

IMAGE EVALUATION TEST TARGET (MT-3)




## CIHM/ICMH Microfiche Series.

## CIHM/ICMH Collection de microfiches.

The Institute has attempted to obtain the best original copy available for filming. Physical features of this copy which may alter any of the images in the reproduction are checked below.


Coloured covers/
Couvertures de couleur

Coloured maps/
Cartes géographiques en coulaur

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Tight binding (may cause shadows or distortion along interior margin)/ Reliure serré (peut causer de l'ombre ou de la distortion le long de la marge intérieure)

Additional comments/
Commentaires supplémentaires

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Certains défauts susceptibles de nuire á la qualité de la reproduction sont notés ci-dessous.

Coloured pages/
Pages de couleur

Coloured plates/
Planches en couleur

Show through/
Transparence

Pages damaged/
Pages endommagées

Bibliographic Notes / Notes bibliographiques

Only edition available/ Seule édition disponible

## Bound with other material/ Relié avec d'autres documents

## Cover title missing/

 Le titre de couverture manque$\square$ Pagination incorrect/
Erreurs de pagination

Pages missing/
Des pages manquent

Maps missing/
Des cartes géogrephiques manquent

Plates missing/
Des planches manquent

Additional comments/
Commentaires supplémentaires

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

The last recorded frame on each microflche shall contain the symbol $\rightarrow$ (meaning CONTINUED"), or the symbol $\nabla$ (meaning "END"), whichever applies.

The original copy was borrowed from, and filmed with, the kind consent of the following institution:

> Library of the Public
> Archives of Canada

Maps or plates too large to be entirely included in one exposure are filmerl beginning in the uppar left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Un des symboles suivants apparaitre sur la dernidre image de chaque microfiche, selon le cas: le symbole $\rightarrow$ signifie "A SUIVRE", le symbole V signifie "FIN".

L'oxemplaire filmé fut reproduit grâce à la générosité de l'établissement prêteur suivant :

## La bibliothèque des Arshives publiques du Canada

Les cartes ou les planches trop grandes pour être reproduites en un seul cliché sont filmées à partir de l'angle supérieure gauche, de gauche à droite et de haut en bas, en prenant le nombre d'ímages nécessaire. Le diagramme suivant illustre la méthode :


## "The City

## Below the Hill"

A Sociological Study of a portion of the City of Montreal, Canada.

HERBERT BROWN AMES, B.A.

## תDontreal:

THE BISHOP ENGRAVIN'S ${ }^{W}$ PRINTING COMPANY, 169 St. James Street.

## CONTENTS.

Page
I Introduction, ..... 3
II Employment, ..... 8
III The Composition of the Family, ..... 15
IV Family Incomes and Workers Wages, ..... 21
V The Homes of the Wage-Earners, ..... 27
VI Comparative Rentals, ..... 35
VII Density and Overcrowding, ..... 41
VIII The Poor of the West End, ..... 49
IX The Death Rate, ..... 59
X Nationalities and Religion, ..... 65
Statistics of "the city below the hill" 1896 ..... 74

## 1.

## Introduction.

The situation and boundaries of "The City belone the Hill"-Comparison with
"The City" above the IFill"-Hoze" the figures for these articles zevere olitained-Why this district ze:rs selected-Lines upon which this sociologrical investisration has been pursued-Purpose of these articies.

If one were to draw a line across the map of a portion of the city of Montreal, following Lagauchetiere street from its junction with Bleury strect to the Windsor Station and thence along the tracks of the C.P.R. as far as the city limits, he would divide the south-western half of our city into two occupied districts of nearly equal extent. One of these districts, that to the west, is upon high ground ; the other, that to the east, is in the main but little above the river level. The former region, for lack of a better name, we shall call "The city above the hill," the latter, in contrast therefrom, "The city below the hill." To pass from the former into the latter it is necessary to descend a considerable hill and with this descent becomes noticeable a marked change in the character of the inhabitants and in the nature of their surroundings. Looking down from the mountain top upon these two areas, the former is seen to contain many spires, but no tall chimneys, the latter is thickly sprinkled with such evidences of industry and the air hangs heavy with their smoke.
"The city above the hill" is the home of the classes. Within its well-built residences will be found the captains of industry, the owners
of real estate, and those who labor with brain rather than hand. Here in predominating proportion reside the employing, the professional and the salaried classes. The manual worker in this district is indeed rare, the home of the poor camot there be found. It is the exclusive habitat of the rich and of the well-to-do.
"The city below the hill," on the other hand, is the dwelling place of the masses. Here it is the rich man that one finds it difficult to discover. Salaried and professional men are not entirely lacking, but even when to their number are added the shop-keepers and hotel men, these together represent but 15 per cent. of its population. "The city below the hill" is the home of the craftsman, of the manual wage-earner, of the mechanic and the clerk, and three-quarters of its population belong to this, the real industrial class. This area is not without its poor, and, as in other cities, a submerged tenth is present with its claims upon neighborly sympathy.

Most of the residents of the upper city know little-and at times seem to care less---regarding their fellow-men in the city below. To many of the former the condition of the latter is as little known as that of natives in Central Africa. With many of the upper city all that they regard as of interest to or with effect upon their daily life is located either in the section wherein they reside or that wherein their daily business is transacted. To pass from the one to the other only well ordered thoroughfares are tracelled. From this beaten track they seldom wander and of other regions they possess little or no knowledge. At this time in the world's history, when careful obscrvers and honest thinkers in every land are coming more and more to realize what is meant by the interdependence of society when those who study city life are each day more fully persuaded that ordinary urban conditions are demoralizing and that no portion of the community can be allowed to deteriorate without danger to the whole, when it is bemg proven over and over again by enlightened municipalities that the public health can be conserved, morals improved and lives saved by a right knowledge of local conditions and the proper use of measures for their amelioration, it is opportune that the citizens of Montreal should, for a time, cease discussing the slums of London, the beggars of Paris and the tenement house evils of New York and endeavor to learn something about themselves and
than hand. the profess district is

It is the
e dwelling ne finds it not entirely seppers and population. an, of the ee-quarter: This area is ed tenth is
nd at times below. To e known as per city all ir daily life nat wherein o the other this beaten ess little or hen careful y more and of society suaded that portion of nger to the nlightened ed, morals conditions opportune cussing the house evils aselves and
to understand more perfectly the conditions present in their very midst.

During the autumn and early winter of 1896 , in an endeavor to obtain accurate information along certain sociological lines for at least a limited portion of the city of Montreal, a house-to-house camvass was made of the district already entitled "the city under the hill." An unofficial industrial census was taken by experienced men of the area lying within the following boundaries: On the west Lagauchetiere street and the Canadian Pacific tracks, on the north St. Alexander and McGill strects, on the east Centre street and a line extended in the same direction ass far as the river, and on the south the city limits and Laprairie street. If one were to take a city map and describe thereon an oblong by means of lines connecting the following points, vi\%,, intersection of the C.P.R. by the city limits, St. Patrick's church, the middle of the guard pier, and St. Gabriel church, he would fairly enclose the area selected for examination. This district, including part of the canals and wharves, parks, streets, etc., is about a square mile in extent and includes 475 acres dedicated to purposes of business or residence. Since nearly thirty-eight thousand persons dwell and about seventeen thousand persons labor therein, we have here sufficient material to enable us to strike reasonable aterages and form fair conclusions. The enumerators were instructed to obtain information upon the following points: regarding each place of employment, the number of workers and their division into men, women, and children ; regarding each residence the number of familics therein, number of rooms per fanily, number of persons in family and the proportion thereof of adults, school children, young children and lodgers, the rental paid, the wages earned, the sanitary accommodation, the nationality, the religious belief and other similar matters. The figures thus gathered were then carefully combined and tabulated. For purposes of comparison "the city below the hill" was also divided into thirty sections and the averages for each section worked out. This material forms the basis of the series of articles which, accompanied by illustrative maps appear in this pamphlet.

There are reasons why the region selected is especially adapted to sociological investigation. It is naturally homogeneous, not as to nationalities, but as to the social scale of its residents. It is a district
the boundaries of which conform with natural conditions. Climb the hill, crossing anywhere our western limit, and one emerges at once into the habitat of the upper middle class. Cross McGill street and one is forthwith among warehouses and office buildings, wherein no residential population can be found. Beyond Centre street lies that special district of loont St. Charles, which is almost an independent suburb by itself, being sustained by employment furnished in the offices and workshops of the G. T. K. Only to the southward, as one crosses Laprairie street, or that imaginary line-in the vicinity of Fulford and Dominion streets - Which separates the city from St. Cunegonde, does one ask why our census stopped here rather than at a point beyond.

One more consideration gives to the study of this section an added interest. The wage-carners among our people are drawn almost exclusively from three nationalities, the French-Canadian, the Irish-Canadian, and the British-Canadian. In this district, and in no other considerable area throughout the entire city, are these three nationalities blended together in not very unequal proportions. The study of any other working.class region would be the study of but one predominating nationality. Here we can study a class rather than a race.

Satisfied then that the district selected is one especially adapted to give returns which may fairly be taken to represent industrial Montreal and may be used when comparing figures with other cities, let me in closing this introductory outline give the topics under which will be treated the material made available by this census.
2. Employment, where furnished and to what extent.
3. The composition of the typical family.
4. Family incomes and workers' wages.
5. The homes of the inclustrial class.
6. Comparative rentals.
7. Density of population and over-crowding in the home.
8. The poor of the "West End."
9. The de .th rate and some of its lessons.
10. Nationalities, their location and distribution.

There are among the dwellers of "the city above the hill" not a few, we believe, who have the wellfare of their fellow-men at heart,



Map A.
"THE CITY BELOW THE HILL"
HOVE - POPULATION OF G SECTION.
BELOW = NO OF PERS. E, 'ovEN THEREIN.

who realize that there is no influence more elevating than the proper home, who acknowledge that there is need for improvement in the matter of housing the working classes of this city, and who would be willing to assist any movement of a semi-philanthropic character having for its object the erection of proper homes for the families of working men. These persons are business men. They are not those who take things for granted. They require to have demonstrated to them in black and white the local need for action and the conditions-changing with every locality-to which it would be needful to conform to meet the needs of the case, and, at the same time, yield reasonable financial returns.

For such as these this series of articles is especially intended. I hope before many months to be able to supplement it with still another paper, demonstrating, from actual experiment, that "Philanthropy and 5 per cent." in Montreal, as elsewhere, can be combined.

## 11.

## Employment.

Why this should be the first matter considered-The fisures on Map B. explained-The four questions considered-1st. : As to zethat portions of the lozer city' are employing and zohat residential; 2nd: Where the chief industrial establishments are located and the amount of employment they furnish: 3 rd: As to the character of the zoork. the proportion of zeomen and ihildren and the kinds of labor upon zehtich they are employed: 4th: As to wihether the district furnishes homes for all therein emplored-Conclusion: Why this section is eminently fitted for philanthropic investment.

One of the first matters worthy of consideration in our study of " the city below the hill" is the location and distribution, the quantity and character of the employment therein furnished. We have already learned that the district furnishes homes for nearly thirty-cight thousand persons, and we now further desire to ascertain where and how these residents secure that employment whereby they are enabled to subsist. In choosing a home, all other circumstances being equal, the wage-earner prefers to locate in the vicinity of his daily work, and, therefore, unless counteracting conditions are found to cxist, the prevalence of centres of large employment will be accompanied by an abundance of dwellings not far distant.

Map $B$ shows the area under consideration divided into thirtysections for purposes of comparative examination. Certain figures will be noticed inscribed within the limits of each section and these
first demand explanation. Just above the Roman letters which designate the section is set forth the number of places therein furnishing employment. Every establishment, from the large factory with several hundred workmen to the corner grocery which employ: but one clerk, is here included as a place of employment. To the left of the section nur ber is found the totality of persons therein employed, to the right the nurri er of "labor inits*" trereby represented. In the centre we have the number or "iti": units ' per acre, and below this again the average number : $f$ "labor units" for each place of employment. Finally in the lower right hand corner of the section is a plus or minus quantity representing the excess or lack of wage-workers employed compared with wage-earners resident within the givein section. The meaning of the figures on the map can be made clearer by illustration : Take section I as an example. We find that there are within its boundaries 60 places of employmen. wherein 1698 persons, represented by 1465 "labor units" are employed ; that this section gives employment at the rate of $125 \frac{2}{10}$ "labor units" per acre of territory; that on an average $24 \frac{4}{10}$ "labor units" are assignable to each establishment; and lastly that 1441 more wageearners obtain work within its limits than reside therein.

From these data we are enabled, by comparing the corresponding figures of the several sections, to draw definite conclusions upon the following matters :

Ist. As to what sections throughout the district may be termed "employing " and what "residential" and the location of these in groups.

2nd. As to the location and distribution of the larger industrial establishments and the amount of employment furnished throughout the "employing belt."

[^0]3 rd . As to the character of the employment and the proportionate amount therein of woman and child labor.

4th. As to whether the city under the hill employs more persons than it supplies with homes.
ist. The total number of places of labor throughout the entire area of "the city below the hill" is reckoned at 1442. In these establishments 16,237 persons fiad work, a figure represented by 14,289 "labor units." This does not include the employers, who would probably number 2000 more. Coming to the first aspect of the question, viz., the separation of the sections into those of employment and those of residence, we observe at once that no section within the district fails to furnish at least some employment, though the amount may vary greatly from 1588 units in section 16 to 3 units in section 9. If we arrange the sections in their order between these extremes as follows : 16-1-21-4-29-27-11-23-2-22-20-$19-5-30-17-28-26-3-13-24-18-14-8-12-25-7-10$ -6-15-9, we find that the first sixteen sections above quoted (alone excluding section 17) provide employment for 14,000 persons, that is to say, contain 90 per cent. of all the employment furnished. In each of the fourteen remaining sections the number of persons employed is less than the number of wage-earners resident therein. The former group of sertions therefore, which have been distinguished upon the map by means of parallel broken lines, may rightly be characterized as "employing" and the latter as "residential" localities.

The location of these "employing" sections is readily apparent. They will be found to occupy the northern and eastern portions of our lower city. A band of territory not unlike a broad fish-hook, with its pont at Windsor street, its back at McGill street, and its shank following the banks of the canal, will include the "employing" sections of the district. There are a few places of employment lying outside of this belt, but only four of these provide work for over 100 employes, not more than twenty employ over 25 persons, and, with exception of sections 24 and 6 , nowhere outside of the " employing belt " will the establishments of any section average 5 "labor units " each.
and. And now, secondly, as to the location and distribution of the industrial establishments throughout the "employing belt" and the amount of employment by them furnished.

The district which lies between Lagauchetiere and Notre Dame strects, stretching from St. Alexander to Windsor streets, comprising sections 1, 2, 4, II and parts of 3 and 5 (but not including Windsor Station) in proportion to its extent furnishes more employment than any other throughout the lower city. Here are employed 4927 persons, equivalent to 4160 "labor units," which gives an average of so "labor units" per acre. In this group of sections are situated no less than 40 places of considerable employment, estab. lishments creclited with at least 25 "labor units." Chicf among these are E. A. Small \& Co.'s wholesale clothing establishment, and the .shoe factories of The Ames-Holden Co. (Ltd.), Jas. Linton \& Co., and Geo. T. Slater \& Sons in section I; also the shirt factories of Tooke Bros. and A. H. Sims \& Co., with the Lang Manf'g Co., makers of confectionery, etc., in section 2. Besides these, several prominent frms of roofers, plumbers, makers of electrical supplies, etc., employing considerable labor, are to be found in this locality.

That district which is made up of sections 16,21 and 22 ranks next in importance, judged by the number of "labor units" per acre. This group may be credited with 3428 units, or 61 to the acre. Herein the nature of the employment varies greatly. In section 16 the wholesale clothing establishment of H. Shorey \& Co., the shoe factory of The Whitham Manf'g Co., and J. M. Fortier's cigar factory are the most important. In section 21, along Mcrill street, are to be found the cigar factories of Jacobs \& Co., and Tasse, Wood \& Co., Tester \& Co.'s candy manufactory, the estabiishment of the Montreal Biscuit Co., and G. H. Harrower's shirt factory, all employment centres of considerable importance. Southward from McGill street are I'atson, Foster \& Co.'s wall paper factory, Miller Bros. \& Toms' machine shop, Ives \& Co.'s foundry, and the several works of the Royal Electric Co., with a number of lesser foundries and machine shops. Esplin's box factory on Duke street, and Davis' tobacco factory on Dalhousie street, are the last outposts of considerable employment as one penetrates the residential portion of "Griffintown."

Sections 23 and 27 , which enclose the canal basin, furnish employment to the amount of 1579 "labor units," but owing to the extent of these sections the average will not exceed 25 units per acre. Section 23 contains the machine shops and metal working establist.-
ments of J. \&ik. Weir, Robert Gardner \& Sons, W. C. White, and others. Beyond the canal in section 27 are the extensive nail works of Peck, Benny \& Co., Pillow, Hersey \& Co., and the Canada Horse Nail Company. Ogilly's Royal flour mills, the Malleable Iron Company's works, and the headquarters of the Sicily Asphalt Co. are also to be found here. In summer time one hundred men are employed about the locks and the canal basin, engaged in unloading the regular river boats ; the Govermment dry dock and the various coal companies along the canal also are considerable employers of labor. (The G. T. R. offices and shops, although these employ about 2000 men exclusive of traimmen, etc., are omitted from this calculation.)

Continuing along the east bank of the canal one finds half a dozen extensive establishments between Wellington and Laprairie streets. In this district the Canada Sugar Refinery is the largest employer of labor. Next in order come Pillow, Hersey \& Co.'s rolling mills, Belding, Paul \& Co.'s silk mills, the rope-walk of the Consumers' Cordage Co., the works of the Canada Switch and Spring Co., J. W. Windsor's camery, and the James Shearer Co's sash and door factory. These, together with several lesser establishments in this district, will aggregate 1779 "labor units," or 23 to each acre of territory:

The last district for examination in this manner is that comprising sections 26, 19 and 20 , lying west of the canal, from Wellington bridge to the city limits. The northern portion of this district contains several box factories and planing mills, and the new station of the Standard Light and Power Co. In the vicinity of the Seigncurs street bridge are MacDougall's foundry and Ogilvy's Glenora flour mills. Southwest of these are the Montreal woollen mills, the works of the Canada Paint Co., Grier's lumber yards, and on the St. Cunegonde boundary line, the factory of the Singer Sewing Machine Co. This district claims in all 1392 "labor units" or 25 to the acre.

3rd. We will next investigate the matter of the proportionate amount of woman and child labor throughout "the city below the hill," and ask where and for what purposes this labor is employed. Of the total number of persons to be found in its industrial establishments of all kind., 12,5 I or 77 per cent. are men, 3266 or 20 per cent. are women
and 460 or 3 per cent. are boys and girls. In order to discover those sections wherein women and child labor is in larger proportion we have only to note where there is considerable disparity between the total number employed and the number of "labor units" as set forth upon the map. In sections: 1, 2, 3, 16, 17, 18, 20, 22, 27, 28 and 30 this difference is most noticeable. In section I , where are the clothing and shoe factorics, about 25 per cent. of those employed are women and children. In section 2, which contains the shirt factories, 75 per cent. of the workers are of this rharacter. Section 16 , because of the clothing, shoe and cigar factories within its boundaries, will be sund employing, out of 1957 persons, 730 or 37 per cent, that are We men and child workers. That section 21 and 22 contain 13 per cent. and 28 per cent. respectively of labor other than adult male, is due agatin to the presence of cigar and shirt factories. In the sections between William street and the canal female labor is rare owing to the heavy nature of the employment. Beyond the canal, out of 3052 persons employed in sections 27 to 30,253 are women and 270 are boys and girls. This is about 17 per cent. of the whole number there at work. Both women and children may be found in considerable numbers in the nail works. The silk manufactory, the cannery and the bage works employ many women ; the sugar refinery employs boys and the rope walk and the paint works many boys and girls. The only establishment immediately west of the canal largely employing this kind of labor is in section 20, vi\%. : the Montreal Woollen Mills, where 100 women are to be found. Several other sections, such as 17 and 18 , contain a high comparative percentage of this labor, but the number of persons in reality is not great. When the industrial census, upon which these articles are based, was taken, grown lads capable of doing a man's work, were counted as men even though not yet of age. This needs to be borne in mind as these have been excluded from among the child workers. Our "city below the hill," then, taken as a representative locality, goes to prove that in Montreal the proportion of woman and child workers is not nearly so high as in the old land. But a little over one out of every five of our industrial workers belong to this category and of this fact we may be justly proud.
fth. Our fourth theme is worthy of consideration before we close this study upon employment in the district of our selection. When our special census returns were totalled, it was found that while 16,237 persons secured regular work in the industrial establishments of the district, only 10,853 ware-carners were reported as belonging to the 7671 families therein resident. The inference from this fact is that at least 5384 ware-earners of the district with their fanilies have homes outside of it. Wo ascertain the correctness of this hypothesis, the main avenues leading north, east and south were watehed for several evenings at about six o'clock and those passing each way were counted. The contents of the West Ward debouches into McGill street, passes up leaver Hall or Windsor street, and but little of it remains for the night within "the city below the hill." Four people come $u p$, McGill street and turn north for every one that comes down on his way toward "Griffintown." Three persons turn north along Craig street for every one who goes south. Standing at the intersections of St. Antoine, St. James or Notre Dame streets by the city limits, one remarks that a constant stream pours outward towards Ste. Cuneronde and St. Henri, while few are those who are inward bound. The travel across Wellington 'n adge is nearly the same both ways, though there is a stight excess of inward bound. The employes of the G. T. R. shops going northwest from Centre street are counterbalanced by those going southeast. There can, therefore, be little doubt but that, for reasons which we may later on consider, full! ome third of those emplayed duriner the day within our district pass out of it rehen the duy's zork is done. Is it wise to endeavor to keep these persons within the district, near to their work, or shall we encourage them to become citi\%ens of outlying municipalities?

We shall in future articles learn something regarding the residential conditions which obtain throughout "the city below the hill." It is sufficient, however, for our present purpose to have shown that the district is capable of sustaining, by means of the industries therein operated, a much larger number of families than it at present contains, and to affirm that, with suitable dwellings and proper civic regulations, every wage-worker employed therein might also lise in comfort and health within casy walking distance of his daily work. This conclusion would seem to indicate that, if some central spot were chosen (as that starred upon the map, which is within half a mile or ten minutes' walk of industrial establishments employing over 12,000 persons), buildings thereon erected, if suitable and of reasonable rental, would not long want for occupants, could not fall to be a benefit to the workingmen and should form an investment for the capitalist at once safe and profitable. This starred spot has been chosen and here the experiment will have a fair trial. Of the result I will have more to say later.
$\triangle \mathrm{H}_{\mathrm{a}} \mathrm{B}$ B.
enptoynear




wea miont maniot + on- -




## Map B.



## The Composition of the Family.

The subjët outlined Statistical presentation of available data. The averuse family-Explunation of Map C.-The lodgers, and zelhere they are most numerous - The typical family, zeithout the lodser elementVariation in size of family-Possible cause for this variation-Tre! popalar ideas regardings it tested-Howe wealthe and poverty affects the size of families-- The larger family in the real industrial classThe value of this and similar information.

Having investigated, in the previous article, the subject of the employment furnished throughout the district under examination, we next turn from the study of the workshop to the study of the home, and offer a few considerations upon matters affecting family life.

Two phis.ses of this subject naturally present themselves, since two things are necessary to every home, the examination of the family occupying and of the habitation occupied. This article is on the former theme and is to treat of the composition of the family as it will be found to exist in "the city below the hill." More fully explained our task is to ascertain, ist, the size of the average family and the local variations from 'his standard; 2nd, the component parts of the average family and the greater or lesser proportion of the several elements in certain localities. We will also incidentally endeavor to discover and trace the operation of several natural laws ; the object of the whole study being to guide us to a right appreciation of proper residential requirements for families according to the several localities.

In the first place we will make a statistical presentation of the available data from which we are to draw our conclusions. In the city below the hill dwell 767 I families. These families include 37,652 persons. Of these persons, 25,051 are from sixteen ycars of age upwards and may be by us regarded as adults. These 25,051 adults are divisible into three classes : the wage-earners, male and female, numbering 10,853 ; the home-tenders reckoned at 11,720 ; and the lodgers, who either may or may not be wage earners, in number 2478 . If we subtract the adults from the total number of persons, the remainder, amounting in number to 12,601 , will represent the children, and this number is again divisible into children of school age of whom there are 6948 and yonng children of whom there are 5653.

What then is the composition of ${ }^{\prime}$, typical family? Though it may appear strange to the eye, this can best be accurately expressed in terms of decimals. The average family contains 4.90 persons. Of this number 1.4I work for wages and are the family's supprit; 1.53 remain at home and contribute more or less to its care. To every third fumily there is assignable one lodger, who helps to swell the family income, but who, further than this, does not enter into our calcuiations. The average home contains 1.64 children; .91 is of school age, while .73 is an infant in the house.

These proportions may perhaps be expressed more vividly if we imagine block to a contain thirty such families. We should then expect to find in this block 147 persons, 42 of whom would be wage-earners; 46 of whom would be home-tenders; 10 of whom would be lodgers; 49 of whom would be children, of these latter 27 being of school age and 22 being infants at home. We might carry the analysis of the wage-earning portion still further. We noted in our study on employment that 77 per cent. of those employed were men and grown boys; 20 per cent. children. Of the 42 wage-earners above cited we might reasonably expect that 33 would be grown males, 8 would be women and one a child.

That there will be considerable variation from the average family, when we come to a comparative examination of the figures peculiar to the several sections, is clearly evident. These differences
of the n the 7,652 f age tdults male, d the 2478. s, the $t$ the chool e are gh it essed rsons. prit; To swell o our is of
if we hould vhom ders ; Idren, ats at rtion
ar: shown by Map $C$, to be studied in connection with this article. By way then of explaining the accompanying map let it be stated that the figures directly over the Roman letters denote-carried to the second decimal-the average family for that section ; that the figures to the left represent the adult portion of this average family, the number above signifying the proportion of wage earners, the figures below the number of home-tenders ; that the figures to the right show, when totalled, the entire number of children in the average family, the number above representing the proportion of school children and that below the proportion of young children ; that the figures immediately under the Roman letters indicate the proportion of lodgers which would fall to each family of the section were it possible for these to be evenly distributed ; and finally, that the figures at the very bottom, within each section, express the typical family of that locality after the "lodger element" has been eliminated.

We have seen that the average family, all included, contains 4.90 persons. Upon examining the map we are struck by the fact that in several sections it very considerably exceeds this figure. The conspicuous sections in this regard are $2,1,5,3$ and 11 . These sections contain numerous boarding houses, and 20 per cent. of their population are lodgers. Now it is obvious that the presence in certain sections of such a considerable proportion of an element not truly an integral part of the real family, and the absence of this element in other sections, renders comparisons unfair until the lodgers have. from all calculations, been eliminated. This accomplished, these several sections, previously accredited with unusually large families, will not now be found greatly to differ from the others, while our typical family group zeill contain 4.6 (4.59) souls.

Now, while the fact and extent of the variation between the several sections is readily apparent, by the aid of the map, in respect to such matters as the size of the family, the prevalence of lodgers, the increase or decrease in the wage-earning as well as the hometending element, the number of the children and the relative proportion of school to infant population, it is a task far more difficult to point out any reasonable explanation for these divergencies. This is probably due to the fact that our "city below the hill" contains a population which, in the matter of social condition, is in the main
homogeneous. We find here no wealthy section, nor do we find a real "slum district" to compare with it. Take then 4.6 as the average for the real family, and it is easy by comparison to note how some sectons surpass, while others fall below this standard. The three sections which now lead the list for large families are Nos. 8, 10 and 6 , all with over five persons. On the other hand, the four localities where families are the smallest are 22, 13, 2I and 5, where an average of $41 / 4$ persons per family is rarely exceeded. Between these extremes are ranged the other sections, but the order suggests little by way of a reason.

A comparison, however, of the figures of the several sections may cause us to modify some preconceived notions and may indicate, dimly shadowed, the working of certain natural laws which, though subject to constant exception, appear to operate in the main with tolerable regularity:
, We are accustomed to say for example that certain nationalities, especially the French-Canadian, are remarkable for large families. This may be true in other parts of the city, but it does not seem to be so for the district now under study. The three sections, Nos. 8 , 10 and 6 , which rank first in matter of large families are peopled in almost equal proportions by English, Irish and French-Canadians Of the four sections which bring up the rear section 22 is mainly Irish, section 13 is four-fifths French, whilst in sections 21 and 5 the nationalities are nearly evenly divided. Agrain sections 17 to 20, immediately below Notre Dame street, show much larger families than do sections 12 to 15 just above it, yet all these sections are alike preponderatingly French-Canadiar. The size of the family in this part of the city does not then appear to depend upon nationality:

We have also been accustomed to think that the poorer the locality the larger the family. The poor man's chief wealth is said to consist in abundance of children. Doubtless many individual instances may be cited in support of such an hypothesis but averages for a considerable number of families, at least in the district we are examining, tend to disprove this theory, Indeed, it is the contrary, rather that appears to be nearer the truth. Three out of four of the sections remarkable for the smallness of their family averages, are at the same time localities wherein the average family incomes are among the tionality: e locality to consist nces may considercamining, ther that e sections the same mong the
lowest to be found. Extremely low income seems an accompaniment of especially small families. The belt below Notre Dame street, where families are large, is a region of better average incomes and fewer poor than the belt above Notre Dame strect, where the families are not large. Nor, on the other hand, does the family in the best sections, such as $1,2,3,6$, and 9 , exceed the average size, sometimes even falling below it. Hence the law which appears to the writer to be dimly apparent is in effect that neither wealth nor poverty is likely on the whole to be iccompanied by large average families. These are rather to be expected among the middle industrial class, and the average number of persons per household decreases as the social status of the residents rises above or falls below this level.

Another matter which invites examination is the adult element of the average family and its occupation. Our average family was found to contain 2.94 persons no longer children. Of these 1.41 work to support the family, while 1.53 are supported at home, where probably in most cases by the performance of household tasks they contribute their part. Here a law seems fairly apparent in that the proportion of wage-earners seems gradually to diminish and the proportion of home-tenders gradually to increase as one passes from an examination of the poorer to that of the more well-to-do sections. It is probably a fact that the poorer the locality, the greater the pressure to increase the number of contributors to the family purse, while the richer the locality the larger the number of those who may be allowed to remain at home.

As to the children, they are relatively most numerous in the sections below Notre Dame strect and least numerous in those above St. Antoine strect. As to the division into children of school age and infants, beyond noting the fact that the poorer the section the more nearly equal are these two portions, and the better the section the more the former exceeds the latter, we venture no conclusions.

The child element, in the typical family, we found to be expressed by the figures 1.64 . In an examination, made in connection with this census, of 400 families among the very poor, this child average was exactly maintained. This fact furnishes additional corroboration of our claim that it is not among the very poor that the average number of children will exceed the standard.

It has been asked-" Has information such as has just been presented any value other than as matter of sociological interest ? Its practical value appears to the writer to be this. Should the time come when capital shall be ready to be invested in the erection of improved industrial dwellings, it is evident that for its intelligent expenditure, in this or that locality, definite knowledge must be in hand as to the personnel and composition of the average family of the section selected. The number and size of the rooms to be provided, in the improwed dwelling for the average family, will depend not only upon the size of the family, but also upon its composition, since the larger the proportion of the adult or school-child element the more the amount of space and air that will need to be allowed.

To make a success of this work of improvement we can afford to allow no facts to be overlooked. Hence this endeavor.

## 1ap C.

2OSITION OF THE FAMILV
been rest? I the ction igent x in umily o be pend ition, ment wed. rd to



## Map C.

rAF C.OM.DOSITION OF THE FAMILY



## IV.

## Family Incomes and Workers' Wages.

The unity, yet sepravation of these taeo topics-Explanation of Map DThe family income, all classes included-Hore lucalities zary in this respect-The individual income, all classes included-Some noticerable variations- The minimum and zuhlore it is found-The " Real Industrial Class," zoho compose it, hoze large it is-7he family income in this stratum of society - The zenge of the individual zuorker therein-Aln attempt at an average by sexes-Real value of this investigation.

Examination into the question of the family income and the remuneration of the wage-earner, when resident within "the city below the hill," will form the subject of this, our fourth suciological study: Although allied topics these two themes may best be considered separately and in the above order. With regard to each we will first survey the field as a whole, then consider the characteristics of certain localities and finally offer some suggestions regarding the utilization of information of this nature.

Let us turn first then to Map I). and familiarize ourselves with the meaning of its figures in order that comparative examination may become possible. A bove the Roman characters, by which each section is designated, is the amount of the average family income therein per week, all classes included. Immediately below the Roman letters is the average weekly income per individual for all persons of the given section. To the left is shown, by percentages,
the division of the residents of that section into three classes, viz. above-the well-to-do; between-the real industrial class, and below -the poor. In this article it will be mainly the middle class of which we shall troat. The amoment specified at the bottom is equiaalent to the average weekly family income among the "real industrial class" " while to the right is expressed the werage weekly earmings per wage-worker among this same order. The meaning of these terms will become clearer as we procecd.

We have already learned that there are 7671 families resident within "the city below the hill." As near as can be ascertained these families receive, each week, an aggregate amount of not less than eighty-five thousand dollars. This means eleven dollats per week to each family. We have also found that these families include 37,652 persons. This gives, on an average, an allowance of two dollars and a quarter per week to each individual. Eleren dollars per family, twer and a quarter dollars per individual, these then are the stamdurds of average lizing in "the city beloze the hill."

Some sections exceed, while others fall below this limit of average income. Turning to the map and comparing the localities with one another, we note that, as a rule, the family income is highest in the group of sections north of St. James street. The average here for the ten sections, Nos. I to 10 , is $\$ 12.64$, with only two sections, viz: 5 and 8 falling below this figure. Section 9 leads the list with an average of nearly $\$ 16.00$ while sections $3,6,2,7$ and 4 , in the order mentioned, complete the list of the six best sections within the entire nether city. Next in order of merit for generous incomes are the belts between Notre Dame and William streets, sections i 6 to 20 , where the average family income is $\$ 1.41$, and below the canal, Nos. 28 to 30 , showing a combined average of $\$ \mathrm{I}$.42. Then follows the strip between St. James and Notre Dame streets, sections it to 15, averaging $\$ 10.59$. Finally there is that group lying between William street and the canal, where the lowest group average of $\$ 9.26$ is to be found. There are six sections, with reference to belts, where the average family income falls below $\$ 10.00$. There are Nos. 12, 13, 24, 22, 21 and 23 with a range from $\$ 9.87$ in the first to $\$ 8.03$ in the last meationed. As we shall see when we come to study
"powerty," it is absence of the well-to-do and prevalence of the very poor which in these localities so reduce the average family income.

Two dollars and twenty-five cents, it will be remembered, was the amount determined upon as the average share per inditidual of the weekly income. Comparison of family with individual incomes brings out several noticeable facts. Arranging the sections in order of merit, the northern strip is still found as a whole to give the best average per person, but sections 1,5 and 8 have slipped down towards the lower end of the list. Sections 12 and 13 make a better showing here than they did in the matter of the family incomes. Sections 21 to 24 , however, still bring up the rear, and in these sections, comprising the major part of old Griffintown, one dollar and seventyfive cents per week, or tzenty-fize cents a duly, is the amount upon which the average resident finds it necessary to live.

But this paper is to deal more especially with the real industrial class. It is then necessary that we determine who belong properly to this order. Among the families below the hill no less than 1176 , or $15 \frac{1}{3}$ per cent. of the total number, were classified by the camassers either in accord with their own information or becanse of their obviously comfortable surroundings, as "well-to-do," that is in receipt of an average income of not less than $\$ 20.00$ per week, or a thousand dollars a year. This number included proprictors, managers, professional men, store-keepers and a few families wherein the combined income of several workers yielded a generous income. It is plain, however, that to include these, together with their profits or salaries, when secking to ascertain the income of the real industrial class would unduly elevate the figures. On the other hand there were discovered by the canvassers families to the number of 888 which, for reasons to be studied later, were living upon incomes not exceeding five dollars per week. These latter families and their meagre carnings should also be deducted from the original figures in order to prevent them from being unduly depressed by the presence of an element not properly belonging to the class now under study. The "well-to-do" and the "submerged tenth," which together constitute twenty-seven per cent. of the whole number, having been deducted, there remains 5607 families to be by us regarded ats the real industrial class and as such examined. When then we ascertain that these

5607 families have an aggregate weekly income of \$57,I39.00, we conclude that $\$ 10.20$ per family, or eighty cents less than the amount established as the average income when all classes wore included, expresses the average weekly income among the real inclustrial class of the nether city. By way of further verification, were we to select the sixteen sections, designated by inner broken lines upon Map D, wherein 75 per cent. or more of the inhabitants are of the class in question, we would find that the average for these was \$10.07. From $\$ 10.00$ to $\$ 10.25$ per zeek, then, is the fimbly income of the real industrial class. As to variation on the part of the several localities from this standard, an examination of Map D. will make these apparent to such as care to pursue their researches further.

One final matter requires consideration before we abandon this subject. What is the average remureration of the individual industrial wage-earner in "the city below the hill ?" The amount previously specified as receivable weekly by all the families of this class was earned by 7794 persons giving an average of $\$ 7.33$ for the earnings of each worker. Taking only the sixteen typical industrial sections before referred to and submitting their figures to a similar test the result is $\$ 7.21$, or twelue cents less. We are safe then in concluding that between $\$ 7.20$, and $\$ 7.35$ per week, or about $\$ 1.20$ per day, is the average zerage per zoorker, taking as a whole the real industrial class of the west end. We have not accurate data upon which to determine the approximate wage of the sexes, but since $m$ our second paper we learned to expect to find in each group of wageearners 20 per cent. of them to be women, and 3 per cent. to be children, this proportion being maintained, there would be, among the 7794 mixed workers, 6000 men, 1560 women, and 234 children. If the men earned $\$ 8.25$ per week, the women $\$ 4.50$ per week, and the children $\$ 3.00$ per week, it would account for the $\$ 57$, I 39.00 , the total amount earned by the aforesaid 7794 mixed workers. This estimate is but conjectural, yet it does not seem likely to be far wide of the mark.

This average per wage-earner of $\$ 7.33$ is not maintained in all parts of the nether city. This is apparent by a glance at Map D. In this calculation, however, it is the average for the largest number that is to us of most value and therefore we will not here cail
attention to the deviations in various sections. • The study of poverty, yet to follow, will bring out local differences to better advantage.

We will not undertake a comparison of wages between Montreal and wher cities. Nowhere else do I know of a study worked out upon exactly similar lines. We may be able, however, when the next Dominion census is taken, to compare results with results, and ascertain-what is of greater value-whether the number of the well-to-do is increasing, the number of poor diminishing, and whether the average wages of the real industrial class throughout "the city below the hill" are advancing. If these conditions be then found present, we may consider that our city has truly prospered. The real measure of advance in any city is not the increase in the number of very wealthy men, nor of handsome residences, but in the improved condition of the middle industrial class. Increase in ability to surround themselves with influences which improve the mind, morals and health of this part of the community means elevation for society from its foundations, whereby all above is also raised. For signs of such advancement we will all watch with eagerness.

no WORKERS WAGES

## FIGAT THE AVEARGE WABE OFTNE

INOUSTPIAR. WORNER

## MUAVION LEFT: PEPCENTAGE OF FANILIES

GHONGING TO AENL INDNITPIALCANS




# Map D 

## Family incomes ano Workefs Wages



AIGMT TME AVEARGE WAEF OH TNE INOUSTAIAL. WORNER
LEFTE PERCENTNGE OF FWMILIES

## GELONGING TO AEAL INOUITRIALCLASS

4LSO WELL TO OO (NEOVE) ATO POON(PELOW)


## V.

## The Homes of the Wage-Earners.

The theme outlined-What the ideal home should provide - Map E explaincd and illustrated-1st: The number of persons per building and tenements per house here and elsezviere. Advantages and disadvantages of the small house-2nd: The rear tenement. Its prevalence, the dangers arising from it and the way to secure its abulition-3rd: The privy pit. Where most numerous. Hoze it may be caused to disappear. Why there is no excuse for its continued presence$4^{\text {th }: ~ T h e ~ n u m b e r ~ o f ~ r o o m s ~ i n ~ t h e ~ a v e r a g e ~ t e n e m e n t . ~ L o c a l ~}$ variations. Comparison with Glasgov-Conclusion-The difference betzeeen the averase and the ideal home should constitute a summons to action.

We are now come to the point where investigation is necessary as to residential conditions in "the city below the hill." Before we can take up the study of comparative rentals we must know something regarding the differing accommodation which the several localities provide. We have then as our present task to answer a series of questions as these :-

Ist. Does the industrial class of the west-end, as a rule, occupy lofty tenement houses or small dwellings ?

2nd. Is any considerable portion of our people to be found in rear tenements?

3rd. What sanitary accommodation do the several localities provide?

4th. How many rooms, on an arerage, constitute a home and how greatly does this number vary with different sections?

I think we will all agree that the ideal home is one where the front cloor is used by but one fanily, where the house faces upon a througl, street, where water-closet accommodation is provided, and where there are as many rooms allotted to a family as there are persons composing it. That this ideal is by no means universally attained goes without saying. By means of the accompanying map we can note how far the different localities fall short of this desired standard and, having thus acquainted ourselves with the extent of the deficiency of each we can more intelligently consider in our next article the matter of comparative rentals. A few words of explamation, however, are here necessary with regard to map E. The figures above the section number denote the aserage number of tenements per dwelling house. The percentage to the right indicates the relative proportion of front and rear tenements, the percentage to the left the proportionate sanitary equipment, while the figures below signify the aserage number of rooms to a family in the section under consideration. If, for example, we take section, , the average number of tenements, (families) to each residential building therein, will be seen to be I .46 ; of these tenements 89 per cent. front on the street and in per cent. on lanes or rear courts; of the occupied tenements 8I per cent. are provided with water closets and 19 per cent. with privies; while there are 6.28 rooms on an average for each family.

It may be of interest at the commencement of our enquiry to compare the number of persons per dwelling house, as ascertained for several large American citics, with our figures in this regard for the district under consideration. According to the United States census, the number of persons to a dwelling house in Philadelphia was 5.6, in Baltimore it was 6.2, in Chicago 8.6 and in New York 18.52. Taking into consideration the poor districts only in these same cities these figures were adranced in Philadelphia to 7.34 persons per dwelling house, in Baltimore to 7.7 I , in Chicago to 15.51 , and in New York to 36.78. Now our "city below the hill" can scarcely in fairness be contrasted with the former series of averages for it does not contain the usual proportion of larger residences occupied
by single families, nor, on the other hand, can it be justly compared with the so-called "poor districts" of the above cited citics ; it would need then to be compared with a mean between the two series, and so, when the average dwelling house is found to contain eight persons, this figure proves that "the city below the hill," is rather one of small residential buildings like Philadelphia and Baltimore, than of lofty tenements like New York and Chicago. In fact, the average house throughout "the city belove the hill," accommodates two families, one being above the other below, as may be proven not only by observation but also by our special census which showed 4700 separate buildings to contain 8390 tenements, or on an average 1.78 per building. There is much variation between sections as to the number of tenements which the average house in each contains. The seven sections wherein this number is lowest, vi\%, Nos. 4, 3, 2, 1, 5, 7. and 8 , ranging from 1.25 to I. 58 -are all to be found above St. James strect. On the other hand the seven sections, wherein the average number of tenements per building is the greatest-riz, Nos. 12,13 , $14,15,18$ and 20 -lie on both sides of Notre Dame street between Chaboillez square and the city limits. Nowhere, however, do we find a section averaging more than 2.15 tenements per building, the case in section 13. The fact that the wage-earner of western Montreal dwells in a small building is not without its effect upon him and his family. It tends to make him independent and self-reliant, preserving as it does all that pertains to separate family life. This state of affairs is without doubt more conducive to health and good morals: than if the many were herded together in huge caravansaries where privacy was impossible. There are also, however, some disadvantages. The small house means but few ratepayers per acre, and this on expensive land, means high rentals or mean accommodation for those who occupy. Small houses mean enhanced cost of heating, and since it is easier to inspect a limited number of large dwellings than many small ones, insanitary conditions are permitted to remain, in connection with small houses in out-of-the-way places, which would be noticed and abolished by the authorities did they exist on a larger scale. On the whole, however, I am inclined to regard the advantages of the small house, occupied by few families, asoutweighing the disadrantages attendant upon this condition of living.

2nd. The second task set for us is to answer the query: Is any considerable proportion of our people to be found in rear tenements? It is somewhat difficult to define just what constitutes a rear tenement. Those buildings faci., upon back yards or courts, to which entrance from the main street is by a covered passage or a narrow lane, where the buildings are so concealed by those in front as scarcely to be visible from the thorouglfare without, such are rear tenements without question. In our investigation, however, we have also come to regard many dwellings, facing upon a passage-way (perchance dignified by the title of "Avenue" or "Terrace"), so narrow and so remote from the street that the disadvantages of the rear tenement were all present, as entitled to be classed in the same category. Including such the total number of rear tenements discovered, in the course of our special census of the district, was 860 or an average, if evenly distributed, of about one in ten homes for every section. Certain sections-see map E--such as 13,12 and 11 , greatly exceed this average, the first with 39 per cent., the second with 29 per cent. and the third 23 per cent. of rear tenements. The neighboring sections to these in the same lateral belt, vi\%,. 14 and 15 , also exceed the average, as also do sections 1, 2 and 16 . Section 9 is absolutely free from this evil, while sections 6 and on are nearly so. The presence of the rear tenement always renders a neighborhood less desirable for residence. It is not only bad in itself but it takes up the space, light and air which properly belong to the house in front of it. The rear tenement is rarely well built, and, being hidden from the public eye, is oftimes permitted to be occupied long after it has fallen into such a state of decay that it is no longer fit for human habitation. If one desires to find where drunkenness and crime, disease and death, poverty and distress are most in evidence in western Montreal, he has only to search out the rear tenements. The typical rear tenement is either an ancient wooden cottage of the rural habitant type or a two-storey building encased in refuse bricks and reached by rickety wooden stairs and galleries. It is high time in Montreal that the majority of these hovels were condemned as unfit for habitation, and that our City Council were empowered by legislature to confiscate and demolish such as were rot, within a reasonable period, torn down or removed by their owners. It is
already within the power of the City Council to prevent the erection of further buildings of this type, and if we are to keep pace with the advanced municipalities of the old land we must go a step forther and give to the civic anthority, as representing the public welfare, the right to interfere even with what are known as private interests and rested rights, when these latter are, ats in this case, a menace to the welfare of the commmaty. The rear tenement must go.

3 rd . We now come to a consideration of the sanitary accommorlation to be found in "the city below the hill." It will doubtless be unexpected information to many of the citizens of the upper city - where such a thing is monown-to learn that that relic of rural conditions, that insanitary abomination, the out-of-close-pit-ia-theground privy, is still to be found in the densely populated heart of our city. That the privy pit is a danger to public health and morals needs no demonstration, and yet in "the city below the hill" mare than half the houscholds are dependent entirely upon such accommodation. This evil is maturally greatest in the older residential quarters where many of the dwellings were erected before the day of proper drainage, and where the ideas of their owners, upon what constitutes proper accommodation for tenants, are as antiquated as their crumbling properties. There is a map in my office whereon are colored in yellow all blocks of buildings containing only proper sanitary accommodation, and whereon the presence of the privy abomination is designated by shades of purple from violet to nearly black according to its prevalence. The sections above St. Antoine street are upon this map mostly yellow. Between Mountain and Richmond strects this favorable color comes down as far as St. Janes street Beyond Caming street it again creeps down to Dominion avenue. This irregular strip and occasional faces along St. James and Notre Dame streets, are the only considerable patches of yellow color upon the entire map, are in fact the only neighborhoods of any extent throughout the nether city where water-closet accommodation is universal. Turning to map E we note that the belt composed of sections I to 10 contains but 22 per cent. of privies, although 4 and! 5 greatly exceed this average. Section 9 alone is wholly exempt, though section 6 is nearly so. The second belt, made up of sections II to I5, contains proper and improper sanitary accommodation in

## $3 ?$

about equal proportion. The third belt, sections $16-20$, is slightly inferior to its predecessor, only 44 .per cent. of the families here having water-closet privileges. It is reserved, however, for old Griffintown to surpass all other localities in unenviable pre-eminence in this regard. Throughout that belt (see sections 21 to 260 map E) only one family in four have water-closet accommodation. In certain sections of it (such ats 22, 25 and 26) the proportion with proper sanitary equipment is but one tenement in every five. Nor is there much improvement below the canal for the percentage of families using privies throughout sections 28 to 30 reaches 72 per cent. On this score then the localities abowe St. Jarres street are most adtranced in the process of ridding themselves of this evil, those sections bordering the canal and within the limits of Griffintown are most backward and in great need of attention and ameliorating effort.

The number of privies, throughout the entire city of Montreal, has considerably diminished during the past five years. Although there are ${ }^{\text {to }}$-day 3000 less of them than in 1891, the total number at the beginning of 1896 was still nearly 5800 . It certainly does not seem to me that the work of eradicating this evil is being pushed forward with the energy and despatch which the urgency of the case demands. The evil is still so wide-spread and abundant that only drastic measures, born of persistent agitation, will suffice to extirpate it. It is now quite in order to prohibit the crection of further privies within the city limits, and it would not be going too far were our corporation to provide, by by-law, that, if, after a reasonable period had elapsed-say two or three ycars from date-any landlord within the city limits shall thereafter continue to be the owner of a privy, he shall be taxed for it at the rate of $\$ 10.00$ per annum until he be thus forced to abate the same as a public muisance. There is no excuse for permitting this evil longer to exist. There is not a street or lane in our nether city which has not a water service. Only a few small alleys are without a drainage system. Not one house in twenty could plead exemption upon this score. But even if a water-closet in every home is a thing as yet unattainable, we can at least where necessary, adopt the Birmingham pail system, whereby all night-soil is collected and removed once in cvery twenty-four hours. Even this
improvement would remove many of the mosit objectionable features of the privy pit as we know it. This much of an adance we might at least make. Would that Montreal might enter the twentieth century with this reform an accomplished fact.

4th. Our last consideration in regard to the homes of the westend is with reference to the number of rooms the average family occupies and how this number varies with different sections. The special industrial census, already so freguently referred to, showed that the 7671 families in "the city below the hill" occupied $3^{8,543}$ rooms. It will be seen that the average is a trifle over five (5.02) rooms per home. This indeed compares favorably with other cities. The best district in Glasgow averages but a trifle over four rooms per fanily. The locality which makes the best showing is section 9 which boasts $73 / 4$ rooms for every family. The order of merit is then as follows:-Sections $9,3,2,6,1,8,4,10,11,5,19,14,17,16,29,7$ $20,23,22,30,12,21,15,25,18,28,24,27,13,26$.

It will be seen that, with the exception of $\mathrm{N} \circ$. 7 , every section above St. James strect shows an average of at least $51 / 2$ rooms per family. In fact, the combined average of sections $1-10$ is over six rooms per family. This high average, however, does not characteri\%e the remaining portion of "the city below the hill." Four and a half roems per famiiy seems elsewhere about the usual rule. In the belt between St. James and Notre Dame streets the average is $41 / 2$ rooms. In that belt which lies between Notre Dame and William streets it is $4 \frac{3}{5}$ rooms. In old Griffintown it is $4 \frac{3}{10}$, while across the canal it is $4 \frac{\partial}{5}$ rooms. There are in all these sections a certain number of homes occupied by families, hardly belonging to the real industrial class : probably if these were deducted from the calculation we would find the average home of the west-end industrial worker still to contain at least four rooms.

Dr. Russell, the head of the Glasgow Health Department, is responsible for the published statement that of every one hundred families in that city 30 per cent. live in one room, 44 per cent. in two rooms, 15 per cent. in three rooms, and only 11 per cent. in four rooms and upwards. How far superior are the conditions which we have been examining? This can be demonstrated by comparing with the above figures those of that section of the nether city most
likely to approximate similar conditions. Take, therefore, section 13, where the average number of rooms reaches the lowest limit known to our limited experience-a little under four (3.99) rooms per family -and we find that in this section there is not a family living in a single room, but 14 per cent. of the families having only two rooms, 3 I per cent. with three rooms, 3 I per cent. with four rooms, 9 per cent. with five rooms, while 15 per cent. with six rooms or more. The comparison is overwhelmingly in our favor.

And now we have about covered the ground set apart for the present study. If we could imagine ten average families coming to settle within "the city be.ow the hill" the division of accommodation among them may be expressed as follows: One family might secure an entire house to itself, but nine families musi ieeds share theirs' with another. Nine families might dwell facing the street, but one would have to live in the rear. Five families might have proper sanitary accommodation, but as many more would have to put up with the pit privy. Three families might have six rooms, four families might have five rooms, while the homes of the remaining three would contain four rooms. This, then, represents the home average for the dwellers of the west-end. There is still need for much effort before the home average can be brought up to the standard of the home ideal set forth in the introduction to this article.

## Map $E$.

THE HOMES of the wage-earners.

OF TENEMENTS oUSE.

OF ROOMS PER FAMITY

RIGHT $=\left\{\begin{array}{l}\text { ABOVE=PERCENTAGE OF TENEMENTS FRONTING ON STREETS } \\ \text { BELOW PERCENTAGE FRONTINOON }\end{array}\right.$ LEFT $=\left\{\begin{array}{l}\text { ABOVE =PERCENTAGE OF TENEMENTS WITH WATER-CLOSETS } \\ \text { BELOW }\end{array}\right.$ below = PERCENTAGE of tenements having Privies.



## Map E.

THE HOMES OF THE WAGE-EARNERS.

Above=Average Number of Tenements per Dwelling House.

BELOW=AVERAGE NUMBER OF ROOMS PER FAMILY.

RIGHT $=\left\{\begin{array}{l}\text { AbOVE =PREGENTAOE OF TENEMENTS FRONTING ON STREETS } \\ \text { BELOW PERCENTAEE FRONTNO }\end{array}\right.$ RIGHT $=\left\{\begin{array}{l}\text { Aelow PERCENTAGE FRONTING ON LANDS AND iN REARS. } \\ \text { BE }\end{array}\right.$
$L E F T=\left\{\begin{array}{l}\text { ABOVE = PERCENTAGE OF TENEMENTS WITH WATER-CLOSITS. } \\ \text { BELOW=PERCENTAGE OF TENEMENTS HAVING PRIVIES. }\end{array}\right.$

VI.

## Comparative Rentals.

What a rental map by blocks zeill show-A feze gencraluzations Map F. and its explanation-The average rental for the typical homeVariations according to situation - The belts compared-Hoze sanitary equipment affects rental values-What proportion renial takes of income-Some instances of very' loze rentals-Recapitulation-Hoze to avoid the most common mistake of philanthropic investment in zoorkingmen's homes.

In our preceding article we considered the homes of "the city below the hill." We learned what the dwelling place of the average family offered by way of situation, sanitary convenience and room space. We noted also the local variations from the standard. We are now therefore prepared (ist) to enter upen a consideration of the cost of such accommodation to the average family ; (2nd) to examine how this amount varies according to the locality ; (3rd) to consider certain other conditions which influence rental values, and, (4th), to ascertain how large a proportion of his income the average wageearner finds it necessary to set aside for rent.

A map of the district under examination hangs upon my study wall. It shows by graduated colors how rental values vary with every block. Where the arerage family rental for a block reaches or exceeds $\$ 20$ per month a light lemon color is used; where the average falls below $\$ 5$ per month a deep chocolate tint renders this fact apparent. From lemon to chocolate are nine shades of color,
each representing a lower rental as the color decpens. A glance at this map suggests a few generalizations. It is noticeable that the bands of lighter color as a rule border the streets which run the length of our nether city. Lagrauchetiere street shows a high rental average for that portion within the district. St. Antoine street, especially from Mountain street to the city limits, is also evidently lined with residences of the better class. St. James and Notre Dame strects, though occasionally showing a clarker tint for a block or two, indicate a higher than ordinary rental average. It is upon streets rumning at right angles with these main thoroughfares that lower rentals predominate. The darkest spots of all, representing the lowest rentals, will be found upon short side streets, or blind alleys and in rear courts. Near the city limits these dark spots grow more frequent, but their presence here, as we shall see, is less ominous than when they occur in localities nearer to the city centre.

Map F, accompanying this article, regards our district as divided not into blocks, but into sections. It deals with averages obtained by grouping together a number of contiguous blozks. Consequently the higher rentals of the main thoroughfares are neutralized by those of the less frequented streets, giving a resultant not fairly representing either class, but still of value for purposes of general comparison. An explanation of this map is therefore nest in order. Above the Roman letters, designating the number of the section, will be found the average rental throughout this group of blocks, together with the number of rooms which that sum will here procure. Below is the average rental value per room. To the left is indicated the grade of accommodation, estimated upon the proportion of families in every hundred that have water-closet accommodation. (Thus section 9, every dwelling therein being properly equipped, is graded at too, while section 22, with but one properly equipped dwelling out of five, is rated at 20.) To the right is shown how large a proportion of the average family income is required to pay the rent. With these data before us we will take up our four points.

1 st. If the rental for every family of the 7671 within the "city below the hill," were equal, the amount would be about $\$ 8.75$ per month. In return for this sum, as we have seen, five rooms might be expected; there would be nine chances out of ten that the home
would be upon an open street and one chance in two that it would contain proper sanitary conveniences. As this gives an average rental value of $\$ 1.75$ per room, were a family to need only four rooms the rental should fall to $\$ 7.00$, while for six rooms $\$ 10.50$ would seem a reasonable charge. I all quite aware that averages, obtained by combining the figures of sections so different in character, are not of much real value, yet it is worth while noticing that for the real industrial sections these general estimates do not come very wide of the mark.

2nd. Great indeed is the variation from the average standard in this matter of rentals. For instance we have in section 3 an average rental almost reaching $\$ 16.00$, while in section 26 it is but $\$ 6.30$ per month. Lotation is a most important factor in determining rental values, and by grouping sections according to natural affinities we may measure the popular estimate of certain neighborhoods on this scorc. (a) Considermg as a whole that group of sections which lies above St. James street, we find that here the highest amounts are paid for rent. Sections 1 to 10 combined show a rental average of $\$ 12.30$ per dwelling or $\$ 1.94$ per room. In sections $2,3,6$ and 9 , about $\$ 15.00$ per month is the ruling figure, while only in sections 5 and to does the arerage rental fall below \$10.00. Equally good accommodation is of higher cost in the northern than in the southern end of this belt. Thus, though only $8_{1}$ per cent. and $8_{4}$ per cent. of the dwellings in sections 2 and 3 have water-closet accommodation, while every residence in section 9 is suitably equipped, rents are proportionately higher near Windsor street than they are in the neighborhood of the city limits. (b) With the exception of sections it and 16 -which, because of the hotels they contain, do not present fair comparative averages-no section below St. James street, exhibits a rental standard exceeding $\$ 8.50$ per family. Taking that group of efoht sections which lie between Chaboillez square and the city limits, Nos. 12 to 15 and Nos. 17 to 20, the average rental is slightly under $\$ 7.50$ per family: As this is an industrial section par excellence this estimate may be taken as fairly indicating the average rental for fanilies of the working class. (c) Between William street and the canal the alerage rental falls to $\$ 6.67$ per family, though it is just possible that our firsures hardly do this locality justice owing to the custom,
somewhat prevalent, of paying lower rentals in winter and higher in summer. (d) Below the canal the rental average falls yet lower to $\$ 6.57$, for this amount, however, more room space being here given than in "Griffintown." A room costs less in section 30 than anywhere else within our nether city. It may be laid down as a rule that the rental value per room will stcadily decline as one draws away from the employing centres and towards the outskirts of the city. It is evident that the wage-earner who is blessed with a large family, and who can pay but moderate rent, withdraws to the suburbs where alone he can obtain the room space which his fanily demands. This, doubtless, accounts for the nightly exodus southward across the city line into St. Cunegonde, noted in our second article.

3 rd. But location and room space are not the only matters which affect rental values, the character of the accommodation also exerts upon them a great influence. It is difficult in this respect to compare the houses of one locality with those of another, but I know of no better method than to rank the sections according to the proportion of residences that they contain, having water-closet privileges; for this test can be fairly taken as indicative of the percentage of dwellings which are of recent and improved construction. It is by applying this test that we are enabled partially, at least, to explain the difference in rentals between such sections as 18 and 25 . There is not much difference between them as to location. In both sections $41 / 4$ rooms constitute the average home, yet this accommodation costs $\$ 7.14$ in section 18, and $\$ 6.43$ in section 25 . The cause is apparent when it is noted that in the former section 53 per cent. of the tenements have water-closets, while in the latter section this is true of but 20 per cent. of the dwellings. Further comparisons may interest the reader. Take sections 13 and 26. Each supplies 4 rooms to the average family, but the cost per room in the former is $\$ 1.80$, while it is but $\$ 1.57$ in the latter. Now section 13 grades 49 points in sanitary accommodation, while section 26 is reckoned at only 19. By this fact the difference of rental value between them is in part at least accounted for. Again, contrast sections 12 and 30 . The room average for each is $4 \frac{2}{3}$. A room in the former costs $\$ 1.79$, in the latter $\$ 1.42$. In sanitary accommodation section 12 is reckoned at 42 and section 30 at but 22 points. Both situation and accommodation here and in gencral influence rental valucs.

4th. It is interesting to note what proportion rental takes of income, and how this proportion varies with different sections. Taking the district ass a whole, 18 per cent. of the total earnings, or nearly one dollar in every rve, reaches the pocket of the landlord. In the better sections of : upper belt this percentage is exceeded. In sections $1,2,3,4,5,6,1,8,9$ and 11 the proportion equals or exceeds 20 per cent. Between St. James street and the canal it will average about 16 per cent., the sections near McGill street considerably exceeding the figure, while those near the city limits falling below it. For the combined sections below the canal the average is but 13 per cent. Nowhere else in our district does rental take so small a proportion of income as beyond the canal.

The real industrial class cannot, as a rule, afford to pay more than 20 per cent of their wages for rent. It is among the well-to-do and among the very poor that a proportion higher than this will be most frequently found.

There were some surprisingly low rentals in certain quarters of limited extent within "the city below the hill." Five dollars a month for three or cren four rooms in a rear tenement is not uncommon. When, however, in the district we are now considering, we find four dollars for three rooms or three dollars for two rooms-unless it be close to the city limits-we may be certain that the accommodation furnished is of the poorest quality. Yet even as low as $\$ 2$ for two rooms was in several instances reported. One whole block, near the city limits, contained 57 families, each occupying three rooms, their average rental being but $\$ 4.33$ per month.

In closing, let me re-state some of the more important conclusions which we have arrived at as a result of this study.

1. The aicrage rental in "the city below the hill," is $\$ \mathrm{I} .75$ per month for each room, and since five rooms constitute the average home, our average family will pay $\$ 8.75$ per month for rent.
2. Rental values are higher in the belt above St. James street than elsewhere throughout the nether city. The value per room gradually diminishes as onc passes southward from McGill strect and approaches the city limits. Rents in Ste. Cunegonde and in St. Gabriel Ward will be yet lower than in the districts we have examined.
3. Where location is of equal desirability the rental value will
largely depend upon accommodation, and this may be best tested by ascertaining the sanitary equipment of the houses of the neighborhood.
4. For the district, as a whole, the proportion which rental takes of income is 18 per cent. For families of the real industrial class 16 per cent. is a fair average. Towards the city limits the proportion still further decreases. It is among the well-to-do and the very poor that rental is permitted to absorb from 20 to 25 per cent. of earnings.

One of the mistakes most frequently made, in semi-philanthropic efforts to provide homes for working people, is the building of dwellings too high priced for the neighborhood. Incidentally this may benefit the locality, though only those already fairly well housed can take advantage of this better value. The bulk of the people live as before. In such experiments the first question should always be: What can the people of the district afforl to pay : the next, what is the best value which philanthropic investment can furnish for this, the current price? These questions well considered in advance will minimize the risk of financial failure.

- 4.5

46 Top rme saction
DeA AOON THEPEIN
which pental ranes of income
comocarion



Map F.
Compapative aenialis
Anove = TME AVEAAGE AENTAL fOA THE SECTION
EELON = " " " PCQ AOOM THEREIN
MIGN = PEACGNTAGE wHICN TENTAL TANES Of income

## VII.

## Density and Overcrowding.

The difference in meaning of the terms-The three points to be considered: Density, Overcrozeding and Vaant Property-IIst: Density-Montreal compared zeith other cities. - The western compared with other ze'ards The "city beiow the hill," its density. -Comparison of groups of sections. Howe this density should be relieved-2nd: Overcroveding-The standitrd for the nether city-Localities exceeding it.-The densest regions com-pared-Instances of overcrozeding-A remedy proposed-3rd: Amount of vilant residential property-Various causes for lack of tenancy. The small percentage in zorking-class sections - Proof that suitable dzevellings for zoorking: people are not too mumerous-.. Conclusion.

Density and overcrowding, by which we mean two entirely different matters, are to-day regarded by medical authoritics as exercising so great an influence upon public health that these subjects demand at our hands full and careful consideration. Density of population is usually expressed in terms of persons to the acre. Overcrowding has come to be regarded as referring to the number of persons per occupied room. Were we to estimate the condition of a neighborhood alone by the former test we might be drawn into quite erroneous conclusions, since of two localities, having the same density per acre, onc may be occupied by three-storey dwellings with abundant room space for all, while the other may be covered with low-built hovels wherein the room space is wholly inadequate. Evidently in such a case the former locality would be far less in need of attention
a id reformatory efforts than the latter. Density and overcrowding must therefore be considered together, and such is the purpose of this article, while we will also deal, in conclusion, with a third topic, viz. : the proportion of vacant residential property.

Let us first explain the accompanying map G., to enable us, as it were, to take inventory of the information at our disposal for a comparative examination of the nether city upon these three points. In each section the figures above the Roman letters show the total population of the section, and the figures below the number of persons per acre which this represents. This material will serve us for a comparative study regarding density. The figures to the right denote the number of rooms per family, those to the left the number of persons per occupied room. This data will aid us when we come to the study of the subject of overcrowding. Finally in the lower right hand corner is to be found the proportion of tenements that were found to be unrented in November last. These statistics will assist us in determining whether there is a demand for additional accommodation in the section indicated. By means of broken diagonal lines the more thickly inhabited portions are indicated upon the map, the greater the density the closer being these lines. A dotted line marks off such portions as are non-residential, though the space is still included in the calculation of the sections.
ist. Havinglearned how toutilize the information set forth upon the map, we are now prepared to take up the subject of density. Judged by old-world standards, Montreal is not a densely peopled city. It will average throughout its entire extent about forty persons to the acre. Neither are St. Antoine and St. Ann's wards-which are in part included within "the city below the hill"-among the more densely populated of our city. While St. Louis Ward averages 117 to the acre, St. James Ward, 96 ; St. Lawrence, 67 ; St. Mary's, 63 ; and St. Jean Baptiste, 56 ; St. Antoine Ward will only average about 47 and St. Amn's Ward 35 persons to the acre. Our "city below the hill," which contains, over all, about 700 acres, a little over a square mile, averages about 55 to the acre and were the population evenly distributed could not be regarded as thickly inhabited. But when we deduct, as we reasonably may, the canal and wharves, the parks and streets, Bonaventure station and the non-residential section No. 27,
we find a total population of 37,633 persons upon about 400 acres, or an average of 94 persons to the acre. This expression represents the density of the "city below the hill."

Taking one hundred persons per acre, as a standard by which to institute comparisons, we will examine the groups of sections which naturally make belts of territory. (a) Least denscly populated of allis the belt made up of sections 28 to 30 . Owing to the presence of numerous industrial establishments along or ncar the east bank of the canal, the residences here do not, as a rule, commence to appear until the second or third block back from it. Consequently for the territory between Centre strect and the canal the population will not exceed 65 per acre, while the only locality more densely populated than the standard (having an average of 153 to the acre) is that situated between Shearer and Island streets. (b) No section throughout the belt between Netre Dame and William streets, sections 16 to 20, exceeds or even reaches a density of ico per acre. Between Barré and Notre Dame strects there is a thickly peopled strip of limited extent averaging 160 to the acre ; just below Chaboillez square lies a half acre on which reside no less than 174 persons; and the northern corner of section 20 cxhibits a density of 190 per acre, but the rest of the territory in this belt does not exceed the adopted standard. (c) Below William strect, however, throughout sections 22, 24 and 25 , the average density exceeds the standard, reaching 120 per acre. But if one wishes to visit the most densely populated neighborhood in "Griffintown" he will find it within the bounds of William, Colborne, Smith and McCord strects, where an average of 173 per acre is attained. The single block with highest record is that wherein is situated No. 6 Police station, where 498 persons occupy less than $21 / 3$ acres, giving a density of 217 per acre. (d) The sections above St. James street, Nos. I to 10, vary considerably but average 104 per acre taken as a whole. Sections 6,8 and 10 show highest averages, with 140,134 and 147 respectively. Section II appears to have a dense population, but the presence of several large hotels therein, with transient occupation, prevents us from being certain in our calculations regarding it.
(e) But it is in the zone known as the "Swamp" that we find the greatest density. Sections 12 to 15 , which contain about 54 acres upon which buildings have been or might be crected, have a joint
population of 8863 souls, or an average throughout of 163 to the acre. Some areas of limited extent far exceed this belt average. Here are the most densely populated localities to be found in all the "city below the hill." One of these special districts lies below the railway track, between Mountain and Lusignan streets, where, in less than 10 acres, dwell two thousand people. Another densely populated locality stretches from St. Antoine to Notre Dame streets, between Richmond and Seigneurs streets. St. Martin street runs through the centre of it, and here a density of 230 per acre is reached. The densest block anywhere discovered within the nether city lies between St. Martin and Seigneurs streets, below the track, a blind alley called Leroux street traversing the middle of it. Here in a trifle over three acres can be found 955 persons, or over 300 to the acre. Think of it, a thousand people residing upon a space the size of one portion of Dominion square. If the residents of this block stood in a row, allowing about twenty inches to each person, they would form one solid line completely enclosing the block on its four sides. It becomes no longer a matter of surprise that upon election day, a single block in the southern comer of St. Antoine Ward should be able to produce ten or even twenty times as many voters as an equal area above Sherbrooke street.

Two hundred persons per acre throughout any considerable extent of territory is not an average which can be permitted, in a city of small homes like Montreal, without special vigilance in regard to all that affects the public health. A district thus congested has demands upon the civic chest for expenditure upon ameliorating and preventative measures, not to be considered merely upon the basis of the proportion of taxation which it bears. With fifteen thousand of our fellow-citizens (between Mountain street and the city limits above Notre Dame street), having as their only breathing space scarcely an acre, called Richmond square, what more fitting way of celcbrating the approaching anniversary of ou: noble Qucen can be devised than to open and equip within this densely populated area a public park in dimensions and adornment worthy the occasion? Another means of relieving the congestion would be to extend Albert street, as homologated, from Bonaventure station to Canning street, opening a
thoroughfare below the railway track. Something certainly should be done to give the residents of the "Swamp" more breathing space.

2nd. The second phase of our question, the subject of overcrozedins. now claims brief consideration. This study deals with the matter of room space, and examines into the number of occupied rooms per family and per individual. As has been demonstrated, a section may show high density yet ample individual room space, so that the danger arising from the former cause may be neutralized by the latter condition. The number of occupied rooms throughout "the city below the hill" is almost identical with the number of persons. In fact, the average would be about $\frac{1}{50}$ rooms per individual. "One person, one room," may then be regarded as the standard. Where, as in sections 1 to 11 , the average famuly accommodation exceeds five rooms, there are as a rule fewer persons than rooms. But where the home contains less than five rooms then more than one person is the average for each room. Two sections, such as 10 and 25 , may rank when tested according to density nearly upon an equality, but when it is noted that in the former locality nine persons would have the use of ten rooms, while in the latter eleven persons would occupy the same number, it is evident that in the former section the congestion is far less dangerous than in the latter. When comparison was made between what are called "Griffintown" and the "Swamp" upon the matter of density, the latter was found to contain a considerably higher average per acre than the former. If, however, the two localities be tested by the number of rooms per individual which each allows, it will be found that while the "Swamp" (sections 13 to I5) averages 1.08 souls per occupied room, the more thickly populated sections of "Griffintown" (Nos. 24 to 26) show an average of 1.13 persons per room. Evidences of overcrowding are more apparent in "Griffintown " than in the "Swamp." The locality which surpasses all others in the number of persons per occupied room is section 24, where a family of five persons will average but four rooms. We also noted that, as the city limits were approached, the density increased; the number of persons per room, however, generally grows less, so that the evil effects of the former condition are largely neutralized by the latter.

Instances of overcrowding were not infrequently discovered in the course of the industrial census, but their number was far less than had been expected. In less than two per cent. of the families visited was an average of two persons per room reached, although cases, where five, six, seven or even eight persons were huddled together in two rooms, were discovered. Seven persons to three rooms was the condition of more than a score of families. Eight, nine, ten, or even eleven persons for three rooms ; nine, ten and eleven persons for four rooms were found. The worst group of overcrowded homes was located on St. James strcet, just beyond Fulford, where 41 persons occupied 20 rooms. There is reason to believe that other parts of our city in this matter are greater transgressors than those we have studied, but for lack of data we can make no comparisons. The laws of health demand that in Montreal, as is already the case in Glasgow, overcrowding be prohibited by civic enactment.

3 rd . The third and last point to be in this article considered is the proportion of vacant residences throughout our nether city and what is demonstrated thereby. Out of 8390 places of residence, 719 , or about $81 / 2$ per cent. were noted to be unrented and unoccupied in November last, when our census was made. This means one dwelling out of every twelve, and appears at first glance to be a large proportion. Local causes, however, accounted for lack of tenants in many cases. Thus, in section 2 it was uncertainty regarding the widening of St. Antoine strect. In sections 7 and 8, where the vacant houses are nearly all above St. Antoine strect, the vacancy was occasioned by their undesirable position, in that they were overshadowed by the C.P.R. track. Were it possible to deduct such residences as are tenantless on account of similar local causes, such as were not erected with proper judgment in making the rental fit the locality, such as are very undesirable on account of extreme dilapidation - were it possible to deduct these, it is probable that not 5 per cent., or not one homse in every taventy, would be unoccupied from other causes. Ordinarily it is in the well-to-do sections that the percentage of unrented dwellings will run highest; it is where the working people live that inoccupancy is less frequent. A score of blocks, in localitics of the latter order, could be named wherein not a room is vacant. In the more thickly populated portions of the "Swamp" and "Griffin-
town " only from 5 to 7 per cent. of vacancy is the rule. When, as here, the number of persons desirous of residing within a given locality is so great that sixteen out of every seventeen available dwellings are regularly rented, it is quite reasonable to assume that were modern dwellings erected, carefully adapted to meet the needs and the incomes of the local inhabitants, such buildings would rarely, if ever, want for tenants.

In conclusion, we would affirm that "the city below the hill," as a whole, is not over populated. There is still much available land that might be built upon to accommodate that excess of wage-carners which, as we found in article II, now find homes outside. Certain densely inhabited localities are to be found, and such congestion should be relieved by the opening of new streets and parks. There does not appear to be great cause for alarm ats to overcrowding-at least, not in this portion of Montreal-but even here cases are sufficiently frequent to demonstrate the necessity for regulations by the civic authorities upon this matter. It is well that we have learned the situation of the more densely peopled and more frequently overcrowded districts, in order that these localities may be watched with greatest care. The comparatively small percentage of unionted dwellings, among those suitable to the real industrial class, leads us to conclude that capital judiciously invested in providing hones for working people in "the city below the hill" would be almost certain to earn reasonable dividends.
2.

OVERCROWDING
ON OF THE SEGTION
s PEN ACRE

- FAMILY
pef occupiea fioom
of of vacant onellings




# 1275 

VII
6.40 79 $\begin{array}{rr}140 \\ & 14 \\ & \\ & \\ & \\ & \\ & \end{array}$ $\begin{array}{rr}140 \\ & 14 \\ & \\ & \\ & \\ & \\ & \end{array}$
14\% $\qquad$
$\qquad$



 $=$ $\begin{array}{r}V \\ 14 \\ - \\ \hline\end{array}$



## Map Ci.

DENSITY AND OVEACROWOING
AEOVE F TOTAL POPULATIUN OF THE SECTEON
EELOW: NO OF PRPSONS PEA ACAF
RIGNTENO OF POOMS PER FAMILY


80

VII'.

## The Poor of the West End.

Who are the poor?-More mumerous are they? Where are they? - Location and distribution-Sixplanation of Map $H$ - Hoze to reckom comparative pozerty - Wide distribution of pozer!! - "Griffintoren" and the "Sarami" - Other like localities of smaller area-- Where is porerty less freguent? Do the zecll-to-de move out ? - Canses of poverty--Irregularity of zeork, zethere mest in covidence?-The relatione of the saloon to idleness and reant-Examination of group of special families-Composition of the family-Summary.

It is difficult to determine what shall constitute the low water mark of decent subsistence in our "city below the hill." Since a dollar a day is regarded as the minimum wage for an unskilled laborer, it would seem that $\$ 6.00$ per week might be taken as the point below which comfort ends and poverty commences. But a dollar a day is by no means equivalent to $\$ 6.00$ per week, since few are those, amorig this cliss of laborers, who can count upon regular work throughout the year. It is also an undeniable fact that there are frugal households, not a few, wherein $\$ 6.00$ per week means independence and comfort. Below $\$ 5.00$ per week, however, it is hardly possible for the weekly income to fall and yet permit of proper provision being made for a growing family, and although there are those who do this also, and all honor to such as can, yet we may safely fix the limit of decent subsistence at $\$ 5.00$ per week and regard such families as, throughout the year, earn no more than $\$ 260.00$, as properly to be termed " the poor."

Now that we have determineduponastandard of measurement, the first quesion to be asked the statisticir 1 of the "city below the hill" is:-How many families are there in his district that fall below the standard, in other words what is the extent of poverty? Of 7,671 families, in the area under examination, 888 or it $\frac{3 \%}{5} \%$ stated in November last, in response so the inquiry of our canvassers, that their average weekly family income taking the year as a whole, did not exceed $\$ 5.00$. This is then the "submerged tenth" of western Montreal and its examination will form the subject of this article.

The accompanying map $H$. is designed to furnish data for comparison along these lines. An explanation thereof is then of first necessity. The figures directly above the Roman letters represent the total number of poor families within the boundaries of the specified section. The figures directly below the Roman letters, signify the proportion of poor families within the boundaries of the specified section, that is the percentage of poor families therein. To the right is to be noted the percentage of families whose incomes are not regular throughout the year. To the left is shown the number of well-to-do familics--whose incomes reach or exceed a thousand dollars a year-and below that again is the percentage of this class to the whole. By these figures we can ascertain the location and distribution of the poor, likewise of the well-to-do. We can also examine the relative proportion of irregular incomes.

There are two sets of data furnished by map H., for comparison between sections in respect to their poverty, viz:- the numerical and the proportional statement. These, by no means, of necessity correspond. A district may contain but few poor families and yet, because thinly populated, may present a high poverty percentage. On the other hand a section wherein are many poor i.milies, because dense'y populated, may not be prominent when ranked according to percentage only. In determin'ing then what districts are of most unenviable pre-eminence as the habitat of poverty, attention must be paid to both the numerical and proportional statement.

The families of the poor are widely distributed throughout the city under the hill. We do not here, find them as is many ocher cities, grouped together in a locality with clearly determinable imits; on the contrary, but one of our residential sections, No. 9, ontains
none of this class among its inhabitants. The presence of the poor is not alway's apparent. Sections generally considered to be wholly consecrated to the well-to-do, contain, in out-of-the-way alleys and in rear tenements, a small proportion at least of needy families.

Two considerable areas, however, those indicated by broken lines upon the map, contain over half the poverty of the "city below the hill." These districts are "Griffintown " and "the Swamp."
"Griffintown," or rather that part of it which lies between William and Brennan strects, from Grey Nun to Young streets, is the home of nearly one thousand families, twenty-four per cent of whom, or one out of every four, are living upon $\$ 5.00$ per zeeek or even less. The four sections, Nos. 21 to 24, included between these boundaries, contain 233 poor families or about one-fourth of the whole number resident within our nether city: No other district of equal extent can surpass this cither in amount or proportion of poverty.

The "Swamp" district, from Chaboillez Square to the city limits, and between St. James and Notre Dame streets, comprising sections 12 to 15 upon our map, contains in all 1915 families, of whom 221 are "poor." Although the number nearly equals that in the previously. described district, it will be seen that the poor familics of the "Swamp" constitute but $11 \frac{1}{2} \%$, or one-eighth part of the whole population, so that the proportion is only half as large as in Griffintown. The two districts above described, when taken together, account for the location of more than half the powerty of the lower city.

Two other sections, of considerable extent, may be further mentioned as containing more than the average proportion of powerty: Scetion 16 , which includes St. Maurice strect, contains 40 poor families about $17 \%$ of the residential population, and section $S$, owing to the rear tenements off St. Martin and Srigneurs strcets, also contains forty poor families or $15 \%$ of those dwelling therein. These two sections account for one-eleventh of the total amount, and together with "Griffintown" and the "Swamp," or ten sections in all, leave but 354 poor families or only $40 \%$ of the poverty, to be distributed among the twenty sections that remain.

The two belts wherein poverty is of least frequent occurrence are:-that above St. Antome street, where a large proportion of the recidents are well-to-do, and that between Notre Dame and William
streets, south of Inspector, which includes the well-known Barré street section, and is occupied almost exclusively by the real inclustrial class, with few among them falling below the standard. Section 9 alone, as previously stated, has no poor whatever.

It has often been affirmed regarding old "Griffintown," and similar districts, that as soon as a family becomes well-to-do it moves to another locality. That this is the case appears to be corroborated by the evidence of our census. Barely one hundred families, or but $7 \%$ of the present residents of "Griffintown," have an income exceeding $\$ 20$ per week. Of this number fully one-half are grocers and saloonkecpers whose business binds them to the locality. This fact is unfortunate since it tends to reduce the general scale of living by removing from a neighborhood such ameliorating influences as can only be sustained where at least a fair proportion of the community are of the well-to-do class. In the "Swamp," sections 12 to 15 , eleven per cent. of the families are of the $\$ 20$ class, while in the belt above St. Janes street $25 \%$ belong to this order. In no other district does one find so many poor and so few well-to-do as in "Griffintown." This region appears to have been by the latter class abandoned to its fate.

As to the causes of poverty, chicf among them is insufficient employment. Few are the families where nothing is carned, although there are such subsisting more or less worthily upon charity. Almost without exception each family has its wage-earner, often more than one, and upon the regularity with which the wage-earner secures employment depends the scale of living for the family.

One of the matters investigated in our. special census was this irregularity of work. Although as families in receipt of recrular incomes were regarded such as possessed at least one worker employed without intermission, and also all families which receiving ten dollars or more per week for part of the year, might be reasonably expected to put aside sufficient to enable them to get through the remainder without hardship, yet even with these regarded as "regular" there still remained 1724 fanilies, or $23 \%$ of the total number, whose small incomes could not be depended upon as constant and regular throughout the year. Of course this included many instances of alternative trades, as for example, when a man is a brick-layer in sum-
mer and a furnace-man in winter, but still the ratio of nearly one fromilu in every four zeithout stendy zoork, seems alarmingly high and explains much of the poverty. The relative proportion of irregularity in employment varies sreatly with the locality, but increases as one approaches the water front. In the belt above St. James street, the proportion is but one family in eight, between St. James and William streets it is one family in every five, beyond the canal it is one family in four, while between William street and the canal the proportion is tar families out of every five. Think of it, of fifteen hundred families in all "Griffintown," six hundred do not know what it is to have a regular income and steady work. It is not at all improbable that these six hundred families could furnish nearly an equal number of able-bodied men to any local enterprise which, during the winter, would offer a living wage. With most of the wage-earners of these families the programme for the year is as follows:-Work upon the wharves in summer and odd jobs of any sort during during five long winter months. When spring arrives, overdue rent and debt at the corne grocery have so mortgaged the coming summer's carnings that saving becomes impossible. This irregularity of work is doubtless the main cause of poverty, for the prolonged idleness unfits many a man for steady work even when he at length succeeds in getting it. Once irregular always irregular is apt to be true, and irregularity, demoralization and poverty is the order of descent.

It may not be at this point out of place to consider bricfly the liquor question in its bearing upon the subject under examination. Whether the sale of intoxicants is the cause of irregular employment and poverty, or whether idleness and want bring into being and maintain the liquor stores we will not attempt to decide. This fact is, however, apparent to the observer, that wherever poverty' and irresularity are most prealalent, there the opportunities for drunkenness are most frequent. Throughout "the city below the hill," there are, all told, 105 licensed saloons and 87 liquor selling groceries. Of these, 28 saloons and 9 groceries are to be found in sections 3,5 and 11 , in close proximity to the Windsor and Bonaventere stations, where it is apparent that they are sustained more by the travelling public than by the residential population. These sections can the: i sly be
eliminated from the calculation, thus leaving 155 liquor stores to provide for the remaining 27 sections, which means on an average one for every 45 families or one for every 219 persons. This is an exact though startling average for the "city below the hill."

Turn now to an examination of the locality between Willian street and the canal, and what do we find in this regard? Where every fifth family is in poverty, where two out of every five familics are but irregularly employed, the population sustains one licensedand no one knows how many unlicensed-liquor store to every 33 families, or one for every 160 persons. Look now, by way of comparison before leaving this subject, at the district beyond the canal, sections 28 to 30 , with a population similar in respect to nationality to that of "Griffintown". Here one liquor store is deemed sufficient for each group of fifty families, one for every 240 persons, and here also one finds but half the irregularity in employment, and but kew-iffths the proportional amount of poverty existent in the "Griffintown" district just across the canal. L.et this stand as evidence sufficient that drink is inseparable from idleness and poverty and vice versa.

It will be remembered that, according to our industrial census, the total number of poor families was reckoned at 888 in "the city below the hill." Half of this number were by the writer selected as material for a second and more searching investigation, with a view of more fully examining the characteristics, conditions and causes of our west-end poverty: Four hundred and thirty-six families were sought for, and the first fact that was brought to the notice of the investigator was that 46 families, or $101 / 2 \%$ of the above number, had left their former abodes, within the two months between the first and second canvass, drawing attention to one of the sad features of poverty's lot, vi\%., the constant necessity to move on because of inability to satisfy the claims of the landlord. If this ratio were maintained, and each month saw $5 \%$ of the poor evicted, in a year not half these families could be found at the former addresses.

A second fact, made apparent by the special investigation, was that our west-end poierty was not the result of recent immigration. Quite the reverse from what would have been the case in New York or Chicago, hardly a dozen families were discovered that had not been residents of the city for at least three years. The vast majority were
old residents who had lived in Montreal for the greater part of their lives. The presence of poverty, then, in the nether city is not chargeable to any considerable influx of foreign elements.

In the case of 323 families inquiries were made as to the causes, assigned by the people themselves, for their indigent condition. With 109 families, or $34 \%$ the reply was "irregularity of work." The wageearners were not without vocations but their employment was intermittent and often work ceased altogether for considerable periods. With 87 families or $28 \%$ the answer was that the wage-earners had no work whatever, nor did there seem to be any immediate prospect of getting any. With 27 families, or $9 \%$, old age had unfitted and with a like number sickness had prevented the worker from earning the requisite support. Out of these 323 families, among the poorest of the poor, $62 \%$ claimed to be able to better their condition were employment regular and abundant. That a certain percentage of the answers given did not state the real facts of the case is quite probable. Few are the families that will admit to a stranger that drink, crime or voluntary idleness is the cause of their misery, though in $\% \%$ of the cases visited drunkemess was clearly at the bottom of the trouble. Still it is the belief of the investigator that the undeserving among the poor form a far smaller proportion than is generally imagined.*

[^1]Chief canse of need.
Lack of ensployment..........
Sickness............................
Inlemperance or shifilessnes...
Miscellaneous canses..........

| New York. <br> Per cent. | Raltimore. <br> Per cent. | Smaller <br> cities. <br> Per cent. |
| :---: | :---: | :---: |
| 48 | 43 | 35 |
| 18 | 18 | 17 |
| 18 | 13 | 20 |
| 14 | 21 | 27 |

What is notable alont this table is that in all these cities the want of employment was believed to be the cause of distress in as many cases as sickness, intemperance, and shiftlessness combined. This, too, it mast be rememhered, was among the families which applied to public charities for aill. Among those which have been aided by the tradesuniuns and hy their own relatives, the propurtion of those whose need was due to the want of regular work was doubtless much larger. One laber mion in this city paid " out-of-work benefit "to over one thousand families during the greater part of the recent winter."

As to the composition of the family, out of 390 families, 8 were found wherein the head of the household wasawidow, and 54 cases where the husband was too old or too ill to work, making in all 140 families, or $36 \%$ of the whole, that might be called "decapitated" family groups. In about two-thirds of the families, or in $64 \%$ of the cases examined, there was an able-bodied man in the house, oftimes more than one, a man able to work and professing to be willing to do so. If these proportions may be taken as fairly indicating the average among the the families of the poor, it is evident that at least one-third of them are in indigent circumstance: through no fault of their own. Death or disease have so crippled the family group that it can no longer unaided keep up in the fieree struggle for subsistence. Charitable effort must come to the relief of such. With nearly two-thirds of the cases, however, it is not charity that is demanded but a chance to work. Were employment obtainable these families would soon be able to adopt a comfortable scale of living. If private enterprise does not furnish sufficient opportunity for willing men to provide for their families the absolute necessities of life, cluring the four cold winter months, then the municipality, by carefully considered relief works conducted at a minimum wage, should come to their assistance.

Still another matter, examined into by the investigator, was the scale of living among these "poor" families. Of 390 families visited, $19 \%$ were classified as "comfortable" even upon slender means; $40 \%$ were regarded as "poor but self-supporting," that is to say, able to subsist without outside help; $30 \%$ were considered as "very poor" and likely" to need aid before the winter ended; while $11 \%$ were, without question, "destitute" and requiring immediate charitable assistance. If this proportion be constant-and we have every reason to expect that it would be so throughout the mwisited balance of the 888 poor familiesthen there are in "the city below the hill" nearly one hundred families in a condition of absolute destitution, while not less that 250 will need to be helped before the arrival of spring.* This is a conservative estimate, the actual destitution is probably greater, it canhardly be less.

By way of acquainting myself in a measure with what was being done through our various charitable institutions for the relief of the

[^2]suffering poor, I sent to several of them a list containing the names and addresses of needy familics belonging to that special race or creed which each society represented. I asked that the organization should indicate what names were already upon its relief roll. From the replies obtained i gathered that a very considerable proportion of the families known to me, were already being cared for by our charitable Boards. The House of Industry and the National Societies aided the needy Protestants. The St. Vincent de Paul Societies assisted the French-Canadian families in distress, especially the widows. The parish authorities seemed well acquainted with, and in many instances were assisting the worthy poor among the Irish Catholics. But besides these there are also many independent organizations, benevolently minded groups and sympathetic individuals, all contributing to atsisist their suffering fellow-men. Evidences, however, are not lacking to prowe that this bencrolent work frequently overlaps with a tendency to pauperize the recipients. This is a result that should be guarded against with greatest care. I am strongly of the opinion that our great weakness in the work of assisting the worthy poor lies in lack of organized effort among the charitable bodies. Some Central Charity Board, upon which representatives of every race and creed might sit, should be here established. A joint roll should be kept. There should be a sort of clearing house in respect to relief effort, where every needy case could be assigned to the organization responsible for it and whereby a family already in receipt of help from one source should not be further assisted from others. There is in Montreal abundant willingness to help those who camoot help themselves, but it wants proper guidance and direction.

What now have we endeavored in this article to set forth on the subject of the poor of the west-end? With regard to the district as a whole we have shown who are the poor, how numerous they are, their location and their distribution. We have also indicated where powerty was most frequent and the proportion of well-to-do to be found in working class sections. As to canses we have considered irresularity of work, intemperance, decapitation and other factors, and, by a more carcful sturly of a group of poor families, brought out eertain characteristics and conditions. We have advocated municipal relief work for the able-bodied and charity organization in dealing with families incapable of self-support. Here then may properly be brought to a close the present article.

STEND
Lirs

, Famorias
LEFT = Numege of, over panconrane wf wall-To-Dorenniaids


| $\frac{65}{15} \%$ | $\begin{array}{l}20 \\ V \\ 5 \%\end{array}$ | $7 \%$ |
| :--- | :--- | :--- |





Map H.
THE POOR OI THE WEST END

Below = Percentage of Docefumilies


$\square$

$\square$




# IMAGE EVALUATION TEST TARGET (MT-3) 



## IX.

## The Death Rate.

An accepted test of progress in sanitary science-It can be lowered-A hiskh rate means unzeholesome conditions-Comparative death rates, here and elsezehere-The rate for "the city" above" and for "the city beloze" the hiul"-Comparison by belts in the nether city-TThe four loculities zeith $h^{\circ} \cdot \mathrm{hest}$ death rate-Summary of the conditions thereinConclusum.
"The closer people live to one another" says Dr. Russell of Glasgow, the "shorter their lives are." This statement needs no proof, for it is universally admitted that urban conditions are less conducive to general sound health and long life than rural surroundings. With natural conditions against the city, it is only by the exercise of additional precautions that this handicap can be overcome. Now the test to which the cities of the civilized world by common consent anmually submit themselves, in order to determine how successful or otherwise each has been in the struggle against these natural disadvantages, is a determination of the local death rate. By means of a knowledge of the mortality of the municipality as a whole, a city can compare itself with its neighbors and thus note its relative advance along lines of sanitary science. By remarking what regions within its borders show a death rate higher than the ordinary, that city can ascertain the sections that are lagging behind and in need of special attention. Thus a high death rate for any city, or for any particular region within it, has come to be regarded as a danger
signal, a finger of warning pointing to that locality and declaring that there must therein exist conditions detrimental to the public health, conditions which demand increased effort for their eradication or improvement. And since it has been, during the past quarter of a century, repeatedly proven, that the death rate can be materially lowered, can be even reduced by half, through the amelioration of local conditions, it gives us an added impulse for examination into the real state of our own case, in the hope that to know our deficiencies may be a step in the path towards their removal.

In this article we purpose, after a few comparative figures, ist, to compare the death rate of "the city above" with that of "the city below the hill," 2nd, to critically examine certain localities within the latter region which the test of high death rate brings into unenviable prominence and finally to review the conditions of life which, in previous articles, we found existent in those sections where the rate of mortality is nigh. For the entire Dominion, during the year 1893, fourteen persons out of every thousand was the proportion of deaths. In the Province of Quebec this was higher, viz, 19 to the thousand. During the same year about twenty-five (24.91) per thousand died within the limits of the city of Montreal. Quebec province exceeds the Dominion rate, and Montreal city shows a record less creditable than that of the prownce. In 1895 , the last year for which the official record for the entire city is as yet obtainable, the death rate in Montreal was 24.8 I to the thousand. Only twice before in our civic history has it been so iow, and we may congratulate ourselves upon the fact that since 1873 our civic death rate has diminished no less than forty per cent. Yet compared with other cities we have as yet little cause for boasting. In 1894, the cities of London, Paris and Birmingham could show that they had reduced their death rate to 20, Rome had reduced hers to 19.4, and Brussels to 18.1. Boston in 1893, had a death rate of 24.02 and New York of 23.52 and a steady decrease in these cities is also apparent. What has been clone elsewhere in the lowering of the death rate should also be possible for Montreal and a further reduction is expected and demanded.

Great are the variations of the several wards from the average death rate of Montreal. In St. Jean Baptiste ward the death rate for 1895 was 35.5 I per thousand, in St. Mary's ward it was 33.20 , in

St. Gabriel ward it was 32.32. Compared with these localities, our "city below the hill" does not present the alarming symptoms noticeable elsewhere. Our nether city is mainly made up of territory belonging to St. Antoine and St. Ann's wards, and of these the death rate for the former as a whole is but 18.13 , and for the latter 16.83 . Evidently the conditions for the locality which we have studied are not so severe upon human life as they are elsewhere, although even here we found many matters demanding improvement. Through the courtesy of the Civic Health Department I have been erabled to ascertain the number of deaths (not including those which occurred in hospitals, institutions and the like) which took place, during the year just closed, for each separate block within the "city below the hill." Having previously learned, through our industrial ce:nsus, the population of every block, it became possible to determine, not only the death rate per block but also for every group of blocks or section. Map I, whereon the territory is clivided into the same thirty sections with which we have become already familiar, shows the population for each section and also the number of persons per thousand who died within its limits during the year just closed. Here we have material sufficient to afford many comparisons.

During the year 1896 there were 832 deaths recorded among a population of 37,021 (those in institutions being omitterl) within "the city below the hill," giving for this district a death rate, exceeding that of either St. Antoine or St. Ann's Wards, a rate of 22.47 per thousand. Though this rate does not equal that of the city at large, does not approach that of certain previously cited wards, it is still higher than need be, as may be shown by a comparison which we can make in this regard between "the city below the hill" and "the sity above the hill." St. Antoine ward, according to the health report of 1895, had a population of 50,607. It probably has to day a larger population than this, in which case our contrast would be all the more startling. In that part of St. Antoine ward below the hill, reside, according to our census, 21,482 souls. Then above the hill about 30,000 persons will be found. Now the death rate for the whole ward is usually about 17 per thousand. But the death rate for that part which lies below the hill, sections I to 15 , is $221 / 4$ per thousand. It follows therefore that inasmuch as the rate for the
lower portion of the ward is higher than the average, by so much will the rate for the upper portion of the ward be lower than the average. In fact, the rate for the "city above the hill" will not exceed 13 per thousand. If then a rate as low as 13 per thousand has been reached for a locality in Montreal occupied by 30,000 people why can not the same be obtained elsewhere?

But returning to our study of the lower city let us see if the average rate of 22.47 holds good throughout. This examination may best be conducted by belts. Sections i to 10 above St. James street show a rate of 19.75 per thousand; sections 11 to 15 , between St. James and Notre Dame streets, a rate of 26.41 per thousand; sections 16 to 20 , just below Notre Dame strect, a rate of 23.32 per thousand; Griffintown or sections 21 to 26 , a rate of 24.62 per thousand; and the belt beyond the canal, sections 28 to 30 , a rate of 14.41 per thousand. The most creditable showing is made beyond the canal and above St. James street, the most ominous indications are those of the "Swamp" and of "Griffintown." The localities near the city limits, notwithstanding the density of their population, seem especially healthy and scarcely a block, beyond Seigneurs street, shows a death rate equal to the average.

I have chosen four districts, of limited extent, whose boundaries will not correspond with those of the sections with which we have grown familiar, but which present a local death rate so much above the average as to demand an examination into the attendant conditions. The first of these regions lies between Wellington, Grey Nun, Common and Brennan streets; the second between William, Young, Wellington and McCord strects ; the third between St. James, Richmond, Basin and Seigueurs streets; and the fourth between the Bonaventure Station and track, Chaboillez Square, Notre Dame and Versailles street. They are shown upon Map I by broken diagonal lines. Here are the mortality statistics for these localities together with certain data usually regarded as having an effect thereon. Along with these figures are given the average of our nether city, taken as a whole, in order that the differences may be apparent.

63

|  |  |  | 苞艺 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| District 1 | $842 \quad 26$ | 30.87 | 54 | 1.10 | . $05 \%$ | 67\% | 10\% | Mised |
| " 2 | 208765 | 31.15 |  | 1.08 | . 04 " | 80 " | $16^{\prime \prime}$ | Irish |
| 3 | 2532 86 | 33.96 | 170 | 1.09 | . 15 " | 50 " | 15" | French Canadian |
| " 4 | $2179 \quad 84$ | 38.54 | 134 | 1.10 | . $22 \times$ | 59 " | $17 \times$ | French Canadian |
| "Thelower City" | $37.021 \quad \because 32$ | 22.47 | 94 | 1.02 | .09314 | 51" | 15 " | Mised |

Here we have a series of death rates, for groups of blocks, ranging from 30.87 to 38.54 per thousand. It would be quite possible to point out single blocks within these districts where the death rate last year greatly exceeded even these high figures, but with areas of such limited extent one can never be certain that he is not dealing with exceptional circumstances not likely to be repeated. In the above table, however, we have several districts, containing a population exceeding two thousand, a sufficient population to produce a stable average. In these four areas it will be noticed that in the matter of population per acre, persons to a room, proportion of rear dwellings and privy pits, these localities, almost without exception, fail to furnish accommodation up to the standard of "the city below th? hill." This failure without doubt is in large measure responsible for the unusually high mortality which in these districts prevails. Until such conditions as are remediable, as for example the rear tenement and the privy, are legislated out of existence, and until such as are not wholly alterable, but which can yet be made less dangerous, are ameliorated, we, of this city, have still reason for agitation and effort. These four districts, and others like them, demand our special attention until their death rate shall no longer exceed the normal figure.

In conclusion I would again draw attention, ist, to the fact that the death rate for "the city below the hill" is far higher than it is for "the city above the hill"; 2nd, that certain specified localities within our nether city, which combined contain one fifth of its total population, exibit a death rate exceeding $3 \not+$ persons to the thousund: 3 rd, that in these and other similar localities exist conditions which are undoubtedly responsible in great measure for this excessive death rate, and finally that these conditions can be improved and ought to be improved since thereby a saving of valuable lives may result.



## Map 1.

 E DEATH. PATE (omerrino inirmuond
## ABOVA DODULATION






## X.

## Nationalities and Religions.

General stutistics-The mationalities of the "Sreomp" ... Consideringr the mether. city bl belts-The three main elements of aur papulation-The numerial strensth and distribution of the furcigin element Some race characteristics meted-Figreres relating to religions belicfsConclusion.

As previonsly stated, "the city below the hill" has a mixed population. Considered as a whole, the 7670 families therein resident may be classified as follows:-French-Canadian, 32.8 ; IrishCanadian, 2614 ; British-Canadian, 1596 ; all others, 242. Thus it will be seen that 42 per cent. of the population (taken by families) is FrenchCanadian: 34 per cent. is Irish-Canadian; 21 per cent. is BritishCanadian, and 3 per cent is of other nationalities.

That portion of the lower city which lies above Notre Dame strect and belongs to $\mathrm{S}^{+}$. Antoine ward is the home of 4307 families. Its population is thus divided:-The French-Canadians number 2155 families or 50 per cent.; the British-Canadians number 1079 families or 25 per cent. the Irish-Canadians number 916 families or 2 I per cent., and other nationalities comprise 157 families or 4 per cent. Thus it will be seen at in this par $冫$ e ward the French-Canadians form one-half of the population, combined.

Grouping the sections into belts, as has been our custom in previous articles, we find that the strip of sections, Nos. ito ro, lying
above St. James street, has a population more erenly divided anong the various nationalities than any other region. Of the 2183 families here resident, 791 or 36 per cent. are British-Canadian; 659 or 30 per cent. are Irish-Canadian ; 628 or 29 per cent. are French-Canadian, and 105 or 5 per cent. belong to other nationalities. The BritishCanadians have a majority in section No. 9 alone, as is indicated upon the map J. by means of crossed diagonal lines. This element has a plurality in sections $2,6,7$ and 8 . The Irish-Canadians are nowhere in a majority but are in a plurality at the extremities of this strip, namely in sections 1 and 10 , in each case not far from their parish church. The French-Canadians are nowhere in this belt in a majority though more numerous than any other nationality in sections 3, 4 and 5. Upon map J, these variations can be noted, as the strongest element in each section is that for which the figures are placed over the Roman letters.

The strip between St. James and William strects, sections in to 20, through the centre of which runs Notre Dame street, contains 3217 familics. Of this number 2190 or 68 per cent. are lirenchCanadian; 510 or 16 per cent. are Irish-Canadian, and 4 IO or 13 per cent. are British-Canadian, with 107 families or 3 per cent. of other nationalitics. Here the French-Canadian is almost universally the predominating element. Only in section 11 does this nationalityfall short of being more numerous than all the others combined, and although in sections 16 and 17 the majority is narrow, it soon becomes overwhelming as one passes to sections southward.

Between William street and the canal, sections 21 to 26 , the IrishCanadian is the most important element. Here are to be found 1517 families, of which 1047 or 69 per cent. are of Irish extraction. The British-Canadian and French-Canadian elements are of nearly equal strength in this district, the former numbering 239 families, or 16 per cent. of the resident population, the latter 215 families, or 14 per cent. of the whole. Other elements here form but i per cent. of the population. Sections 21 and 23 of this belt are but sparsely occupied by dwellings, only 220 families being found therein. Along Grey Nun and Common streets there is a considerable group of FrenchCanadian families. In fact, this element is the predominating one in section 21 and forms more than onc-fifth of the population of 23.

Elsewhere throughout "Griffintown" the Irish-Canadians are in majority, the proportion steadily increasing as one approaches St. Ann's Parish Church.

Beyond the canal, sections 28 to 30 , taken as a whole, show an Irish-Canadian majority over all others. The population here numbers 754 families. Of these 398 or 53 per cent. are of lrish descent; 185 or 24 per cent. of French extraction, and 156 or 21 per cent. are British-Canadians. Only 15 families or 2 per cent. may not be included am ong these three nationalitics. It is to be noted that the French-Canadian element, with a strength of but 5 per cent in section 28, claims 24 per cent. of the families in 29 and, in section 30 , -which is partly in St. Gabriel ward-is the most powerful element, comprising here 41 per cent. of the total number. Beyond Laprairic Street, in that part of St. Gabriel ward which is west of the railway track, the French-Canadains are in the large majority.

Hawing dealt with the three main nationalities, let us now consider briefly the number and location of the foreign elements in "the city below the hill." These are here but 3 per cent. of the total population, numbering in all only 242 fainilies. Of these the German and Dutch number 94 families; Russian and Polish, 70; Negro, 24 ; Chinese, 18 ; Italian, 17 ; Scandinavian and Danish, 17 ; Spanish and Belgian one each. The Germans are to be found in almost every section, especially along the avenues of trade. The Russians and Poles, who are nearly all Jews, are found mainly along St. Maurice street in section 16 and also in section 11 . The negro element is nowhere numerous, but is to be found in greatest number above Bonaventure Station in sections 5 and 6 . The Chinese are mainly to be found above St. James strect. They have 14 laundries, a hotel and a mission within the lower city and are usually located upon the main strects. Owing to our inability to obtain definite information regarding them, the Chinese have been generally omitted from previous calculations. There are but few Italian families; section of contains six, section 5 includes three and section 1 has two. The Scandinavians are scattered. They have become, as a rule, merged into the English Protestant element. In fact, the fow families of foreign lineage, within "the city below the hill," exclusive of the

Chinese, cannot fail soon to be, if they are not already, so fully identified with our native population as to be essentially Canadian.

Perhaps it may not be out of place, in view of the fact that we possess considerable data regarding the various localitics within the lower city and now know the predominating nationality in each, that we here turn our attention to a consideration of race characteristics to see if any such, through our series of articles, have been made apparent. I trust I may offend no one in so doing and that it will be borne in mind that I am not giving opinions but stating facts. Let us, for purposes of such comparison, regard sections 12 to 20 as the typical French-Canadian belt, since over two-thirds of the families are of this race. These sections are shown by horizontal broken lines on map J. The district made up of sections 21 to 30 we will call the Irish-Canadian belt, as here two-thirds of the population are of Irish descent, being indicated on the map by perpendicular broken lines. Sections i to'in we will call the "mixed belt," containing as it does the three elements in nearly equal proportions. Section 9, the only section occupied in majority by British-Canadians, is hardly of sufficient extent to be compared with the other areas.

We have treated of many subjects in previous articles, we will see how these thrce belts:-the French-Canadian, the Irish-Canadian and the "mixed" belt, compare with each other upon these matters.

The average size of the family (after deducting the lodgers) in the "Mixed" belt is 4.67 persons.
" " Irish-Canadian " " 4.57 "

The average number of wage-carners per family in the Irish-Canadian belt is $\mathbf{I} .43$ persons.

| " " "Mixed" | " " | ".41 |
| :--- | :--- | :--- |
| " " French-Canadian | " | 1.40 " |

The average number of home-tenders per family in the "Mixed" belt is 1.72 persons.

$$
\begin{array}{lllll}
\text { " " French-Canadian } & \text { " } & \text { " } 1.48 & \text { " } \\
\text { " " } & \text { Irish-Canadian } & \text { " " } & 1.48 &
\end{array}
$$

69
The proportion of children under five years of age in the average family of the French-Canadian belt is 16 per cent.
" " Irrsh-Canadian
" " 16 " "
" " I3 " "
The percentage of school children in the average family, of the French-Canadian belt is
" Irish-Canadian
" "Mixed"
20 p.c.

The proportion of well-to-do families among the population of the "Mixed"
" French-Canadian belt is

* Irish-Canadian

The proportion of families belonging to the "real inclustrial class." in the French-Canadian belt is.

77 p.c.
" Irish-Canadian " 74 р.c.
" "Mixed" " 66 p.c.
The proportion of regular and irregular incomes in the "Mixed" belt is 87 p.c. Regular and 13 p.c. Irregular.
" French-Canadian
" Irish-Canadian " " 79 p.c. " 21 p.c.
The proportion of families, living upon $\$ 5.00$ per week or less, among the total number, in the Irish-Canadian belt is......I7 p.c.
" " French-Canadian " "......11 p.c.
" " "Mixed" " "..... 8 p.c.
There is a marked difference between the several nationalities which compose our population in ability to comfortably subsist upon very small incomes. Of the poor families especially investigated, among the French-Canadians 62 per cent. were comfortable and $m$ dependent even upon $\$ 5.00$ per week, 58 per cent. of the BritishCanadians were in similar condition, but only 51 per cent. of the Irish-Canadians of this grade were not in need of assistance.

The average family income for all classes

| in the "Mixed" | belt is. . . | $\$ 12$ | $54 ;$ | per individual .. | $\$ 2$ | 36 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $"$ | French-Canadian | $"$ | $" \ldots$. | 10 | $73 ;$ | $"$ | $"$ | $\ldots$ |

The average earnings per wage-carner in the "Mixed" belt amount to ........... $\$ 8$ 89 per week.
" French-Canadian $\qquad$ 762
" Irish-Canadian
700
The average family income of the real industrial class only
in the "Mixed"
belt is
\$10 92 per week.
" French-Canadian
992
" Irish-Canadian
987

The average wage per worker among the "real industrial class " in the "Mixed" belt is .................... $\$ 792$ per week.
" French-Canadian
726
" Irish-Canadian!
689
The average number of rooms in the "Mixed" belt is 6.13 per family.

$$
\begin{array}{llll}
" & \text { Pr. Canadian " } & 4.50 & " \\
" & \text { Irish Canadian " } & 4.33 &
\end{array}
$$

The average number of persons per occupied room in the Irish-Canadian belt is

French-Canadian " "
I. 04
" "Mixed" 86

The average family rental for the "Mixed" belt is " " French-Canadian" " " " Trish-Canadian " "
\$12 19 per month.

## 756

664

The proportion which rental takes of income in the "Mixed". belt is

$$
24 \text { p.c. }
$$

" French-Canadian" ".................................... $\overline{7} / 2$ p.c.
" Irish-Canadian 16 p.c.
The average death rate throughout the lirench-Canadian belt was. 25 per thousand in 1896
" Irish-Canadian

$$
\text { . } 21
$$

" "Mixed"
As to the sale of intoxicants.
In the
Irish-Canadian belt there are 26 saloons and 34 liquor groceries, or one liquor shop for every 179 persons.

In the
" Mixed" belt are 40 saloons and 24 liquor groceries, or I liquor shop for every 198 persons. In the French-Canadian belt are 39 saloons and 29 liquor grocerics, or 1 liquor shop for every 208 persons.

On the whole the "mixed" belt, from these comparisons, mes the best showing. Incones and wages, renta!s and accommodation, are all upon a better scale there than elsewhere. The size of the family and the proportion of the elements which compose it are tery nearly the same in the French-Canadian and in the Irish-Canadian belts. Among the French-Canadians is to be found the largest proportion of families belonging to the "real molustrial class." For density and high death rate the French-Canadians take undesirable precedence; for overcrowding and poverty the Irish-Canadian sections make the least creditable showing. Upon other points the comparison between these two belts is, as a rule, more favorable to the former than to the latter nationality.

It has frequently been asked why a location in "Griffintown" should be selected as the spot upon which should first be tried in Montreal the experiment of philanthropic investment in the form of improved dwellings for the working classes. I think the foregoing comparisons have already given the answer. It is because in this region the need at the present time is greater than in any other locality within our nether city, and because if success can be here attained it will be certain elscwhere.

In closing this article, the figures of our census respecting the religious beliefs of the families in "the city below the hill" may also be given without comment.

Belt I. Sections r-io contain 1237 Roman Catholic families, 893 Protestant, 41 Jew, in Pagan.

Belt II. Sections 11-15 contain 1790 Roman Catholic familics, 302 l'rotestant, 3 I Jew, I Pagan.

Belt III. Sections $16-20$ contain 915 Roman Catholic families, 135 Protestant, 42 Jew, I Pagan.

Belt IV. Sections 21-26 contain 1229 Roman Catholic families, 285 Protestant, i Jew, ı Pagan.

Belt V. Sections 27-30 contain 600 Roman Catholic families, 152 Protestant, o Jew, 2 Pagan.

By the above it will be seen that $751 / 4$ per cent. of the families of "the city below the hill" are Roman Catholic, 23 per cent. are Protestant, .OI $1 / 2$ per cent. are Jewish, and about $.05 \frac{1}{5}$ per cent. are Pagan. Except in Belt I, where 41 per cent. are Protestant, this element nowhere exceeds onc-fifth of the population. Belt II contains 14 per cent., Belt III 12 per cent., Belt IV 18 per cent. and Belt V 20 per cent. of families belonging to the Protestant faith.

I trust that a fuller knowledge of "the city below the hill" may result in the putting forth of more earnest and effective efforts for the improvement of this district.

This investigation has necessarily dealt with but a limited portion of our city, it has considered the case of barely one-sixth of our population. If, however, besides calling attention to certain local deficiencies the publication of this series of articles shall have accomplished anything by way of impressing upon the main body of our citizens the immense importance of collecting and interpreting similar figures for the city as a whole, my main object shall have been attained. It is unwise, even if it were possible, for private enterprise to undertake duties properly belonging to the municipality or the State. It is the duty of our civic and provincial authorities to secure for us similar data with respect to the entire city. By means of our civic servants, in the Police and Fire Departments and at the City Hall, a civic census could be annually taken within at most three days time. The cask of obtaining accurate sociological statistics might be accomplished with less haste by our Assessors in connection with their regular annual rounds, or should a special department be required, an annual expenditure of a sum not exceeding $\$ 5000$ would suffice to secure this much nceded information.

Were we by such means enabled each year to accurately determine what progress was being made in improving the general condition of society, were we able every twelve months to place the finger upon every district which exhibited unhealthy symptoms, I have faith to believe that our citizens would not be unwilling to take the necessary steps towards betterment.
es of are

## STATISTICS OF "THE CITY BELOW TH

EMPLOYMENT.


THE FAMHIJ.


## THE HILL."

(1896.)


## Map J. <br> NATIONALITIES





[^0]:    *The term "labor unit" is to be thus understood: A man is taken as the unit of measurement. A woman is regarded as represemting $1 / 2$ and a child $1 / 4$ of this unit. Thus four persons, one man, one woman and two children would represent two "labor units." Where the number of "labor units," as in section 10 , is nearly equal to the number employed, it is obvious that woman and child labor in this section exist to a very inconsiderable extent ; when, however, as is the case in section 2, there is apparent a great difference between the left and right hand numbers, this signifies that here many women and children find work.

[^1]:    *The following clipping from "The Outlook" of May Sth, 1897 , is of value for purposes of cumparison:-
    "The American Statistical Association publishes the records of the Charity Orginization Sucieties of New York, Baltimore, and six smaller cities respecting the cause of need among the families whose condition was investigated last year. In a condensed form the results reached were as followed :

[^2]:    *This statement was prepared in Fehruay 1897.

