

**Organization *and* Business  
Methods**  
*of*  
**The City Government**  
*of*  
**Portland, Oregon**  
&

*Report by*  
**Bureau of Municipal Research**  
New York City

## **Introduction**

At the invitation of Mr. C. S. Jackson, Editor of the Portland Journal, a meeting of some fifty citizens of the City of Portland was held at the Commercial Club on the evening of March 11, 1913, for the purpose of listening to an address by William H. Allen, Director of the New York Bureau of Municipal Research, upon the work of that Bureau as conducted in other cities throughout the United States.

As a result of this meeting, the following committee was appointed by Richard W. Montague, then presiding, to inquire as to the feasibility of organizing a permanent Bureau of Municipal Research in this city:

W. B. AYER,	JAMES B. KERR,
C. S. JACKSON,	A. FELDENHEIMER,
A. H. DEVERS,	KINGMAN BREWSTER.

Subsequently, Richard W. Montague and Charles D. Mahaffie were elected members of this committee.

On March 22, 1913, the Bureau of Municipal Research of New York City was engaged by this committee to make a preliminary survey of the organization and business methods of Portland's City Government. Their report follows.

**BUREAU OF MUNICIPAL RESEARCH**  
**261 Broadway, New York**

Portland, Oregon, May 5, 1913.

Mr. Kingman Brewster, Secretary,

Committee of Municipal Research, Portland, Oregon.

Dear Sir: In accordance with your instructions, the New York Bureau of Municipal Research has made a general survey of the organization and business methods of the city government of Portland. As reports on the several departments have been completed, we have submitted them to the chairman of your committee for approval, after which they have been released for publication from day to day in the local press, beginning April 13. We beg to hand you herewith a complete set of these reports.

In order that the full value of this survey may be realized, a continuity of effort is essential. A local Bureau of Municipal Research should be organized to continue the constructive work along the lines laid down herein.

Very respectfully,

NEW YORK BUREAU OF MUNICIPAL RESEARCH.

# **PUBLIC SAFETY**

---

## **POLICE DEPARTMENT**

To enumerate elements of adequate police protection which are lacking in the Portland Police Department would be to describe a modern police organization. Except for the finger-print and photograph room, the co-operation with other cities through the exchange of photographs, prints and pawn-shop lists, the beginnings of local pawn-shop supervision, the printed rules of which are obviously too little read, and the unheeded recommendations of Mayor and Acting Chief, there is practically not one single earmark of proper organization or efficient method.

On the contrary, there are innumerable earmarks of deficient organization and improper method. The chief is an acting chief, known by his force not to wish the position and to be holding it temporarily; he still has no deputy, although the appropriation has been passed; there are no physical or setting-up exercises, although Captain Moore has taken interest in March drills; there is no instruction of the police during their probationary period, or afterward, in the duties of police, in use of a revolver or in first aid to the injured. They do not know and have never been taught what constitutes proper evidence so that their time and that of the Court need not be wasted and the law flouted by bringing persons before the Court who must be dismissed for "want of evidence," police "uniform" is by no means uniform except in original color, for there are many degrees of faded blue, untidiness and uncleanliness, vari-colored ties, varied collars; uniforms, etc., are inspected too seldom, twice a year; the station has not the proper lights or sign which should mark even a temporary headquarters; each sergeant has too many men (about 20), and too large a district; filing and attending to complaints, reports and correspondence are not of modern methods; the general appearance is not of order and discipline, either at central or detective headquarters. The probation period of six months is not used for trying out men and weeding out those who are found to be unsuited for police work; when a committee of part-time officers puts an incompetent back after dismissal because they are sorry for him (as was done), probation comes to mean life job, not trying out. The proper use of this period would long ago have made out a case for proper tests by the Civil Service Commission, including character and personality.

A decrease of 237 in arrests is cited in the annual report as evidence of increased police efficiency or improved community conduct; obviously, it may mean fewer complaints or violations attended to.

A member of the police committee, Mr. Hodson, protested to the Executive Board, April 11, 1913, against signing orders for police supplies at exorbitant rates, for goods or prices incompatible with efficiency. Whether similar discrepancies exist in the construction of the new headquarters should be immediately investigated. The new police building has been planned by the police board, not only without seeking the country's best experience and judgment by the police board, but without ascertaining the needs of Portland's own department. For example, fingerprint and photograph room as at present planned will be on the floor where the photographed persons are to be kept, and not on the floor with the officers who should use these records; laundry equipment is lacking; needed files, etc., have not been considered in planning work. The new building's plans should be scrutinized in detail from the standpoint of office efficiency and availability of records before too late. Similarly, office and record needs of the department should be worked out in detail, so that, with the new building, may start adequate methods.

### **Box Signals Needed**

For want of a proper signal system, reporting in of men on post is meaningless, for they may easily report several times from the same place or, for that matter, as the Mayor says, "from their rooms." Field inspection is inadequate to see whether false reports are made; but no inspection can possibly equal electric signal boxes. Many of the beats are so large that



missing for each month, twelve of whom have been located," *i.e.*, *seventy-two of whom have not been located*. Again he writes: "This department has located a great number (not stated) of fugitives from justice from outside cities, *nearly all* (not stated) of whom have been returned." "We have also arrested; a *great number* (not stated) of men on vagrancy charges, which cases proved, after investigation, to be men for whom we were looking." Records show total investigations and total "clearances" by detectives, *i.e.*, cases marked requiring no further attention. They do not show the detective captain, the acting chief, the Police Board, the Mayor or the public, for example, for the first three months of 1913 that 393 out of 1095 cases were not "cleared;" that 289 out of 721 larceny cases, 55 out of 90 burglary cases, 14 out of 29 robbery cases were not cleared. No summary of the quarter for percentages; no statement of successful cases; "clearing" does not mean satisfactory clearing, but merely no further attention; the detective, not his superior, marks cases cleared except striking cases; cleared and uncleared cases are kept together in one file, and the uncleared cases are not transferred at the end of the month to the new month's file. Detectives work in pairs even for innumerable visits where only messenger service is required and frequently for 'general work about the city'—as the record reads.

The detective's time book gives no time but merely brief entries as to what the day was given to. One entry is made per team, hence there is not even the check of two independent records. Often, apparently records get way behind and several days' work is written up at a sitting. March 5th, two men "testified in Justice Court against C & R;" January 13th, "working on the case where the fellow lost \$250;" January 1st, 10th and 12th, "general work about the city;" from January 9th on, "on emergency duty most of the month, and, investigating burglaries and robberies;" February 11th, "arrested JFG for larceny;" January 24th, "went to 21st and Johnson Street on call, but the lady was not in that called us." A clerk receives telephone calls, and in effect and actually is responsible too largely both for consignment and supervision.

The line up of arrested persons at headquarters each morning is inspected by the morning shift of detectives, one of whom puts down the names of men who look as if they needed to be followed tip. On April 10th, fourteen different names were brought back to the detective. bureau and men assigned to detectives for keeping an eye on them, for example, on the four of the fourteen who were arrested for being out "after hours."

### **Court's Obstruction Not Shown**

The records are not used to show how Courts handicap police work and cause unnecessary expense. For instance, the detective's day-book shows that on January 2nd:

Thomas Francisco, with many aliases, was arrested by detectives Maloney and Swennes for robbing a man of a watch and money, beating him up and throwing him from a taxicab.

Francisco "admitted his part in the job; he had the watch on him."

On January 3rd, the Court put off action on the case until January 6th.

The record for January 6th reads, "Searching for Thomas Francisco, who was let out on recog."-(recognition)-"in the assault and robbery case."

January 7th and January 8th, two men again spent the greater part of the day trying to locate Thomas Francisco.

He was located on January 8th and arrested at Medford, Oregon.

One of the men went on January 9th to get him at Medford, and brought him back on the 10th.

On January 13th, Francisco was held on \$3000 bail to await action of grand jury.

And all because the Court let out a self-confessed blackjacker and robber on his own "recog."

### **Vice Control Vicious for Its Irresponsibility**

To supplement and check individual patrol work and detectives, if need be, headquarters has a special squad. But the police board, not the acting chief, decides who is appointed to this as to all other special details. The files show that as recently as March 13th, the acting chief "respectfully recommended" against putting inexperienced men on vice cases, and closed his letter to three laymen giving part time, unpaid and necessarily inadequately informed service—"Any plans or suggestions that the members of the Commission may see fit to give will be thankfully received," etc.

In the recent Vice Commission's report, charges were implied but not proved that policemen were being paid to overlook immoral houses and immoral people. The department cannot tell now from any records it has whether that serious charge is reasonably well founded or unfounded.

Again, an appeal is being made for a special Court to treat so-called moral cases, particularly women brought into Court for disorderly and immoral conduct; also mothers and children involved in domestic troubles. Nobody now knows how many such individuals there are in a year. The

department does know how many times people have been brought into Court for these so-called moral difficulties. They also know that some of these people have been arrested two times or four times or ten times, but how many have been arrested only once, or how many ten times, nobody knows and nobody has tried to find out. Similarly, the treatment of liquor law violations (248 last year arrested) is not described or summarized and cannot be studied without more work than anyone is apt to give. If the committee wants to shield or condone offenses, it can. The Court's responsibility cannot be proved from present records. Until the routine methods of the department are changed from top to bottom, until record blanks are put in which call for information and comparing that will tell the chief, the mayor and the public what is going on in the police department, it is unfair to expect the enforcement of the laws regarding vice and crime. Conditions are now analogous to those of the New York Vice Squad, except that Portland's chief has less information than the New York Commissioner, although closer personal contact with men. With a large number of householders, prostitutes and men related to both who have reasons for not complying with the law, and with police officers working under conditions where no one will know if they overlook violations of law with or without compensation, it would be little short of a miracle if there were not general disregard of duty ~~not~~ to say absolute corruption ~~in~~ the Police Department. The recent Vice Commission's report gives conclusive evidence that the problem is not now to pile up more evidence as to vice, but to make sure of a change of procedure such as is contemplated by the proposed administrative code in section 20 of the amended charter. The enforcement of the Tin Plate Ordinance, not its passage, will discourage commercialized vice. Passage without enforcement is almost certain to mean encouraging and blackmailing commercialized vice and demoralizing the police.

### **Genuine Civil Service Hindrances**

Patrolmen at \$80.00, patrolmen sergeants, detectives and detective sergeants at \$125.00, captains at \$175.00, automobile drivers, jailers, guards, office clerks and finger-print photographer are all in one class. The charter, section 309, says that the Civil Service commission shall classify "officers, places and employments according to the *respective functions of said offices, places and employments and the compensation attached thereto.*" By saying to policemen, as it now does, that the work of a patrolman is the same as the work of a captain or detective sergeant or detective, is not only an affront to the intelligence of the police department and the public, but is an initial step toward making discipline, efficiency, and non-partisanship difficult if not impossible. Throughout the department there is a conviction that the higher salaries go in violation of an express provision of the charter and according not to merit but to personal and political influence, trades, etc. On August 30, 1911, the Civil Service

Commission, as its records show, voted to put detective and detective sergeant in a separate class, but June 3, 1912, such action was rescinded. It should not be hard for the department itself to collect concrete evidence that the present jumbled classification is working against efficiency of both patrolmen and detectives.

Civil service examiners accept, without hesitation, statements as to character and personality given on the vouchers which accompany the application. Again, their physical examination blank calls for the physician's judgment as to age, sight, hearing, physique, etc., rather than for signed statement of exactly what the man can see at twenty feet with each eye, exactly how far away the hearing is perfect, etc., etc. Finally, the maximum age of fifty years for admission is altogether too high, for other reason than the conclusive reason that this makes a man eligible to pension after contributing but ten years.

While the department may exercise its right to dismiss a man during the six months' probation period and thus correct the omissions of Civil Service examination as to physique, character, personality and fitness, it does not try to get the information necessary to exercise this right intelligibly and impartially. In a recent case, after the chief had recommended the discharge of a probationer for reasons given to his committee, the officer was put back on the permanent roll the day before the probation period expired because the commissioners felt sorry for him. The tests given by the Civil Service examination for patrolmen are more practical than the great majority of school or college examinations, but would be vastly strengthened by the changes above suggested.

### **Fictitious Civil Service Hindrance**

It was publicly charged by an officer of the police department at a recent meeting of two hundred members of the police department, that the Civil Service Commission had discouraged honesty and efficiency by reinstating men removed for inefficiency and dishonesty. An examination of the records of the Civil Service Commission shows that during the three years and three and one-half months from January 1, 1910, to April 15, 1913, just two officers were reinstated by the Civil Service Commission—one on January 10, 1912, and one on January 22, 1912. An examination of the testimony shows that in one case the Civil Service Commission's reason was that no written notice had been given to the officer before dismissal, and in the other there was reasonable doubt as to the completeness of the evidence submitted in support of the charges. Yet in 1913, the committee on police of the Executive Board exonerated eight men and dismissed charges in five other cases submitted to the Board by the acting chief.

### **Charter on Civil Service Misunderstood**

Subordinates in the police department, as well as many citizens, erroneously believe either that the present charter or the rules of the Civil Service Commission provide that a hearing on charges must be held before dismissal. How the practice developed of holding a hearing before dismissal, it is needless here to relate. The important fact is that neither the charter nor the Civil Service rules demand a trial before dismissal whereas, both clearly require trial after dismissal if the applicant requests. (Section 317 of Charter, Rule X.)

### **Efficiency and Inefficiency Concealed**

No policeman can prove that charges against him are unfounded, no higher officer can substantiate charges against incompetent men of the department, because records of time spent and work done are lacking. This condition, the acting Chief has advertised in his annual report and in public statements, including a statement in our presence and before 200 police officers. Though the rules call for daily individual reports which would make efficiency records possible, the central office has no such records and not even a history card giving such essential facts as follows:

- a-Name.
- b-Badge
- c-Address
- d-Previous occupations.
- e-Height at date of appointment.
- f-Weight at date of appointment.
- g-Changes in beat, kind of service, details, etc.
- h-Promotions, demotions and all ranks or acting ranks ever held.
- i-Commendations (by reference).
- j-Delinquencies.
- k-Efficiency in police work.
- l-Efficiency in drill.
- m-Conduct.
- n-Marksmanship.
- o-Attendance at school of instruction.

### **Reorganization Imperatively Needed**

Portland should overhaul from top to bottom its organization of the police department, systematize the delegation of authority by the Chief to captains, provide a deputy, and meet with the other recommendations made herewith. The opening of new headquarters in October, 1913, makes at once the propitious time to begin.

Except for our emphasis upon procedure and records, we state nothing which is not frankly stated by the Mayor, by the chief of police, captain of

detectives and other officers. We have found no one who was at all satisfied with police management, and no one who did not frankly admit present deficiencies. Nowhere have we seen the need for instruction not only of recruits, but of all officers, or the need for impersonal, correct, individual service records more forcefully stated than by the acting chief. It is, however, obvious that those now in charge, including the Police committee of the Executive Board, are either lacking in time or in the knowledge of administrative methods to bring about the desired reorganization.

Whoever is to be held responsible for police efficiency in Portland should be given an opportunity to see advanced methods actually in use in other cities. The small cost would be repaid over and over again.

## **FIRE DEPARTMENT**

One of the most popular present day slogans is fire prevention. "One ounce of prevention is worth a pound of cure" is the keynote of the modern efficient fire department. The best way to fight fires is to prevent them. Portland has a good fire fighting equipment but is doing practically nothing on prevention, with the exception of making a monthly inspection. School children have been instructed how to "pull a box," but if they were informed how to prevent fires more good would accrue than by knowing how to turn in the alarm after the fire has started.

A comprehensive campaign should be launched for fire prevention. The importance of such a campaign is emphasized, for example, by the following facts based on the department's 1911 report. There were 936 fires from known causes during the year, and they were attributed to 74 different causes. However, an analysis shows that 570 of the fires, or over 60 per cent, were caused in only 13 different ways, all of which may be classed as preventable. They were as follows

Burning flues .....	285
Defective flues .....	28
Sparks.....	83
Electric wires .....	25
Burning grass.....	32
Burning grease .....	15
Burning brush .....	23
Cigars .....	16
Bonfires .....	15
Over-heated stove .....	22
Over-heated furnace .....	10
Matches .....	<u>16</u>
	570

The place to start such a campaign is in the schools for there not only is the child ~~the~~ coming citizen ~~in~~structed but the parents of that child as well. The press would undoubtedly give such a movement plenty of publicity.

One way of carrying out such a campaign would be to issue monthly statements of the causes of fire with the relative increase or decrease in number of the previous months of the year and the same month of the year preceding; also showing the percentage of decrease or increase. Excellent results would obtain if the chief were to frequently visit the schools (in assembly or classes) and give talks on fire prevention in the home; show the children how to operate a signal box; also hold a fire drill.

It is essential that the large down town business buildings be thoroughly familiar to all officers of the department. For this reason, they should be taken through the buildings in groups say twice a year—o that if they were called upon to combat a conflagration in the business district they would already be familiar with the interior arrangement of the buildings.

### **Lack of Financial Accounting**

The only accounting record kept in the fire department is in memorandum form, by station houses. It is only a record of bills rendered and as small stores are kept separately and not charged out to the different houses, the purpose of the memorandum is defeated. All requisitions for supplies pass through the central office, but no record of them is kept. They are merely filed. Purchase requisitions are not set up as a liability when issued. In fact, there is no liability accounting. No stores ledger is kept for small stores.

Although job cost cards are provided to show material and labor cost of repairs, they are not operated so as to be of real value. The master mechanic sends in a detailed monthly statement of work done, with both material and labor cost, but it is arranged in such a way that the total labor cost does not have to balance with the payroll for the repair shop. With a little different arrangement this could be done very easily.

Equipment service cards are provided but they also are not properly kept. It cannot be determined how much one engine has cost for repairs in a given time as compared with another. This information is important in buying new equipment. Now that the department has started in buying automobiles, detailed equipment and repair records should be kept.

Although members of the department are physically examined upon admission to the department, no subsequent physical examination is made, and while the entrance age is 21 to 35 there is no limit to the serviceable

age. This is largely due to the fact that the department has no pension system.

A card catalogue of members is kept at headquarters upon which are recorded the sustained charges of each individual, but no record is kept of efficient service nor is continued service, efficiency or meritorious bravery rewarded. Some system of stripe or star designation for efficiency should be devised to stimulate good *esprit de corps*.

### **Need New House**

Engine House No. 6 is almost dilapidated and in a very bad location. The horses must run a half block on an improvised wooden runway built on the sidewalk before reaching the street, and then make a hairpin turn in order to go to fires in the mill section. As the city owns a lot within two blocks of this building, a new building should be built there.

## **DEPARTMENT OF BUILDINGS**

Portland has an excellently organized and efficiently operated Building Department, but the ultimate result obtained is far from desirable. Hard work with no backing means in Portland exactly what it means everywhere else-failure. There are a few minor faults in office methods and inspection control which are now in the process of elimination, but the fundamental difficulties are not inherent in the building department itself. No executive backing, frequent overruling by the council, and the lack of definite jurisdiction lines have caused the present condition wherein the Building Department is forced to operate by policy rather than law, upon personal preferment, and not equal rights and privileges to all citizens.

### **Special Legislation and Policy Administration Very Harmful**

With no Executive Board committee, no Council committee, no special board (except on appeals) in charge of the administration of the Building Department, and with the Mayor so encumbered with other duties that it is impossible for him to devote adequate time to the work, the Building Department has almost been running loose. Granted that the present form of government by boards and committees is inefficient, it is certainly better than an organization with no executive head. Backing by an authoritative body or individual has been and always will be most needed in the enforcement of the building code. Too often in the past have various executive officers of the city of Portland suggested without issuing written instructions that "the policy of the Building Department should be liberal" in certain cases. And entirely too often has the Council arbitrarily assumed the administration of various building operations and granted an astonishing

number of special permits, sometimes even without referring the question to the Building Department for preliminary report. It is impossible to expect that the Council as such has sufficient technical engineering knowledge to pass judgment intelligently upon applications for building permits. In the more detailed statements which follow in this article, a resume is given of various special permits granted by Council.

In more detail, the criticisms on the present method of controlling building construction are as follows:

### **Office Methods Could Be Improved**

1. The present inspection organization of this department and the procedure established for the control of building inspection is worthy of mention here as being the only inspection division in Portland's city government property controlled by means of current reports and comprehensive summaries. We would suggest, however, that complete control over inspection operations necessitates a tickler file as a basis for controlling inspection notices carried by the inspectors in the field. With this slight addition, and with the institution of a carbon process in making out duplicate inspection forms, and cross reference cards, more complete control could be obtained.

### **A Revision of Permit Charges Needed**

2. An analysis of the receipts of the building department develops the fact that charges on building permits are too low, and on electrical permits too high, while no charge whatsoever is made for building material permits. Where one particular individual receives a direct benefit—every often to the distinct disadvantage of the community at large—that permittee or licensee should be required to pay for the privilege. Regarding building material permits, we would suggest that a charge be made not only for the cost of issuing the permit and inspecting the work, but also for the use of the street. The many violations of space occupied could no doubt be reduced by requiring everyone using the street as a storage ground to pay a fair rental for such restricted area.

### **Many Violations of Building Material Regulations**

3. In making an inspection of various building operations in the city, a surprisingly large number of violations of the building material regulations were noted. Almost invariably the building material occupied more street area than is permitted by the provisions of the ordinances. Concrete was being mixed directly on the surface of the pavements and various kinds of building material were piled directly on the pavement surface, absolutely contrary to the Provisions of the ordinance which require that the pavement shall be protected with planking. Supervision over inspection of building

material on the street has not been assigned to one department. At the present time, the engineering department is responsible for the condition of the street pavements, the police department responsible for interference with traffic, and the building department for construction proper and protection to pedestrians. With such indefinite jurisdiction lines, it is not surprising that in practically every case, provisions of the ordinance are being violated by the permittee.

### **Inadequate Control of Signs and Bill Boards**

4. Definite jurisdiction is also needed for supervision over signs and bill boards. Whether this responsibility belongs to the building department, to the police or to the city engineer is somewhat of a question. Since the ordinance split the jurisdiction among the departments, supervision is naturally lax and results unsatisfactory. The building department has even been required to report upon the moral effect of the kinds of pictures and posters placed upon various bill boards –hardly a function of a department established for the purpose of controlling building construction. This is another feature which the administrative code provided for in the proposed charter will include.

### **Need for Controlled Permits**

5. The permits issued by this department are not treated as official instruments per se. Considering the fact that it is the form, the printing, color and general set-up of the permit and not the signature of the head of department which makes a permit an official instrument in the field, we would suggest for serious consideration that all permit forms be under the control of the central accounting division. This lack of controlled stationery permits is not a particular fault with the building department alone, but general throughout the whole city government of Portland.

### **Moving Picture Ordinance Inadequate**

6. The present Moving Picture ordinance controlling construction and equipment of moving picture theatres, is wholly inadequate for the present conditions. It was drawn originally with the idea that 250 seats would be a maximum seating capacity for moving picture theatres. There is absolutely no provision today for theatres of a larger capacity; exits are not properly specified and construction is not restricted to those methods which eliminate danger in case of fire or panic. It is understood that an ordinance was presented about 7 or 8 months ago providing for a change in the present moving picture theatre regulations, and after receiving the approval of the Health and Police committees was returned to the Council, but has recently been referred to the committee on revision of the building code.

**Regulation of All Buildings Needed**

7. The building code as heretofore planned was to apply almost entirely to new construction. There is need, however, for very close supervision over buildings already constructed. According to the statements of the building inspector, not one department store in the city of Portland complies with the present provisions of the building code -a- code more lenient than in many cities where special legislation has been enacted for such stores. These exceptions to the code relate primarily to that part of the code which increases the factor of safety in construction of stairs and exits for buildings of such nature. Considering a building code to be a prime factor in the protection of life and property, Portland's present code is very deficient in its regulation of buildings already constructed.

**Special Permits Mean Special Privileges**

8. The most serious fault found in the control of building construction is in the granting of special permits. The following is a tabulation showing exceptions to the building code authorized by council in the last 8 years:

1905.....	2	1909.....	2
1906.....	0	1910.....	2
1907.....	0	1911.....	8
1908.....	2	1912.....	24
1913 (to April 15).....		14	

It will be noticed that the fault is increasing seriously rather than decreasing in the last two years. There were three times as many special permits granted in 1912 as in 1911, and at the rate such permits have been granted during the first part of this year, they will exceed twice the number granted in 1912. It is, of course, ridiculous to believe that a city has a building code for the control of building construction when so many exceptions are being made by the legislative body to the provisions of that code. Independent of the fact that council as such is wholly incompetent to make a proper determination as to the merits of various kinds of building construction, the granting of special permits excepting the applicant from certain provisions of the law is special legislation unquestionably liable to political abuse.

That these exceptions granted by special permit are serious may be realized from the fact that more than one-half the exceptions granted violate provisions of the building code established for fire protection. A resume of the main provisions of a few of the special permits granted in 1912 may emphasize the seriousness of such condition:

Ordinance No.	Name.	Main exceptions to code.
26332	Mitchell, Lewis & Staver Co.	Authorizes the remodeling of a frame building to be used as a garage.
26328	F. C. Lyman	Exempts from enclosing basement stairs with a brick wall and fire door.
26325	Ardmay Terrace Apts.	Exempts from placing fire proof doors in stairways and substitutes wood.
26250	Morgan-Bushong Investment Co	Exempts from provisions of section 442 of ordinance No. 21455, reducing number of stairs two to one, on building eight stories high, 100 feet wide and 200 feet long.
26238		Permits alteration of building of inferior construction to be used as a garage.
26087	Pacific Tel. & Tel. Co.	Grants authority to construct 15 story building and make use therein of a system of floor construction not sufficiently strong to meet requirements of building code.
25292	Y. W. C. A.	Permits adding two additional floors to this building, thereby violating provisions of building code respecting 6 story buildings within fire limits (This ordinance was refused two years ago by Council.)
24709	Fred Fritz	Grants authority to construct wooden floor in second story of building at 246 Burnside street used as a theatre.

1913 Permits.

26490	Northwestern Fidelity Co.	Lowers the factor of safety in the wind bracing, etc. Stair ways reduced from 2 to 1, fire escapes 3 to 2, and placed improperly. (The actual construction of this building does not even conform to the special permit.)
26517	Jacob Rosenthal and J. C. Friendly	"To omit wire-ribbed floor glass and metal covered wood-work in a light opening between first and second floors."
26630	Mrs. Cramer	Authorized to construct a sidewalk elevator in excess of the ordinance limits.
26654	P. J. Stroud	Authorized to construct a frame building in excess of 75 per cent of the lot area.
26673	Heywood Bros. & Wakefield	Authorized to construct a balcony in violation of the regulations of building code
26730	Wadhams & Kerr Bros.	Authorizes the practical reconstruction of a frame building within the fire limits.
26751	Mead Estate (Holtz Dept. Store Tenants)	Authorizes the removal of a stairway between 1st and 2nd floors of a department store.
26746	James A. Mott	Authorizes the moving of a frame building within the fire limits.
26753	Morgan, Fliedner and Boyce	Authorizes the use of sidewalk space during the construction of building.

# HEALTH AND SANITATION

## HEALTH DEPARTMENT

With the same number of cases of smallpox per hundred thousand population as Portland had last year, New York would have had 5400 cases; it actually had but 22 cases. Portland had nearly one-third more deaths from typhoid in proportion to population than did New York.

The Portland reports show 189 contagious disease cases in February and 220 in March of this year; 35 cases of scarlet fever in February, 35 in March; 30 cases of diphtheria and 31 cases of smallpox in the two months; 150 cases of diphtheria, 277 cases of scarlet fever and 270 of smallpox last year.

All of these figures undoubtedly understate the actual amount of each disease in the city. The Health Officer admits that one-fourth of the tuberculosis cases are not reported, and that a considerable proportion—neither known nor sought --of smallpox cases are treated as chickenpox.

An examination of office routine and office records proves the following deficiencies of methods in dealing with transmissible diseases:

Notifications by telephone are accepted without details elsewhere considered indispensable to understanding the situation. The names and addresses are entered in books, but with the exception of diphtheria, ages are not given. While in some cases the fact of attendance at school is noted, in many other cases it is not noted. The department does not know, therefore, what are the prospects of spreading contagion through the school; the lists of cases notified reach the schools twenty-four hours after notification, all names and addresses being put together unclassified on the formal notice.

Cases are released from quarantine by telephone or upon word of family physician in minor diseases, and verbally without any formal record, in other cases by the Health Officer, Medical Inspector or Health Officer's assistant. There is no reason to believe that if quarantine signs were taken down by private citizens or passersby, the department would ever know the fact, because there are no records to show cases under supervision.

Venereal diseases are not reported as the physicians of the city decided against it; no effort is being made to interest physicians.

Although there are probably at least 850 cases of tuberculosis in the city, the department has no official estimate of the number; has not attempted to count the number; does not attempt to detect duplicates; does not check deaths against the list of reported cases of tuberculosis to see whether private physicians are reporting.

Scarlet fever, typhoid, diphtheria, etc., are not checked against lists of reported cases to see to what extent the important law requiring notification is being violated, by what physicians and when.

Although there were 277 notified cases of diphtheria last year, the department has no record of antitoxin being used. The Auditing department has record of but 75 cents paid to the company which the Health Officer says has a contract for supplying antitoxin to families not able to pay for it.

### **Typhoid Source Not Properly Recorded**

Although it was reported that 53 cases of typhoid were brought from outside the city, the records show that the central office has inconclusive evidence that the typhoid originated outside the city — it merely knows that patients gave their "residence" as outside the city.

Although smallpox, an ought-to-be-obsolete disease, is running at a rate of 25 times the rate for New York City, neither vaccination is enforced nor the department's right to quarantine cases which "have been exposed." At any time any unvaccinated child or adult of any class is apt to find himself beside active smallpox in a street car, in a moving picture show, or church. (The Health Officer estimates that not 50 per cent of the citizens of Portland are vaccinated.)

### **Disinfection of Doubtful Value**

The disinfection is mainly in charge of the Health Officer's assistant, who keeps no record but a little vest pocket day book with meagre notes; the Health Officer himself has no record but a lead pencil or ink check on the case book which indicates disinfection. If the assistant forgets or loses some paper or checks by mistake, there is no way to learn the mistake.

The number of offenders against the law requiring notification is not known, nor the number of arrests nor the outcome of arrests. All arrest records are with the Police Department.

There is no city ambulance nor is there check on the cases treated in private hospitals for which the city pays.

### **School Inspection Inadequate**

School inspection is obviously ineffective. With numbers of children of school age in different parts of town being reported for transmissible diseases, physicians and nurses are failing to report such diseases. If a serious epidemic broke out the Health Department would learn of it too late. Monthly statements of fumigation show that school rooms are not being fumigated; there is no regular inspection of parochial and private schools to prevent transmissible diseases.

Ten thousand six hundred and ninety pupils were reported as examined in February, 14,883 in January. If examination includes, as the Health Officer says it does, "physical examination to detect physical defects"—which furnish a fertile soil for contagion and which retard children's progress—examinations are then too superficial to be worth while. Whereas in the time which physicians give, 20 examinations in a morning would be exceptionally good work added to inspection for transmissible diseases, 100, 150 to 400 inspections a day are actually reported by officers. If, on the other hand, examination means only a cursory looking at children, officers should reach not 10,000 or 14,000 a month, but all the children in the schools of Portland namely, 25,000.

In a school enrollment of 25,000, at least 20,000 need dental attention—an important check again to transmissible diseases. The Dental Clinic received last year 474 patients. If preventive and educational work is being done by school physicians and nurses, it is not only negligible but the department does not know of it or expect it.

### **Cultivating Contagion**

Children having transmissible diseases are excluded from school. They may not return until the Health Officer has notified the principal that it is safe. To ascertain whether it is safe for them to be at large or whether they are still a menace to their neighbors, they do not wait to be visited at home. On the contrary, they are brought to the Health Department or the Health Officer's private office. Three children came in about the same time one morning recently and were in succession examined by the Health Officer: one for chicken pox which the Health Officer reported as hives and as an adenoid case; one for mumps, with a face as big as a lamp shade, whom the Health Officer told to continue in quarantine; and a third with contagious impetigo, with several open contagious sores on the face, who also was told to stay at home until cured.

There could hardly be a better way of spreading contagious diseases and of defeating the whole idea of segregation of transmissible diseases than to have children traipsing about the town on street cars, through the City Hall corridors and private office, waiting their turn with other children having other diseases, to find out whether they still have a transmissible disease. The danger and the miseducation of the child are both aggravated by the absence of washing facilities at the Health Office.

A city of 250,000 population cannot afford to have its Health Officer examining school children anyway; nor answering telephone notices of diseases, complaints, etc., which a clerk could do more cheaply and quite as well. A time sheet would show that a great part of the time of Portland's Health Officer is given to messenger work which he should be directing, criticising, supervising.

### **Moving Picture Places Foster Disease Germs**

Simple ventilation devices were found lacking in several moving picture places and theatres. For comfort and decency, as well as health protection, these much frequented, often crowded places should have clean air.

### **Sanctuary for Rats, Flies and Mosquitoes**

There is no fear of the plague; nothing is being done to trap or poison rats. Buildings are "supposed" to be rat-proof, but they are not. The department knows it, yet does nothing remedy it. A coast city with less shipping than Portland advertises nearly one million rats killed in one year, and an indefatigable rat-killing and preventing campaign. A half dozen cases of bubonic plague would cost Portland in money and prestige enough to endow its health department.

Similarly, there is no campaign or progress in mind regarding flies, and no inspection to discover and abate breeding ground for flies and mosquitoes. Although uncollected garbage is prolific breeder of poison-bearing flies, the department is failing to relate the garbage problem as one cause to the effect of contagious diseases.

Better protection against contagion should be required at once. In striking contrast with the lack of plan and efficiency in dealing with the general transmissible diseases, is the work for improving the milk supply which will be treated later.

Nature is thus far favoring Portland and permitting it to violate with seeming impunity laws of cleanliness and health protection. A slight shift in temperature or the building of tenements may easily convert an ever-present danger into a sickness and death spreading epidemic. Because people do not die does not mean that "mild cases" are not too expensive.

The conditions described in recent reports to the Mayor of Portland by the sub-committee on Harbor Sanitation, Street Sanitation and Terminal Yard Sanitation, and by the Consumers' League *re* housing conditions, cannot be corrected without changing the method of supervision of inspectors in the field. There are now three sanitary inspectors—two additional inspectors having been added this year. The three inspectors are on the same footing; it is nobody's business to supervise their work. One made 196 visits of inspection in February, one 88, one 70. One served 185 written notices, one 10, one none. The office method of handling nuisance complaints is such that Portland can by no means be sure that it is having any better protection with three men as now supervised, than with one man under similar conditions. Inspectors and other workers are not taught program or method.

An additional market inspector was appointed January 1st, the city having had only one up to the first of January this year. (We were told that there was actually public criticism of the Mayor for adding to the inspection service.)

The woman inspector, Mrs. Evans, indicated what the field staff would regularly observe and record if supervised efficiently and given efficient and systematic methods:

"That a license be taken out by every person intending to go into a business where food is kept, prepared for sale or sold, and that a permit from a health inspector be required before the license is granted.

That a definite building requirement should be exacted in every place where food is prepared, kept or held for sale.

That no fish, meat or fruit, except melons and citrus fruit be allowed outside the building-(for instance, hanging poultry on the outside of the building; exposing fish, crabs, etc., on the pavements).

That closed fronts be exacted.

That no poultry be slaughtered for sale within certain city limits, and in *no* building where foods are kept or sold.

That expert meat inspection should be had which would extend to the slaughter houses outside the city, but whose market is within."

### **Need for An Administrative Code Illustrated**

No office in Portland better illustrates the dependence of efficient administration upon efficient routine. Doing things the wrong way may here and there give satisfactory results nevertheless, but doing things in the wrong way in health work can never give satisfactory results.

There is scarcely a record in the Health Department, outside of the score cards and the dentist's physical record card, which gives the information necessary to intelligent supervision; not a record is ever tested for its accuracy by anyone but possibly now and then the person who makes it; practically all of the totals published by the Health Department for the different kinds of work, patients and diseases are of doubtful accuracy.

Time sheets are not used. Reports of inspectors throw no useful light upon whether they are doing in timeliness, quantity and quality what they should do. Such fundamentals are lacking as listing and registering of mid-wives and noting births attended by them; pin maps or other summaries to show where diseases are running and the attention of the department needed; comparative tables showing how month compares with month preceding, and with same month of preceding year, and year with year. Nowhere is there outlined a health program for a progressive study of work undertaken

by Portland or work done. Not one published statement is comprehensive or effective even with respect to the relatively few items reported.

### **Printing Cheaper Than Time**

Time is taken by clerk, medical inspectors, school inspectors and health officer to write out headings day after day, which time might better be spent in real work. Under present conditions, an officer may do the best he knows how or the worst he knows how; no one will discover it in either case. There is absolutely no basis for measuring the efficiency or inefficiency of school inspectors, market and sanitary inspectors, or bacteriologist.

### **Three Notable Exceptions**

Three notable exceptions should be emphasized: the unchecked work of the clerk, so far as quantity is concerned; the incinerator, which will be dealt with in a later report; and the milk division, which deserves detailed description.

If records and methods are to be installed elsewhere which will show the size of the problem, the work done and progress made, work left undone and needs not attended to for each health division, the milk division should be studied. With the equipment of men, appliances and transportation facilities within its means, that department knows what ought to be done, what is being done, and what is left undone, to give Portland a safe milk supply. To its work the Health Officer attributes decrease in deaths of babies due to diarrhea and enterities from 100 in 1909 to 38 in 1912. That the milk supply is cleaner is proved by the score cards of dairies, by the Department's success in securing an ordinance to stop the sale of dipped milk in stores, and providing for the proper pasteurization of milk when pasteurized. However, the excellent, systematic, up-to-date work of the milk division is in danger of not only being misunderstood by the public, but of failing to secure needed financial support. It is not living up to its program. Its \$1500 officers are spending time, necessarily so far as they are concerned, on typing and other simple clerical work. They cannot get around to milkshops, dairies and creameries to enforce the law. There is no educational work with mothers to prevent, for example, thirty-one deaths in one winter month (February, 1913). Their work might become useless or pernicious without the department heads knowing about it except by complaints from the outside. It is very hard to be efficient and ambitious under such circumstances.

### **Defects of Monthly Health Bulletin**

Portland's health department issues a monthly bulletin and an annual report. It does not yet issue press notices, circular letters to the public, etc. Thus far, it is like most health departments.

But the monthly report is a four-page sheet, 7 by 12. The last page is given to the United States Meteorological report for Portland, which it is doubtful if two citizens of Portland ever use.

The first page contains a picture of the city hall, and the names of the board of health, and some interesting statistical material which would be very vastly more effective for its purposes, i.e., advertising Portland's attractions, if varied from month to month. As mentioned before, the population, death rate and birth rate figures are probably incorrect, and are not based upon careful estimates.

The second and third pages contain a detailed list of causes of death by persons dying, by age, race, birthplace, social condition, etc. The two summarized items of births and contagion diseases are marked "incomplete reports." Valuable information is given as to fumigation, bacteriological analyses, examinations of school children, visits by school nurse, dental clinic's work, inspections of markets, other sanitary inspections, inspection of plumbing and drainage, and a small part of the milk work. There are no comments upon the work, no lessons, warnings or suggestions, such as are now found in a large number of the cities with which Portland is competing for population and capital.

In Portland's health bulletin there are no efforts to check up the amount of work done, although there are simple facts which would help the board of health, the health officer, or the Public to gauge the estimate of efficiency work; would, at least, raise question—for example, three men working every day, all told, 7 days, in February, made 354 inspections on complaints, or less than five a day each. Similarly, two market inspectors made, all told, 374 inspections of groceries, restaurants, fish market bakeries, etc., or an average of seven each day.

The school nurse made less than one visit a day to homes of pupils, and, although physicians reported 1020 defective pupils, the nurse referred only 10 to specialists. No less than 31 children under one year of age died in the one month, and that a favorable month—February. Nowhere is question asked or explanation made, nor is there a single comparison of any of the numerous facts given, either with the preceding month or with the corresponding month of the preceding year.

### **Inflated Population Figures a Menace**

After the United States census for 1910 proved that a neighbor of Portland had been for several years over-estimating the population upon which she figured her health rate, birth rate, and so forth, her health department corrected its population, and all figures based on population. No such correction has been made in Portland.

After being "caught" with inflated estimates, this neighbor stopped making her own estimates and asked the United States census bureau to be responsible for her estimates. Not only has Portland's board of health failed to do this, but it has done most unscientific guessing since 1910. For example, it guessed a gain of 45,000 during one year of 1911; but a gain of only 4000 in 1912.

In 1911 there were 3711 births and 2394 deaths, a difference of 1317 net gain because of births alone. If the population jumped up 45,000, this meant 43,683 immigrants in one year, an increase of 22 per cent. That year the number of premises receiving water increased only 10.4 per cent. Because of the big jump in population, the birth rate dropped from 19 to 14.7 in a thousand. That is, there were 1084 fewer births in 1911 than there would have been had the births been the same per thousand as in 1910. No effort was made to explain this drop in the birth rate. It may have meant an influx of unmarried adults and young children.

Again, while the population increased over 22 per cent in one year, the average of school children belonging increased but 9.2 per cent. To have the birth rate and school register arrested is worse for a city's reputation than to have a trifle higher death rate.

But the health's office's unscientific guessing reacts against Portland's interest even more seriously in 1912. Something unfavorable for Portland is advertised when the 1910 increase of 45,000 is followed by a 1911 increase of only 4000.

Again the birth rate drops 3.45 in a thousand below that of 1910; that is, 883 fewer children were born in 1912 than would have been born had births been the same per thousand as in 1910. Moreover, the slight increase of 4000 in the total population in 1912 over 1911, is accompanied by practically the same increase in school children belonging (8.8 per cent) as the preceding year's increase of 45,000.

This sudden check in growth is not a mere statistical detail. It is a serious indication of health methods and health results. At any time, if it is uncorrected, it is apt to be used to injure Portland. Competing cities are justified in using Portland's own advertised figures to show growth or decrease of population. If Portland "booster clubs" and "push clubs" use health department estimates to attract capital, competitors A and B are justified in using those same estimates to deflect capital away from Portland. Investors themselves have trained their agents to go beyond advertised allurements of investment opportunities to fundamental facts showing prosperity and probability of growth. Investment demands a high birth rate and a high rate of attendance of children at school quite as well as a low death rate.

### Part Time Service

As part explanation of the discrepancy in estimates of population and of failure to show the relation of death rates to birth rates and school attendance and to other city indexes of prosperity, it is the part time service in Portland's health work. In the year 1913 for a population which will probably be advertised at 260,000 if the 1912 rate of growth is used, or 296,000 if the 1910 rate is used, Portland has only 12 employes working full time to protect health and check disease and nuisance.

Part time service only is given to health work by the three appointed members of the board of health and also by the following officers:

	Per Month
Health officer .....	\$250.00
Deputy health officer .....	125.00
City bacteriologist.....	75.00
Medical school inspector.....	50.00
City dentist .....	40.00
Attendance dental clinic .....	10.00

Just how much time the part time officers and employes give is not a matter of record, nor is there record of time spent by the 12 employes who are expected to give full time service.

The health officer himself plans to be at the health office between 8 and 8:30 and 10:30, and "in and out" at different times of the day. Some health work is done in the field and at his private office -how much is not matter of record. The city bacteriologist receives \$75 a month for work "in mornings;" but for full time and overtime service the corresponding analyst known as the milk chemist receives \$125 a month-two-thirds more for at least three times as many hours. In March the city bacteriologist received \$75 for making 75 examinations of diphtheria cultures, sputum, water and blood. The milk chemist in the same month, using the same room, made 231 chemical and bacteriological analyses, besides inspecting dairies and milk shops, attending to numerous office duties and keeping up records, typewriting, etc. The city dentist and his attendant are supposed to work Saturdays from 9 to 5. How long they work, how much, if any overtime they give, is not matter of record.

Of all these part time officials except the dentist, the statement is made that they are "on call" during other times of the day and night. How many times they are called is not a matter of record. From quantity and character of work, which will be described in a later statement, there is reason to

believe that "on call" means in Portland, as it usually means in health work, "negligible calls, except private calls."

The clerical work of the health office is done by one woman clerk, receiving \$100 a month. Although held responsible for a great deal more work than any one clerk should be asked to do, and although innumerable necessary important facts are not now recorded at all, this clerk is working without short cuts which proper blanks and records would furnish.

### **Civil Service Needed**

Both the present and the new charter specifically exempt the health department from civil service. Thus the general public is party to conditions of inefficiency and practically advertises to the city that standards of efficiency will not be required of the health protection service.

### **The Board's Responsibility**

The above conditions are not new. They have existed for years. It is only fair to the present board and to the public to state that relatively notable advance steps have been taken by them in the new milk work, the reorganized incinerator and in securing two additional sanitary inspectors, an additional mother inspector and the dental clinic. Administrative supervision, however, is lacking. The mayor and chief of police have other absorbing duties and the other members of the Board of Health are expected to give only part time and volunteer service.

## **GARBAGE COLLECTION AND INCINERATION**

These two functions which are naturally very closely related are in Portland, when viewed from an efficiency standpoint, decidedly apart. Whereas the present incinerator is ably operated under the direction of a competent superintendent, the garbage collection is a disgrace to any city. There is an air of efficiency, business like methods and hard work about the incinerator, while the collecting function is conspicuous by the almost total lack of anything in its favor.

### **Private Collection of Garbage Always a Failure**

Considering the fact that collection of garbage by private scavengers has proved to be a failure wherever tried, it is not surprising that such has been the result in Portland. It is difficult, if not impossible, with such a method to exercise any direct control over the men, equipment or method of collection. Many of the wagons leak badly, none have tight covers and generally are in miserable condition, in need of both painting and cleaning. The stench from the open wagons during the summer months must be terrific. These statements are not new to the citizens of Portland—v eryone

realizes the absurdity and disgraceful condition of the present situation, yet nothing is done. Perhaps a slight elaboration on the cost side might hasten proper action.

### **What It Costs Today**

According to the report of the Water Department, there are approximately 50,000 water service connections in the city of Portland for residences, saloons, apartment houses, and other buildings, where garbage must be disposed of. Many householders are required to pay \$1.00 a month to the scavengers for collection –others have to dispose of it themselves either by burying it in sinkholes or gulleys or by burning it in their stoves or furnaces. Taking \$10 a year as the average cost to the householder for the collection of garbage which is, according to the statement of Mr. Otis, the superintendent, a very conservative estimate, the cost to the citizens of Portland is approximately \$500,000 a year. Simply because the cost of garbage collection is borne by the individual householder instead of by the city at large, its elimination from the operating expenses of the city government cannot be used in determining economy in the cost of running the city. In fact, it costs the community much more today to have its garbage collected than it would if the city were to do the collecting.

### **What Municipal Collection Would Cost**

How much municipal collection would cost depends primarily on two points, –location of the new incinerators and the frequency of collection. If two 100-ton plants were to be constructed and properly located, the average direct haul could be reduced to less than two miles. If we consider collection three times a week to be sufficient for the great majority of all the garbage, the cost of municipal collection would be very much less than the cost today, even though the number of weekly collections would be increased. With an approximate direct haul of two miles, three collections a week, and proper garbage can equipment, all garbage and household waste should be collected at a cost of approximately \$300,000 per year— saving in one year sufficient to pay for the construction of two 100-ton incinerators. On the basis, of the present average haul of slightly more than three miles for all garbage now collected, the cost would be somewhat greater, depending entirely on the difference in the average length of haul. These figures are all conservative and can be substantiated by detailed calculations. They are based primarily on a household waste production rate of one ton per day per 1000 inhabitants, a family rate of five, a double team rate, including driver, at \$6.00 per day, with a loading cost of \$2.50 per ton and 50 cents per ton mile haul, including return, three collections per week and a 23-pound accumulation per collection.

Close calculations which would depend for their accuracy upon the efficiency of the proposed organization and other local conditions could no

doubt decrease this estimated total cost for municipal collection very greatly. It is interesting for purposes of comparison to know that the average per capita cost of garbage collection as shown by the last statistical report of the Census Bureau (1907) amounts to 41 cents per capita. At this rate, the presumptive cost for the collecting of garbage in Portland would be slightly more than \$100,000 per year. These figures are unquestionably inaccurate, but have some value for comparative purposes.

With municipal collection, routes and methods might readily be standardized and the inefficiency caused today by duplication of collection routes, which adds greatly to the expense of the collection, would be entirely eliminated. We noted four different scavengers at work at one time within two blocks on Washington street.

### **Other Advantages of Municipal Collection**

In addition to the large saving in cost, municipal collection should mean a uniformed force employed under the supervision of the Civil Service Commission, tight bottom wagons, well covered, and controlled collection. With municipal collection of garbage, every householder should be able to locate responsibility for lax collection. Today there is absolutely no redress for inefficient collection by the private scavengers.

### **Might Also Collect Ashes and Household Waste**

At the present time, both household wastes and ashes are taken care of also by the private scavenger. This feature could very easily be amalgamated with municipal garbage collection and the cost like that of garbage collection very greatly reduced.

### **Providing Funds for Municipal Collection**

An amendment to the charter of 1903 provides that the Board of Health may use an appropriation of \$75,000 for providing equipment for the collection of garbage, and further authorizes the Board of Health to establish individual rates for such collection.

Garbage collection is not only a convenience for the householder but is a very definite factor in promoting proper sanitation throughout the city. Therefore, the cost may be properly assessed against the city at large in the general tax levy. This method has been found to be the only feasible method for financing garbage collection. Seeming inequalities placed upon the property owners by such a plan are more than compensated by the advantages gained in increasing property values generally through proper control over garbage disposal, and the promotion of health and sanitation in the poorer districts.

The amount of accounting and recording necessary to control properly the special assessments against individual householders if the rate plan were adopted would very greatly increase the cost of such collection. Moreover, it would be practically impossible to make the occupant responsible for monthly, quarterly or annual fees for the collection of garbage. The responsibility would ultimately have to be placed with the property owner rather than the occupant. Unlike the collection of water rents, the collection of money due for garbage disposal could not be controlled by shutting off the service. What the city wants primarily is prompt disposal of garbage. Any system which premises its financing of garbage collection on a control to be established through the service rendered defeats its own end.

### **Should Provide Sanitary Cans**

The present control over ash cans, garbage barrels, etc., is very inadequate. Practically no inspection is made except on complaints, and no uniform rules have been established to control the kind of equipment which should be used by householders. There is considerable complaint on the part of the authorities in respect to garbage being placed in boxes, tubs and other unsanitary receptacles. Ordinances should be passed requiring the use of standard sanitary cans and an inspector should report careless householders and see that violators are fined. Such inspector could designate the proper place to put the receptacles for easy collection and inspect them regularly to see that they are kept clean and in their proper places.

While at first thought it might seem that requiring a standard kind of equipment, such as galvanized iron garbage cans, would place a great hardship upon the small householders, it is not true ultimately. In the poorer sections the city could provide proper equipment at a very moderate cost. Any abuse of such provision could be eliminated by requiring that such cans be kept in a conspicuous place and displaying on the cans a notice that they were furnished by the city.

### **Alternative Suggestions**

Although contract collection of garbage and household wastes can never equal efficient municipal collection, it would be far superior to present methods. By a proper survey of the city and compilation of detailed estimates, specifications for contract collection of garbage could be advertised publicly. It is suggested that this method be tried in the west side of the city, the cost of such collection being assessed against the property within that district only. The results obtained through such public letting could be subsequently used to very great advantage in developing municipal collection.

### **Should Buy More Dumping Ground**

Owing to the fact that the ground owned by the city in the vicinity of the incinerator has been used almost to its maximum for dumping purposes, the ashes and incinerator refuse are being dumped on private property. Considering the amount of marsh land in the vicinity of the incinerator, ashes and clean refuse are quite valuable for fill. The city has already very greatly enhanced the value of certain surrounding property by filling low ground and has received nothing in return. In fact, in one case they have been required to pay the property owner for the privilege of adding greatly to the value of his property. This situation should not be permitted to continue. If necessary, the city should purchase additional grounds, preferably under water, and make use of the fill in increasing the value of its own property. It is interesting to note that immediately north and east of the incinerator, a private contractor is spending a great deal of money in filling low ground in order to make factory sites out of the marsh around Guild's Lake. Foresight on the part of the city would return any expenditure for land many times in the next 20 years.

### **Need for a New Incinerator**

The present incinerator is operated almost daily during the summer months at more than its designed maximum capacity. Only by the arduous labor of the men in charge has a break-down been prevented. This statement is not new -everybody in Portland has heard of it, yet nothing is done. But something must be done very shortly to relieve the strain on the present incinerator. It seems as if the only way to impress upon the citizens of Portland the seriousness of this condition would be by having a break down at the incinerator. This, by the way, may be expected at any time. No plant can withstand forever continuous forcing day and night. When that time comes and garbage is permitted to collect at various points about the city, and unpleasant and obnoxious odors permeate the whole city, and the health of Portland is threatened, then realization may come of the need for immediate action.

The highest daily run of the incinerator to date is about 178 tons. It was designed originally for only 150 tons daily consumption. But even 178 tons per day is not all the garbage and refuse which is to be expected from a city the size of Portland. One ton per day per thousand inhabitants is a fair estimate for garbage and refuse. One ton per day per thousand inhabitants would mean for Portland a production of 250 tons per day. Where the rest of the garbage goes only those residing in the outlying districts of the city can tell. Part of it is burned-most of it is thrown away in gulleys and sink holes.

### **Selecting Incinerator Locations**

Any new incinerators which may be constructed should be located, in so far as possible, after a thorough study of the garbage production districts with a view of developing greater efficiency of haul than that of the present plant. Only about 40 per cent of the territory within a three-mile radius of the present incinerator can be classified as a garbage production district within efficient hauling distance. This situation is caused in part by the physical contour of the west side which has concentrated that part of Portland into a very small area. Also on account of the fact that the nearest bridge across the Willamette (the new Broadway bridge) is about a mile and a half from the incinerator, thus allowing for only one and a half mile haul on the east side.

Portland is growing very rapidly but not on the west side, and in order to cut down the length of haul of garbage collection it would be necessary when building new incinerators to build them on the east side of the city. One incinerator of 100 tons would be sufficient to relieve the present congestion, but the establishment of two 100-ton incinerators would be much more advisable from the standpoint of establishing a minimum haul and hence reducing the cost of collection. Two 100-ton incinerators could be built for approximately \$175,000. When the city commences municipal collection, the amount which could be saved in one year by decreasing the average length of haul to approximately two miles should be sufficient to pay the cost of one 100-ton incinerator. The average length haul at present for garbage which is being collected is approximately three miles. If all garbage could be collected and disposed of at the present incinerator, the average haul would be about five miles.

## **STREET CLEANING**

Keeping the streets of Portland clean is simplified by a number of local conditions, of which the lack of congested population centers, a great mileage of smooth surface pavements, and an evenly distributed rainfall all have a bearing. What problem there is today, however, seems to have been met successfully from a work standpoint - Portland's streets are clean. The questions raised in the following report are suggestive of certain inefficiencies in methods, the elimination of which would aid in decreasing the cost.

### **Records in Need of Revision**

Due to the lack of proper instruction and not to the lack of conscientious effort on the part of the employes in the street cleaning department, the records and accounts are in need of revision. This is particularly true regarding control of supplies. Although a physical inventory is prepared at the end of each month, it is evident that the accounts

shown therein are inaccurate. An audit of one item –hayw- a s made during the course of the survey, which showed a discrepancy of more than 100 tons. When an attempt was made to balance a daily ration for each horse against the consumption figures as shown by the difference in January and February inventories of 1913, a large discrepancy was also found. The hay account was chosen entirely at random, and considering the large discrepancy found in that one account serious doubts very properly exist as to the accuracy of all other accounts shown therein.

In addition to the lack of control over supplies purchased and supplies used, the equipment is not controlled in any scientific manner. Horse days and equipment days shown in the cost records are estimated without having such estimated amounts corrected by actual cost from proper equipment accounts.

A fair start has been made towards establishing street cleaning costs. To be of value for administrative purposes, however, recapitulation and summaries of these costs should be very much improved. The statements of the foremen as to work done are not checked, and this again raises a question as to the accuracy of the cost records. The fact that routes have not been standardized and that foremen's reports form the only basis for statement of work done, only increases the uncertainty as to the accuracy of such cost records.

Machine shop costs are not known. It was stated that at one time an attempt was made to install a work order system in the machine shop but the system was never carried through. From a survey of the work of the machine shop, and considering the general business-like and efficient atmosphere therein, it would seem that the repair costs would be low. This, of course, would redound greatly to the credit of the street cleaning department and for that reason alone it is surprising that such records have not been maintained.

### **West Side Barn a Fire-Trap**

This barn has certainly passed its day of usefulness and should be supplanted with a more modern building. Best results can never be obtained in the street cleaning or any other city department involving the use of horses and city equipment, until adequate provision has been made for their housing. The present barn is a regular fire-trap in itself. Furthermore, the Poundmaster has a gas tank on the first floor for killing stray dogs and there are several open vents in the tanks.

### **Block Men's Uniform**

According to the statement of the superintendent, Portland has a uniformed force of ten men stationed in the down town section of the city. From our observation of these men we would suggest that a dirty uniform is

worse than no uniform, and that a helmet, cap or hat is a very essential part to any uniform. The men should be provided with proper helmets and the uniforms washed more often than once a month which is the present rule.

### **Sanding of Streets Inadequate**

Considering one of the main functions of city government to be the providing of proper street facilities, sanding of streets in rainy weather is just as important as the original construction of the pavement. The need for sanding of streets in the city of Portland is very much augmented by the steep grades throughout the whole city, and also on account of the fact that the maximum grade limit on smooth pavements is much higher in Portland than in most cities. It is understood that formal complaint has been made by an association of team owners, requesting the street cleaning department to sand the streets. Objection was raised by the department on the ground that the owners of abutting property should be responsible for the condition of the street. This is certainly not sound reasoning. It is as much a maintenance cost as the repair of the pavement proper.

### **Number of Complaints as a Criterion**

In the annual report of the superintendent for the year 1912, the following sentence appears: "Very few complaints have reached this office either from the public direct or from any of my superior officers, therefore I feel highly gratified at the results obtained by the department for this year." The mere fact that complaints received by the street cleaning department have decreased in number in itself means nothing. Indeed, the more cooperation offered by the citizens in general to a city department, the more complaints that department receives. An attempt should be made to provide for the citizens some easy means for sending complaints to the city departments. This applies equally to engineering, police, weights and measures, etc., as well as the street cleaning department. There is a constantly growing number of city administrators who believe, and rightly, that the efficiency of their departments will increase directly in proportion to the number of complaints received from citizens, city officials or other city departments.

### **Building Material and Retaining Walls**

Two of the most serious difficulties which are placed in the way of Portland's street cleaning department arise from operations over which the street cleaning department has absolutely no control. The first of these is the storing of building material on the streets while a building is being constructed. The many violations of the ordinance covering the storage of building material on the streets will be referred to in greater detail in our reports on building inspection. Suffice it to say here that the mixing of

mortar directly on the surface of the street pavement, failure to use tight planking, and violation of the storage area allowed under the regulations of building material permits, seriously hamper the street cleaning department. Difficulties arise from this condition not only on the surface of the pavement, but in the sewer catch basins cleaned by this department. Such conditions will continue to exist just so long as the jurisdiction over building material permits is divided among three or four city departments.

The street cleaning department also has to cart away loose earth washed on to the streets from sides of the hills. In laying out a new street, it is very often necessary to make a rather deep cut in a hill to reach the proper grade. Only in very few cases have retaining walls been built, and consequently every rain washes a great deal of loose earth on to the street. In such cases, either the contractors should be required to grade the side of the cut to a normal slope, or the property owners required to build a retaining wall.

### **To Improve Specifications of Oiling Contracts**

We would suggest that all contracts, whether in the street cleaning department or any other city department, be let strictly on a work basis. The oiling contract for 1913 and the contract of 1912 merely required that the contractor should oil certain of the dirt roads in such manner that all dust would be laid. There was no statement as to the kind of oil, its specific gravity, how much oil was to be spread over each square yard of surface, or how many times the road was to be oiled. Such contracts always offer an opportunity for very great injustice either to the contractor or to the city. A simpler and more efficient form of contract would be one wherein the contractor would bid on the cost of spreading a definite quantity of a definite quality of oil at a unit price per gallon of oil or square yard of surface covered leaving the ordering of work both as to time and amount at discretion of the superintendent.

# **PUBLIC WORKS**

## **CONSTRUCTION OF PUBLIC WORKS**

Most of the construction of public works is in charge of the department of engineering. The following report discusses this department under (1) Organization and jurisdiction, (2) Pavement Construction, (3) Sewer Construction, and (4) Office Methods.

### **Organization and Jurisdiction**

#### **Defects of Division Organization**

As in the proper organization of city departments, so in bureau and division organizations within each department the organization units should conform to the functions and activities thereof. This principle has not been adhered to in the present organization of the department of engineering. The clerical and the accounting records are scattered in a number of different places without competent central supervision. Although one particular room has been set aside for the draughting force, men engaged on this work were found in several other offices, particularly in the sewer division and in the offices of each one of the district engineers. To secure efficiency, it is extremely important that survey and draughting work be centralized and placed under the supervision of a competent engineer. There is nothing fundamentally different in preparing surveys and giving line and grade for sewers than in preparing for pavement or sidewalk construction,--yet each one of these operations is carried on by an individual force.

At the present time a number of the outside men --supervisors, engineers and foremen --are required to keep office records. This is particularly true of the division of sidewalks. Best results either from an engineering or a clerical standpoint cannot be obtained when the field superintendents are required to spend considerable time in the office keeping accounts and preparing reports.

#### **Restricted Jurisdiction of the Department**

The title of the department of engineering indicates that its duties are general for the entire city that the chief engineer is available, and he should be, for use by any department involving in its operations the constructions or maintenance of public works. This, however, is not the case. The duties of the engineering department are limited and very closely restricted to the control of sewers, sidewalks, highways and bridges.

### **Has No Control Over Park Roads**

For example, the highway division of this department has no control whatsoever over the construction and maintenance of park roads. Why? There is absolutely no difference in either the engineering or administrative difficulties in the construction and maintenance of park roads, from those found on city streets. The lack of such centralization necessitates the duplication of force and equipment. Moreover, it points towards a lack of proper supervision over the public works within the parks. To succeed in his position, the superintendent of parks must lay particular emphasis upon the development and operation of parks, playgrounds, etc. It is almost impossible to find a man competent to administer the social side of park operation and at the same time be trained in the administration of public works' improvements.

## **Pavement Construction**

### **Reorganization Needed**

The supervision of pavement construction has been delegated to three district engineers, one in charge of the west side and two on the east side of the city. As the pavement problem in Portland in the past few years has been almost entirely construction, such an organization was no doubt well warranted. In the near future, however, the problem will be one of maintenance and not construction, at which time the present organization will not be the best for carrying on the work. It will then be necessary to district the city for maintenance and to establish one overhead division for all construction work, just the reverse of the present organization.

Each district engineer has a separate force for the supervision of pavement construction; each district has an individual surveying bureau and a computing division which does considerable draughting. This is the same criticism subsequently noted herein relative to organization in the sewer division, and is a very serious hindrance to obtaining best results.

### **No Progress Reports**

Notwithstanding the large amount of pavement construction, there is a total lack of comprehensive progress reports on work done and material used. To establish any sort of control over pavement construction, it is absolutely essential that current statements of work done and quantities used be returned by inspectors to the main office and there recapitulated by contracts for the use of the engineers in charge.

How it is possible for the executive committee to exercise proper judgment in extending the time limits of contracts beyond the time specified therein without current progress reports is beyond our conception. As shown by the minutes of the executive board, it is nevertheless customary to grant

such time extensions. For example, during the eight months following March 1, 1912, permissions were granted as follows:

Date	Number
March 1 .....	6
“ 15.....	3
“ 29.....	2
April 26.....	3
May 10 .....	2
“ 24.....	4
June 14 .....	5
“ 28.....	5
July 26.....	3
Aug.16.....	4
“ 30.....	11
Sept.13 .....	4
“ 27.....	4
Oct. 11.....	3
“ 25.....	5

### **No Contract Summaries**

Although it is of great advantage to the administrator to have the complete history of each contract filed together in one place, it has not been done. For engineering purposes and for current control over construction operations a duplicate copy of the contract, the current progress reports, statements of amount of money paid, reports from the chemist on materials used and reports from the inspector on quantities used should be readily available.

### **How Foresight May Save Expense**

Sewer, water and gas connections should be extended at least to the curb lines of each lot and all contemplated changes in street railways made prior to paving or repaving of streets unless the property owners and street railway companies waive in writing the right to have such extensions made or work done within a definite number of years thereafter. When such agreements are made they should run with the land and bind the heirs and assigns. If the law on this subject is inadequate it should be supplemented and then enforced so as to prevent Portland's pavements from being so often torn up soon after they are constructed. It is evident that permission to tear up pavements has in many cases been too easily obtained.

### **Street Railroad Area Should Be Improved**

The street railroad companies are required to maintain the street pavement between the outside rails of their car tracks and one foot in addition each side. On almost every street stone blocks are used as runners or toothing stones from eight to twelve inches outside the car rail, although the street proper is paved with sheet asphalt, bitulithic pavement or wood blocks. This principle in pavement construction has been discarded by progressive pavement engineers for some years. It contributes to an uneven surface, is unsightly and increases the maintenance cost of the joints very greatly. Where the rails have not been set on a concrete foundation, a single runner of brick laid parallel with the track would be sufficient to make a firm joint and would present a neater appearance. Where the car rails are set in concrete or on a very firm foundation and well ballasted, the asphaltic pavement can be brought flush to the rail to a very great advantage. On lower Morrison and Washington streets, also Third, Fourth and Fifth streets, where the traffic is very heavy, the poor results obtained from such construction methods are especially apparent.

### **Need for Subsurface Maps**

Proper control over the construction and maintenance of substructures demands the preparation of recapitulation maps showing the entire subsurface condition of each street. Their absence places very serious difficulties in the way of future pavement administration and public utility control. The real advantage of such recapitulation maps will become more noticeable as the city grows older and the streets become crowded with various substructures. The present, however, when construction is under way, is the only time when such maps can be accurately assembled. Their preparation has recently been authorized and should not be delayed longer. A strict control should be established over the location of all substructures in the street, the engineering department to give line and grade to all public service corporations and other city departments desiring to lay mains and conduits in the street. What supervision there is today is more apparent than real.

### **Should Plan for the Future**

The work of street extensions cannot be carried on to any advantage without very close co-operation with the county and it should be in even closer relation to the Greater Portland Plan Association. Few matters are more important to the future greatness of Portland than conformity to a well designed city plan, yet thus far detailed plans have not been prepared.

It may be noted by looking at a map of the city and vicinity that the platted district is rapidly extending out beyond the present city limits. If the geographical growth of Portland in the last decade can be used as a basis for

future reckoning, the present city limits will very soon have to be expanded. The time to regulate street extension of the city is when the addition is first platted, but the jurisdiction of the department of engineering does not extend beyond the city limits. If statutory revision be needed, the legislature should be asked to authorize the department of engineering to plat all new additions within a reasonable area outside the city limits in the direction of the prospective geographic expansion of the city.

## **Sewer Construction**

### **Reorganization Needed**

The continuation of a separate filing room for sewer plans and profiles and a separate division of design and survey wholly independent of the draughting and surveying of the other divisions of the engineering department, violates a fundamental principle in efficient organization. The records of the engineer's estimates of final quantities are also kept separately in this division. Such recording is a clerical function and should be placed under the chief clerk. Centralization of like activities will eliminate more waste time than any other single organization factor.

### **No Progress Reports on Contracts**

The absence of information in the central office already noted in connection with pavement construction, is equally noticeable in sewer construction. No current progress reports are received by the main office from the inspectors employed on contract work, nor are there any recapitulation records showing the costs of the contract during its operation. It is prima facie impossible to make up an accurate engineer's certificate of quantities used in the course of sewer construction (which is the basis for payment) without detailed progress reports.

Particularly in sewer construction where the work after completion is underground, it is absolutely essential that current statements of quantities used and work done be returned daily to the main office. Such reports should be in the form of a certification by the inspector on the work that the material used was in conformance with the specification on the contract. At the present time the only certification made by the inspector is when the work is finally accepted. Proper control of any form of public works construction demands current detailed reports with certification by the inspectors as to the accuracy of the figures of their reports and the quality of the material used submitted daily.

## Office Methods

### Office Organization Defective

The physical arrangement of an office, coupled with the organization of the personnel, is a very important item in developing efficient administration. At the present time the chief clerk is in a separate room with the office engineer and cannot have any direct supervision over the clerical force. Three clerks are in the main receiving room; another clerk engaged on recording of pavement estimates is isolated in another room; the cost accounts of the maintenance division are kept in an entirely different room; while the sewer records on construction are in still another room.

Co-operation among employes and co-ordination of effort cannot be expected under present conditions. The accounting and recording division of the department of engineering is a distinct overhead function of that department requiring as special qualifications for supervision as the construction of sewers or highways. The present chief clerk has the title without the powers. From experience in many other cities, it has been found that a fundamental cause for the lack of efficiency in engineering and public works departments has been the lack of co-ordination and co-operation between the accounting and the engineering.

### Accounting Records Neglected

Fundamental accounts for control over appropriations and expenditures, contracts, and open market orders, are conspicuous by their absence. There are no proper accounting records in the main office worthy of the name. In making the survey of this particular division, an attempt was made to obtain the information absolutely necessary for the guidance of an administrator. Such information was not to be obtained.

From the appropriation accounts it was impossible to determine the unencumbered balance which would be available for future work, or even the unexpended or cash balance (one or two minor exceptions). There was also no information of balances outstanding on unliquidated contracts and open market orders. The fact that there is no liability accounting whatsoever, coupled with the same lack in the auditor's office, presents serious difficulties to proper administration.

Contract accounts which would permit of the submission of *partial estimates* and of *monthly payments* upon extensive construction or maintenance work were not to be found. Contractors are not paid until the work is completed. This works a hardship upon both the contractors bidding for city work and the city itself. It necessitates higher bids on contracts. There is no excuse for this from any standpoint. Ordinary commercial custom demands that a contractor engaged upon extensive work be paid at definite intervals for work completed.

### **Cost Records**

With the exception of the maintenance division, no cost records have been established in this department. It is no less desirable that accurate cost records be currently compiled for construction work. The installation of a recording control by means of location card index file, showing blocks and intersections, could be used for nearly all the records in the department. Progress reports on contracts, inspectors' reports on conditions of work necessary to be done (of which there are none in the department) could well be filed in juxtaposition with the cost and expense records applying to that particular work.

### **Duplication of Work**

Omission to use the carbon process in preparing duplicates necessitates additional cost in clerical hire. This is particularly true in the preparation of final estimates. Five detailed records, identically the same, showing the quantities used in various construction work, are made out individually in the main office. This condition also applies to the reports of work done on sidewalk construction chargeable to the property owner. By the substitution of the loose leaf system instead of bound books now used, several rewrites of detailed sidewalk accounts could be avoided entirely.

In the recording of house connections on sewers, a comprehensive card index has been prepared in order that the information recorded in large cumbersome bound books could be made available for easy reference. By entering such records direct on the index cards themselves, one whole operation could be eliminated. There are several other instances of similar duplication of work due almost entirely to the use of bound books for recording purposes. It is fundamental in all public works recording where accessibility depends upon a location index that the original entries be made on cards rather than in bound books, such cards to be filed directly by location.

### **Should Use Central Files**

The department maintains an efficient filing division. Hence, it seems absurd that the plans, profiles and maps are not all kept there in charge of the filing clerk. Strangely, the sewer division maintains an entirely distinct filing room.

### **How to Secure Better Correspondence Control**

The present system of correspondence control operated by the filing division is sufficiently comprehensive and detailed to control correspondence and records after they have once reached the files. However, a large part of the department's problem in correspondence depends upon the control of reports and correspondence, particularly complaints, while in

transit through the office. This could be established by a simple form of registration when the mail is received and in the charging of letters and reports to the various division heads to whom such correspondence should be referred. Duplication in the filing system of card indexing by name and subject could be avoided by the installation of a subject classification based either on the duodecimal principal of classification or the pneumatic classification, for the actual physical filing of correspondence and reports.

## **MAINTENANCE OF PUBLIC WORKS**

Owing to the very rapid growth of the city of Portland, its engineering problem has thus far been almost entirely one of construction. The defects of organization for handling such work and of the methods employed were set forth above. In the future the problem will be one of maintenance—particularly of pavements. The maintenance division of the engineering department should, therefore, be placed under the direct supervision of a competent assistant engineer and the relative importance of the office of the district construction engineers very greatly decreased.

### **Accounting System Established, But Inadequate**

In the maintenance division of the engineering department, a start has been made to install cost accounts of work done. This is commendable at the present time for the attempt made rather than results obtained. A number of minor changes in the operation of the cost procedure will eliminate some of the present work and obtain more usable results.

Labor and material costs as reported by the foremen are not posted to the job cost cards until the job has been completed. It should be done currently.

Complaints are recorded on an individual complaint slip which is used as a job order and notification to the foreman to do work. Such recording of complaints is highly desirable but a great many complaints cannot be used as job orders. It would be better to issue a special job order where work is necessary and to hold that particular order as a charge against the inspector or foreman in charge until his statement of work done clears the record.

The filing system should be made standard for all reports and records in the department of engineering. For this purpose, the 8x5 filing size for field reports has proved to be the best in the past. Field reports drawn to this scale can be filed directly in the same cabinet with the job cost cards. Several different sizes of field reports and office records are now in use.

The registration of payments for supplies, materials, and services has been kept with considerable detail in a book the form of which suggests a

mixture of an invoice register, a journal and a ledger. This condition, together with the lack of a proper classification of expense, has in a way impaired the success of the work. The expense, account as kept in the maintenance division varies by several thousand dollars from the general books kept by the auditor. This condition has arisen from a number of causes, of which lack of co-operation between the two offices, lack of proper stores records and arbitrary charges against various appropriations are the most important. Sufficient care has not been taken in charging supplies purchased to the individual accounts. For example, we noted that considerable material used by the sidewalk construction force in making repairs to several bridges had been charged to sidewalk expense instead of to bridge expense.

Even though the form of cost and expense system were perfect, one would still not be sure of the accuracy of the records unless they were balanced periodically with the fundamental accounts,-- i.e., were under control through certain central accounts in a general ledger. There is no such control at present, and until it be established and currently maintained the detailed records must be open to question.

### **Economy Practically Disregarded In Purchases.**

An investigation of the purchase requisitions of the engineering department for 1912, and of the annual report of that department for that year, disclosed the fact that not a single contract for supplies or services had been executed during that year. Of the principal materials used by the maintenance division during the year, 1,816 barrels of cement, 7,385 cubic yards of crushed rock, 541,146 feet of lumber, 10,600 pounds of nails, 238 tons of coal, 6,782 lineal feet of sewer pipe and 102,000 bricks were purchased on open market orders not exceeding \$250 each, without public letting and in the majority of cases without inviting bids. The charter restriction limiting the purchase on open market order to \$250 is absolutely useless unless some regulation be established prohibiting the continuous issuance of individual orders for the same supply at retail prices.

### **No Stores Records**

There are absolutely no stores records in operation anywhere in the engineering department. Current comparison between material purchased and material used is indispensable in properly administering any city department. It is impossible to make such a comparison in the engineering department, however, without devoting much time to preparing a very detailed analysis for whatever period the administrative official wishes to review.

## **Permits**

Permits are issued for making house connections to sewers, for opening streets for subsurface construction or repairing, and for private construction of various public works, such as sidewalks, sewers and pavements. The city makes no charge for this work, although five or ten per cent is added to all assessment bills and charged against the property owner for such work done. In this connection it is to be noted that no accounts have been kept which would show what per cent is a fair charge.

In private construction work, nothing is charged for permits issued even though the engineering supervision in giving line and grade and inspecting the work during the course of construction is identical with that upon city work. Such permits authorize acts for the specific benefit of individuals, firms or corporations,--very often to the distinct disadvantage of the community. Moreover, considerable expense is involved for clerical and inspection services. A charge should certainly be made for such permits.

## **Maintenance of Pavements**

With over three hundred miles of hard surface pavement, the city should have a very well defined maintenance program.

## **Maintenance By City Labor Should Be Cheaper**

City gangs for the construction and maintenance of all kinds of pavement have proved to be very effective in other cities. A start has been made in Portland in maintaining certain stone block and macadam roads by city labor. A municipal asphalt plant for repairing all asphaltic pavements and city yards for the storage of material and equipment should be established. However, in undertaking repair work with city labor, a rigid supervision and inspection should be maintained. Otherwise, the cost will be even higher than under a contract plan. For example, cost records of the maintenance department show that between February 6th and March 3rd of this year, approximately 5900 square yards of roadway on Sandy Boulevard between East Seventy-second and East Eighty-second streets were repaired by city labor. The total cost of the job amounted to a little over a thousand dollars, at a unit cost of 17 cents a square yard. Another job--the repairing of East Thirty-seventh street between Hancock and Beaumont streets--cost over 42 cents per square yard for placing and rolling a new gravel surface. This cost does not include the value of the gravel which was hauled from the immediate vicinity and evidently cost the city nothing. Considering the kind of work done and the fact that the cost in both cases consisted almost entirely of labor and teams --no material cost --the present efficiency of Portland's city maintenance gangs as opposed to contract work shows the need for better supervision.

### **Contracts Not On Proper Basis**

Such future contracts as may be let for maintenance of pavements should be let on the basis of square yards laid rather than upon the basis of an annual maintenance on each square yard of pavement. A number of contracts are in existence now which provide for the payment of an annual rate of from 1 to 2 1/2 cents per square yard for maintenance of asphaltic pavement. This method brings in so great an element of uncertainty that the price bid by the contractors must be guesses on their part. In all such cases the chances are that the contractor adds a little to his first guess to be on the safe side. It is unscientific and impractical and should be discontinued as soon as there is any considerable amount of maintenance work to be done.

### **Should Be Discontinued**

A certain class of asphaltic pavements where the maintenance contracts have expired are maintained by open market orders of less than \$250. Invitations are sent out for bids and the work done, after which an order is issued. This operation, although not very serious at the present time owing to the small expenditure, is wrong in principle and as the maintenance problem grows in importance it should be discontinued.

### **Inspectors' Reports Lacking**

As in the case of pavement construction, there is a lack of comprehensive daily reports from inspectors on pavement repairs. The only report found was in field book form and showed the dimensions of the patches only with no statement of their exact location. This condition precludes the possibility of using inspectors' reports as a basis for an audit of contractor's charges.

### **Pavement Cuts Not All Under Control**

To secure more prompt repairing of cuts made in pavements, a more direct control thereover should be established in the central office. Under the present procedure, the various paving companies are paid directly by the persons obtaining the permits. If the city were to enter into contracts for this work and pay for it directly, charging the cost to deposits received on the permits issued, the present charges could, no doubt, be very greatly decreased.

In this connection, it is to be noted that neither the water department nor any other city department is required to take out a permit from the department of engineering when they desire to make cuts in the pavements. To obtain adequate control over pavement maintenance, all cuts therein should be allowed only under permit from the highways division. The water department in particular, both on maintenance work and original construction, may cause an enormous amount of damage to the pavements.

To avoid this, the supervision of the back filling of trenches and the ultimate restoration of the pavement should be delegated to the department of engineering, which at the present time has no voice in the matter.

### **Maintenance of Sewers**

With a comparatively new and up-to-date system of sewers, with excellent drainage gradients, and with the cleaning of catch basins carried on by street cleaning department, no great amount of work is left for a Sewer Maintenance Division in Portland. Two points of inefficiency, however, are worthy of note.

### **Purchase of Supplies**

In order to obtain materials for repair work, a series of \$250 open market orders is issued by the sewer maintenance division. One blanket order of \$250 is issued each month, and against this credit account deliveries are made by the supply contractor upon verbal or telephone order. Any system which presumes the issuance of a series of open market orders for identically the same supply violates the spirit if not the letter of the charter restriction. The purchase of materials in such small quantities involving a great loss to the city should be stopped immediately,

### **Sewer Repairs Expensive**

The two following examples explain the advantage of a cost system in bringing to light inefficiency in making sewer repairs.

A job cost sheet (no order number given) showing the cost of repairing a sewer on East Clay street between East First and East Second streets, where 34 feet of 10-inch pipe sewer was rebuilt, shows a cost of \$208.82. This work was caused by the sewer being stopped up through certain faults in the construction of a Hassam pavement laid nearby. The paving contractor was, of course, responsible for repairing the damage done to the sewer. Although the actual cost of the job as shown from the records amounted to \$208.82, the contractor paid less than \$100 to the city for this work, and refused to pay more. At this rate, sewer repairs by the city gang cost more than double what they are worth.

Another sewer was rebuilt on Fourteenth street between Front and Savier, where a manhole was built and 270 feet of 16 inch pipe laid, the total cost of which amounted to \$1481.71. An interesting item contributing to the very high expense on this job was the team hire. For hauling a few barrels of cement, 1500 feet of lumber, 1600 brick and small amounts of other materials, the job cost card showed that 14 full days' time of a team had been used.

## **Maintenance of Sidewalks**

### **The Superintendent**

Under the present procedure the field Superintendent is required to devote considerable time to the assembling of office records. To make a clerk out of a supervisor or constructor of maintenance work seriously decreases his usefulness as a field superintendent. Such office records should be taken care of by the general clerical force.

### **Posting of Property**

When either by order of the city attorney or through a physical inspection of the conditions, defective sidewalks are condemned as being dangerous to life and limb, the action should automatically notify the property owners to make a repair and set up a charge to that effect on the central office books. This is not done at present and there is no way of telling from the records kept in the sidewalk division the effect of such notifications. The property owner may or may not repair or reconstruct the sidewalk. The only way to ascertain what action has been taken is by a subsequent inspection which may or may not be made. Slightly more lineal feet of sidewalks were constructed during 1912 than were posted as being in need of repair, but as no distinction is made in the sidewalk records of permits issued for new construction and permits issued in response to notifications of defective conditions, it is impossible to relate the two.

### **Inspection of Private Work**

Men engaged on the inspection of private work do not submit daily reports of the work inspected. This condition is comparable to the lack of adequate detailed inspection reports which we have already mentioned in connection with pavements and sewers and is no less necessary in establishing strict control over sidewalk construction.

## **Maintenance of Bridges**

The following suggestions do not relate to the bridges over the Willamette river which are maintained by the county.

### **Painting and Cleaning of Steel Work**

Unless steel work be thoroughly cleaned before being painted, very little benefit is obtained. Several examples were noted where the paint had been applied on the steel work of the city's bridges over very large scales of iron rust. Paint so applied is absolutely useless in protecting the steel work from subsequent corrosion. In this connection it must be understood that

hand cleaning of steel work is a very expensive process and in many cases almost impossible, and yet no special cleaning appliances have been purchased for this division. Considering the fact that corrosion has evidently gotten a fair start on the steel work of a number of the city's bridges, it is important that a sand blast cleaning machine or other approved appliance be purchased for the use of the bridge division without further delay.

### **Should Have Expense Records of Bridges**

Comparative data from a number of cities can be obtained showing the relation of maintenance cost to the valuation of the bridge. Nothing has yet been done to compile maintenance expense of Portland's bridges.

Although provision has been made for the inclusion of bridge repairs in the general cost system the present work is not being done on job orders and the reports of labor and material used are not being shown as job costs. There is no reason why this should not be done and the omission to do so entirely prevents assembling of job costs.

## **SPECIAL ASSESSMENTS FOR PAVEMENTS**

According to the improvement code now in force, the cost of all pavement construction and also of reconstruction is a charge which may be legally assessed against the owners of the abutting property. The actual method used for distributing the assessments is upon the zone basis which stipulates varying percentages which may be assessed within certain distances of the street, and provides further for a pro rata distribution of the cost of construction of street intersections.

### **General Criticisms**

In so far as the method of special assessment for paving is concerned, very little criticism can be offered. Error has been made, however, in not distinguishing sharply between original construction and reconstruction of pavements. The fundamental reasons for any special assessments for pavement construction apply only to the construction of the first pavement. It is the first pavement which tends to enhance realty values. Moreover, special assessments on original construction protect the administrative officers from undue influence being exerted by private individuals interested in the development of new territory. Without such protection, no efficient restriction can be exercised in order to prevent laying of costly pavements as a boom in real estate speculation.

These arguments for special assessments on paving do not apply in any way to reconstruction. In fact, the continuation of special assessments as a

means of financing repaving of streets seriously interferes with the maintenance of proper pavement conditions throughout the city.

### **Property Owners Not Responsible for Deterioration**

The time is coming in the very near future when Washington street, Morrison street, and several other down-town streets where the traffic is exceptionally heavy will have to be repaved. Under the present charter, the cost of such repaving must be assessed against the owners of the abutting property. It is, of course, ridiculous to suppose that the property owners are responsible for the deterioration of pavements used by automobiles, trucks, delivery wagons and all kinds and conditions of motor and horse drawn vehicles from all parts of the city. Repaving is unquestionably a proper charge against the city at large, the financing of such contracts to be by a bond issue, with the term of the bonds approximately equal to the life of the pavement.

### **Remonstrance Against Original Construction**

It very often happens that a main artery of travel passes through a territory where the abutting property is not of sufficient value to stand an assessment for the cost of the kind of pavement which should be laid. In such cases, the city should have the charter right to place the street in proper condition for travel, with the understanding that the cost of one permanent pavement be assessed against abutting property when it has sufficiently increased in value to permit such assessment being made.

### **Original Assessments Should Be Equitable**

If all pavement reconstruction is to be paid for from the general tax levy, care must be taken to make sure that a standard unit price pavement or pavements of approximately the same value be assessed against the property fronting on each street—that is to say, that if the original pavement construction is to be assessed against abutting property all property owners should be required to pay by special assessment for pavement of approximately the same quality and cost.

## **SPECIAL ASSESSMENTS FOR SEWERS**

Independent of the right or wrong of special assessments as a means for financing sewer construction, the detailed methods now employed in actually making the levy are in need of immediate revision. No statement of area is made in the lien docket—consequently, means is not afforded for making an easy audit of the amount assessed. The total area within the assessed district should be at the disposal of every property owner required

to pay an assessment. Certified statements of area, sworn to by the responsible engineer, should be publicly posted in the Auditor's office. Only by the use of maps, showing geographically the distribution of assessment bills, of which there are absolutely none at the present time, will it be possible for the property owner to make an easy comparison between his own assessments and others within the district. A certified copy of the lien docket, sworn to by the Auditor, should be provided for the support of such maps and both maps and docket publicly displayed in the Auditor's office.

## **WATER DEPARTMENT**

The following statement of defects now observable in this department does not include several complexities of procedure which are the same here as in other departments –such as budgetary control by Council; power of both Mayor and Board to give direct instructions to division heads and employes, etc; reliance upon unpaid part-time services of all Board members except Mayor; making a clerk of the independently elected Auditor, who should be equal to and not subordinate to the water and other boards in matters pertaining to financial method, regularity, etc.

### **Important Deficiencies Noted**

The present revised "revenue control" shows whether money paid to the collector reaches the Board and the Treasurer. It does not attempt to discover or show whether all of the money that ought to be charged is actually charged. Obviously, the taxpayer wants to know how much revenue ought to come from water as well as that part of revenue due from water which actually is received.

The total consumption of water reported by the Water Board is worth \$238,000 more than is accounted for in Water Board reports. This figure of \$238,000 is the difference between the value of the total consumption of water reported at the lowest meter rate (ten and two-thirds cents per thousand gallons) and the total revenues for 1912, after deducting the official liberal estimate of \$50,000 supplied to the city's own streets, buildings, etc. Where this unaccounted for water goes nobody knows and nobody has heretofore tried to find out. Pitometer tests will, however, be made in the near future.

The superintendent and the engineer disagree as to the total amount of water actually consumed. Although this disagreement seriously affects the city's control over water revenue due, neither officer knows and neither they nor the Water Board are making tests to prove whether published consumption figures are over or under –or correctly stated.

### **Big Leak Noted**

Although this discrepancy, understated at \$238,000, may mean that meter and flat rates are too low, or that there is enormous leak and waste either in the mains or among flat rate consumers, or that the city is using for its own purposes more than the estimated \$50,000 a year, nobody now knows and nobody is trying to find out which alternative explains the discrepancy. Nothing systematic has been done to stop the leaks (except on complaints), and nothing to regulate the rates and measure water on a scientific basis. To be losing, wasting, or failing to account for nearly 25 per cent of the water distributed should not be overlooked merely because of a large net profit on water operations.

The present meter rates represent not the actual cost of water and not a computed fair charge to consumers, large and small; but an estimate made some years ago of the probable amount of water used under the old flat rate—that is, the flat rate itself is based not upon the amount of water used, but upon opportunity to use water—upon the number of fixtures, rooms, kinds of use, character of occupants, etc.

The public bathtub in a hotel pays six times as much as a private bathtub; the public bathtub in an apartment house pays 35 cents; the bathtub used by one family of 10 persons or less, 10 cents a month; one barber chair pays 75 cents; a shop with 10 chairs pays 25 cents for each chair after the first; six Chinamen must pay the same as 10 non-Chinamen.

### **Consumers Paying Too Much**

In 1910-11, as the result of a general inspection, all large consumers were required to install water meters, i.e., laundries, breweries, apartment houses, etc., in congested districts, and occupants of a lot and a half in outlying districts.

Present day consumers are not only paying more for water than it costs to deliver it, but are giving to future generations of 20, 30 and 50 years hence present day profits, and are paying the cost of installing water mains formerly paid for by special assessments. Since 1887 \$3,694,000 of water profits have been used for "extending mains and construction." This means capital improvements for increasing business, and does not include repairs or replacements. In the years of 1911 and 1912 \$311,047 and \$235,031, respectively, was used for such improvements.

This "pay-as-you-go" policy has been clearly explained to citizens year after year by the water board, and means also a "pay-for-posterity" policy. While it will give Portland in a short time a water system adequate to provide for a population for all time and will lay the basis for very marked future reductions in water rates, the present consumers should at least challenge a policy charging them for water more than twice what it costs to deliver it.

### **Meter Service Considered**

Of 57,000 users of water, only 13,221 are now metered. The report for 1912 states that of the total services 23.3 per cent are metered, but of the total consumption only 11.5 per cent passes through the metered services—that is to say, the metered places consume less than half as much as they might be expected to consume. This seems incompatible with the department's belief that it is metering all the large consumers. Of course, it may mean that the small consumers are using vastly more per consumer than the department believe.

The figures argue clearly, however, for metering the city throughout so that each consumer shall pay for what he actually uses rather than for somebody's estimate of his opportunity to use.

When an inspector goes out to read a citizen's meter—that is, when he goes out to learn the amount of water for which the consumer is to be charged, he takes with him the reading of that meter for the previous month. Whenever this method is used the inspector is tempted to fill out the meter reading without actually going to the meter.

The system of itself invites first, laziness, then inaccuracy and sometimes dishonesty on the part of inspectors. Supplied with the information which is now furnished to Portland's meter readers, a fair guesser could read all the meters in the city of Portland without moving out of his room and without giving dissatisfaction to consumers or arousing suspicion of the Water Board. Sometimes bad guessing by inspectors is corrected by better guessing, or by actual inspection and meter readings, and monthly bills jump up about 50, 100 and 500 per cent.

### **Plan Should Be Corrected**

This condition should be corrected by requiring inspectors to turn in the actual reading of meters each month, to be posted and compared with the preceding month's readings by the meter clerk. It is claimed that a single man averages over 200 meter readings a day. Even after making allowance for the accessibility of meters, this raises at least a question as to the care with which the meter is read and recorded.

The qualifications of men provided by civil service for meter readers and inspectors have been criticised by officials in the water department. When we suggested the above method of preventing either random or systematic guesses where there should be actual reading, the officials' attitude was that Portland's meter readers could not make proper readings without having the preceding month's reading before them. This recalls the experience of many cities where only a small fraction, e.g., 10 out of 70, meter readers and inspectors actually were able to read a meter. A general test of Portland's readers has not been made, but is here suggested.

The present charter says that the Water Board may collect monthly in advance. This is construed to mean that it may not collect quarterly in advance, but that it permits metered service for which deposit has been made.

Another reason for monthly rather than quarterly or semiannual collections is that the charter does not now specifically make uncollected water rents a lien on the property.

### **Quarterly Collections Urged**

The city must, therefore, look to the occupant rather than to the owner of premises. Twelve times every year 55,400 bills are made, with all the detail on the bill and on the books, enumerating the charge for each fixture, noting meter readings, etc. If quarterly collections were substituted for monthly collections, there would be a saving on postage alone of over \$1600, besides a saving in the cost of supplies, bookkeepers' salaries, time of collecting agents-to say nothing of the enormous saving of necessary trouble now caused the consumer. The money saving alone from substituting quarterly for monthly collections would pay for a thoroughgoing inspection of all flat rate services at least every other year.

Inspection of fixtures to determine amounts consumed is now made almost exclusively upon complaints from users. The system now employed makes it possible that, without detection, a part of the water now unaccounted for may be flowing through private fixtures, taps or by-passes not recorded on the department's books. The money spent in unnecessary monthly collections might better be spent in making a thorough survey of every premise of the city at least every other year to see whether or not the water department has a complete list of all water users to whom bills should be sent and a complete list of water fixtures which should be used in determining the amount of each bill.

### **Lack of General Inspection**

While the system assumes that no water shall be turned on anywhere and no new fixtures permitted until after the plumber has received a permit from both the water department and plumbing inspector, the above mentioned lack of general inspection, and especially the large amount of water unaccounted for, would indicate that new fixtures or enlarged fixtures or change of use frequently alter the probable consumption of water without a change in rate being made.

The method of accounting for expenditures now being outlined as part of the Board's reorganization treats the Water Board as if it had absolutely no relation to the general government of Portland, and fails to provide the central accounting office with sufficient information to permit a proper audit; for example -the clerk in the central accounting office having charge

of the water accounts, says he has never been approached by the authorities in charge of the reorganization of the accounts of the water department to see whether they provide a basis for central audit. This will be treated in a later report discussing the city's accounting methods.

A quarterly report showing "operations in detail" is called for by section 237 of the charter. The quarterly report as published does not show operations in detail; is merely a cash accounting for moneys spent during the quarter; gives no idea of the quantity of work done, new consumers added, old premises cut off, etc.

The publication in the annual report of consumption figures, declared by the superintendent to be inaccurate, tends to vitiate all cost figures published and raises a question as to the accuracy of all operation reports.

### **Minutes Admirably Kept**

The minutes of the Board are admirably kept by the Auditor or his representative acting as clerk, but not only are copies not sent to the Board, but the reading of minutes of regular meetings and of special meetings is regularly and automatically "dispensed with and same approved as recorded by the Auditor"; it has been made the duty of no member of the Board or any officer of the city to see that the Auditor's minutes even accurately quote resolutions offered.

With vast expenditures to direct and revenues totaling nearly \$1,000,000 a year, the present method leaves altogether too much responsibility to the clerk of the Board who belongs to another department, and also fails to give adequate protection to employes and officers of the Board who may easily find themselves signing papers and approving actions without the information necessary to tell whether such action is efficient or even honest.

# **FINANCE**

## **THE BUDGET**

Wrong budget making is a chief sin of inefficient government. Although the making of the city's budget is the most important annual governmental event of the year to citizens of Portland and is public business, the council provides no means for informing the public thereof either as to:

1. What is intended to be done.
2. What is going on during the actual making of the budget, or
3. What the result is after action is finally taken.

Not only has the public not been adequately informed relative to this important public business, but even the Council itself in passing appropriations has labored largely in the dark.

Only three copies of departmental budget estimates are prepared. In fact, until the present year only two copies were prepared. Local newspapers may copy and publish these estimates if they so desire, but they are not printed in pamphlet form. Neither is the Mayor's (and Auditor's) revision thereof which is transmitted to Council and referred to the Ways and Means Committee.

There have not been even typewritten copies for use of each of the members of the committee as a basis for deliberations thereof. They are usually furnished copies of local papers which have printed the estimates as news items.

Moreover, when this committee reports back to the other ten members of the Council only one copy of their recommendations is provided. Council members desiring to question any provision of the budget, or to amplify or modify it must rely on their memories after the report is read. With such a lack of information, it is no wonder that budgets have been adopted almost pro forma as reported by the Ways and Means Committee.

Although the committee and Council hold open meetings, no definite dates have been set aside for public hearings on the estimates. Little interest has been taken in the estimates except by employes desiring salary increases. The reason of this is that no attempt has been made to arouse any general citizen interest in budget matters. Since the annual budget is the city's program for an entire year and affects either directly or indirectly every citizen of Portland, special effort should be made to interest not only all local newspapers but also all civic organizations, commercial

associations, the pulpit, clubs and the public generally. Departmental estimates and the Mayor's recommendations (in parallel columns) should be published in pamphlet form and widely distributed. Such pamphlets should show clearly all increases and decreases over original appropriations and expenses of the preceding year, and all supplemental appropriations and transfers during that period.

After the committee has held a public hearing, the committee's recommendations, which are, in fact, a tentative budget, should also be printed in pamphlet form. The Council, after adequate advertisement thereof, should then hold a public hearing on this tentative budget.

### **Present Charter a Handicap**

Scientific budget making in Portland is handicapped to a regrettable extent by the present charter, which prescribes special tax levies for certain functions, usable only for the specific purposes for which the levies are made. Instead, therefore, of the Council being able to apportion money out of a single fund or, at the most, from two or three funds, according to the varying needs of each of the city's functions and activities, the Council is limited by these special levies arbitrarily and absolutely from appropriating for such purposes more than the amount specified in the charter. For example, in 1912 eleven special funds were established by such levies. These included such important functions as police, fire, street repair, lighting, parks, docks, street cleaning and sprinkling, etc. Only the smaller departments, bureaus and offices are maintained out of the general fund, i.e., the fund deriving revenue from sources other than taxes, and, therefore, not restricted by such limitations as those above mentioned.

### **Portland Has No Budget**

At the present time a taxpayer who may desire to obtain a copy of Portland's budget as adopted cannot do so. He may, perhaps, read in a local newspaper the Mayor's recommendations, which are known about the City Hall as the budget, but as compared with other cities there is no single document in existence constituting a final budget. There is a collection of ordinances, 14 for the year 1913, which provide appropriations for the several departments, but no copies of even these are available, because none of the Council proceedings are printed. Even a citizen who, by hook or crook, might manage to ascertain what was intended would still be unable to center his attention on the budget as an entity. It is so scattered as to be invisible to the public eye. The budget should be adopted as a single document in a single ordinance, printed and made available to all those entitled to receive a copy.

In this connection, it is to be noted that neither the water nor harbor boards are under any budgetary control except in total. There should be a single budget for the entire city.

### **Inadequate Basis for Judgment**

Sound municipal financing demands that as a basis for judgment in adopting a financial program (budget) each year, a statement be prepared showing on one side the estimated available revenue from the different sources and on the other side the estimated expenditures. Otherwise there is danger of over-appropriating, of making "wind" appropriations which tend to destroy the efficiency of administering all appropriations. Although a statement of this character is prepared by the Auditor (one copy only) for the information of the Ways and Means Committee no copies thereof are made available to the other members of the Council, although they, too, are charged with responsibility for the appropriations made. Neither does the public ever see such a statement. The lump sum estimate of probable revenues set forth in the Mayor's message does not answer the purpose. In short, no comprehensive picture is afforded of needs to be met and resources available for meeting them.

### **No Uniformity of Estimates**

Not only is the budget making procedure illogical and conducive to secretive methods, but the estimate forms are inefficient for administrative purposes. Department heads are free to send in their estimates in any form they may desire. There is absolutely no uniformity of account titles. Under such conditions, it is practically impossible to ascertain how much is requested, appropriated or expended by the city during the year for any particular object of expenditure, such as fuel, forage, provisions, etc. In order to secure the benefit of comparisons by departments from year to year, and also to lay a basis for passing and administering the budget, standard account titles should be adopted and strictly adhered to from year to year. By adopting such standards for estimates, a standardized budget composed of the same standard accounts may be made. Such budgets have been adopted and are in successful operation in New York, Chicago, Philadelphia, Cincinnati, Los Angeles and a number of other cities. To facilitate requisitioning, auditing and bookkeeping, the account titles should also be codified.

Steps should be taken to install unit cost systems in all departments so that at budget making time the Council will have available complete information not only of the quantity of work performed for the money expended the previous year, but the amount of work to be performed the ensuing year and the probable cost per work unit of accomplishing it (i.e., cost per square yard of pavements laid, repaired and cleaned, per cubic yard of garbage removed and destroyed, etc.).

Budget estimates would then be supported by number of work units instead of only the amount of money paid out or to be paid out. A real basis would also be afforded for testing the relative efficiency of (1) departments as compared with the same departments of other cities, (2) departments the past year as compared with preceding years, (3) different methods of accomplishing work and (4) different employes, gangs, divisions, etc.

## **PASSING ORDINANCES**

Not only do the present Council methods fail to give the public any information about making the annual budget ~~the~~ principal instrument controlling the city's finances ~~but~~ the public is kept equally in the dark regarding a very large proportion of all other public business.

### **Rushing Ordinances Through Council**

An examination of the minutes of the City Council shows that approximately 90 per cent of the city's ordinances are adopted at the same meeting at which they are introduced. Council proceedings are not printed and pending a recodification of the ordinances, citizens who would know the local laws must consult the city attorney or hunt through the typewritten minutes in the Auditor's office. Moreover, no means is provided for verifying the correctness of the minutes; no copies thereof are sent to members nor are they read at any subsequent meeting; in short, no effort whatever is made to check their correctness. We were informed that at one time the executive board designated one of its members to check the minutes, which he did carefully once or twice, and then perfunctorily O.K.'d them until the check was discontinued.

True, a calendar is made up by the Auditor and delivered to Council members 24 hours in advance of meetings, but this does not set forth the text of proposed ordinances. A citizen might, by being present and listening attentively, ascertain what legislation was proposed, but even then, if he wished to object to any particular clause, he would be compelled to rely on his memory of hearing the ordinance read. No copy thereof is available to him.

The Council rules provide that ordinances must be read three times before being adopted, and that there shall not be more than two readings at the same meeting, except by unanimous consent. The object of this provision, of course, is to prevent legislation being jammed through Council without proper consideration. However, since the proposed ordinances are not printed, we are unable to understand how the Council and the public are expected to become informed thereof sufficiently to know whether particular provisions thereof are good or bad, whether there are jokers hidden away therein, etc.

To ascertain, nevertheless, to what extent this rule, prohibiting more than two readings at the same meeting has been observed, we took at random the minutes of six successive meetings --November 13th, 1912, to January 22d, 1913-- and analyzed and tabulated them.

Of the 393 ordinances passed by the Council during this period, the rule was suspended in the case of 354, or over 90 per cent of them, and they had their first, second and third readings and were passed at the same meeting at which they were introduced. Of this 90 per cent which were read three times, 223, or 63 per cent, related to street, sidewalk and sewer improvements, assessments, etc. The other 131, or 37 per cent, included such important ordinances as:

- Revoking a street railway franchise;
- Authorizing the issue and sale of improvement bonds;
- Making appropriations out of various funds;
- Authorizing Mayor and Auditor to draw warrants for claims, etc.;
- Transfer of specific appropriations within a department to other uses;
- Establishing the tax levy;
- Authorizing Treasurer to redeem improvement bonds;
- Custody of bonds held by the city as investments;
- Creating office of Curator of Free Museum and establishing salary therefor;
- Granting permission to a company to construct a fifteen story building;
- Prescribing regulations for management of the Water Works.

The danger from such procedure is obvious. While we neither sought nor found evidence of malfeasance, the opportunity for corrupt practices by such methods is unlimited.

Only on rare occasions and in case of special emergency should an ordinance ever be passed at the same meeting at which it is introduced. The official record should always make clear in such cases all of the reasons and facts which made such hasty action necessary. The proposed commission charter is clear on this point. Not only should notice of proposed legislation be placed on the calendar, but after it is introduced the text matter thereof should be printed in full in official proceedings of the Council, and not be brought to a vote until at least one week, and preferably two, have intervened.

## **CONTROLLING EXPENDITURES**

The methods used in making the city's budget each year have been shown to be seriously defective from almost every point of view--in fact, the city has no real budget. There is also much need for improving the present method of administering the annual appropriations after they have been made. The methods of making and administering appropriations are

almost equally defective. Even the most scientific budget making system may be rendered futile unless the appropriations are efficiently administered during the year.

Such administration is dependent on (1) an efficient accounting and reporting system and (2) proper supervision over subsequent supplemental appropriations.

The city's accounting and reporting system is not efficient, in that it does not afford the Auditor, who is the central financial officer, any means for preventing department heads and other officials from incurring liabilities in excess of the amounts appropriated.

The present system provides that when a department or official issues a purchase order or enters into a contract for supplies, material, equipment, services, etc., a carbon copy of the order shall be sent to the Auditor. If this procedure were really observed and these copies used as a basis for making charges against the proper appropriations, the Auditor would have partial control of the situation. However, no charges are made against appropriations until goods have been delivered and a bill reaches the Auditor's office. In most cases, that is the first information he has that a purchase has been made and a liability incurred against the city, because in forwarding him the carbon duplicate of purchase orders it is usually held back in the outside departments until the bill is received and all are then sent to the Auditor together. The accounting forms are not used as intended.

There is almost an utter lack of accounting, so far as city contracts are concerned. Not only is there failure to charge the amount of such contracts as an encumbrance against the bond funds or appropriations from which they must be paid, but no separate account is maintained with each contractor. As a measure of self-protection, a clerk in the Auditor's office has adopted the plan of making memorandum notes on the back of the original contracts themselves of the amounts actually paid. These notes, however, contain no reference to supporting warrant or voucher numbers. It is, therefore, impossible for one to ascertain the nature of the claim on which such payments were based without going to an infinite amount of trouble in hunting through voucher register or files.

One does not need to be an accountant or bookkeeper to recognize the fact that the Auditor, as controlling financial officer of the city, has no means of control; that his accounts give him no information whatever as to the amount of purchase orders issued and contracts entered into for which no bills have yet been received; that he, therefore, cannot prevent the incurring of liabilities (purchase orders, contracts, etc.,) in excess of amounts appropriated. His accounts may show a considerable available balance when, as a matter of fact, there may not be any available balance. Moreover, he cannot compile a balance sheet from his books because, although these liabilities are actual encumbrances on appropriations and

legal claims against the city, his books afford him no information of the amount thereof.

In short, the Auditor's financial control is no control. It consists of his being informed of what has been done after it has been done.

### **Monthly Estimates Unnecessary**

An attempt is made to maintain a central control over expenditures by requiring that in addition to rendering a yearly estimate of amounts needed, each department must submit to the Auditor a monthly estimate of the department's probable needs. These estimates cause unnecessary labor in preparation, tend to complicate the procedure, and are unnecessary. They are received by the Auditor about two and a half months before the month for which the estimate is made. He examines them and if they are within the amount of the annual appropriation the Council passes them upon his recommendation. The department is not supposed to exceed such monthly estimates unless ordinance authority is granted by Council. As a matter of fact, no one knows whether liabilities are subsequently incurred in excess of the estimates or not.

### **Should Set Up Reserves**

Proper administration of appropriations demands that whenever a purchase order is issued or a contract certified the actual or estimated amount thereof shall be charged immediately as an encumbrance on the appropriation against which it is issued. It then acts as a reserve to insure the retention of a sufficient balance in the account to take care of the invoice or bill when rendered (and which liquidates the reserve). Even on contracts which contain no approximate total, but are on a unit basis, it is practicable to set up an estimated amount as a reserve and subsequently make an adjustment entry if it becomes apparent that the reserve is too large or small. All appropriation or bond fund accounts should be put on that kind of a basis. It is the only system by which the exact condition of such authorizations may be currently ascertained and departments prevented from overincumbering the amounts allowed them.

### **Should Make Use of Inventory**

An inventory of city owned property has been compiled. This is commendable. However, no use has been made of this inventory except to print it in the annual report. Aside from having a record of what the city owns, the main use of such an inventory is administrative. Ledger accounts should be opened for each kind of property, and the accounts kept up to the date as purchases are made and property sold or destroyed. Columns should be provided for setting forth each year the present condition, probable life,

etc. In this way a real administrative use can be made of this information at budget making time.

### **Certification by Executive Board Unnecessary**

The signing of bills or vouchers by the executive board or committees thereof has no practical value because the persons signing have but little if any real knowledge of the facts on which the claims are based. Their signatures lend a semblance of correctness to a claim, whereas there may be reasons of which the executive board members know nothing why the claim should be disallowed. It is, in fact, unfair to the members to expect them to sign these documents. Each signature on claims should certify only to facts of which the person certifying has definite knowledge.

The defects of the present systems are forcibly illustrated by the police and fire departments.

In the police department, instead of the name of the department head being signed on purchase orders, it is typewritten and not even the addition of the clerk's initial who issues the order is considered necessary. Moreover, when the bill is received and vouchered, the signature of the department head does not appear at all, even typewritten. Consequently there is no evidence to show that any one in authority in the department has ever seen or has any knowledge whatever of the claim. Notwithstanding the absence of all evidence to establish the integrity of such claims, they are approved by a member of the Executive Board Committee supervising this department.

In the fire department, instead of claims being signed, a small rubber stamp with the chief's name is used and there is no evidence to show that this stamp is not available for misuse.

The certificates described in the appendix herewith are adequate insurance of the fact that the claims should be paid and subsequent signatures can afford no additional protection to the city.

What is said above relative to requiring the signatures of executive board members to claims based on purchase orders applies with equal force to a certification of the city's pay rolls. It is unfair to the members, of no real protection to the city, and tends to mislead.

Executive Board Committees merely sign the pay rolls upon signatures of department heads. The certificates of the latter are very defective. Nothing whatever is said therein about the existence or non-existence of time sheets or records showing kinds of service rendered, that the claims have not been duplicated, that money is available for payment, etc., etc.

The manner in which salary and wage accruals are certified and the points covered in the certificates constitute two of the most important features in pay roll making. The importance of this matter is further

increased by the fact that from one-third to two-thirds of the total amount of the city's cost of operating is for salaries and wages. Every element of information, therefore, which is necessary to establish responsibility should be covered and certified to in the pay rolls. (See Appendix herewith.)

### **Should Revise Method of Paying Employes**

City employes are all paid by check once a month. The experience of many cities has demonstrated the desirability of paying all per diem employes weekly and paying them in cash at or near the places where they work. Experience seems to demonstrate that paying only once a month tends to force employes into the clutches of loan sharks. That this has also been the experience of Portland is proven by the fact that up to within a comparatively recent date large numbers of the city's pay checks were returned to the Treasurer's office endorsed by loan sharks. The Civil Service Commission has finally been compelled to adopt a rule that they will discharge every employe who assigns his or her salary. It is impossible, however, to make such a rule serve the purpose for which it was intended. What needs to be done is to remove the cause which contributes to such a condition.

We were informed at the Treasurer's office that each month at least 500 employes engaged outside of the City Hall call at the Treasurer's office to have their checks cashed. Assuming that these employes average only one hour each in so doing, even then 500 hours are lost to the city each month. This means 62 days for one man, which, at \$3.00 per day, represents \$186 per month or \$2232 in a year. As a matter of fact, the time lost is undoubtedly much greater.

## **APPENDIX**

### **A**

#### **Certification of Vouchers**

It is suggested that vouchers be signed in all departments by two persons: First, by a person who is cognizant of (a) whether the articles have been received, service rendered, or amounts expended for the city, (b) that the claim is correct as to price and amount, (c) that it was necessary for the proper transaction of that it was incurred solely the business of the department, (d) that it was incurred solely for the benefit of the city, (e) that all calculations have been verified, (f) that the amount of the claim does not exceed the unincumbered balances of amounts duly appropriated against which the same is chargeable, and (g) that the amount of the claim contained in the voucher has not been included in or made a part of any voucher or claim previously certified by the department for payment.

Second, by the head of the department who should certify that (a) the certificates attached to the vouchers and supporting time sheets, invoices, etc., are made by persons designated by him to make such certificates, and whose signatures thereto are known by him to be genuine, (b) that to the best of his information and belief the claim is correct, (c) that the provisions of the charter and of the ordinances and resolutions of the Council applicable thereto have been complied with, (d) that the expenditure was necessary and was duly authorized and appropriated.

After the vouchers have been transmitted to the auditor's office, they should be signed by him certifying that (a) he has examined, audited, revised and settled the claim for the sum of \$ --, (b) that the expenditure was lawfully incurred and that the charge therefor is reasonable and just, (c) that the warrant is correctly drawn and payment may properly be made from the fund shown on the voucher.

## **B**

### **Certification of Payrolls**

The person who prepares the pay roll should certify (a) that he has in his possession written evidence that each person named in the pay roll was duly appointed and elected, (b) that there is on file a time record and report duly certified by persons having knowledge of the facts showing the kind and exact time of service of each person, (c) that the pay roll is correct. The person who has knowledge of the accounts of the department should certify in substance (a) that the several amounts are proper charges against the appropriation or fund accounts stated, (b) that the amounts mentioned in the pay roll will not exceed the unincumbered balances of appropriations, (c) that no part of the pay roll has been certified for payment in any previous pay roll.

The head of the department should certify in substance (a) that the persons named in the pay roll were elected, appointed or promoted to the positions named in accordance with (Civil Service) laws and rules pertaining thereto, and that the salaries of positions have been established in accordance with charter provisions, (b) that except when granted leave of absence the persons named have been regularly employed in the performance of the appropriate duties of the positions indicated and have at no time during the period covered by this pay roll been assigned to duties pertaining to any other position except as noted, (c) that the services were necessary for the proper conduct of the business of the department, (d) that any overtime allowed was due to an extraordinary emergency caused by fire, flood or danger to life or property; (e) upon receiving certificates signed by persons designated by him to do so, the head of the department should

certify that to the best of his knowledge, information and belief the pay roll is correct.

## **HOW THE CITY DOES ITS BUYING**

The city of Portland might save \$100,000 a year by the adoption of correct organization and methods for purchase. To effect this saving involves three simple steps, (1) centralization of purchasing power, (2) standardization of specifications, and (3) purchasing in large quantities and by competitive bids.

### **Purchasing Power Should Be Centralized**

Each of the departments does its own buying independently of all the others. Unitedly the several departments have a large buying power. If it were centralized, the city might deal direct with wholesalers and secure wholesale prices. Wholesalers are not generally attracted by small orders such as must be issued by departments when they buy separately. Even when small orders are placed with wholesalers the cost is nearly always higher than on large orders. Moreover, centralized purchasing makes it possible to maintain a better equipped purchasing plant, which is also conducive to obtaining low costs.

The city's purchasing should be placed in charge of an appointed official, independent of all of the city departments. Such official should be selected solely on merit and should have previous experience as a purchasing agent. He should devote all of his time to the work, and maintain complete files of current prices, trade catalogues, adequate telephone service, etc. He should also be required to keep records showing the names of all bidders on both formal and informal contracts, and the amounts of each bid. At the present time a large number of purchases are made over the telephone without making any record of the number, name or amount of bids received on such purchases. It is, therefore, impossible to determine whether there has been sufficient endeavor to obtain competition and lowest price, and whether the purchases have actually been made from the lowest bidder.

Space within or a room adjoining the Auditor's office might be set aside for the use of a purchasing agent. Before purchasing orders are issued the Auditor or his representative should certify thereon that there is a sufficient balance of a duly authorized appropriation remaining unencumbered to pay the claim; also whether there is an existing contract for purchase of the commodity requisitioned. For this purpose the Auditor's clerk charged with keeping the appropriation, contract and bond fund ledgers might be given a desk in the room assigned to the purchasing agent or in the room adjoining thereto, so that he might refer to his books and initial the requisitions without causing any delay. Under present procedure, as pointed out above

the Auditor is afforded no means of preventing departments from making purchases in excess of the amounts appropriated therefor.

Many instances might be cited to show how Portland's lack of central accounting control permits department heads to exceed amounts appropriated. One will suffice. A grocery bill paid from the Street Repair fund for \$214.67, rendered in December, 1911, was not paid until March 6th of the next year because at the time the bill was presented there were insufficient funds by \$157.01 to pay it. Therefore, the Council was asked for an additional appropriation of \$157.01, which, of course, was granted.

If at any time under the plan herein suggested, a department official did find it absolutely necessary to make a purchase direct he should first call the purchasing agent on the phone and ask that an order number be assigned him. He might then forward the original order to a dealer and the carbon duplicate thereof to the Auditor, thus enabling the latter to set up a reserve for the amount of the order.

Centralized purchasing for an entire year does not necessarily mean that all supplies and materials must be kept in a central storehouse. Contracts may be arranged for periodical deliveries as needed at any number of delivery points, either to go into stores there or to be used at once. There are certain kinds of supplies, however, which must be kept on hand anyway, and if kept in a central storehouse a smaller inventory is required and hence a smaller investment than would be necessary if kept in the store rooms of several departments. Space for such a central store room might probably be found in the City Hall or in other buildings owned or leased by the city.

### **Should Standardize Specifications**

Most commercial organizations and some cities are awake to the immense savings which may be realized by standardizing their equipment, materials and supplies so that only the kind, grade, style, etc., best adapted for each particular need will be purchased. Practically nothing of this character has been done by the city of Portland. Each department head buys whatever kind and grade of supply, material and equipment he may fancy. No standardization has been effected of even the common supplies, such as coal, lubricating oil, lumber, etc., of which the city buys a very large quantity each year. Properly drawn specifications would enable the city to secure far better quality of supplies for the same price. For example, instead of buying coal simply as "coal," or even by brand or grade, it should be purchased and paid for on the basis of the number of heat units contained therein, as determined by laboratory tests of samples taken from deliveries. It is commonly known as the British Thermal Unit basis.

Even on such minor supplies as letterheads and envelopes, considerable saving might be realized by formally adopting certain grades of paper, style of printing, etc., as standard and buying no other. At present, if an official

desires engraved letterheads, he simply orders them. An illustration of lack of standard is taken at random from the Street Repair fund, which shows that three purchases of coffee were made from the same dealer in the same month at three different prices

50 lbs. at ..... 19c  
10 lbs. at ..... 25c  
10 lbs. at ..... 27 ½ c

Some departments evidently consider it easier to buy ready mixed paint than to buy the ingredients and mix them. We noted a bill for 30 gallons of French green paint at \$1.90 per gallon.

Meat is bought simply as "meat," butter as "butter," etc. No specifications, no tests of deliveries. Enough such instances are available in the Auditor's files to fill many pages of this report, if we had desired to include them.

All supplies and materials which are susceptible of being accurately described should be purchased only on specifications, and adequate chemical or physical tests should be made of deliveries to determine whether they conform to such specifications. Purchase "according to sample" should be kept at a minimum. Portland is large enough to warrant the establishment of a city testing laboratory. Some tests of water pipe and other materials have been made by a local firm of engineering chemists. Payments for such services would be unnecessary if the city had its own laboratory.

Standardization of objects of purchase and specifications might perhaps be best accomplished by a small committee composed of the purchasing agent and two department heads. The committee would, of course, advise with all department heads and with manufacturers and dealers and would consider original costs of articles as well as the relative efficiency thereof.

### **Should Purchase In Quantities By Competitive Bid**

To purchase efficiently and economically the purchasing power of the city should not only be centralized, properly organized, and the objects of expenditure standardized, but the needs of all departments should, as far as possible, be anticipated at least a year in advance and contracts let for quantities adequate to last the entire period. Sometimes, of course, a contract may be based on unit costs and equally low prices may be obtained without guaranteeing that the city will purchase any definite quantity. Exceptions to purchasing at the beginning of the year would, of course, be made in the case of fuel, forage and other supplies which are of a seasonal nature and for which lower prices may be obtained by making contracts during the year. For example, the superintendent of street cleaning stated that if he were permitted to do so he could buy road oil much cheaper in December than the following spring.

It is very evident that the amount of money which the city government actually wastes each year through failure to purchase in large quantities under competitive bids is enormous. The city's purchases amount to over half a million dollars a year. Owing to the lack of standardized budget and accounting methods, no information is available as to just how much the purchases do amount to in a year for any particular class of supplies. Experience shows that correct purchasing may effect a saving of from 10 to 33 per cent. Even assuming half a million dollars as a basis, which is manifestly fair, a saving of 20 per cent would be \$100,000 a year, an amount which could accomplish much needed work in several departments.

Looking over the files of the thousands of purchases made in small quantities and at retail prices, one cannot comprehend why the present lax, unbusinesslike methods have been permitted to continue so long.

There is a provision in the charter (also in the proposed charter) limiting to \$250 the amount which may be purchased on open market order, i.e., without competitive bids on contract. Not only has little effort been made to obey the spirit of this charter provision by buying on competitive bids and in large quantities, but it appears to have been deliberately nullified. The way this is done is to issue several small orders often and thus keep each order within the \$250 limitation. The files are literally full of such instances. We took at random the requisitions of the water department for two months from May 16, 1912. The following tabulation shows how frequently small orders (commonly known as "split" orders) were issued for certain hardware. The tabulation might have been extended for each article and for other articles, but it was considered unnecessary. The condition is obvious.

Date of Purchase.	Quantity.	Amount.
½" Corporation Cocks --		
May 31	450.....	\$ 75.60
June 1	200 .....	171.68
June 17	400.....	50.40
July 5	400.....	50.40
July 12	450.....	75.60
July 24	400.....	59.85
5/8" Corporation Cocks --		
June 1	400.....	70.86
June 4	75 .....	53.16
June 17	400.....	70.88
July 2	400.....	70.88
July 24	400.....	70.88
6' Gate Valves --		
June 11	42 .....	119.76

June 14	42	119.76
June 18	48	179.64
July 6	42	119.76
July	40 20	199.60
8' Gate Valves --		
June 5	42	201.60
June 13	2	33.60
July 8	40	168.00
July 9	40	168.00
July 13	42	201.60
July 18	40	177.50
July 19	7	124.25

Similarly this department issued a purchase order for 20 sacks of "Santa Cruz" cement on each of the following dates (except that June 5th it was 32 sacks): May 8, June 4, 5, 20 and 28, July 3, 12 and 16.

Turning to another department ~~the~~ maintenance division of the engineering department ~~we~~ noted that during two months (April and May, 1912) 46 separate purchase orders were issued for sand and gravel, 22 orders for coal (44 tons) and 25 for cement.

Not only is there an evident intent to avoid contract purchasing, but consecutive orders are even distributed to different dealers. Such a practice might evidence a desire to secure or maintain political favor with as many dealers as possible. Continuing to use the water department and the same two months for purposes of illustration, we find such distribution of orders as the following:

		½" A.A. Lead Connections			
Name of Dealer.	Purchase Order No.	Date.	Quantity.	Amount.	
Schade Bros. & Co....	20,027	June 1	100	\$135.00	
T. J. Rowe .....	20,036	June 5	100	135.00	
Ruedy Bros .....	20,417	July 12	20	27.00	
Schade Bros. & Co....	20,473	July 24	25	33.75	
T. J. Rowe .....	20,494	July 26	100	135.00	

Many bills are on file which prove decidedly that purchasing in larger quantities secures lower prices. For example, during the same month the same dealer sold potatoes to the police department as follows:

5 sacks potatoes at .....	\$2.00
15 sacks potatoes at.....	1.40

Another illustration of the waste of money by permitting each department to buy "ad libitum" is afforded by the variation prices paid by different departments for the same supplies. For example, the following items are taken from actual bills paid within the space of a few weeks:

Description.	St. Repair Fund.	Police Dept.
1 case pears	\$4.30	\$3.80
1 case peas	2.70	3.50
50 lbs. dried apples	7.00	5.50
50 lbs. dried peaches	6.25	6.00
2 sacks dried onions	3.20	5.00
4 sacks flour	5.00	4.40
1 quart vanilla extract	1.75	2.00
6 bottles catsup	1.10	1.50
1 lb. tea	.50	.35

Not only is there a large discrepancy between the prices paid for the same supply by different departments, but very often the purchases of the same department show a wide variation within a very short period. The following examples were taken from the requisitions of the engineering department for the purchase of sand during April and May, 1912:

Date.	Quantity	Unit Price.
April 22	3y, cubic yds.	\$1.00 per yd.
April 26	5 5-6 cubic yds.	1.25 per yd.
April 27	4 cubic yds.	.60 per yd.
May 14	1 1-6 cubic yds.	1.00 per yd.
May 16	9 1-3 cubic yds.	1.25 per yd.
May 22	7 cubic yds.	1.20 per yd.
May 31	2 1-3 cubic yds.	1.00 per yd.

A member of the executive board of the police department recently called attention to some bills for luxuries purchased for the guards and men out at the "rock pile." Payment on these bills has since been held up. We took the following items from one month's bills in the files of the Auditor's office which had actually been paid (February, 1913). They also relate to supplies delivered to the "rock pile?":

85 lbs. cheese, at 21c.....	\$17.85
1 doz. pkgs. currants, at 11c .....	1.32
1 case cherries.....	6.00
5 gal. maple syrup, at \$1.30.....	6.50
1 case pineapples .....	5.40

Thousands of taxpayers feel they cannot afford maple syrup, pineapples, etc., and yet under the present organization and methods they are paying for such supplies at the "rock pile."

## **THE CITY REVENUES**

Determining whether or not the city actually receives all of its revenues is equally important with determining whether expenditures are properly authorized. The revenues of the city of Portland fall naturally into three general classes: (1) taxes, (2) water rates, and (3) miscellaneous revenues.

Several cities, notably New York and Philadelphia, have recently made intensive studies to determine new sources of city revenue. Such an inquiry would be timely in Portland.

### **City Has No Control Over Taxes**

The city not only has no accounting or auditing control over the amount of taxes accrued and collected, but is in the somewhat peculiar position of being unable to establish such control—at least, without the co-operation of the county officials. All taxes are assessed and collected by the county. This is as it should be. However, the City Treasurer receives from the County Treasurer only such amounts as the latter desires to turn over to him, and only at such times as may suit the latter's convenience.

Neither the City Treasurer nor the County Auditor knows or has any means of knowing whether the city actually receives all of the taxes to which it is entitled. In other words, the City Auditor may set upon his books as an asset of the city the total amount of a year's tax levy. From time to time this "taxes receivable" account is credited with the amount of tax money received from the County Treasurer, but the entire amount of the levy is never received. There is always a considerable uncollected balance left standing on the city's books. It is assumed that this balance represents rebates, cancellations, discounts, etc., but neither the City Auditor nor the City Treasurer is furnished with any evidence that the balance of the tax levy has not been collected or is not collectible.

The county tax collector or County Auditor should certify such information to the City Auditor each year, and thus enable the latter not only to clear his books, but to determine whether or not the City Treasurer has received from the County Treasurer all of the money to which the city is entitled.

We were informed that it is customary for the county tax collector to turn over his collections to the County Treasurer each week. The books of the City Treasurer show, however, that the city's portion of the taxes are received from the County Treasurer much less frequently—in fact, as shown by the City Treasurer's books, only 20 installments were received during 1912.

The promptness with which the city's taxes are turned over naturally affects the amount of interest which may be received thereon. Although the city only receives 2 per cent on daily balances, even this is of importance when it is considered that the installments range from \$13,000 to \$450,000 each in amount. While we have made no examination of the county books, it is possible that the failure to pay over the city's money more promptly is due to the delinquency of the tax collector (sheriff) in turning over collections to the County Treasurer instead of the delinquency of the latter in turning the amount he receives over to the City Treasurer.

### **Need for Central Control of Water Rate Accruals**

The City Auditor has no accounting or auditing control over water rates. He knows how much is turned over to the City Treasurer by the water department, but has no means of knowing whether all the money collected is turned over. (In a previous report we pointed out that even the water department itself had no means of knowing whether it actually collects all that should be collected.) Inasmuch as it is desirable as soon as possible to install in the Auditor's office a system of accounts which will place the city upon a revenue instead of only a cash basis, the water department should schedule to the Auditor each month the amount of water bills rendered. It is particularly essential that the Auditor be furnished with such information, because part of the water bills (approximately 25 per cent) are based on meter charges and relate to the preceding month, while the remaining proportion (approximately 75 per cent) are based on frontage rates and relate to the ensuing month. If the Auditor, therefore, in connection with statements of expense, is to produce a statement of revenues for any particular month, it is absolutely necessary for him to know the amount of revenues which have actually accrued during that month. Moreover, it is only good business for the City Auditor to have an auditing control over this important branch of the city's revenues, which amounts to over three-quarters of a million dollars a year.

### **Controlling the Miscellaneous Revenues**

Practically all of the city licenses are issued by the Auditor. There are two defects to the present system—firstly, much inconvenience is caused citizens who desire licenses by compelling them to go to the Auditor, then to the Treasurer, then back to the Auditor, and in the case of several kinds of licenses to other offices, also; secondly, outside inspection is not organized to produce the best results.

The first defect might be easily remedied by having the Treasurer issue the licenses as well as collect the money. All necessary auditing control might be secured by what is known as "controlled financial stationery." This

means that all license documents would be printed on specially prepared paper; that they would be ordered only by the Auditor and charged out by him on ledger accounts to the Treasurer's office, and that the latter would be held strictly accountable at the end of each month for each and every document delivered to him. Further, to facilitate the granting of licenses, a standard form of application should be designed and required to be filled out by each person who desires a license. To compel all persons to take out licenses who conduct licensable kinds of business, an outside inspection is necessary. Two men from the Auditor's office have been performing this function, but have lately been transferred to the police department, where they are under even less control than they were before. To place all such work in the hands of only two men is to invite collusion. One day each month or each quarter should be designated as license day and every policeman required to report each licensable business on his beat. Since police are shifted from one beat to another from time to time, the desired check is secured on each man's report. This may be supplemented by an occasional "overhead" inspection by a man from the Auditor's office.

Auditing control over building permits and similar documents should be established either by (1) transmittal by the building department to the Auditor of all applications and counterfoils (with graduated coupons) of permits issued, or (2) sending a representative of the Auditor to the office of the building department each month to check up the accuracy of the charges which have been made for permits.

Although the receipts from the Municipal Court amount to approximately \$50,000 a year, there is no auditing control thereover whatsoever. This defect will be further explained in our subsequent report on the Municipal Court.

### **Interest on Deposits of Public Funds**

Both city and county governments fail to secure the amount of interest on public funds demanded by good financing, and which they probably might secure if the restrictions as to collateral security were made less severe. We were informed that owing to lack of authority, no interest whatever is received on approximately 75 per cent of the county funds; also that the restrictions of the enabling act passed by the last legislature are so severe as to make it doubtful whether even in the future any appreciable amount of county funds may be placed at interest. While the city receives 2 per cent interest on most of its funds, an examination of the City Treasurer's books shows, nevertheless, that there is at times a considerable amount of city money on which no interest whatever is received. For example, no interest was received on the following daily balances of January and April, 1912, the former being designated as a "light" month, and the latter as a heavy month:

January, 1912.	April, 1912.
\$ 68,749.82	\$307,521.61
49,797.82	267,635.26
40,343.98	549,868.26
43,024.61	251,018.43
42,018.49	250,480.35
47,002.75	252,810.43
58,671.68	257,201.31
37,299.67	254,163.92
44,282.13	258,559.55
56,950.50	274,734.15
43,047.09	202,583.45
61,569.17	166,248.10
42,497.06	155,228.17
34,271.23	229,106.94
36,651.30	300,531.78
40,019.83	454,539.19
36,064.79	314,615.97
42,697.33	311,396.88
41,895.58	311,206.55
43,814.10	305,718.57
43,016.92	315,161.15
41,019.16	443,013.79
39,641.43	442,369.49
50,191.19	417,761.53
178,097.15	416,118.36
214,426.94	

Even on other city funds, the maximum rate of interest received is two per cent. Due to the fact that taxes in Portland are payable semi-annually and also to the fact that from time to time the city treasurer has on hand a considerable amount of money received from bond sales, he might— if he were permitted to do so— place lump sum amounts on time deposit and by so doing secure a higher rate of interest than the present rate of two per cent. However, there is a charter provision (section 293) which has been construed as prohibiting him from placing funds on time deposit. It is suggested that this restriction is unnecessary. Even in states renowned for their sound financial policy, many cities finding themselves possessed of larger amounts than necessary to meet their current needs, make time deposits thereof of several months' duration. That the city of Portland would be able to make time deposits and receive a higher rate of interest is indicated by a tabulation made by us showing that the lowest daily balance carried in all banks from June 1, 1912, to March 1, 1913, in nine months— was not less than \$2,500,000.

In connection with the subject of interest, it is to be noted that the city auditor does not audit the correctness of amounts (two per cent) paid by the banks as interest on daily balances.

### **BONDED DEBT**

The bonded debt of the city December 31st, 1912, exclusive of improvement bonds, was \$12,798,700. Of this amount, only \$52,000 was in the form of serial bonds. The remainder is dependent for payment upon sinking funds. In this connection, it is to be noted that until within a comparatively recent date no provision whatever was made for the payment of this portion of the city's indebtedness. Such lax financial management can only be attributed to the present complex form of government which fails signally to fix responsibility.

Not until 1905 was any provision made for retiring even the outstanding water bonds, although at that date over \$3,000,000 of such bonds had been issued. Moreover, not until 1910 was any provision whatever made for retiring the general bonds of the city, although at that date \$3,766,500 thereof had been issued. When in 1905 sinking fund provision was made for water bonds, instead of permitting an amount to be set aside according to the annual requirements, an arbitrary limit of two per cent was placed thereon. With respect to the general bonds, the city simply drifted until 1910, then at the instance of the auditor's office a policy was adopted of setting aside some amount each year as a sinking fund. just how much should be set aside has been contingent upon how much the council would allow. The appropriations actually made have been as follows:

Mills	
1910 .....	.2
1911 .....	.25
1912 .....	.4
1913 .....	.4

The city is to be congratulated that some steps were finally taken to provide for payment of its debt. However, the establishment of sinking funds is a scientific proposition and good management demands that they be operated on a scientific basis. Instead of appropriating for such purposes a greater or less amount each year according to the exigencies of the council, and varying property valuation on which the mill taxes are based, the exact amount should be appropriated each year, which by actuarial computation is necessary to insure there being a sufficient amount available in the fund to meet each bond issue when it matures. Nothing strikes more at the root of a city's credit and integrity, or reflects the efficiency or inefficiency of its business management than the provision made for payment of its debt.

In this connection, it is to be noted that throughout the country sinking funds are becoming obsolete as a method of paying indebtedness. Both cities and states are each year becoming more committed to the serial method. However well a sinking fund may be administered, it is nevertheless cumbersome. It involves not only an obligation to keep the funds properly invested but necessitates many complicated mathematical computations in order equitably to spread the amount of the assessments over the period of the loan and have the latter paid at maturity. Scores of instances are available throughout the country where sinking funds have been established in good faith, and yet at maturity of the loans have been found far short of the amount necessary to pay the debt. Many instances are also available where at maturity the amounts in the sinking fund have been found far too large. For example, the state of New York recently awoke to the fact that it had accumulated \$19,000,000 more in its sinking funds than should have been placed there. The serial method is much simpler of operation, more easily understood by the average citizen, and is cheaper in that it imposes a lighter burden upon the taxpayer. It is suggested that all future issues of Portland bonds should be on a serial basis.

## **OTHER SUBJECTS**

### **DEPARTMENT OF PARKS**

In making a survey of park administration, the problem is divided naturally into two main divisions: (1) the construction and maintenance of park grounds, buildings and equipment, and (2) the social operation of parks, playgrounds, etc. The organization of Portland's Park Department fails in not distinguishing clearly between these two functions.

The failure properly to determine organization lines is particularly important, because of the excellent start made in developing recreation grounds in Portland. Defects of organization should be corrected without delay. There certainly will be no need for the establishment of a special commission to manage playgrounds and recreation centers if the organization of the Park Department be determined properly.

#### **Park Roads**

As an example of the lack of proper organization, we cite the fact that park roads are constructed and maintained by the Park Department. That there is no fundamental difference either of engineering technique or administrative difficulties in the care and construction of park roads and that found in connection with city streets is beyond question. Still, even though Portland has a street division administered by men chosen solely for their knowledge of street construction and maintenance, their services are not made available for those city streets and roads which may happen to be inside the limits of parks. Such lack of centralization necessitates duplication in force and equipment, and naturally the best results cannot be obtained under such conditions.

#### **Care of Trees**

In the last three reports of the park superintendent, statement was made of the need for more definite jurisdiction over the trees growing along city streets and the strips between the sidewalk and the curb. If statutory or ordinance revision be needed in order to provide authority for properly supervising these trees, such revision certainly should be made. This unanswered complaint of the park superintendent is typical of a general attitude throughout Portland in which unassailable recommendations of city officials fail from lack of backing. There is no question that the protection of the trees along Portland streets is a very positive need for the general good of the city. Sidewalks and paving contractors, electric light, telephone and telegraph companies, and even private property owners have been permitted

to mutilate the trees. Some one city department should be delegated specific authority to stop such malpractice.

### **Need of Co-operation Between School and Park Boards**

According to the statement of the park superintendent, only one combined meeting of the school and park boards has ever been held. When one considers that parks, playgrounds and recreation centers are of fundamental importance in the proper training and development of children, particularly in preventing immorality during adolescence, it is difficult to understand why school and park boards have not made use of the wonderful opportunities offered through co-operation. To list the advantages which might be obtained through complete co-operation of park and school boards would be to recite the endless advantages which healthy outdoor exercise, play, and clean social intercourse offer in eliminating certain fundamental causes for incipient vice and crime, and in developing a citizenship strong in physique, morals, and mentality.

Portland cannot afford to delay longer the complete use of the opportunities afforded for constructive good provided in its park playgrounds and recreation centers.

### **Programs Without Financial Data**

Although Portland's Park Department has shown commendable foresight in laying out a program for future park developments, not one financial statement has been included therein. No one knows how much it would cost, no one has taken the trouble to find out. Particularly in Portland where control by the people over municipal operations is so indirect, it is absolutely essential that comprehensive financial data be prepared for the support of any proposed work. It is no wonder that citizens have refused to authorize bond issues, that the park board has been hesitant about asking for appropriations, that the park superintendent has been unable to obtain in many cases sufficient funds for carrying on the work. No one has been offered a clean-cut, comprehensive statement of presumptive cost in carrying on work. Just so long as this condition exists, the appropriating body, and also the electorate, is warranted in refusing to authorize funds for future work.

There can be no question but that a large part, if not all, of the proposed park and playground development in Portland is absolutely essential for the development of the city, and the preparation and submittal of accurate, comprehensive financial data relative thereto should not be longer neglected.

## **MUNICIPAL COURT**

The most reprehensible fact brought to light by our survey of the Municipal Court is that practically nothing has been done to eliminate the defects of methods and organization so ably set forth in the report of the Portland Vice Commission five months ago. In the hopes that the disgraceful apathy now existing regarding conditions in the Municipal Court, in so far as it concerns the immediate improvement of that institution, may be eliminated, this report has been prepared. The citizens of Portland must realize that best results or even fairly satisfactory results can never be obtained from an organization so hampered by lax financial methods, inefficient historical case data, inadequate organization and overwork as the present Municipal Court.

Concerning the organization and policy of the Municipal Court, our findings are as follows:

### **Need for Historical Records**

There is a total lack of comprehensive historical data concerning offenders against decency and morality. That there is a need for detailed records on repeaters and continual offenders of this class is beyond question, but even though a report presenting this fact was published five months ago, not one thing has been done to prepare a comprehensive system for eliminating this deficiency. The additional expenditure necessary is absurdly small, and the additional time which would be required to operate such a system would certainly not require any more clerical service.

### **More Probation Officers Needed**

If the Municipal Court is to be expected to carry on constructive work in controlling the vice situation, more probation officers are absolutely essential. At the present time the only probation officer is the bailiff of the court. This one man, encumbered with other duties and very much limited in the scope of his work, cannot be expected to obtain the desired results in supervising prisoners placed on probation. It is of course, true that this is not a fault of the Municipal Court or the municipal judge per se, but is a striking indictment of the municipal government in Portland, considering the fact that this failure was also brought to light several months ago.

### **Organization Should Follow Functional Lines**

In our previous reports on other departments of the city government of Portland, we have very often referred to the need for a clear cut alignment of functions of government in determining organization of city departments. It is no less true of the Municipal Court, yet in this institution we find an organization designed evidently for a village or a very small city attempting to operate in a city the size of Portland. There is as much fundamental

difference in the requirements for proper supervision over offences against persons and property on the one hand, and against decency and morality on the other, as there is dissimilarity in the construction of a pavement on Washington street and the construction of the Broadway bridge. An examination of the docket of the Municipal Court shows that the business of the court is a heterogeneous mixture of these two problems. It is not surprising, then, that the detailed study made by the Portland Vice Commission resulted in their finding that the present control over vice by the Municipal Court was inadequate, inefficient and pernicious.

### **New Charter Remedies Defects**

Here again we found a situation where poor results are being obtained from an institution employing under-paid, part-time service. The municipal judge receives a salary of \$1800 per year, is elected by the people, and gives to the city only as much of his time as is required by the exigencies of the docket. Too much emphasis cannot be placed upon the inadequacy of a system which provides for the electing of a municipal judge having almost complete control over all vice and incipient crime in the city of Portland. This objection is entirely eliminated by the provisions of the new charter which provides for the appointing of a municipal judge and the regulation of his salary by the four commissioners and the mayor.

### **The Fining System a Failure**

Anyone familiar with the fining system as it is used in controlling offences against decency and morality realizes the woeful incompetency of such procedure. The detailed analysis made by the Portland Vice Commission brought out the fact that the fines imposed on female offenders amounted practically to licensed vice. No matter how excellent the judge or how comprehensive the personal records of the various offenders may be, any system which premises its control of vice by imposing a fine for punishment defeats its own end by contradiction. What is needed in Portland and this is certainly not new-is a reformatory for female offenders. It is of utmost importance that some provision be made for constructive reform.

### **Night Court Badly Needed**

Considering the fact that a majority of the violations against decency and morality, and quite a noticeable per cent of violations against persons and property occur during the night and particularly during the early evening, the establishment of a night court should not be delayed longer. In subsequent paragraphs dealing with the detail of the methods and procedure of the Municipal Court, the question of fixing fines by police officers will be taken up. Suffice it to say here that this inefficiency could be entirely

eliminated and responsibility for bail delegated to the proper body if a night court were to be established. In addition, it is extremely difficult to obtain warrants for arrest after five o'clock, notwithstanding the fact that most warrants are needed after that time of day. The police are wholly without judicial backing during the time when their best efforts are most needed to protect life and property and promote decency and morality throughout the city. There are also any number of cases brought before the Municipal Court where expediency is absolutely essential. Too often have the police officers taken upon themselves the right to fix a nominal bail, two, three, four or five dollars, the forfeiting of which by the offender has operated as a fine. This assumed prerogative delegates to the police an adjudicative function wholly without their proper sphere and against the law.

The following paragraphs have to do with detailed methods of the Municipal Court. Nowhere in the city government have we found so conspicuous dereliction in financial control and standardized procedure. Such instances of inefficiency must of necessity bring to mind the thought of possible advantages to be obtained by city employes through any collusion which might be effected.

### **Control of Money Due On Fines Lacking**

Fines may be paid to the clerk of the court, his deputy, or to the police official at the desk in headquarters. The form of receipt issued can never be used as a basis for audit. Even the stubs of the receipt book kept by the clerk of the court are not filled out showing the amount received in response to which the receipt was issued. There are no original documents such as duplicate receipts or graduated stubs on file anywhere in the department which could be used in checking up revenue receivable with the amount of cash actually received.

Fines due are entered in the court book but no attempt is made to balance money received on fines, and fines liquidated by day's imprisonment with the amount imposed.

### **Records of Imprisonment Lacking**

It is a serious failing of the Municipal Court that none of its records showing imprisonments ordered or fines imposed which must be liquidated through the imprisonment of the offender, are balanced against statements from the superintendent of the rockpile or other warden which would show that the order of the court has been carried out. Every sentence of the court, whether fine or imprisonment, should automatically set up a charge against the individual to be cleared only by the payment of the money due or a certified report from the competent officer stating that the order of the court had been carried out. The lack of such records makes it impossible for the

court to be sure that the judgments rendered therein are not violated by other officers.

### **Inadequate Supervision of Bail**

The bail situation is under no control whatsoever. Bail may be received by any one of three officials, the clerk of the court, his deputy, or whatever police official is at the time in charge of the desk at headquarters. The lack of supervision by the municipal judge over the amount of bail specified in various cases has already been referred to. Inadequate receipts for bail refunded as well as bail taken in makes it impossible for the auditor to obtain any adequate check on such money.

### **Need for Control of all Receipts**

More particularly regarding the receipt it is suggested that if there ever were need for central accounting control of financial stationery such as official receipts anywhere in any city government, there is need for it in the Municipal Court in Portland. Every financial document issued by this court should be under the control of the city auditor and susceptible of a comprehensive routine audit.

### **Book Records Inadequate**

In so far as the book records are concerned the methods employed are cumbersome and inadequate. An effort was made to correct the lax accounting methods the first of April of this year by installing a cash book. In making an audit of one item shown therein, we noted a discrepancy of over \$450. It related to a statement of bail received as shown in the cash book and the amount shown in the court docket for corresponding period. This cash book, established as an additional record, is certainly not carrying out its function.

The amounts of fines and bail shown in the docket of the Municipal Court are never reconciled with the amounts shown in the records of the police department. Here is an opportunity for at least one check and counter-balance, but even this has been entirely neglected.

### **Private Bank Accounts for City Money**

At the present time, the clerk of the court has two individual bank accounts subject to his own personal check, in which various funds received are deposited. One particular account with the United States National Bank is used for daily payments to the city treasurer of fines received. A balance of this account is carried in the check book. On the other hand, an account is carried in the Hibernia Savings Bank for money received on hail, etc., which very often by its forfeiture acts the same as a fine. No balance was carried in this check book and it was impossible to determine from the records at the

court just how much cash was on hand. There is a specification in the charter (section 301) which requires that all money received by any city official shall be turned over to the treasurer at the close of each day. It further provides that "If any such officer, agent or other person shall fail to pay to the treasurer any money so received for more than 48 hours after the money shall have been received by him, such officer, agent or other person shall forfeit to the city double the amount so received." Money received by the Municipal Court, including bail, is at least prospective city money through forfeiture or fine and should not be retained by the clerk of the court and deposited in a private bank account subject to his own personal check.

### **Better Supervision of Warrants Suggested**

No register is kept of warrants issued, consequently it is difficult—not impossible—to determine the effect of warrants issued by the court. As we have repeatedly affirmed in our previous reports and in the preceding portion of this report, the initiation of any official act should automatically set up a charge against some person to carry out a particular undertaking and should be held as an open charge against the proper person until a properly authorized officer certifies that the work is completed. In so far as warrants are concerned, outstanding warrants may be made and have been made in the past in many cities the basis for blackmail. Any official instrument carrying as peremptory power as a warrant should be under the most strict control. They should be properly recorded upon issuance and subject to continuous supervision.

Stated in summary form, the needs of the Municipal Court are as follows:

1. Establishment of a comprehensive system for providing records of offenders to make available for the municipal judge information absolutely essential, but now lacking, as a basis for judicial decisions.
2. Elaboration of the probation system with supervision by competent probation officers.
3. More emphasis placed on court control offenses against decency and morality by the separation of vice control from punishment of offenses against persons and property.
4. Elimination of part-time service of an elected officer and provision for proper compensation for the municipal judge.
5. Restriction, if not elimination, of the present fining system for control of vice and the substitution of constructive reform methods.
6. Establishment of a night court.
7. Installation of proper imprisonment records in order to make sure that the decisions of the court are being carried out.

8. Standardization of procedure and establishment of better supervision respecting receipt and refunding of bail, and receipt of fines.

9. Establishment of control by the auditor over all financial instruments issued by the court.

10. Revision of the book records and the installation of proper accounting methods.

11. Elimination of private bank accounts for deposit of city funds.

12. Registration of warrants upon issuance and better supervision over outstanding warrants.

As we have already stated, the deficiencies of the Municipal Court have often been pointed out in past reports and should be thoroughly understood by the citizens of Portland. What is needed now ~~is~~ not more commissions, more surveys, more reports, ~~but~~ action.

## **CIVIL SERVICE COMMISSION**

Neither the city at large nor the Civil Service employes themselves have seemed to appreciate that the protection of Civil Service employes is but one point of many which must be covered in a survey of the methods and results of Civil Service. Entrance requirements and provisions for recognizing efficient service by promotion are fully as important even from the employe's viewpoint as protection against discharge.

In the following report, the Bureau of Municipal Research points out specific instances in the operation of the present Civil Service law which could be improved. The city's payrolls, exclusive of schools, amount to nearly \$2,000,000 a year. There are approximately 1000 employes (exclusive of the water department and of all unskilled labor).

### **No Basis for Determining Salary Rates**

Notwithstanding the large amount of money involved, the large number of employes, and the importance of the work they are assigned to perform, no definite basis has been adopted for determining the rates of salaries which should be paid. Portland's Civil Service regulation has stopped with the examination of applicants and supervision over discharges. While these two factors are fundamental they will not in themselves develop an efficient service. There is no central control over the rates of salaries to be paid employes, no specification of salary limits within a classification, or a grade of such classification, no definite provision for salary increases within a classification, and no regulation establishing like compensation for like service.

### **Destroys Initiative and Ambition of Employees**

That the city's employees are not paid according to the value of service rendered is evident. Some are paid too much and some not enough. The fact that employees receiving a high salary rate may perform a minimum of work and still continue to receive promotions from year to year is most discouraging to employees who work conscientiously and well but receive no promotions. It soon destroys their incentive to be efficient, kills their ambition, and militates against a good esprit de corps of the entire city service.

### **Some Cases In Point**

Any of the city departments may be used for purpose of illustrating the lack of adequate civil service control after appointment. For example—the Water department pays \$600 to \$1200 a year more for engineering service than the maximum amount paid, for comparable service in the Engineering department. This situation is partly due to restrictions of the present charter concerning the higher grades of the engineering service in the Engineering department, but a like discrepancy in rates of pay is found in the lower grades unaffected by charter restrictions. In the Water department also there are two clerks doing exactly the same kind of work; one is paid \$85 a month, and the other \$125 per month. Clerks in the office of the Auditor and Treasurer and various departments doing work of the same general character have entirely different rates of pay. In the Engineering department, bookkeeping is being done by a man employed as a computer. Inspectors, instrument men and others engaged in survey work are paid not on the basis of Civil Service grades but on the basis of how much they can get. Portland can never expect departmental efficiency until employees doing the same kind and quantity of work receive the same compensation for their services and have been examined upon the same subjects. This situation has arisen largely on account of the fact that the Civil Service commission does not specify the grade limits of the positions for which examinations are held and, consequently, can exercise practically no supervision over promotions. Even though the grade of chainman is considered inferior to that of instrument man, it is now possible for a chainman to be paid more than an instrument man, without having to take an examination to get into the higher grade. In fact, an inspector in the Engineering service may be paid more money than an assistant engineer whose entrance examination requires much more technical knowledge, experience and administrative capacity than that taken by the inspector. Equitable control over promotion and salary increases can never be effected until the salary limits of each position are clearly specified prior to the holding of examinations.

### **Should Keep Up With Other Cities**

Chicago, New York and Philadelphia have been and are engaged at the present time in a very exhaustive study of the duties of city employes and their compensation for service. The results already obtained well warrant the expenditure made. Portland should recognize the fundamental truth that like services deserve like pay.

### **Both Charters Give Authority**

The Civil Service commission is authorized and directed to control promotion as well as appointment of Civil Service employes. Section 309 of both the old and new charter says that the commission shall classify places and employment. "Such classification shall be based upon the respective functions of said offices, places and employments and the compensation attached thereto, and shall be arranged so as to permit the grading of offices, places and employments of like character in groups and subdivisions." Section 316 of both charters specifies that "the Commission shall by its rules provide for promotion in the classified service on the basis of ascertained merit, seniority in service and standing upon examination, etc."

Just so long as the present condition exists wherein an employe of an inferior grade may be paid more than an employe of a higher grade, the way will continue open for promotions by political preferment and not honest effort.

### **Five Basic Points**

Equitable adjustment of salary rates, commonly known as standardization of salaries, recognizes the following points as basic in promoting efficient personal service:

1. Definite classification of the service according to the character and responsibility of duties.
2. Definite determination of grades within each class and allocation to each grade of the duties to be comprehended therein.
3. Adoption of titles which shall be standard throughout the service.
4. Establishment of a maximum and minimum limitation upon the salary rates of each grade.
5. Establishment of a definite scale of salary rates within each grade.

Administration of the Civil Service law in Portland relates only to the examination of an employe and regulation of his discharge. The whole question of developing efficiency in the employes retained in office has been entirely neglected.

### **Personality and Character Neglected**

There are certain essential factors in qualifying for city service which cannot be brought out by written examinations. Personality and character are primarily matters of judgment and personal knowledge and the qualifications of any candidate upon these lines can never be determined by his ability to answer stated questions. The almost total lack of supervision over these two essentials for city employes is one of the conspicuous blunders of the present Civil Service commission. Often the statements of applicants as to experience are not investigated by the examiners, in fact, no regular checking up of statements on the application blanks has been inaugurated. Any check which may be made is initiated either upon complaint or suspicion aroused when the application is submitted.

Investigation of records, however, is only one factor in determining the character of men making application for positions. Too often former employers are willing to recommend to others, men that they themselves would not keep. Discharge frequently is accompanied by a letter of recommendation. Thus even strict investigation of experience, statements as to accuracy, etc., will not bring out all that is wanted as to the character of the candidate. More attention must be given to interviews with candidates applying for positions involving the exercise of administrative judgment and delegated power, by a board of examiners politically uninterested and nonpartisan.

We would suggest for serious consideration the plan now in operation in Philadelphia, where the Civil Service commission, after determining in so far as possible the fitness of candidates by written examinations, sends those who have qualified to a number of business men to be interviewed by them. The latter then report to the Commission their impressions as to character, personality and general fitness. just what intangible thing it is which goes to make up personality or character nobody knows, but every business man knows that he would never undertake to appoint an executive or semi-executive officer with only a written examination as a basis. No more would he hire a nightwatchman on such a basis. Why is it, then, that although personality and character are prime requisites for the great majority of Civil Service employes, particularly the police, that so little attention has been given to these factors in Portland?

### **Need for Efficiency Records**

The office methods of the Civil Service commission are in need of revision. There are no efficiency records. Without such records no control over promotion or intelligent supervision over discharge can be effected. They are a protection both to the subordinate and the executive and the only basis for the control of promotion without examination.

### **Special Provision of New Charter**

This the new charter has recognized in the specifications imposed in section 20 which provides that "Each department shall keep time reports and cost data and efficiency records of its employes which shall be made the basis of promotions and increase of salary."

It is not done at the present time and its lack places a very serious obstacle in the way of Civil Service efficiency.

### **Are all Charges Recorded?**

Charges against Civil Service employes are not filed, entered in book of records, or recorded in any other manner which permits definite control over each case. It is true that a great many of the carbon copies of charges transmitted to the Civil Service commission have attached thereto a statement of the disposition of the case. However, there are a great many, the disposition of which is not recorded. We would suggest that every letter containing charges against a Civil Service employe forwarded to the Civil Service commission be entered and recorded in such a manner that the initiation of such charges shall open an account against the particular employe in question to be cleared only by dismissal of the employe or the refutation of the charges against him. No register of such cases is kept and there is no way of telling whether or not those charges on file with the Civil Service commission are all of the cases brought against delinquent employes.

## **DEPARTMENTAL REPORTING METHODS**

Under the present organization and methods, citizens of Portland have been left almost completely in the dark concerning their city government. They have known little of what was going on at the City Hall and their government has afforded them no means for becoming informed.

As stockholders in the corporation of the city of Portland, they have been assessed year after year, but have been given no balance sheets, no adequate statements of operation, nothing in short that as stockholders in any private corporation they would have demanded as a matter of right.

Had they been furnished with properly prepared quarterly and annual reports of operating costs, methods, and results obtained—v en such as have been set forth in the reports of the Bureau of Municipal Research, a change in organization and methods would undoubtedly have been effected long ago.

Such departmental reports as have been rendered have been such a hodgepodge of information and misinformation that the average taxpayer has been discouraged from even attempting to glean anything of value from them. As an illustration of the city's reporting methods, we will cite the

Annual Register for 1911 which is the last printed Register available, although the year 1912 is now four months past. Containing as it does 940 pages, it is as cumbersome as the form of government it represents. To find any particular subject in it is as discouraging as to attempt to fix responsibility under the present charter. This vast volume is not indexed. It merely contains a half page table of contents and calls that an index.

Throughout the entire report there is an absence of comparisons of costs of the past year with preceding years and of results obtained from year to year. Although the mind can grasp percentages much more readily than large amounts, there is almost an utter failure to use percentages in setting forth any of the varied kinds of information. Throughout the commercial world, the value of graphic charts has been recognized as a medium for imparting a large amount of data within a small space, and so that it may be comprehended at a glance. With the exception of the water department report, no use whatever has been made of graphic charts in the city's reports.

All departments alike have failed to recognize that reports rendered the public should contain a maximum of quality and a minimum of quantity; should afford to the busy man a ready medium for testing the efficiency of his government. This failure is plainly evidenced in the mayor's message of January 3rd, 1912, transmitting the 1911 Register, wherein he said: "Many of the reports are voluminous and comprehensive and a close study of them will show," etc., etc. For the average citizen to make a "close study" thereof, or any sort of a study which would really be informative, is work not only for a rainy day but for Portland's entire rainy season.

Fifteen pages of the report are devoted to data obtained from a Chamber of Commerce bulletin. It is not placed either at the beginning or the end of the report, where one would naturally expect to find such matter, but is inserted in the midst of other text matter (pages 78 to 92).

There is a great deal of waste of space and hence of cost in preparation and printing due to duplication of the same information. For example, pages 99 to 112 are practically duplicated on pages 229 to 246.

As an illustration of how discouraging it is to determine what the report does and does not contain, 42 pages of tabular matter are grouped under the following illuminative ( ? ) title:

Statement of Appropriations And Demands Approved And Audited, Bonds Redeemed And Interest Paid, Except For Street Improvement, Street Extensions, Sewers, Water Mains And Street And Sewer Interest Funds.

As a matter of fact, the data on these 42 pages might have been condensed into one-third the number of pages without the omission of a single figure or fact. For another illustration take page 155 which contains a "summary of disbursements" which is not a summary of disbursements at all but of warrants drawn. Six pages ( 156 to 161 ) are used to set forth a trial

balance of a ledger. A trial balance is entirely out of place and almost meaningless in a public report.

Twenty-eight pages are used to set forth warrants outstanding and balances in street improvement funds. Like the trial balance above noted, such matter in a report of this kind is merely a waste of so much paper.

Seventeen pages (196-207 and 210-214) are devoted to describing an inventory of city owned real property. The city should of course have an inventory of what it owns and keep it under accounting control in a property ledger (which it does not do). It may then be used for administrative purposes at budget-making time (which is not done) but the publication of inventories in an annual report helps no one but the printer.

Pages 215 to 228 are descriptive of franchises which are in force, Franchises when granted should be published in printed minutes of the city council, duly registered in the Auditor's office, and accruals and collections thereon kept under current auditing and accounting control. Many of these franchises have been in operation for 10, 15 or 20 years and longer. A description of them has no place in a report of a given year's operations.

Containing as it does so much data of a financial character which should have been omitted, it fails to include several features of fundamental importance. For example, nowhere does it show the revenues accrued to the city during the year and which, therefore, become assets of the city. What would a stockholder of a private corporation think of a financial report which failed to show the year's earnings? The report also fails to show the amount of expense incurred for the several functions and activities during the year, although as noted above 32 pages are devoted to showing disbursements and warrants drawn. In other words, the taxpayer stockholder is asked to base his judgment upon the flow of cash without any information as to revenues accrued and expenses incurred.

The City Engineer's report contains much information that is really informing. There is, however, not only a great waste of space but the method of presenting it does not lend itself readily to assimilation by the reader. Here also several pages are devoted, to describing an inventory of city owned property, even setting forth the different kinds of furniture.

The City Attorney's report contains 47 pages (318-364) most of which space should have been used for better purposes. It even includes a page and a half editorial from a local evening paper. This report should have been carefully classified and presented in an orderly statement occupying very few pages.

The report of the Building Inspector and also of street cleaning and sprinkling are as a whole very good. The latter reports could be very much improved by including comparisons with prior years. Moreover, the comparisons which the Building Inspector makes between months and

between years would be much more clearly set forth if columns were introduced to show the actual "increase" and "decrease," in both amounts and percentages. The Building Inspector's report wastes considerable space. The statement of pavement area included in the report of the Superintendent of Street Cleaning is a duplication of the table on page 277 of the City Engineer's report, except that the latter got his table on one page while the former used two pages.

In the matter of waste space, the Health Department is easily the champion. Page 405 is devoted exclusively to a table which has only one line. Pages 406, 407, and 409 are each monopolized by a table having only two lines; pages 411 and 414 by tables having only four lines. The report contains no morbidity tables; no tables of children's diseases, or death rates according to the different ages. In fact, it contains no morbidity, birth rate, or death rate tables whatever, and no tables showing the tendencies of different diseases as they affect different wards or other sections of the city. Nothing is more important to the welfare of a community than knowing whether or not the tendency of its birth rate and death rate is upward or downward from year to year; nothing has more vital interest in a health report than the annual fluctuations of birth rates and death rates; and yet the health department report makes no comparisons whatever with preceding years.

The Library report contains 45 pages and is much in need of condensation. Even with the 45 pages, it fails to show the different kinds of books used, and to what extent, at any of the libraries. The financial statement should be much condensed. Yearly comparisons should be made showing the increasing or decreasing (demand for the several kinds of literature, and also the increase and decrease of operating costs. The president's report, the reports of the several committees, and the librarian's report should all be condensed in a single businesslike statement of results accomplished. The roster of employes, laws of Oregon, county contract, photographs, etc., should be omitted.

The Civil Service report sins chiefly by wasting space.

The Park Department contains very good cost detail, but comparisons between parks could be brought out better by more closely set tables, the introduction of the areas of the different parks, cost per acre, comparisons between years, etc.

The report of the Municipal judge is simply a one-half page statement of fines, forfeitures and costs. It fails entirely to set forth anything relative to the essential workings of the court, i.e., the kinds of cases which have come before it, the problems presented, how they have been met the general policy of the court with respect to the different problems, the needs of the court, etc.

The police report devotes six pages to a roster, which has no place therein. Crimes are not classified by sex, age, nationality, disposition, etc. Even the police reports of small towns and cities show such detail. There is no annual comparison (or even monthly) showing crime tendencies. Three pages are devoted to inventory of equipment, including each piece of furniture, feather dusters, bed sheets, brooms, etc. Much space is given to showing the "cases reported" and "cleared up" by the detective bureau. No explanation is vouchsafed as to what is meant by "cleared up." Moreover, the way these cases are arranged they are of no value. No comparisons can be made in any way to determine the relative efficiency of the detective bureau.

The Fire Department, in order to put out a report of a size that would "look well," included all of its 1912 budget estimates (eight pages). Having done that, it proceeded to include all of the amounts which were appropriated for that year (six pages). Six more pages were then used to set forth the ways in which the money was spent, although two pages would have been adequate. Five pages were then used to enumerate the property owned by the department and location thereof; 13 pages to statistics of fires, which might easily be put in one-half the space; six pages to location of fire alarm boxes, and two to an inventory of fire alarm telegraph, both of which might better have been omitted; 36 pages to a roster of firemen, transfers, etc., of each company, the only significant features of which (number of alarms of each company) might readily have been put on a single page; 82 pages to showing the location of every fire hydrant in the city, and three pages to the location of cisterns. It is absolutely indefensible to include this latter matter in a report rendered to an intelligent public.

The Dock Commission has included special reports which should have been a volume in themselves, relative to dock facilities and conditions in different parts of the world. As an encyclopedia or other reference book this matter is useful, but not in an annual report.

The Water Department's report is very good, except that one is unable to ascertain, for example, how much was paid out for salaries, or for supplies. The report might be considerably condensed without impairing its value.

# CONTENTS

## PUBLIC SAFETY

*(original page numbers)*

	Page
Police Department .....	5
Fire Department.....	15
Department of Buildings .....	18

## HEALTH AND SANITATION

Health Department.....	24
Garbage Collection and Incineration .....	36
Street Cleaning .....	43

## PUBLIC WORKS

Construction of Public Works .....	47
Maintenance of Public Works .....	56
Special Assessments -for Pavements .....	63
Special Assessments for Sewers.....	65
Water Department .....	66

## FINANCE

The Budget .....	71
Passing Ordinances .....	75
Controlling Expenditures .....	77
How the City Does Its Buying.....	84
The City Revenues.....	91
Bonded Debt.....	96

## OTHER SUBJECTS

Department of Parks .....	98
Municipal Court .....	101
Civil Service Commission.....	108
Departmental Reporting Methods.....	113