceilings and are dark. There were six barrels of trash in a dirty back yard."

"In six of these houses the middle room has no window, and is consequently very dark. There is a dump about 100 yards away where all the folks along here dump their refuse, garbage, and ashes, as the garbage and trash men are seldom seen."

"The water closet does not flush. Several boards in the floor are weak and are giving way. The plaster is coming down on the second floor."

"The back porch floor is dangerous. The plaster all over the house is coming down, the exposure making it very cold in winter. Under one window the rain pours in. The water closet is very dirty. A large refuse dump is in the rear of the yard. The husband drinks and gambles away his money."

"Several houses owned by their occupants are in a splendid condition of repair and would be a credit to any neighborhood."

"Get drinking water at a spring a block away. Walls are very dirty and have received no attention in five years. Ceiling is weak and fell on occupants one night while asleep."

"When it rains the water runs under these houses and often into the kitchens."

"The middle room is dark. There is a dump across the street and much refuse on a vacant lot beside the house."

"The roof leaks and rain comes into the house. The tenants are afraid to wash the windows and shutters as they may drop out."

"The basement of this house cannot be used, as it fills with water during every rain. The water runs from the street into the basement."

"This house faces the dumps, and when it rains all the water and filth run into the yard."

"Nearly all the houses on this block are owned by the occu-

pants, and they are well kept, clean, up-to-date in every way, and would be a credit to any section."

"This is a house of one room in the back yard, in which live a man, wife and five children, the one room being used for all purposes."

"The walls are covered with newspapers to cover up the dirty and broken plaster. The ceiling is loose and ready to fall."

"The occupants keep young chickens in the back room upstairs, which room is also used as a water closet."

APPENDIX III.

THE DEATH RATE OF RICHMOND COMPARED WITH THAT OF OTHER CITIES.

In 1911, the year for which the latest comparable figures are available, Richmond had the second highest death rate of the fifty leading cities in the United States, being exceeded by Memphis, Tenn. The death rate per 1,000 of population was 21.0 in Richmond, and 21.3 in Memphis. This is shown in the following table:

Death Rate Per 1,000 Population in the Fifty Leading Cities, Showing White and Negro Death Rate Separately for Cities Having a Negro Population of 10,000 or Over, 1911.

Cities	White	Negro	Both Races
New York	15.0	25.1	15.2
Chicago, Ill.	14.3	22.1	14.5
Philadelphia, Pa.	16.2	23.2	16.6
St. Louis, Mo.	14.6	25.8	15.4
Boston, Mass.	16.9	24.3	17.1
Cleveland, Ohio .....	...	...	13.8
Baltimore, Md.	16.2	30.8	18.4
Pittsburg, Pa.	14.8	16.8	14.9
Detroit, Mich. ....	...	...	14.4
Buffalo, N. Y. ....	...	...	14.5
San Francisco, Cal.	15.0	20.4	15.2
Milwaukee, Wis. ....	...	...	11.9
Cincinnati, Ohio	15.7	29.2	16.5
Newark, N. J. ....	...	...	14.8
New Orleans, La.	16.6	31.2	20.4
Washington, D. C.	15.5	26.5	18.7
Los Angeles, Cal.	14.4	17.2	14.5
Minneapolis, Minn. ....	...	...	11.5
Jersey City, N. J. ....	...	...	15.8
Kansas City, Mo.	14.3	25.3	15.4
Seattle, Wash. ....	...	...	8.8
Indianapolis, Ind.	13.9	22.3	14.7

Providence, R. I. ....	...	15.6
Louisville, Ky.	13.9	25.8
Rochester, N. Y. ....	...	14.4
St. Paul, Minn. ....	...	10.9
Denver, Col. ....	...	15.5
Portland, Oregon ....	...	10.9
Columbus, Ohio	13.9	19.4
Toledo, Ohio ....	...	14.9
Atlanta, Ga.	15.8	27.8
Oakland, Cal. ....	...	12.7
Worcester, Mass. ....	...	15.7
Syracuse, N. Y. ....	...	14.3
New Haven, Conn. ....	...	16.7
Birmingham, Ala.	14.2	24.3
Memphis, Tenn.	16.7	28.3
Scranton, Pa. ....	...	14.8
Richmond, Va.	16.7	28.4
Paterson, N. J. ....	...	14.6
Omaha, Neb. ....	...	14.3
Fall River, Mass. ....	...	17.4
Dayton, Ohio ....	...	13.7
Grand Rapids, Mich. ....	...	13.6
Nashville, Tenn.	16.0	29.6
Lowell, Mass. ....	...	17.7
Cambridge, Mass. ....	...	15.2
Spokane, Wash. ....	...	11.6
Bridgeport, Conn. ....	...	13.9
Albany, N. Y. ....	...	20.4

As in every case the negro death rate is higher than the white death rate, it is interesting to study the comparative white death rate only. The latest Census Bureau report showing the death rate for white and colored people separately is for the year 1911 in cities in which the negro population formed at least 10 per cent. of the total. There were twenty-one out of the fifty leading cities where such a separation was made. For the purposes of the present comparison it will be assumed that the negro death rate did not have an appreciable effect upon the total death rate in the remaining twenty-nine cities, and the total death rate in those cities will be compared with the white death rate in the other twenty-one.

The white death rate per 1,000 population in Richmond was 16.7. This was exceeded in but four cities, namely, Boston, Fall River and Lowell, Mass., cities having a very large proportion of foreigners, and Albany, N. Y. It was equalled in New Haven, Conn., and Memphis, Tenn.

It will be observed that in the cities where both the white and negro death rates are shown, the white death rate is usually high where the negro death rate is high. Thus in the five cities having the lowest negro death rate, ranging from 16.8 to 22.1, the white death rate ranged from 13.9 to 15.0 per 1,000; while in the five cities having the highest negro death rate, 28.4 to 31.2, the white death rate ranged from 15.7 to 16.7 per 1,000. Furthermore, the cities with a comparatively small negro population have, as a rule, a much smaller death rate than the white populations in the other cities. Thus, of the twenty-nine cities having a negro population of less than 10,000, twenty, or 69 per cent., had a total white death rate of less than 15.0 per 1,000. Of the remaining twenty-one cities, with larger negro populations only nine, or 43 per cent., have a white death rate under 15.0 per 1,000.

The next table shows the death rate per 100,000 of population by races and by causes of death in 1911 in Richmond, in other Virginia cities, and in all registration cities in the United States as a whole:

Death Rate per 100,000 Population in Richmond, Va. in 1911 from Principal Causes of Death, Compared With That of Other Virginia Cities and With All Other Registration Cities in the United States

[Compiled from Bulletin 112 U. S. Census Bureau.]

CAUSES OF DEATH	RICHMOND			ALL REGISTRATION CITIES OF VIRGINIA (a)			ALL REGISTRATION CITIES OF THE UNITED STATES		
	White.	Negro.	Both Races.	White.	Negro.	Both Races.	White.	Negro.	Both Races.
Typhoid Fever.....	19.5	14.8	17.8	36.0	40.9	37.7	18.8	41.2	20.0
Measles.....	8.5	8.4	8.5	7.3	6.8	7.1	10.1	11.8	10.2
Scarlet Fever.....	2.4	2.1	2.3	6.4	0.9	4.5	11.7	1.9	11.2
Whooping Cough.....	19.5	52.8	31.7	18.2	82.7	40.7	9.8	30.5	10.9
Diphtheria and Group.....	14.6	2.1	10.1	18.2	8.5	14.9	22.5	10.6	21.9
Influenza.....	13.4	25.3	17.8	13.2	30.7	19.3	10.3	24.1	11.0
Tuberculosis (all forms).....	162.3	403.3	250.6	160.2	423.6	252.0	162.1	466.6	177.9
Cancer.....	97.6	69.7	87.4	82.1	56.3	73.1	82.2	63.6	81.3
Meningitis.....	9.8	12.7	10.8	19.2	14.5	17.5	13.0	18.8	13.3
Cerebral Hemorrhage and Softening.....	122.1	192.2	147.7	89.4	144.0	108.5	72.0	92.7	73.1
Organic Diseases of the Heart.....	153.8	200.6	170.9	134.1	231.0	167.9	142.6	245.3	147.9
Bronchitis.....	12.2	65.5	31.7	13.2	75.9	35.1	20.0	39.7	21.1
Pneumonia (all forms).....	90.3	276.6	158.6	83.5	277.0	150.9	150.2	290.5	157.5
Other Respiratory Diseases.....	23.2	78.1	43.3	18.7	73.3	37.7	14.7	34.3	15.7
Diarrhea and Culeritis (under 2 years).....	115.9	232.3	158.6	106.3	223.3	147.1	93.7	124.6	95.3
Cirrhosis of the Liver.....	15.9	4.2	11.6	15.1	12.8	14.3	17.0	15.3	16.9
Nephritis, Bright's Disease.....	173.3	228.0	193.4	146.0	257.4	184.8	111.3	205.5	116.2
Congenital Debility and Malformation.....	107.4	164.7	128.4	94.0	159.4	83.1	124.2	124.2	85.2
Suicide.....	26.9	6.3	19.3	20.1	4.3	14.6	19.8	10.6	19.3
Other violent deaths.....	83.0	168.9	114.5	84.4	151.7	107.9	92.5	154.8	95.7
All causes.....	1,674.6	2,842.2	2,102.3	1,564.3	2,987.4	2,060.4	1,474.5	2,604.3	1,533.3

(a) Alexandria, Danville, Lynchburg, Norfolk, Petersburg, Richmond, Roanoke.

APPENDIX IV.

RICHMOND'S FINANCIAL STATISTICS COMPARED WITH THOSE OF OTHER CITIES.

According to the most recent returns published by the U. S. Census Bureau, namely, for the year 1910, both the receipts and the expenditures, per capita, of Richmond are less than those of the average cities of 100,000 to 300,000 population, and very much less than the average of all cities in the United States.

Thus, while the receipts from other than public service enterprises were \$17.64 per capita in Richmond, they were, on an average, \$21.15 in cities of 100,000 to 300,000 population, and \$24.77 in all cities of over 30,000 population. The figures showing total cost payments for other than expenses of public service enterprises were \$21.75, \$26.21, and 30.06 respectively.

This is shown in the following table compiled from the Census report:

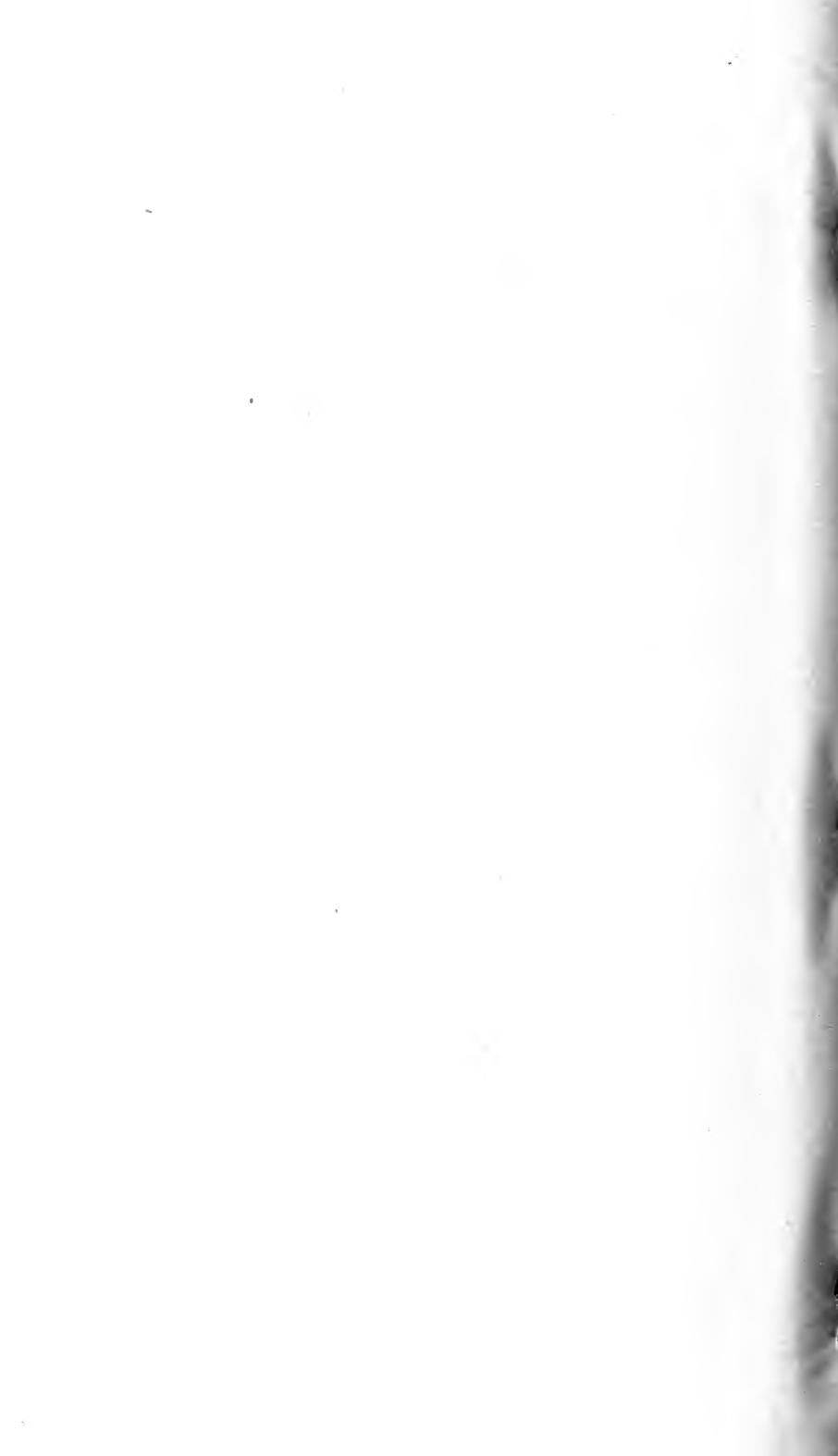
Per Capita Revenue Receipts and Per Capita Governmental Cost Payments, 1910, of Richmond, Va., Compared With Those of Other Cities.

(From U. S. Census Report on Financial Statistics of Cities, 1910.)

	Richmond, Va.	Cities having a population of 100,- 000 300,000.	All cities having a population of 30,- 000 or over.
Per capita revenue receipts:			
Other than public service enterprises	\$17.64	\$21.15	\$24.77
Public service enterprises....	5.25	2.50	3.05
	<hr/>	<hr/>	<hr/>
Total	\$22.89	\$23.65	\$27.82
Per capita governmental cost payments:			
For expenses other than of public service enterprises			
General government	\$ 1.27	\$ 1.19	\$ 1.95
Police department	1.21	1.53	2.15
Fire department	1.27	1.65	1.65
Other protection to person and property	0.18	0.15	0.30
Health conservation	0.28	0.27	0.33
Sanitation	1.05	1.01	1.29
Highways	1.23	1.60	2.01
Charities, hospitals and corrections	0.60	0.59	1.08
Schools	2.34	4.16	4.62
Libraries, museums, and art galleries	0.01	0.21	0.27
Parks, playgrounds, baths and public entertainments	0.43	0.44	0.59
Miscellaneous	0.13	0.15	0.20
	<hr/>	<hr/>	<hr/>
Aggregate	9.99	12.97	16.45
For expenses of public service enterprises			
For interest	2.83	1.07	1.26
For outlays	3.61	2.39	3.40
	<hr/>	<hr/>	<hr/>
For outlays	8.27	10.80	10.22
	<hr/>	<hr/>	<hr/>
Total cost payments ...	\$24.70	\$27.23	\$31.32

Comparing the detailed expenditures of the Richmond Government with the average of cities of from 100,000 to 300,000 population, it is found that Richmond in 1910 paid more, per capita, than the average, for expenses of the general government, for health conservation, for sanitation, and for charities, hospitals and corrections. Richmond paid less than the average for the police department, fire department, highways, schools, libraries and parks and playgrounds. The most conspicuous difference is in the case of expenditures for schools, the per capita for Richmond being \$2.34 as compared with the average of \$4.16 for cities of 100,000 to 300,000 population and \$4.62 for all cities of over 30,000 population. The per capita expenditures for libraries, museums and art galleries was \$0.01 for Richmond and \$0.21 and \$0.27 respectively for the two other groups of cities. This low expenditure for schools and other educational purposes accounts in a measure for the high percentage of illiteracy in Richmond, especially among those who came under the observation of this society.







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