

expenses to meet, than the tax-collector who is; a regular member of the municipal staff. As every one who has had experience of collecting work knows very well, the last twenty per cent or so of the demand gives more worry and requires more labour than all the rest put together. This twenty per cent may be taken to represent the taxes of the contingent of "habitual defaulters"; and it is precisely in his dealings with this class that the disadvantages of the contractor's position become most clearly apparent.

The tax-collector on the one hand takes the necessary coercive measures with the full and undivided weight of the authority of the Commissioners behind him; orders for warrants, sales of property, and the institution of civil suits are all passed by the Chairman himself, and against his orders there is no appeal. The contractor on the other hand, though he may nominally exercise all these powers, finds them considerably restricted in practice. The Chairman must of course see that the ratepayers are not victimised by the contractor and his subordinates; and when he receives complaints of illegal action and oppression on the part of the latter, he is in duty bound to satisfy himself as to their truth. Now, to any one who has had any experience of Indian ways, the endless opportunities for delay afforded by the procedure necessary for his so satisfying himself need not be pointed out. The habitual defaulter at any rate may be trusted to recognise and avail himself of them at once; he will discover that the system is virtually one of dual control; and by the exercise of a little ingenuity he will be able to ring the changes on reports, explanations, local enquiries, and adjournments to such an extent, as to prevent the contractor from really coming to grips with him within six months of the date on which his tax falls due.

Again, in the case of the contractor, the percentage for collection charges has to cover a good deal more than it does in the case of the collector. In addition to the actual expenses of collection, the contractor has to provide for his own profits, interest on his sunk capital, insurance against loss, and in all probability,

regular *douceurs* to the subordinates of the municipal staff told off to check his work and watch his dealings with the taxpayers.

It would be an extraordinary thing then, if one found that a contractor working under all these disadvantages could do things as cheaply and efficiently as a properly organized and well-managed municipal staff. And as a matter of fact he does not. In municipalities where the contract system is in force, one usually finds the collecting staff badly undermanned, and the contractor content to realise between eighty and ninety per cent of the demand, the remainder lapsing as "irrecoverable." This state of things of course entails a serious financial loss on the Commissioners. Moreover it is very bad administration, inasmuch as it puts a direct premium on "passive resistance." It is very demoralising to the exemplary householder who pays his rates and taxes punctually, to see a section of his fellow-citizens evading all such financial obligations by dint of first ignoring, and then objecting to, all demands made upon them by the contractor; and Commissioners should not allow themselves to forget that one of the chief features of a sound collection system is the encouragement of the others by the persistent harrying of the passive resister. He must be made to learn that he has got to pay sooner or later, and that the longer he evades payment the larger will be the item for "extras" in his bill.

If then we accept this view, *i.e.*, that the contract system of collection is both less efficient and more expensive than the departmental system, it becomes necessary to enquire what compensating advantages it possesses sufficiently considerable to induce Commissioners to adopt it. The only reasonable answer that suggests itself is, that the Commissioners have an idea that, by appointing a contractor, they relieve themselves and their officers of an appreciable amount of difficult work. But surely such an idea is quite fallacious. The actual work of collection, however large the amount may be, is not particularly difficult: as will be shewn below when we discuss the details of the system, with a properly organized staff, and a strict adherence to the Collection Rules prescribed by Government, collection work becomes in a great

measure automatic, and calls for little special attention on the part of the higher authorities. The part of the work that *does* call for the special attention of the authorities, and that often proves very troublesome indeed, is that connected with petitions for exemption, remission, and apportionment, and with complaints of misconduct and oppression on the part of the collecting staff. But the work in connection with exemption, remission, and apportionment is identically the same whichever system is followed ; while from what has been said above on this subject, it is not difficult to see that the work in connection with complaints against the staff is likely to be both heavier and more difficult to dispose of under the contract system than it is under the departmental system.

There is another consideration however that may possibly have some weight, especially with the Commissioners of small municipalities who are necessarily brought in somewhat closer personal touch with individual ratepayers than is the case in larger towns, and that is the consideration that the contract system diverts from the Commissioners to the contractor a good deal of the unpopularity that always and everywhere attaches to the tax-gatherer.

But this, of course, is a mere shirking of the issue ; and in the case of the advanced municipality we have taken as an example, we must certainly assume that the Commissioners possess the "courage of their assessment" so to speak, and make their choice of systems uninfluenced by any idea of providing themselves with something in the shape of a scape-goat.

We have now examined in some detail the advantages and limitations of the contract system as applied to each of the seven items to which it is found possible in practice to adapt it. The only point in issue is expediency ; and on this point we have found in each case the evidence for and against the system to be sufficiently clear and straightforward to justify us in coming to a definite conclusion on the whole question without further delay.

Let us then pronounce our verdict as follows—*A large municipality of an advanced type should adopt the contract system in the case of three items of work, viz., Roads, Construction, and Pounds and Ferries; and should reject it in the case of the four remaining items, to which it is possible to apply it, viz., Lighting, Markets, Conservancy, and Collections.*

This, of course, is to be regarded as a general statement only; and as being subject to the reservation that peculiar local conditions may possibly in some cases cause the balance to incline the other way.

### **Summary of conclusions.**

With the passing of judgment in the "Contract System" question our discussion of the duties of the Commissioners, and of the ways and means of performing them comes to an end. The discussion has been a rather discursive one, and it is possible that the detailed enquiries we have found it necessary to make into the inner working of various municipal departments may have obscured to some extent the conclusions we have come to with regard to the main points in issue. At any rate, there can be no harm in recapitulating them. Let us therefore condense the general results of our enquiries, and restate them as follows:—

1. In a large and advanced municipality the Commissioners' duties (both compulsory and "optional"), may be grouped under the thirty heads or items of work detailed above on pages 36—37.

2. As regards five of these items, viz., *Police, Education, Hospitals, Plague, and Vaccination*, the responsibility of the Commissioners is, under present circumstances, a financial one merely, the actual work being done by Government.

3. As regards two of the items, viz., *Assessment and Construction*, the Commissioners may, but should not, convert their direct responsibility into a merely financial one by engaging Government to do the work for them.

4. As regards three items, viz., *Construction, Roads, and*



*Pounds and Ferries*, the Commissioners should have the work performed by contractors working under the general supervision of the municipal staff.

5. As regards four items, *viz.*, *Lighting, Markets, Conservancy, and Collections*, the Commissioners may have the work performed by contractors working under the general supervision of the municipal staff, but *should* not do so, but should have the work performed directly by the municipal staff.

6. As regards all the remaining seventeen items, *viz.*, *Elections, Meetings, By-laws, Taxation, Correspondence, Records, Accounts, Drainage, Water-supply, Food Inspection, Vital Statistics, Fire Prevention, Building Regulations, Slum Improvement, Burial Grounds, Storekeeping, and Prosecutions*, the Commissioners must necessarily have the work performed directly by the municipal staff.

#### **Hints on Municipal Policy.**

In this and the two preceding chapters we have on several occasions found it necessary to consider some question of general municipal policy, and to decide which of several alternative courses it would be advisable for our typical municipality to adopt with regard to it. And we may conveniently wind up our discussion of this first main section of our subject by making a list of our decisions on these questions ; completing the list by adding to it such other conclusions with regard to the main features of municipal administration as appear to command general acceptance.

Indian municipalities are too young to have much in the way of tradition to go upon, and, as a rule, too much isolated to have any chance of profiting by the successes and mistakes of their neighbours ; so that a summary of the generally accepted views on a few of the more important points of municipal policy with regard to which differences of opinion are likely to arise, may be of some use to them, in the way of pointing out the more common pitfalls, and of warning them from starting work on lines which experience in this and other countries has proved to be foredoomed to failure.

Indeed perhaps the best way of presenting this summary of decisions and conclusions would be to throw it into the form of a series of warnings and recommendations addressed to the Commissioners of an imaginary municipality. Let us do so and let us call it "Hints to Commissioners."

*Hints to Commissioners.*

1. Make a strict and impartial assessment of the ratepayers. Deal carefully with objections and appeals, shewing special consideration to the poor and those who are not able-bodied. But once you have finally settled your demand, realise it in full by the rigorous application of the methods placed at your disposal by the law.

2. Before finally passing any resolution, estimate carefully its effect on your finances and place the estimate on record.

3. Avoid speech-making; and do the bulk of your work in sub-committee.

4. Do not let clamour among the ratepayers deter you from following what you believe to be the right course—a popularity that is tinged with contempt is not such a valuable possession after all.

5. Assume as many of your "optional" responsibilities as you may reasonably expect to be able to perform.

6. Make it a general rule to get your work done by your own staff, rather than by the agency of contractors; and invoke the assistance of Government only when absolutely compelled to do so.

7. When settling the salaries and wages of your staff, bear in mind Mr. Chamberlain's dictum that "municipal corruption creeps in when the higher officials are paid less, and lower employees more, than the market value of their services."

8. Do not let ideas of party patronage, or anything in the shape of what is known in America as "the spoils system," influence your dealings with the members of your staff; and interfere with your Chairman's control of them as little as possible.

9. Remember that whatever may be the case with your other imperfections, the avoidance of the reproach of the two besetting sins of municipal administration in this country—slackness and procrastination—is a matter which lies entirely in your own hands.

10. Look ahead. Remember that you are not merely the representatives of the actually existing ratepayers; you are responsible to a greater or less degree for your town's future development, and for the health, safety, and comfort of future generations of its citizens.

---

## PART II.

# THE ORGANIZATION OF THE STAFF.

---

### CHAPTER IV.

#### *Principles and precepts of Organization.*

**The six conditions of a successful organization system—The three different systems compared—Division of responsibility between the Secretary and the Engineer—Rules of working for the Secretary-cum-Engineer system.**

#### **The six conditions of a successful organization system.**

From what has been said in the last chapter, it may be gathered that the great stumbling-block in the path of the Commissioners of an advanced municipality is the simple fact that they have not got sufficient funds to perform properly all of the many important duties imposed upon them by the law and by public opinion. This, of course, is a very common difficulty ; as one knows very well, in every department of public business, the interests of efficiency and the interests of economy are more or less in conflict, and the working arrangements must necessarily be the outcome of some sort of compromise between them. But nowhere perhaps are the claims of both these interests more urgent, or more difficult to reconcile, than in an average municipality ; and it is, and always must be, a difficult task for the Commissioners to work out the terms of the particular compromise that best suits the circumstances of their particular town, and to assign to each department of municipal work its proper place in the system, and its due proportion of the municipal staff and the municipal funds.

It must be remembered too, that in carrying out this task the

Commissioners get very little help from outside. The Government has designedly refrained from prescribing any particular form of municipal organization, and the municipal system itself has not yet been in force long enough to allow of anything in the shape of a "standard plan" being evolved from experience, and being tested sufficiently to receive the stamp of popular recognition and approval. It is not surprising to find therefore, that in many municipalities, the Commissioners, thus deprived of the guidance of authority and tradition alike, have gone rather widely astray, and are, without realising it, struggling against the heavy handicap of an ill-balanced and unco-ordinated system of organization and administration.

Returning now to our typical municipality, let us suppose that the Commissioners have determined to satisfy themselves that they are not labouring under this particular disadvantage. And let us suppose that, as the best means of doing so, and of ensuring that their investigations shall be conducted without prejudice and with an open mind, they have decided to make a *tabula rasa* of their existing arrangements, and to work out for themselves, at first hand, the scheme of organization best suited to the needs and resources of their municipality.

Their first step will naturally be to examine and compare the different systems of working in force in the best and most successful of existing municipalities, with the view of extracting from them some common principles of organization and administration to serve as a foundation on which their own scheme may be built. Nor should this be a difficult matter. They will find that however much they may appear to differ outwardly, all successful systems, when carefully examined, exhibit certain well-defined features in common. They will find, that is to say, that every system which is distinguished by efficient and economical working, complies generally with certain conditions, which may be formulated somewhat as follows :—

CONDITION I—*The control exercised by the Chairman in every department must be as direct and thorough as the amount of time at the Chairman's disposal allows.*

CONDITION II—*The Chairman's control must be facilitated by a system of inter-departmental checking of as complete a character as the circumstances of the municipality allow.*

CONDITION III—*The higher officers must be relieved of the burden of detail by a system of devolution of responsibility carried as far as the qualifications of subordinate officers allow.*

CONDITION IV—*The work of the departments must be so organized and co-ordinated, that there is no overlapping of authority, and that each officer knows precisely to what superior officer, and for what work, and for what subordinate officers, he is responsible.*

CONDITION V—*Each department must be adequately, and not more than adequately, staffed.*

CONDITION VI—*Provision must be made for the periodical readjustment of the staffing arrangements in response to the growth and decline of work in the various departments.*

These six conditions thus sanctioned by the best experience will presumably be taken by our Commissioners as the guiding principles of their investigation, and their task of constructing an organization scheme will therefore resolve itself into the task of applying these conditions to the particular circumstances of their own town, cases of doubt and difficulty being settled by a reference to the practice prevailing in the municipalities of the best repute.

It will be seen that the order in which these six conditions have been placed is, roughly speaking, the order of increasing definiteness and detail. And this of course is the order in which the Commissioners would most naturally consider them. They would, that is to say, in the first place naturally decide on the general outlines of a scheme which (other things being more or less equal) would best provide for the fullest measure of control that their Chairman and Vice-Chairman could find the time for; next, they would consider this scheme in detail, and work out a co-ordinated system of departmental organization; and finally, they would distribute among these departments, in accord-

ance with their relative importance, the men and money they were able to provide.

Let us therefore suppose them to start on their investigation in accordance with this programme.

### **The three different systems of organization compared.**

Now the first thing that they will notice is that for all but the highest officers, the actual working arrangements in all large municipalities are framed on very similar lines. In every municipality they will find the daily routine work performed by a staff of officers divided off into separate and distinct departments; each department having its particular responsibility, and each officer of the department his particular share of this responsibility, more or less precisely defined. But in regard to the important matter of co-ordinating the work of these departments, and regulating the mutual relations of their respective heads, no such uniformity will be found to exist. The arrangements made for this purpose by different municipalities exhibit many striking differences, and it is on the character of these arrangements that the nature and extent of the control exercised by the Chairman will be found mainly to depend.

Let us suppose then our Commissioners to proceed to pass in review these different arrangements, or (to be more precise), these different systems of organization, actually in force in various large municipalities, with the object of ascertaining their respective advantages and disadvantages, more particularly with reference to the question of control by the Chairman.

Their investigations will shew them that these organization systems naturally fall into three groups or types, to one or other of which the system in force in any particular municipality may always be referred. These classes, or types, may be designated respectively—(1) *The One-man system*, (2) *The Departmental system*, and (3) *The Dual system*—each of which has its more or less well recognised merits and defects.

Let us deal with them in this order :—

*The One-man system.*

This system concentrates the responsibility for the working of the staff in one officer. He may be styled variously the Engineer, or the Secretary, or the Engineer-Secretary, or the Secretary-Engineer ; but in every case his position is the same. He is the one man ultimately responsible for the work of every single department, and all orders from the Chairman to the staff, and all reports and representations from the staff to the Chairman pass through him.

Let us note briefly the advantages and disadvantages of this system.

*Firstly*, its advantages :—

(i) It has the great merit always attaching to a one-man rule.

One bad general is proverbially better than two good ones ; and it is not easy to over-estimate the economic advantage of having the same set of ideas, purposes, and methods applied consistently to the work of the staff in every department.

(ii) It prevents any loss of power on account of inter-departmental friction.

Where there is one supreme head, this sort of thing can be very promptly nipped in the bud.

(iii) It saves the time of the Chairman.

Cases requiring the Chairman's orders will be put up in a more or less cut-and-dried form : and he will very rarely find himself called upon to investigate disputes between departments, or to discuss and settle questions with regard to which different opinions are entertained by different officers.

*Secondly*, its disadvantages .—

(i) The post of the Engineer-Secretary (as we may call him for the sake of convenience) is a very difficult one to fill.

There is no particular training ground for Engineer-Secretaries. They are recruited either from the ranks of "office men," *i.e.*, men whose work is concerned with files and accounts, and is done at a desk ; or else from the ranks of practical Engineers, *i.e.*, men trained to supervise contractors and handle skilled and unskilled labour, and whose work lies mainly in the field.



Now, as we have seen, the duties that devolve on the staff in a large municipality are highly diversified in character, more so perhaps than in any other department of public business. Moreover these duties will be found to divide themselves naturally into two strongly contrasted classes or sides—indoor or office work on one side, and outdoor or executive work on the other. Further, as is fairly obvious, it will be found that the efficiency of the staff as a whole depends a good deal on whether or no the balance is fairly maintained between the interests of these two sides. But, from the nature of the case, the Engineer-Secretary under the one-man system will not find it an easy matter to maintain this balance. If he is an office-trained man, he will at times fail to realise that “the work is the thing,” and that rules, forms, and procedure generally are means and not ends. If, on the other hand, his previous training has been on “practical” lines, he will be apt to become impatient of the checks and delays incident to a system of sub-committees and General Meetings, and in general, to undervalue the constitutional privileges of the Commissioners and the rights of the public. In the one case, the danger to be guarded against is “red-tape”; in the other case, it is friction with the Commissioners and litigation with the ratepayers.

In fact, the knowledge, training, and habits of mind demanded by one of the two sides of municipal work differ so widely from those demanded by the other, that it is no exaggeration to say, that the Commissioners would find less difficulty in selecting six good Secretaries, and six good Engineers, than in selecting one man who possesses in a satisfactory degree all the qualifications necessary for the combined post.

(ii). It is very difficult to fill up the vacancy caused by the Engineer-Secretary's absence on leave.

This is a real difficulty, especially where (as in many large municipalities) the Engineer-Secretary is a European, who requires to go to Europe periodically on long leave. No member of the staff is in training to take his place; and either a new man who knows nothing of the municipality, or else the head assistant on

the office side, or the head assistant on the executive side, must be put in to officiate for him. In any case, the disadvantages of the arrangement are obvious, and are well enough recognized in practice ; for one usually finds, that when the Engineer-Secretary is on leave, no attempt is made to do more than "keep things going," all important questions affecting the work of the staff being shelved till his return.

(iii). The direct control of the Chairman is reduced to a minimum.

Of this there can be no doubt whatever : every member of the staff knows very well that in regard to the merits of subordinate officers the Chairman is more or less bound to accept the opinion of the Engineer-Secretary ; and he realises that on the favour of this officer his own prospects of promotion and increased pay depend almost entirely. It would be too much to expect therefore, that any departmental head or other officer should criticise frankly arrangements made by his chief ; or, when any question of municipal policy comes under discussion, that he should express with freedom views which he knows that his chief does not share.

The result is, that the Chairman, when dealing with questions affecting the staff, finds that he has very little material to work upon. He will find, in fact, that not only is he obliged to leave more or less entirely in the hands of the Engineer-Secretary the distribution of work among the departments and routine arrangements generally ; but also that he must in the absence of effective criticism accept perforce that officer's individual opinion with regard to important matters in which the interests of *both* sides of the staff may be concerned.

(iv). Control by means of a system of inter-departmental check is rendered practically non-efficient, *as far as the Chairman is concerned.*

The reasons are much the same as those given in (iii) above : a departmental head, who finds something wrong in the methods or doings of another department with which his own is concerned, cannot be expected to criticise them freely and independently, if

he has reason to believe that they have been inspired by the Engineer-Secretary. The utmost he will do, is to state the facts and his views in a more or less colourless way for that officer to take such action as he may think fit.

But it is obvious that the Chairman's power to discover and prevent extravagance and financial irregularities must depend mainly on the effectiveness with which the work of the spending departments is checked by the Accounts and other allied departments of the office : and although it is not so obvious, it is no less true, that the Chairman's power to discover and prevent illegal and oppressive conduct on the part of the members of the staff depends greatly on the extent to which departmental independence *in general* is carried.

To take an example from actual experience. In a certain municipality in which the one-man system was in force, it was discovered that one of the methods of bringing pressure to bear on house-holders who were dilatory in paying their rates and taxes, was first to curtail, and subsequently to discontinue altogether, the visits of the conservancy staff to their houses. Now this sort of thing may easily occur under a system by which the same officer is made responsible both for the collection of taxes and the conservancy service ; but would be practically impossible in municipalities where the Collection and Conservancy departments were entirely independent of each other, with the Chairman as their only common head.

The considerations of principle and expediency, which we have applied in this analysis of the one-man system, apply of course equally to all. It would not therefore be necessary for our Commissioners to go over the same ground again and discuss the two remaining systems in the same detail ; all that they would need to do, would be to apply these considerations at once to each system, note briefly the resultant good and bad points, and compare these good and bad points with those of the other two.

Let us therefore suppose them to deal in this way with the departmental system.

*The Departmental System.*

Under this system the staff is divided into several departments entirely independent of each other, the head of each department receiving orders from, and sending reports and representations to, the Chairman direct. In a fairly large municipality the heads of departments would be some six or seven in number, *e.g.*, the Head Clerk, the Tax-Collector, the Accountant, the Conservancy Superintendent, the Road Overseer, the Water Works Overseer, and the Food Inspector.

This system is, of course, the exact opposite of the one-man system, and generally speaking, will be found to be defective in precisely those points in which that system is effective, and *vice versa*. Let us note its advantages and disadvantages :—

*Firstly*, its advantages :—

- (i) The Chairman exercises a complete control.
- (ii) Inter-departmental check is provided for as fully as possible.
- (iii) There is no difficulty in appointing competent heads of departments.
- (iv) There is no difficulty in filling up temporary vacancies caused by the absence on leave of heads of departments.

*Secondly*, its disadvantages :—

- (i) A great deal of work is thrown on the Chairman.
- (ii) When the Chairman is temporarily absent, all work except that of a strictly routine character is suspended.

This is an important point where (as in most municipalities) the Chairman is an honorary official who will naturally want to leave the town periodically on business or pleasure.

- (iii) There is no officer of sufficient calibre to give the Chairman advice regarding matters that occur outside the ordinary routine.

- (iv) There is abundant opportunity for inter-departmental friction, which may result in serious confusion and delay.

Now let us take the last remaining system—The dual or **Engineer-cum-Secretary** system.

*The Dual System.*

Under this system, the entire work of the staff is divided into two sides, which represent roughly the indoor work and the outdoor work respectively. The indoor side is placed under an officer called the Secretary, and the outdoor side under an officer called the Engineer. These two officers are entirely independent of each other, and are responsible for every matter affecting every department of their respective sides. All orders of the Chairman to the staff, and all reports and representations from the staff to the Chairman, pass through the Secretary or the Engineer, as the case may be.

This system is, of course, a compromise between the one-man system and the departmental system. Let us see then how it compares with them in regard to each of the main points in issue, which, as we have seen, may be taken to be seven in number as follows: (a) selection of heads of the staff, (b) filling of temporary vacancies caused by absence on leave of heads of the staff, (c) efficiency of Chairman's general control, (d) efficiency of inter-departmental checking, (e) saving of Chairman's time, (f) loss of power through inter-departmental friction, (g) ability of officers to act as advisers of the Chairman.

• With regard to points (a) and (b) we may say that the dual system holds a great advantage over the one-man system, and is at a slight disadvantage as compared with the departmental system.

Much the same may be said with regard to points (c) and (d), it being noted that the checking department and the checked department can usually be put on opposite sides.

With regard to points (e) and (f) the dual system obviously holds a great advantage over the departmental system, and is at some disadvantage as compared with the one-man system.

In regard to point (g) the dual system holds a distinct advantage over the departmental system, and certainly is at no disadvantage as compared with the one-man system.

We may now presume that our Commissioners are satisfied

that they have before them sufficient material to justify them in coming to some general conclusion as to the respective merits of the three different types of systems they have found to be in force in existing municipalities; their first consideration being, as we said above, to "decide on the general outlines of a scheme which (other things being more or less equal) would best provide for the fullest measure of control that the Chairman and Vice-Chairman could find the time for."

Reviewing therefore the three systems from this standpoint, our Commissioners will presumably come to some such conclusions as these :—

1. The departmental system throws so much work on the Chairman, and provides so many opportunities for confusion and delay on account of inter-departmental friction, that it is to be preferred only in either a very large municipality, in which the Chairman (or the Vice-Chairman) is a whole-time salaried officer, or else a small municipality, in which the amount of work to be performed by the staff is, comparatively speaking, inconsiderable.

2. The dual system, combining as it does to a great extent the advantages of the other two systems, is decidedly to be preferred in ordinary municipalities where the Chairmanship is an honorary post, provided always that the Chairman is competent, and can devote a reasonable amount of his time to the daily routine work of the office.

3. If, however, the Chairman either has not leisure enough, or is not competent enough, or intelligent enough, to control efficiently the Secretary and the Engineer, and to co-ordinate the work of their respective sides—then, in spite of its many disadvantages, the one-man or Engineer-Secretary system is to be preferred.

In the case of our "advanced" municipality we must of course assume that the Chairman is a competent person, and has the requisite amount of leisure. This being taken for granted, our Commissioners need have no hesitation in selecting the dual or Engineer-cum-Secretary system as the system best suited to their municipality, and as best fulfilling the requirements of the first

of the conditions of successful organization, namely, the condition of "Control by the Chairman."

#### **Division of responsibility between the Secretary and the Engineer.**

The first condition thus disposed of, the Commissioners will now proceed to consider the second—the condition of "Inter-departmental check." And as the dual system has been definitely adopted, their first step in this direction will necessarily be to divide between the Secretary and the Engineer the entire amount of work connected with the performance of such of the "Duties of the Commissioners" as they have decided to have performed directly by the municipal staff.

A list of these duties is given on page 38 and may be reproduced. It is as follows—Elections, Meetings, By-laws, Taxation, Assessment, Collections, Correspondence, Records, Accounts, Conservancy, Roads, Lighting, Drainage, Water-supply, Construction, Public Markets, Food Inspection, Vital Statistics, Fire Prevention, Building Regulations, Slum Improvement, Pounds and Ferries, Burial Grounds, Storekeeping, and Prosecutions.

Now, as we have seen, office or indoor work is to be the province of the Secretary, executive or outdoor work the province of the Engineer; and in the case of the majority of the duties in the list, there can be no doubt as to the category to which they may severally be referred. Some cases however are doubtful, and must be settled in accordance with considerations of general expediency. Let us divide up the list accordingly into (a) duties wholly or mainly of an office character, (b) duties wholly or mainly of an executive character, and (c) duties of a "mixed" character, in which office work and executive work are more or less equally balanced. We shall get three lists as follows:—

(a) *Office Duties*—Meetings, By-laws, Taxation, Correspondence, Records, and Accounts.

(b) *Executive Duties*—Conservancy, Roads, Lighting, Drainage, Water-supply, Construction, Public Markets, Food

**Inspection, Vital Statistics, Fire Prevention, Building Regulations, Slum Improvement, Pounds and Ferries, and Burial Grounds.**

(c) "*Mixed*" *Duties*—Elections, Assessment, Collections, Stores, and Prosecutions.

Giving the duties in list (a) to the Secretary and those in list (b) to the Engineer, let us consider how the duties in the "mixed" list (c) are to be distributed.

*Elections*—The work connected with a general election or a by-election is not great in quantity ; but it is important that the preliminary procedure (which covers a period of three months) should be very carefully performed, as the slightest irregularity renders the election void. This preliminary procedure is entirely of an office nature, and there can be little doubt that the entire responsibility for the conduct of elections should be with the Secretary.

*Assessment*—The work is mainly of an outdoor nature, and is moreover intimately connected with (and in fact the natural sequel of) the work of the Building Regulations department, which is a typical Engineer's department. Some municipalities however make the Secretary their Assessor, while others divide the work among the Commissioners themselves. Neither of these arrangements can be approved ; the work of valuation calls for a certain amount of engineering knowledge and experience, and the Engineer should certainly be the Assessor also.

*Collections*—The upkeep of the registers, the writing out of bills demand notices and receipts, correspondence and interviews with ratepayers, all come under the head of office work. The actual work of collection is, of course, outdoor work (although in some municipalities a fair proportion of the rates and taxes is paid into the office direct). But the deciding factor in the case is the circumstance that the Assessment department and the Collection department are natural checks on each other. They should therefore be on different sides of the office, and, as the Assessment department has been given to the Engineer, the Collection department should go to the Secretary.

*Stores*—The keeping of the stores required by the executive



departments would naturally seem to be the business of the Engineer : but, on the principle that a checking department should be on a different side from the department it checks, Store-keeping must go to the Secretary.

*Prosecutions*—Offences against municipal laws and by-laws are detected and reported by the officers of the executive departments ; and when the Chairman's sanction for prosecution has been obtained, the responsibility for putting the cases before the Court will lie ordinarily with the head of the department concerned. Specially difficult cases however, or those which involve points of law, will be made over by the Chairman to the Secretary, who will examine and report on the evidence, and if necessary, employ and instruct a pleader.

Nevertheless, nine-tenths of the cases can be perfectly well dealt with by the executive departments themselves ; and "Prosecutions" should therefore be reckoned among the duties of the Engineer.

Dividing up then these five "mixed" duties on the above lines, and adding them to their appropriate lists, the Commissioners will get as their final distribution of work between the Secretary and the Engineer, the following :—

(a) *Secretary's work*—Meetings, By-laws, Taxation, Correspondence, Records, Accounts, Elections, Collections, and Stores.

(b) *Engineer's work*—Conservancy, Roads, Lighting, Drainage, Water-supply, Construction, Public Markets, Food Inspection, Vital Statistics, Fire Prevention, Building Regulations, Slum Improvement, Pounds and Ferries, Burial grounds, Assessment, and Prosecutions.

### **Rules of working for the Dual System**

This division of duties between the Secretary and the Engineer provides a framework for the system of inter-departmental check required by the second condition of successful organization given above ; and the Commissioners can now proceed to fill in this framework, and at the same time arrange to satisfy

the third and fourth conditions, namely, the condition of the "devolution of responsibility" and the condition of the "co-ordination of work." To do this, they will have to divide up the work of each side into a number of departments, and lay down some general rules to govern the mutual relations of these departments and, as far as is practicable, their internal working.

Now the number of these departments is, of course, a matter which depends almost entirely on the size of the municipality under consideration; and, as it is advisable to avoid particulars and keep our investigations on general lines as long as possible, it will be convenient to defer discussing the details of the departments and their number and size to the next chapter, where we shall find ourselves at last obliged to give our typical municipality a definite income and a definite population.

This however need not prevent us from proceeding to discuss forthwith the mutual relations of departments and their internal regulation—these being matters which can be dealt with on general principles applicable more or less to all municipalities.

We must suppose then our Commissioners to apply to the dual system the second third and fourth conditions of successful organization given above, and we must suppose them to check their deductions as before by a reference to the practice of the most efficient municipalities.

This procedure will put them in possession of a series of practical working rules which may be formulated somewhat as follows :—

*RULE 1.—The two sides of the office are to be kept absolutely distinct, and communication between departments on opposite sides is to take place only through the heads of the staff, or on lines definitely approved by both heads of the staff and the Chairman. Communication between departments on the same side is to take place only through the head of the staff concerned, or on lines definitely approved by him.*

This rule is the foundation of the whole system, and must be observed to the letter.

*RULE 2—The work of every department is to be under the control of one head, who is to be held solely and entirely responsible for the due performance of the routine duties of his department.*

The distinguishing mark of a head of a department is the right to report to, and receive orders from, his head of the staff direct ; and all dealings of his department both with the head of the staff and other departments must be conducted through him.

The "routine duties" of each department must be prescribed by the heads of the staff. That is to say, they will lay down generally what kinds of cases are to be dealt with and decided by the heads of the various departments, and what kinds of cases are to be reserved for their own orders. The proportion of the work of any department to be considered as "routine" will, of course, vary with the character of the department, and the degree of confidence placed in its head, but the general principle should be to carry the devolution of responsibility as far as is consistent with safety.

*N. B.*—A head of the staff must be entitled to assume, in the absence of any representation to the contrary from a head of a department, that the staff of that department is generally adequate, and that each member of it is working satisfactorily. But this assumption will throw an unfair responsibility on the head of the department, unless he is given more or less of a free hand in maintaining discipline among his subordinates and arranging their work.

*RULE 3—A head of a department submitting the facts of a case for the orders of his head of the staff shall invariably make a recommendation as to the orders to be passed.*

Where this is not insisted on, one is likely to find the greater part of the time of the head of the staff taken up by the actual manual labour of writing a multitude of orders which vary little in their general character from day to day. This is not economical administration. In any municipal department at least seventy

per cent of the work submitted to the head of the staff is of a purely routine character, and the head of the department knows better than anybody else the orders that should be passed on it; in at least twenty per cent of the remaining cases he should be able, from his knowledge of orders passed in previous cases, to make a very accurate guess as to the actual order that the head of the staff will pass; while in the remaining ten per cent of the cases in which he finds himself obliged to rely on his own unaided intelligence, it will certainly do no harm to himself, or any one else, to have his views as to the course to pursue, placed on record.

The criticism therefore is not well-informed that would make it a matter of reproach to a head of the staff that he "simply initials his subordinate's orders." Properly understood, they are not his subordinate's orders but his own. A head of a department does not want his own subordinates to see his recommendations ignored time after time, and very soon learns to recommend only what he knows his chief will endorse, and he will frame his draft orders, not in accordance with his own idea of what is right and proper, but in accordance with what he has learnt to be the views and methods of the head of the staff.

*N. B.*—The heads of the staff may extend this privilege of making recommendations to selected subordinate officers of the departments with useful results. Their interest in their work is stimulated, they are made to use their brains, and a capable man gets a chance of distinguishing himself from the ruck.

**RULE 4**—*Every officer shall have one immediate superior to whom he is responsible for all his work and from whom he receives all his orders.*

The art of playing off one superior officer against another is thoroughly well understood in India, and an arrangement that puts a clerk to work under two heads of departments, or an overseer to work under two superintendents, renders the responsibility of all concerned uncertain, and is bound to result in friction sooner or later.

In many municipalities this particular defect of organization

is very noticeable. It is only very seldom however, that it will not be found possible to remove it by a re-arrangement of duties among the departments; and every municipality should have a scheme of its organization system prepared and kept up to date, so that the Commissioners and the Chairman may be able at any time to satisfy themselves that the existing arrangements conform to this rule.

But it is no use having a good system on paper if it is not followed in practice. If, to take a particular instance of not infrequent occurrence, a Chairman with the laudable intention of saving time and trouble, makes a practice of sending petitions and complaints for enquiry to the various overseers in the various wards *direct*, instead of through the Engineer and the heads of departments concerned, he is bound to throw the whole machine out of gear; higher officers lose something of their sense of responsibility, their authority with their subordinates is weakened, and any routine system of control that may be in operation goes by the board altogether.

To insist on orders and reports going through "the usual channels" is not "red-tape," but a sign that one appreciates at its proper value a principle of administration recognised as axiomatic all the world over.

*RULE 5—For every subordinate officer there shall be prepared a detailed list of the duties for which he is responsible, approved and countersigned by his head of the staff.*

A department can get on well enough without any thing of this sort for a long time; but sooner or later, some scandal or serious error comes to light, and then everybody throws the blame on everybody else, and it is impossible to fix the responsibility on anybody in particular. Moreover these lists are useful for inspection purposes; they facilitate the general control of the heads of the staff; and they save a lot of trouble when changes take place in the *personnel*.

*RULE 6—Every outdoor officer shall keep a full diary and submit it daily to his immediate superior.*

It is not easy to keep an outdoor subordinate working up to the collar in the same way as one can an office clerk who sits all day under the eye of the head of his department. One effect of the Indian climate is to make people, outside the ranks of manual labourers, find outdoor work distinctly irksome during the greater part of the year, while during the two or three hot-weather months, merely to walk about in the streets causes them actual physical discomfort. The outdoor officer is therefore always subject to the temptation to "lie off" for an hour or so out of the sun, instead of doing his work; and of course, if he yields to the temptation, the coolies he has to look after will do the same.

The only means of checking this sort of thing is to make the outdoor officer keep a diary, shewing in full detail how he spends his time, to test its correctness occasionally by means of local enquiries and surprise inspections, and to make it very clear to him that the discovery of any deliberate falsification of his diary means his immediate dismissal.

A thorough-going devolution of responsibility on the lines indicated above requires, of course, the complement of an effective *general* control by the two heads of the staff. Relieved to a large extent of the burden of detail, they will have leisure to supervise the working of the machine as a whole, and to satisfy themselves by means of occasional surprise inspections that each part is working up to its maximum of efficiency.

Each head of the staff must, of course, work out for himself the system of general control best suited to the circumstances of his particular municipality, and it may perhaps be considered superfluous to say anything further on this point. It can, however, at any rate do no harm to complete our list of rules by adding to it two rules relating to this general control which have been proved by the practice of many municipalities to be of more or less universal application.

These two rules may be stated as follows :—

**RULE 7**—*All work of a recurring nature shall be regula-*

raised and controlled by a system of periodical reports and returns.

The heads of the staff arrange the system for the different departments of their respective sides in consultation with the heads of the departments concerned. As an example, let us take the Sanitary department; and let us suppose that its supervising staff consists of one sanitary inspector and four overseers working under him, each overseer being in charge of the sanitary work of one quarter of the municipal area. Then we may suppose that the system of routine control will run on some such lines as these :—

Each overseer to submit to the sanitary inspector : *Daily*—his rough pocket-book—his diary—muster-book of sweeper-staff—register of attendance of rest of staff—register of reports against sweeper-staff. *Weekly*—return showing progress and results of prosecutions. *Monthly*—statement shewing progress in slum improvement work—stock register—register of notices. *Half-yearly*—tools and plant register—report on half-yearly inspection of “improved” slums.

The sanitary inspector to submit to the Engineer : *Daily*—his diary. *Weekly*—the diaries of the four overseers, accompanied by his own covering report. *Monthly*—the weekly prosecution statements submitted to him by the four overseers accompanied by his own covering report—the monthly statement and reports (three for each overseer) submitted to him by the four overseers, each batch accompanied by his own covering report. *Half-yearly*—the half-yearly registers and reports submitted to him by the four overseers, each batch accompanied by his own covering report.

We may enumerate two or three of the more obvious advantages of having some such system of routine control working in each department :—

1. Neglect of regular duties, or unpunctuality in performing them, is brought at once to the notice of the supervising officer.
2. The heads of the staff by getting work of a similar nature put up to them for scrutiny at intervals, and in large masses

analysed and commented upon by their immediate subordinates, instead of in promiscuous daily dribbles, are better able to "codify," so to speak, the work of the departments by working out rules for simplifying and regularizing procedure. It is as well however to remember that these rules should be few, and should be concerned with *principles* only ; nothing paralyzes initiative, or produces "dry-rot" in a department more certainly than a multitude of "standing orders" framed to meet the circumstances of particular cases and requiring constant alterations and additions.

3. Comparison of the work of one man with that of another in the same line, or of one man's work during a certain period with his own or his predecessor's work during a previous period, has much virtue in promoting efficiency. Suppose for instance—to take the Sanitary department again—the periodical registers, statements, &c., shew that overseer A gets through his work more promptly than the other three, that overseer B has his coolies more in hand, that overseer C keeps his cattle in better health, and that overseer D is more successful in prosecutions : then it should not be difficult for the sanitary inspector and the Engineer, by making careful and intelligent enquiries into the methods by which the good results were obtained in each case, to gradually "screw up" efficiency all round until the work in each circle attains A's standard of promptness, B's standard of discipline, C's standard of cattle management, and D's standard of success in prosecutions.

Codification of procedure, and the use of comparative results for the purpose of screwing up efficiency, are of course common-places of business administration everywhere. But in municipal administration their importance is apt to be lost sight of ; in the absence of the stimulating effect of competition, supervising officers are inclined to get into grooves, and to confine their energies to passing orders on particular cases as they come before them.

*RULE 8—The arrangements for ensuring that the orders of superior officers are actually carried out must be effectual.*



This also sounds like a commonplace, to be taken for granted in every system of administration. But any one engaged in administrative work in India will know to his cost that this is very far from being the case—his experience having taught him to place in the front rank of his many difficulties and trials the exasperating tendency of his subordinates to come to a halt just on the wrong side of performance. He will have learnt too that the East has its own way of doing things, and resents being hustled ; and that the remarkable *vis inertiae* immanent in an Indian office can be overcome only by persistent driving on the part of its head.

But whatever amount of "driving power" a head of the staff may possess, he cannot feel certain that no order of his is being "hung up" in the office, or is being rendered futile by the neglect of some trifling but necessary detail, unless he insists on his staff "working to dates" whenever the work permits of it ; compliance being secured by a system of register-keeping which traces from start to finish every stage in the execution of each of his orders. And whatever may be the arrangements he makes for this purpose, it is essential that they should be adhered to with the utmost strictness : every subordinate must be made to realise that to omit to make an entry in a register is a serious misdemeanour ; while should a date have been fixed for the submission of a report or note or anything of the kind, to omit to put up the papers of the case on that date, *whether the order has been carried out or not*, amounts to a heinous crime.

---

## CHAPTER V

### *Organization scheme for a large municipality.*

**A typical city municipality—Suggested scheme for the Secretary's side—  
Suggested scheme for the Engineer's side.**

#### **A typical city municipality.**

The Commissioners have now reached the final stage of their task of organizing their staff. They have complied with the first four conditions of successful organization enumerated at the beginning of the last chapter by adopting the dual system and formulating the rules necessary for its successful working. What remains for them to do is to differentiate the various departments, framing their constitution in conformity with the last two of the six conditions, namely, the condition of "adequate staffing" and the condition of "elasticity in the staffing arrangements;" or in other words, as we said above, "dividing among them in accordance with their relative importance, the men and money they are able to provide."

Hitherto our typical town has been dealt with on general lines as "a large municipality of an advanced type." Now however this is no longer feasible; we cannot attempt to fix the number of departments, and discuss them in detail, until we have provided our municipality with a definite income, and made some more or less definite assumptions with regard to such other factors of the problem as the situation of the town, the size and density of its population, its system of taxation, and its water-supply. To do this, let us take the statistics of the twenty largest municipalities in India. They will give us an average population of about 1,45,000, and an incidence of taxation ranging from Rs. 2-8 to Rs. 3 per head of population per annum. So we shall be conforming closely enough to actual con-

ditions if we give our Commissioners a community of 1,50,000 persons to provide for, and an annual income *from all sources* of Rs. 4,50,000 to do it with.

We shall also be conforming more or less to average actual conditions if we assume, with regard to the other factors mentioned above, that the town is situated in the plains, that its population is mainly urban, that its system of taxation is based on rental values, and that its inhabitants are supplied with filtered water at the rate of eight to twelve gallons per head per diem.

The task before our Commissioners is therefore to decide what departments it is necessary to provide to carry on municipal work in a town of this description, and what staff it is necessary to give to each of these departments, in order to get the best value out of their four and a half lakhs of income, in the way of promoting the health, safety and comfort of its inhabitants. And they will find that before they can feel justified in deciding on the relative importance to the community of the various kinds of municipal services, and in allotting the funds and men necessary for the performance of each such service, they must institute searching enquiries in many directions, work out elaborate calculations of cost and value, and weigh and discuss many alternative policies, checking each stage of their deliberations by reference to the actual experience of their own and other municipalities.

It would, of course, be hopeless for us to pretend to follow these investigations step by step. What we can do, however, is to assume that the Commissioners *have* duly enquired, calculated, discussed, and checked; and that as a result of their labours they have obtained the particular scheme of organization that is best suited to the circumstances of a town of the description given above. We can then take the scheme as it stands, and "work backwards" from it, so to speak, discussing it department by department, and explaining, as we go along, the calculations and considerations on which the departmental distribution has been based.

Such a scheme has been prepared in two parts—one ~~for~~

the Secretary's side of the office, and the other for the Engineer's side. Each part will be found below at the end of the section to which it refers. They have been printed on double pages, the inner halves of which have been left blank in order to allow of their being referred to when reading the explanatory notes now to be given.

Let us then deal first with the Secretary's side.

### **Suggested scheme for the Secretary's Side.**

[*For scheme see below, opposite page 80.*]

The scheme shows the staff necessary for the performance of the nine duties noted on page 66 above as falling within the province of the Secretary, *viz.*, Meetings, By-laws, Taxation, Correspondence, Records, Accounts, Elections, Collections, and Stores.

Let us examine it in detail, noting department by department the duties of the principal officers and the calculations on which the strength of the staff has been based.

#### **1. General Department**

*Head clerk*—General supervision; specially responsible for the maintenance of files containing Government circular orders and Chairman's standing orders; attends General Meetings and sub-committees in the absence of the Secretary.

*Four clerks*—Work in this department is of so varied a nature that it is rather difficult to find a basis of calculation for the number of clerks required. The best basis is perhaps the number of letters issued and received. It is calculated that there should be one clerk for every 750 letters issued or received per annum. Estimated number of letters 3,000, (1,500 issued, 1,500 received). Registers kept are, (i) Register of letters received, (ii) Register of letters issued, (iii) Sorting register of current correspondence.

*Petition clerk*—Petition work only. Basis of calculation 1,500 petitions per man per annum. Estimated number 3,000. **This excludes Assessment petitions.**

*Record-keeper*—Keeps following registers—(i) Record-room register, (ii) Register of deeds and documents, (iii) Sorting register of old correspondence, (iv) Index register of building petitions.

## **2 Accounts Department**

*Accountant*—General supervision; specially responsible for the preparation of periodical statements and returns, the Budget, and the Administration Report; attends the Government Auditor when preparing Audit report. Drafts all correspondence connected with his department.

*Five Assistant Accountants*—Basis of calculation Rs. 1,00,000 of expenditure per man per annum. Estimated expenditure Rs. 5,00,000 (Rs. 4,50,000 Revenue and Rs. 50,000 Loan). Their work is the keeping of the thirty or forty registers prescribed by the Account Rules.

*Engineer's Accountant*—Deals with all accounts connected with the Engineer's side; checks contractors' bills, workshop accounts, and all registers kept by officers under the Engineer (nine altogether); keeps all stamp accounts, passes work-bills, and writes completion certificate, and drafts Budget estimates and annual reports for the Engineer.

## **3. Collection Department**

*Tax-collector*—General supervision; authorized to carry on routine correspondence with ratepayers; personally grants receipts for all taxes paid into the office.

*Collection Inspector*—Supervises the outdoor work of the bill-collectors. Special duties: (i) to explain to ratepayers challenged entries in their bills; (ii) to personally execute warrants in "difficult" cases; (iii) to make local enquiries for the purpose of checking reports submitted by bill-collectors on (a) "irrecoverable" warrants, (b) holdings to be sold, (c) holdings not in existence, (d) new and improved holdings; (iv) to make local enquiries in all mutation cases.

*Fifteen Bill-collectors*—Basis of calculation, 1,000 bills per man per quarter. Estimated number of bills 15,000 per quarter.

They serve bills, and notices of demand, and execute warrants ; also submit quarterly lists of non-existent, new, and improved holdings.

*Seven Clerks*—Basis of calculation 2,000 ratepayers per head. Estimated number of ratepayers 15,000. Their chief work is to check in detail the work of the bill-collectors, and to keep up about sixteen registers prescribed by the Account Rules.

#### **4. Cash Department**

*Cashier*—Receives all money, and grants receipts ; pays out all cash, and keeps vouchers ; keeps following registers—(i) Cash-book, (ii) Register of permanent advances, (iii) Court-fee account.

#### **5. Stores Department**

The basis of calculation is Rs. 50,000 worth of stores per man. Estimated annual value of stores consumed is Rs. 1,00,000. The store-keeper and his assistant prepare the orders for all articles purchased through contractors, weigh, measure, and store them, granting receipts ; also check indents from departments, and issue stores daily. This department keeps eight registers and ledgers in all.

#### **6. Law Department**

*Municipal Pleader*—Gives his opinion to the authorities on all legal matters, conducts all cases in Civil and Revenue Courts, and specially difficult criminal prosecutions or cases for breach of the by-laws. Estimated number of cases 200, viz., suits for realization of arrears 150, regular civil suits 25, criminal and municipal prosecutions 25. The municipal pleader is, of course, not a whole-time servant. He gets a monthly retaining fee *plus* a fixed amount for each case in which he is employed.

*Law Clerk*—Writes out plaints and written statements, receives and deposits all money due to the municipality from the courts, takes copies of deeds, plans and other documents from the courts and public offices, keeps accounts of imprest cash and advances, and generally “ looks after ” cases before the courts,

**Suggested scheme for the Engineer's side.**

[For scheme, see below, opposite page 90.]

The scheme shows the staff necessary for the performance of the sixteen duties noted on page 66 above as falling within the province of the Engineer, viz., Conservancy, Roads, Lighting, Drainage, Water-supply, Construction, Public Markets, Food Inspection, Vital Statistics, Fire Prevention, Building Regulations, Slum Improvement, Pounds and Ferries, Burial Grounds, Assessment, and Prosecutions.

It will be seen that he has a large staff to control—about 1,450 persons altogether. The chief point in connection with the organization of this large force is the distribution of responsibility among the heads of departments; and some explanation of the system of distribution adopted in the scheme may be given.

1. Eleven separate heads of departments are provided. This gives almost too large a number of officers dealing directly with the Engineer. However, it is difficult to see how the number can be reduced, without combining two or more departments under an *additional* officer of superior status, whose pay would, of course, be a considerable item in the establishment charges.

2. The Construction department is kept entirely separate from what may be called the "routine" and "maintenance" departments. This is an important point. Experience shews that where both construction work and routine work are given to the same officer (the Assistant Engineer for example), routine work makes so many and such urgent calls on his time, that the construction work—especially those parts of it that do not *show*, such as the preliminary survey, and the working out of engineering details—is likely to go to the wall.

3. Water-supply is dealt with by two separate departments. This is unavoidable. Where, as in most towns, the intake is some miles away from the distributing centres, a single officer cannot supervise the whole work satisfactorily, unless, of course, he is appointed as an *addition* to the staff shewn in the scheme.





## SECRETARY'S SIDE

### *Heads of Departments.*

#### **I General Department**

HEAD CLERK	{ 4 Clerks	
	{ 1 Petition Clerk	{ 1 Assistant Clerk
	{ 1 Bookbinder	{ 1 Messenger
	{ 1 Record keeper,	{ Bookbinder
	{ 1 Office caretaker	
	{ 3 Messengers	

#### **II Accounts Department**

ACCOUNTANT	{ 2 Assistant Accountants
	{ 1 Engineer's Accountant
	{ 1 Messenger

#### **III Cash Department**

CASHIER	{ 1 Bank Messenger
	{ 1 Messenger

#### **IV Collection Department**

TAX-COLLECTOR	{ 1 Inspector	{ 15 Bill Collectors	{ 15 Messengers
	{ 7 Clerks		
	{ 1 Messenger		

#### **V Store Department**

STORE KEEPER	{ 1 Clerk
	{ 1 Bookbinder
	{ 1 Messenger

#### **VI Law Department**

MUNICIPAL CLERK	{ 1 Clerk
	{ 1 Process-server
	{ 1 Messenger

4. The six remaining "routine" duties, namely, Assessment, Building Regulations, Roads, Conservancy, Drainage, and Lighting are divided among three departments—Assessment Building Regulations and Roads going to one department, Conservancy and Drainage to another, and Lighting to a third.

The reasons for this arrangement are as follows :—

(a) The Assessment and Building Regulation departments are closely connected ; it is obviously desirable that the officer who scrutinises the plans of a new building, and watches its erection, should make the valuation of it when it is finished. Moreover, in view of the pecuniary interests involved, it is desirable that this officer should hold a high position in the staff, and be at least as well paid as any other head of a department. But the assessment and building regulation work taken together would not provide a sufficient amount of work for an officer of this stamp. Some other responsible work must be found for him ; and it has been found in practice, that the road-repairing work, *i.e.*, the supervision of the work of the road overseers, is the most suitable in this respect, and fits in best with his other duties.

(b) In Presidency towns and some of the larger municipalities, it is the practice to divide up the sanitary duties, *viz.*, conservancy, drainage, street-cleaning, &c., among two or more distinct departments. All this work however is of much the same general character ; and in practice, it is not always easy to decide whether a particular duty falls within the province of the Health Officer, the Conservancy Inspector, or the District Engineer. In an ordinary municipality, it will probably be found that the best way to prevent friction and the over-lapping of authority, and to fix responsibility, is to bring all these duties together, and make them over to a single department, as has been done in the scheme.

(c) It will be seen that the head of the Miscellaneous department is called the Lighting Inspector. The lighting of the town is his chief duty ; but he will also be called upon to perform various other minor duties, such as the supervision of pounds and ferries, burning *ghats* and burial grounds, the preparation of

vital statistics, and the outdoor work connected with the granting of the various licenses for which fees are paid to the municipality. These miscellaneous duties are often entrusted to the Sanitary department, but that department has quite enough to do in attending to its own special work, and should be relieved of everything else if possible.

5. In some head-quarter municipalities the Food Inspector (who should, of course, be a qualified medical man) works under the direct supervision of the Civil Surgeon. There does not seem to be any valid reason for violating the fundamental principles of municipal administration by thus dividing responsibility and introducing an authority who is not accountable to the ratepayers. It is in no way derogatory to an Assistant Surgeon to work under the order of an experienced Engineer, and as a matter of fact, a Food Inspector, unless carefully controlled, is apt to be overzealous, and to cause hardship to the public by setting up unnecessarily high standards of food-purity and market management. It is therefore desirable that the ordinary procedure should not be departed from, and that the Food Inspector should work under some officer, who (paid or unpaid) is responsible directly to the Commissioners, and through them to the ratepayers. Moreover, in municipalities elsewhere than at head-quarters of districts, supervision by the Civil Surgeon is impossible.

Now let us take in order each of the departments shewn in the scheme, as we did in the case of the scheme for the Secretary's side.

#### **1. General Department.**

As in the case of the corresponding department on the Secretary's side, the number of letters issued and received is taken as the basis of calculation. The staff given is sufficient to deal with 1200 letters (600 issued and 600 received).

#### **2. Construction Department.**

Deals with construction work only. It is assumed that the

municipality is carrying out a large scheme of drainage, or water-supply, or both. If no such scheme is in hand, the department will be abolished altogether. The staff is provided for an estimated annual expenditure of, say, Rs. 50,000 a year on original construction work.

The minimum qualification for the Assistant Engineer should be that of an upper-grade subordinate.

#### **3. Water filtering & Pumping Department.**

The staff is provided for the filtering and pumping of 1,50,000 gallons of water per diem, which is assumed to be effected by two engines consuming on the average three tons of coal per diem. The Water-works Superintendent should be a trained mechanical engineer. The fourteen coolies are mainly employed in spreading and washing the sand for the filters.

#### **4. Filtered water Distribution Department**

The staff is provided to deal with ten miles of rising main, and forty-five miles of distributory pipes. The work of the department is as follows : laying and shifting of pipes ; supervision of the work of the plumbers dealing with private connections ; attending to and repairing leaks and bursts ; up-keep of reservoirs and hydrants ; detection and prevention of waste ; recording of metre readings ; detection and prosecution of offenders against the laws and by-laws affecting water-supply.

The minimum qualification for the Water-works Inspector should be that of an upper-grade subordinate.

#### **5. Building Regulation and Assessment Department.**

: As noted above, this department is responsible for (a) the assessment of the town, (b) the regulation of the building of houses and huts, and (c) the construction and repair of roads. The staff has been provided in accordance with an estimate of (a) 15,000 holdings, (b) 400 building petitions for new and improved holdings per annum, and (c) 40 miles of roads.

*Building Inspector and Assistant Assessor.*—Deals with all

assessment work, enquiring personally into all assessment petitions, inspecting, measuring, and valuing new and improved holdings, inspecting vacant holdings, and checking warrants returned as non-realizable by the collection department. Is in general charge of building of houses and huts, making personal inspections before approving plans and sites, and periodically inspecting holdings in course of construction ; also in general charge of petty construction and road construction and repair, personally checking all estimates and bills submitted by the road overseers.

The minimum qualification for this post should be that of an upper-grade subordinate.

*Head Clerk.*—Responsible for the whole of the clerical work of the department ; also responsible for preparing for the collection department in triplicate every quarter 15,000 bills shewing the demand for holding-rate, lighting-rate, water-rate and latrine-fee. This department keeps the eighteen assessment registers prescribed by the Account Rules.

*Road Overseers.*—It will be seen that the division of work between the two overseers is made by *area*, and not by *duties*. With the latter method, *i.e.*, one overseer in charge of the building work and the other in charge of the roads work of the entire town, a good deal of time would be wasted by each officer in getting about from one end of the town to the other ; moreover for four or five months in the year the " roads " officer would have practically nothing to do.

The duties of a road overseer are as follows : supervision of all work on roads including construction, renewal, and petty repair ; keeping of the road-charts and preparation of annual road statements ; road-watering ; preparation of plans and estimates for culverts and other petty works, and supervision of their construction ; preparation of preliminary surveys for building and assessment work ; supervision of private buildings and huts under construction ; preparation of plans for land acquisition ; general charge of all public buildings, *ghats*, tanks, gardens and squares in his division.

**6. Sanitary Department.**

It is assumed that the bullock-cart system of conservancy is in force, and that the drainage system is mainly "kutchā." With a population of 1,50,000 it may be assumed that there will be 15,000 private privies, 18 public latrines, 6,000 sullage-water cesspools and, (as noted above) 40 miles of roads and streets.

*Sanitary Inspector.*—His main duties are the supervision of the work of the six sanitary overseers, and the maintenance of discipline and efficiency among the very large labour force for which he is responsible. Special duties: the working out of plans for the improvement of slums; the taking of measures for dealing with the owners of insanitary tanks; the maintenance of stock, tools, and plant; the monthly payment of the sweeper-staff, (he must be present throughout); and the preparation and submission to the Engineer of the draft Budget of his department. He should be an upper-grade subordinate.

*Sanitary Overseers.*—The town has been divided into six circles, each under an overseer. Each overseer therefore will on an average look after the sanitary requirements of a population of 25,000; and will deal with 2,500 private privies, 3 public latrines, 1,000 cesspools, and about 7 miles of roads and drains; this being the basis on which the menial staff has been calculated.

His main duties are those connected with the collection and removal of night-soil, sullage, and rubbish. Summarized shortly, they are as follows: to take early morning muster of sweepers, and distribute their work daily; to arrange for and supervise the cleaning of public roads, lanes, side-drains, ditches, channels and outfalls; and to arrange for the removing of trade-rubbish, and the cleaning of public and private latrines, privies and cesspools, and the disposing of sullage and night-soil at the sullage-filters and trenching-grounds; also to inspect all trenching-grounds, sullage-filters, incinerators, septic tanks, and skinning-platforms. Besides these conservancy duties, he is responsible for inspecting and reporting upon encroachments, dangerous buildings, dangerous and insanitary tanks, insanitary dairies and stables; he arranges for the killing of stray dogs, and the impounding of stray cattle;

he is responsible for the publication of all notices that have to be published by beat of drum ; and he prosecutes offenders against the laws and by-laws affecting sanitation.

His minimum qualification should be that of a lower-grade subordinate.

*Peons.*—Each overseer has under him on an average four peons, whose duties are to supervise in detail the work of the menial staff. The average circle will be divided into two sub-circles, in each of which there will be two peons, one in charge of the night-soil and sullage workers, (average number in each sub-circle being 50 night-soil workers, 8 night-soil carters and 8 sullage carters) ; and the other in charge of the rest, (average number in each sub-circle being 8 drain coolies, 5 wheel-barrow-men, 6 sweeping coolies and 4 rubbish carters). It is necessary to make this division between the work of the peons, because the night-soil work begins before day-break and is practically over by noon ; while the drain-cleaning and sweeping work goes on all day.

*Trenching-ground staff.*—Two trenching-grounds provided for. A trenching-ground will naturally be in general charge of the overseer in whose circle it lies. Each trenching-ground is in direct charge of a *jemadar*, who resides on the ground and is generally responsible. The trenching-clerk attends from day-break up to noon, to check the number of carts and buckets brought to the trenching-ground. He is independent of, and, in some measure, a check on, the *jemadar*.

#### 7 Miscellaneous Department

As noted above, this department is responsible for the lighting of the town, the control of burning and burial grounds, cart-registration, and all work in connection with the various kinds of licenses with the exception of the actual collection of the fees. It is assumed that the main streets of the town (say one-third of its area) are lighted by 450 gas lamps under contract with a gas company, the rest of the town being lighted by oil-lamps under the direct management of the Commissioners.

The staff has been provided for an estimate of 450 oil lamps, 250 carts, and 900 licenses, (horses and carriages 500 ; stables, dairies, &c., 350 ; dangerous and offensive trades 40 ; private markets 10).

*Lighting Inspector.*—Generally supervises the work of the two overseers. Special duties—strictly supervises the gas-lighting arrangements with the view of reporting any failure on the part of the gas company to carry out the terms of its contract ; receives oil from store ; personally enquires into petitions and complaints with regard to lighting received from the ratepayers ; makes occasional rounds of inspection at night ; personally registers carts and receives registering-fees ; carries on routine correspondence with the public with regard to licenses.

*Lighting Overseer.*—A night officer. Supervises the work of the lamp-lighters, (30 lamps to each man). He checks the amount of oil given to the lamps and is responsible that they are lighted, put out, and cleaned at the proper time ; keeps an account of all burners, chimneys, and pots issued ; goes on rounds of inspection every night.

*License Overseer.*—As regards licenses, his work is chiefly of a detective character, *i.e.*, he makes regular rounds with the object of discovering cases in which the taking out of a license is being avoided ; conducts license prosecutions in the courts ; inspects all burial and burning grounds daily, enquiring into complaints made by the public, and collecting death figures.

*Clerk.*—Does all the clerical work and keeps all the registers of the department. Specially responsible for writing out all licenses to be sent to the Collection department for collection of fees.

#### **8. Cattle Department.**

The municipality is assumed to keep 200 buffaloes (for the night-soil and sullage carts), 50 bullocks (for the drain-cleaning and rubbish carts), and 20 ponies (for the watering-carts), and the staff has been provided accordingly. In order to avoid unnecessary length of "lead," at least two cattle-yards should be provided



—one in “A” division and the other in “B” division—each of which takes half the staff. This department is responsible for the housing and feeding of the cattle, and for keeping them in health ; the animals are actually worked by carters belonging to the Sanitary and Roads departments. Owing to this arrangement (which considerations of caste render necessary) one of the main duties of the department is to make a strict daily examination of the entire stock with the view of ascertaining whether they have been over-driven or maltreated.

*Superintendent.*—Should possess some veterinary qualifications, and have had experience of handling unskilled labour. Supervises both cattle-yards, and maintains discipline and efficiency among the staff ; treats sick animals and segregates them when affected by contagious diseases ; prepares daily fodder indent on the store-keeper ; takes early morning muster at one or other of the yards, and distributes the animals among the carters : takes evening muster at one or other of the yards, and examines the condition of the animals returned.

*Yard Jemadar.*—In general charge of the yard. Receives fodder, &c., from the store-keeper, and is responsible for seeing that all the animals in the yard are fed, watered, groomed and littered down ; takes morning and evening musters in the absence of the superintendent.

*Assistant Jemadar.*—A night officer and in general charge of the yard at night. Takes night muster (*see* below under “Conservancy”) and distributes animals, receiving them back in the early morning.

*Eighteen cattle-men.*—About one for every fifteen head of cattle will be found sufficient. They look after the buffaloes and bullocks, feeding, watering, and washing them, and keeping the sheds and enclosures clean.

*Four syces.*—Do the same for the ponies ; one syce for every five ponies will be found sufficient.

#### 9 Market Department.

The staff is provided for one municipal market with slaught-

er-house attached. The market revenue is estimated at Rs. 1,700 monthly (Rs. 600 slaughtering-fees and Rs. 400 stall-rents).

*Market Superintendent.*—Should reside on the premises. In general charge of the market ; collects stall-rents and slaughtering-fees ; inspects animals brought for slaughter ; classifies and stamps the meat, and is responsible for the quality of the food-supply generally ; investigates all complaints made by the public.

*Market-keeper.*—In general charge of the municipal property in the market, and preserves order.

*Peon.*—Works directly under the superintendent, and assists him in collecting fees and rents.

#### **10. Food Inspection Department.**

*Food Inspector.*—Makes daily rounds of inspection of markets and shops, seizing unwholesome food and drink and prosecuting vendors in the courts ; performs analyses when necessary. Directs operations of disinfecting gangs in epidemics ; and when ordered by the Engineer examines and reports on particular insanitary tanks, catchpits and drains. Examines medically municipal officers entering the service or applying for sick leave.

The minimum medical qualification for the post should be that of a Licenciate of Medicine and Surgery.

#### **11 Fire Brigade Department.**

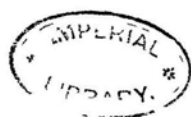
*Superintendent.*—Responsible for the training and discipline of his force of firemen, and for keeping engines, pumps, etc., in a high state of efficiency. His arrangements must ensure the whole effective force being brought promptly to the scene of any fire at any hour of the day or night.

The number of fires occurring in the year may be estimated at ten.

Our Commissioners have now completed the task they set themselves in Chapter V. They have worked out in full detail a scheme of organization which satisfies all the six conditions

formulated in that chapter ; and which besides admits of the application of all the eight working rules which we have found to be necessary for the translating of these conditions into actual practice.

---



## ENGINEER'S SIDE

### *Heads of Departments.*

#### I. General Department.

HEAD CLERK .. .. { 1 Clerk.  
1 Bill checker.  
1 Messenger.

#### II. Construction Department.

ASSISTANT ENGINEER .. { 2 Clerks of Works.. { 2 Messengers,  
2 Coolies.  
1 Surveyor.. { 1 Draughtsman .. { 1 Tracer,  
1 Leveller .. { 1 Chairman.  
4 Coolies.

#### III. Water-filtering & Pumping Department.

WATER-WORKS SUPERINTENDENT. { 1 Door-keeper.  
2 Keymen.  
2 Filtermen.  
2 Asstt Engineers.. { 2 Greasers  
2 Firemen .. { 4 Coal trimmers.  
5 Cleaners.  
1 Blacksmith.  
2 Filtermen.  
14 Coolies.

#### IV. Filtered water Distribution Department.

WATER-WORKS INSPECTOR .. { 1 Sub-Inspector .. { 2 Pipe-layers.  
8 Coolies.  
1 Messenger.

#### V. Building Regulation & Assessment Department.

BUILDING INSPECTOR AND ASSISTANT ASSESSOR. { Head Clerk .. { 4 Clerks.  
1 Road Overseer & Building Survey- or "A" division. { 1 Head Bill-writer .. { 4 Bill-writers.  
2 Office Messengers.  
2 Road Foremen .. { 25 Coolies.  
8 Carters.  
4 Bullock roller drivers.  
12 Watering cart syces.  
1 Steam roller driver. { 1 Fireman.  
1 Water-carrier.  
2 Road Foremen .. { 25 Coolies.  
8 Carters.  
4 Bullock cart-drivers.  
12 Watering cart syces.  
1 Blacksmith.  
1 Rivetter.  
1 Carpenter.  
1 Hammerman.  
1 Bellows boy.  
1 Road Overseer & Building survey- or "B" division. { 1 Workshop Overseer  
1 Draughtsman .. { 1 Tracer

## ENGINEER'S SIDE.—*Contd.*

### *Heads of Departments.*

#### VI. Sanitary Department.

SANITARY INSPECTOR	..	1 Clerk.	..	24 Peons	..	100 Drain coolies.
..	..	6 Overseers	..	2 Trenching ground Jemadars.	..	60 Wheel-barrowmen.
..	..	2 Tally Clerks	..	90 Nightsoil carters.	..	75 Sweeping coolies.
..	..	2 Tally Clerks	..	90 Sullage carters.	..	80 Rubbish carters.
..	..	2 Tally Clerks	..	75 Sweepers.	..	600 Sweepers.
..	..	2 Tally Clerks	..	2 Messengers.	..	..

#### VII. Miscellaneous Department.

LIGHTING INSPECTOR	..	1 Clerk.	..	1 Lighting Overseer.	..	15 Lamplighters.
..	..	1 License Overseer.	..	2 Burning ground registrars.	..	1 Tinsmith.
..	..	1 License Overseer.	..	1 Burial ground registrar.	..	1 Messenger.

#### VIII. Cattle Department.

CATTLE SUPERINTENDENT	..	2 Yard Jemadars	..	2 Assistant Yard-jemadars.	..	18 Cattlemen.
..	..	2 Yard Jemadars	..	4 Syces.	..	2 Water-carriers.
..	..	2 Yard Jemadars	..	2 Messengers.	..	..

#### IX. Municipal Market Department.

MARKET SUPERINTENDENT	..	1 Slaughterman.	..	1 Market-keeper	..	1 Water-carrier.
..	..	1 Peon.	..	1 Peon.	..	2 Sweepers.

#### X. Food Inspection Department.

FOOD INSPECTOR	..	2 Coolies.
----------------	----	------------

#### XI. Fire Brigade Department.

FIRE BRIGADE SUPERINTENDENT	..	1 Engine driver.	..	4 Leading Firemen.	..	15 Firemen.
..	..	1 Driver.	..	3 Syces.	..	..