

are called municipalities. There are some 781 municipalities in India with over 210 lakhs of people residing within their limits. Of these municipalities about 710 have got a population of less than 50,000 each and the remaining have got a population of 50,000 or over. More than 20 per cent. of the population of Bombay live within municipalities, while only 3 per cent. is the quota for Assam.

The big municipalities of Calcutta, Bombay and Madras constituted by special acts are commonly known as corporations. Others are known as municipalities. Calcutta and Bombay have also established improvement trusts with a view to making provision for the improvement and expansion of the cities by opening up congested areas, laying out or altering streets, providing open spaces for purposes of ventilation or recreation, demolishing or constructing buildings and rehousing the poorer working classes displaced by the execution of improvement schemes. The scheme of improvement trusts has also been extended in other provinces. Improvement Trusts have thus been constituted in Lucknow, Allahabad and Cawnpore in the United Provinces.

The municipal government is vested in a body of commissioners or councillors. The councillors of the corporation vary in number from 106 in Bombay to 61 in Madras, mostly elected on a fairly wide franchise, varying from 10% in Bombay to 5% in Madras. In the case of other municipalities about 14% of urban population enjoys municipal franchise. In every town the majority of the councillors are elected, varying from four-fifths of the total membership in Bihar and Orissa to two-thirds in Bengal. The nominated members usually represent minorities, special interest and men of special abilities. All questions are decided by majority of votes at a meeting. The government reserve the right of suspension of a municipality in case of gross mismanagement, abuse of power, or neglect of duty. The provincial governments exercise their power through District Officers and Divisional Commissioners to whom all the proceedings are supplied by the Boards.

District Boards.

The duties and functions assigned to the municipalities in urban areas are entrusted to district and local boards in rural areas. In almost every district of British India except in

Assam, there are district boards and sub-district boards.

Throughout India there are some 207 district boards with 584 sub-district boards and more than 800 union committees. The machinery has jurisdiction over a population of $21\frac{1}{4}$ crores. The majority of the members are elected on a franchise which now gives the vote to a little more than 3.2 per cent of the population. Communal electorate for Muhammedans are provided in the Bombay Presidency and the United Provinces for district boards and in Assam for local boards. Minorities and special interests are represented by nomination. Almost everywhere in the district boards the chairman is elected. Their constitution is much the same as that of the municipalities. Besides, there are other minor units of village government. The panchayats look after such matters like sanitation and wells in the villages. Mostly members are elected. In Madras, Bombay and Assam all the adult males have a right of vote for this election.

Functions of Local Bodies.

The main functions of these local bodies are :—

(a) Public Safety. This includes the construction, upkeep, cleansing, watering, naming and lighting of streets and roads; the protection from fire and from dangerous buildings, the regulation of public nuisances and dangerous trades.

(b) Conservation of public health. The preservation of the public health—principally with reference to the reclamation of unhealthy areas, prevention of epidemic diseases, vaccination, sanitation, drainage and the provision of medical relief through hospitals, dispensaries, supply of midwives, etc., the construction of tanks, washing places, bathing places, parks, etc., comprise an important function of municipalities.

(c) Commercial undertakings. Water supply, gas, and electric supply, the construction and maintenance of bazars, crematoriums, tramways and bus services, etc., are financed and managed by the corporations.

(d) Imparting of education, maintenance of middle or secondary schools, colleges, libraries, museums, social service exhibitions and particularly propagation of primary education, comprize the important function of municipalities.

Municipalities make lump grants to schools within their jurisdiction. In some, particularly as regards primary education, they start and maintain free primary schools. The Calcutta Corporation maintains more than 100 free schools.

Finance of the Municipal and Local Boards.

Municipalities are allowed a wide choice in the form of the taxes which they may levy, Octroi duties, terminal taxes, taxes on circumstances and property, professions and vehicles, have all been utilised, while for particular services, such as education and water supply, special taxes or cesses are imposed. The total municipal income is 14·03 crores out of which only the four cities of Calcutta Bombay, Madras, and Rangoon together account for 40%.

The Government's control in financial matters is limited generally to cases in which the interest of the general public call for special protection. The Government has the right to alter a municipal budget, if it considers that due provision has not been made for loan charges and for the maintenance of a working balance, and it may intervene in the administration of a council by way of preventing or initiating action in matters affecting human life, health, safety or public

tranquillity. But these powers have been rather infrequently exercised.

The main source of rural authorities is a tax or cess levied on the annual value of land and collected with the land revenue, though this may be supplemented by taxes on companies and professional men and by tolls on vehicles. A very large proportion of the revenue of these authorities, however, consists of subvention from the various provincial Governments. These are given not only as grant-in-aid for particular services, but not infrequently in the form of capital sums for the provision of works of constructions.

It is said that the financial resources are quite inadequate to meet the needs of these local bodies. The grant given by the Local Governments does not make up deficit. In Bombay the Government grants amounted to nearly 60% of the revenue of district Boards. "The most disturbing feature is however the failure to collect taxes imposed by the local bodies. In the municipalities since the Reforms uncollected arrears have been mounting up to very large sums. This feature is referred to by almost every provincial government in reviewing the work of their local

bodies and it is a great laxity in this respect." Steps are however being taken to remedy this defect.

Local self-Government under the new Constitution.

Under the new constitution the position of the Local self-Government remains the same. It remains a provincial subject under the control of a minister responsible to the legislature. List 2 of the 7th schedule to the Government of India Act 1935 provides that "Local Government, that is to say, the constitution and powers of the municipal corporation, improvement trust, district boards mining settlement authorities and other local authorities for the purpose of local self-government or village administration" together with "Public health and sanitation; hospitals and dispensaries; registration of births and deaths" will form part of the Provincial Legislative List. Thus although statutorily the new constitution makes no difference, still it is apt to produce some substantial changes indirectly. The system of nominations to the legislatures has been almost completely brought to an end under the new constitutions. It is therefore not far to visualise of all-elected local bodies. Not very late

this question was referred to in the United Provinces Legislative Council. The wide extension of franchise from 3% to about 14% to the provincial lower house and the considerable increase in the number of the constituencies are bound to produce some corresponding effect on these self governing bodies. A general growth of public consciousness in the body politic, as a result of the new constitution, has further give an impetus for the increased activities of the department of local self government. Panchayats are already increasing. Lastly, finance is also a transferred subject now and the legislature has an effective control over the provincial purse to utilise it for the development of this institution.

Municipal accounting

In municipalities and other local organisations, accounting forms one of the chief duties of a Secretary. Accounts work includes general supervision, preparation of periodical statement and returns, the budget, the administration report on accounts; and helping the work of Gov't auditors. Engineers accounts deal with all account connected with engineers side. But Secretary has also to acquaint himself

with those accounts. Check contractors, bills workshop accounts and registers kept by officers under the engineer should be prepared as detailed in Rules on the subject. Stamps account, pass work bill are the main items.

The collection department supervises the outdoor work of bill collector. Special duties are (1) to explain to ratepayers challenged entries in their bills (2) to personally execute warrant in defficult cases (3) to make local enquiries (4) new and improved holding.

The cash department must Keep cash book Register of permanent advances and court fee account in addition to other registers and documents.

CHAPTER X

POST WAR EDUCATIONAL DEVELOPMENT IN INDIA

The expenditure on education in India in 1938-39 was Rs. -/8/9 per head, while this expenditure per head in Great Britain was Rs. 33/2/- before the War. This shows the neglect of education in this country. The Government were however conscious much earlier about the necessity of expansion of education and effective reforms in that direction and with that end had set up a Central Advisory Board of Education under the chairmanship of the Education Member of the Viceroy's Executive Council.

The Board in its recent report "Post War Educational Development in India" has made suggestions for the improvement of the existing system of education in India. They have devoted their attention in recent years to surveying the main fields of educational activity with a view to ascertaining what would be the minimum provision for education in India. Since their reconstitution in 1935 they have set up Com-

mittees to study and report upon the following, among other, subjects :—

1. Basic Education (2 reports)
2. Adult Education.
3. The Physical Welfare of School-Children.
4. School Buildings.
5. Social Service.
6. The Recruitment, Training and Conditions of Service of Teachers in Primary, Middle and High Schools.
7. The Recruitment of Education Officers.
8. Technical (including Commercial and Art) Education.

Recently the Board reviewed the recommendations of these Committees with special reference to post-war needs and to the possibility of post-war developments. These recommendations provide the foundations upon which an efficient system of public instruction, suited to the needs and circumstances of this country, can effectively be erected. The expenditure involved is admittedly heavy but the experience of war suggests that when a paramount necessity can be established, the money required to meet it can and will be found.

Pre-Primary Education.

The Board have stressed the necessity of nursery schools for small children. In most countries in Europe and America it has now been clearly recognised that the nursery or infants school has an important part to play in every school system. Russia, where an extremely efficient system of kindergartens, creches and nurseries has been evolved, deserves special mention in this connection. Outside India the nursery school has come into its own and has taken a well-defined place in the fabric of public instruction, but the importance of looking after the physical and mental welfare of future citizens from their earliest years has still to be brought home to the responsible authorities in this country. The summary of the main conclusions of the Board in respect of pre-primary education is reproduced below :—

“(a) An adequate provision of pre-primary instruction in the form of Nursery Schools or classes is an essential adjunct to any national system of education. The provision in this respect at present is negligible.

(b) In urban areas, where sufficient children are available within a reasonable radius, separate Nursery Schools or departments may be provided:

elsewhere Nursery classes should be attached to Junior Basic (Primary) Schools.

(c) Nursery Schools and classes should invariably be staffed with women teachers who have received special training for this work.

(d) Pre-Primary education should in all cases be free. While it may not be feasible to make attendance compulsory, no efforts should be spared to persuade parents to send their children to school voluntarily, particularly in areas where housing conditions are unsatisfactory and/or mothers are accustomed to go out to work.

(e) The main object of education at this stage is to give young children social experience rather than formal instruction.

(f) On the basis of a normal age-range of three to six years provision has been made for 10,00,000 places in Nursery School and classes.

(g) The total estimated net cost of the proposals when in full operation is Rs. 3,18,40,000."

A Summary of the main conclusions of the Board for basic Education.

"(a) A system of universal, compulsory and free education for all boys and girls between ages of six and fourteen should be introduced as speedily as possible though in view of the

practical difficulty of recruiting the requisite supply of trained teachers it may not be possible to complete it in less than forty years.

(b) The character of the instruction to be provided should follow the general lines laid down in the reports of the Central Advisory Board's two Committees on Basic Education

(c) The senior Basic (Middle) School, being the finishing school for the great majority of future citizens, is of fundamental importance and should be generously staffed and equipped.

(d) All education depends on the teacher. The present status and remuneration of teachers, and especially those in Primary Schools, are deplorable. The standards in regard to the training, recruitment and conditions of service of teachers prescribed in the report of the Committee approved by the Central Advisory Board in 1943 represent the minimum compatible with the success of a national system: these should be adopted and enforced everywhere.

(e) A vast increase in the number of trained women teachers will be required.

(f) The total estimated annual cost of the proposal contained in this chapter when in full operation is Rs. 200 crores approximately."

The following is the Summary of the main conclusions of the Board regarding High School Education.

(a) The High School course should cover six years and the normal age of admission should be about eleven.

(b) Entry to High Schools should be on a selective basis; only those pupils should be admitted who show promise of taking full advantage of the education provided. Additional places may be provided for those not selected provided that no cost falls on public fund.

(c) In accordance with the general principle set out in (b) above, places in High Schools should be provided for at least one child in every five of the appropriate age-group.

(d) In order to secure the right children, the methods of selection to be employed will require the most careful consideration. Special arrangements will have to be made for the transfer from Senior Basic (Middle) Schools to High Schools of suitable children and particularly of those who show signs of late development.

(e) High Schools should be of two main types (a) Academic (b) Technical. The objective of both should be to provide a good all-round education combined with some prepara-

tion in the later stages for the careers which pupils will enter on leaving school.

(f) The curriculum in all cases should be as varied as circumstances permit and should not be unduly restricted by the requirements of Universities or examining bodies.

(g) In order that no poor child of ability may be excluded, liberal assistance in the form of free places, scholarships and stipends should be available throughout the course.

(h) In order to secure teachers of the right type, the salary paid in all recognised school, whether maintained by the State or by private bodies, should private bodies, should not be less than those prescribed by the Central Advisory Board of Education.

(i) The estimated minimum net annual cost of the High School system outlined in this chapter when in full operation is Rs. 50 crores.

A Summary of the main conclusions of the Advisory Board regarding University education is reproduced below in this chapter :—

(a) Indian Universities, as they exist to-day, despite many admirable features do not fully satisfy the requirements of a national system of education.

(b) In order to raise students allround, the conditions for admission must be revised with the object of ensuring that all students are capable of taking full advantage of a University Course. The proposed reorganisation of the high school system will facilitate this. Adequate financial assistance must be provided for poor students.

(c) The present Intermediate course should be abolished. Ultimately the whole of this course should be covered in the High School but as an immediate step the first year of the course should be transferred to high schools and the second to universities.

(d) The minimum length of a University degree course should be three years.

(e) The tutorial system should be widely extended and closer personal contacts established between teachers and students.

(f) The importance of establishing a high standard in post-graduate studies and particularly in pure and applied research should be emphasised.

(g) Steps should be taken to improve the conditions of service, including remuneration, of University and college teachers where those

now in operation are not attracting men and women of the requisite calibre

(h) An Indian University Grants Committee should be constituted for the purposes and with the terms of reference set out in this chapter.

(i) To provide for the increased number of able all well prepared students which a national system of High Schools may be expected to produce, approximately 2,40,000 places, or double the existing number, should be available in Universities.

(j) The estimated total net annul cost of the scheme for University Education set out in this chapter when in full operation is Rs. 6,72 lakhs.

The question of Technical Education in this country was also reviewed by the Technical Education Committee and their main conclusions are reproduced below ;—

(1) In view of the recent expansion of industry and the likelihood of further development after the war it is necessary to plan immediately a comprehensive system of technical education at all stages.

(2) The function of Technical education may be described as two-fold, (a) to meet the need of industry and commerce for properly

trained workers of all grades and (b) to provide a suitable form of education for those boys and girls whose natural abilities can best be developed by instruction on practical lines.

(3) Technical education should be regarded as an integral part of any educational system and as in no way inferior to education of the academic type.

(4) Education from the earliest stages should be given a more practical character, and the curriculum should aim at making boys and girls familiar with practical as well as academic subjects

(5) Technical education must include commercial education and art in relation to industry.

(6) Agricultural education should be regarded as essential branch of technical education. Senior Basic (Middle as well as High Schools in rural areas should have an agricultural bias

(7) In view of the great importance of agricultural education for this country a special committee of educational and agricultural experts should be set up to consider the subject fully

(8) In order to provide suitable instruction and training for the different types of workers

required there should be the following main types of technical institutions :—

(a) Junior Technical or Industrial or Trade Schools.

(b) Technical High Schools,

(c) Senior Technical Institutions.

(a) and (b) will normally provide full-time instruction preparatory to employment, while (c) will also provide part-time instruction for those already in employment.

9) The type and duration of part-time instruction should be determined in consultation with the employees and according to the needs of the locality. It is desirable that part time classes should be held during the day rather than in the evening.

(10) Whenever circumstances permit, polytechnics are to be preferred to monotchnics.

(11) The following courses of studies should be provided in technical institutions.

(i) a two-year full-time course in Junior Technical or Industrial or Trade Schools, to which pupils should be admitted on leaving the Senior Basic (Middle) School at the age of about fourteen,

(ii) a six-year full-time course in Technical

High Schools to which selected pupils will be admitted on completing the Primary (Junior Basic) stage at about the age of eleven. The first three years of the course will be mainly devoted to general subjects,

(iii) a three year full-time Diploma course to which students will be admitted after passing the final examination of a Technical High School or an equivalent examination,

(iv) a two-year full time Advanced Diploma course for those who have passed the above examination,

(v) a three-year part-time Certificate course in Technical High School for students already in employment,

(vi) a two-year part-time Advanced Certificate course for those who have passed the above examination and,

(vii) classes in individual arts, crafts and other subjects related to Industry and Commerce for which there may be a sufficient demand.

(12) There should be only one external examination at the end of a course. Other examinations should be conducted internally.

(13) All teachers in technical institutions

should have some first-hand experience of some branch of industry or commerce.

(14) (a) Teachers of general subjects in Technical High Schools should receive the same grades of pay as teachers in ordinary High Schools. They may be granted up to five increments for appropriate industrial or commercial experience after the age of twenty.

(b) Teachers of technical subjects should receive the following scales of salaries :—

(i) Workshop or Laboratory Assistants—Rs. 50—1—75 p. m. The initial salary should be fixed according to experience.

(ii) Teachers Class III—Rs. 75—5—150 p. m.

(iii) Teachers Class II—Rs. 175—10—325 p. m.

(iv) Teachers Class I (including Heads of Deptts.)—Rs. 400—25—1,000 p. m.

(v) Principals—Salary according to the nature and size of the institution.

Teachers in Classes II and III may in certain areas be given an allowance of up to 50 per cent. to meet the higher cost of living or other special circumstances. There should also be a limited number of posts of special responsibility carry-

ing an allowance of Rs. 25 p. m. These will normally be limited to teachers in Class II and Class III.

(15) All teachers of technical subjects should be encouraged to keep in touch with the appropriate branch of industry or commerce and, with this object in view, they should be permitted to undertake consulting practice or commission, subject to approved conditions designed to prevent such private work interfering with the efficient discharge of their duties as teachers.

(16) There should be an adequate system of scholarships and maintenance allowances designed to ensure that no one having the necessary aptitude and ability should be prevented by lack of means from pursuing a course in technical institutions. Hostels should be provided wherever necessary.

(17) Technical institutions should be located in or near industrial and commercial areas, but students from other areas should have an equal opportunity of admission to those institutions. To ensure this it is necessary that technical education should be organised on an all India basis.

(18) Technical High Schools and Junior

Technical, Trade or Industrial Schools should be administered by Provincial Governments, but all technical education beyond this stage other than that given in the technological departments of Universities should be placed under a central controlling body which would have on it representatives of all the interests concerned. This body should be set up as soon as possible.

(19) The formation of the A. P. T. I. (1) is a most welcome step in the direction of co-ordinating technical instruction in the country. It should be given adequate representation on the central controlling body

(20) It is essential that subject to the recommendation in (18) above, the administration of all technical education should be under the Education Department of the Central or Provincial Government or State, as the case may be. There should be a separate inspectorial staff for this purpose. The Education Department should maintain close contact with the other Departments concerned with Industry and Commerce.

(21) As a corollary to technical education in its higher stages being administered by a central body, the financial responsibility will have to be accepted by the Central Government."

A Summary of the main conclusions of the Advisory Board regarding Training of Teacher is given below :—

“(a) The proposals for the recruitment and training of teachers as set out in the Report approved by the Central Advisory Board in January 1943 should be generally adopted.

(b) The existing training institutions are barely sufficient to meet wastage among existing teachers and to train those hitherto untrained

(c) New Training Schools and Colleges (including University Education Departments) must be provided to supply the additional teachers whom a national system will require. These will amount to over 20,00,000 non-graduates for schools of all types and 1,80,000 graduates for High Schools.

(d) Arrangements should be made to pick out suitable boys and girls towards the end of the High School course. This is particularly important in Girls' High Schools in view of the vast increase in the number of women teachers required.

(e) The courses provided should be essentially practical and should be specially related to

the needs of the schools in which the trainees will subsequently serve.

(f) No fees should be charged either in Training Schools or Training Colleges: liberal assistance should be available for the maintenance of poor students.

(g) Referresher courses are of the utmost importance and should be provided for all types of teachers but particularly for those in remote rural areas. Facilities should be provided for research and selected teachers should be encouraged to study educational methods in foreign countries

(h) It is impossible to calculate the precise annual cost of the proposals contained in this chapter. The total net cost of training the additional teachers required for a national system will amount, including maintenance where necessary to Rs. 159,98,250 over a period of thirty-five years or an average of Rs. 4,56,99,950 a year."

Summary of the main conclusions regarding recreation :—

"(a) The provision of recreative and social activities on an adequate scale is an essential feature of any modern educational system.

(b) Apart from the needs of boys and girls in schools and colleges special attention should be paid to those in the 14—20 age group who are no longer attending school. To serve these a Youth Movement on an All-India basis should be set up.

(c) A Youth Movement should aim at co-ordinating and supplementing rather than superseding the work of organisations already dealing with aspects of this problem.

(d) The main need of a Youth Movement will be for leaders, both men and women who will have to be specially trained. The possibility of finding suitable recruits among demobilised Officers and N. C. O's. should be explored.

(e) The provision of social and recreative facilities for adults should form an important part of any Social Service scheme. Reference is invited to the report of the Board's Committee on Social Service and Public Administration (1941).

(f) It is impossible to estimate the ultimate cost of the provision contemplated in this chapter. Rs. 1 crore may be included in the estimate."

Employment Bureaux.

The Advisory Board has also suggested the establishment of an employment Bureau and a summary of their main conclusions in the report is reproduced below :

“(a) Employment Bureaux form an essential part of educational administration : they are especially necessary in India in view of the restricted openings at the moment for progressive employment.

(b) Employment Bureaux, if they are to fulfil successfully the functions set out in this chapter, must be staffed by trained experts with practical experience of teaching and of industrial conditions.

(c) While contact should be maintained with Unemployment Exchanges, Labour Tribunals, etc., established by other Departments, Employment Bureaux, which deal with the output of educational institutions should be under the control of the Education Department.

(d) It is estimated that the gross annual cost of running Employment Bureaux (apart from those separately established by institutions of University rank) will amount to Rs. 64,00,000.

This should be regarded ultimately as a normal part of administrative expenditure.

Administration

The Advisory Board has reached the following main conclusions regarding the administration of educational institution.

(a) The Provinces should remain the main units for educational administration except in regard to University and higher Technical education, the activities of which should be co-ordinated on an All-India basis.

(b) In the event of the Indian States taking part in educational development on an All-India scale it may be necessary in order to form economic educational units to group the smaller ones or attach them to larger States or contiguous Provinces.

(c) A national system of education will require much closer co-operation, financial and otherwise, between the Central and Provincial Governments.

(d) Provincial Governments should be left to make such changes in their administrative arrangements as the carrying out of education developments on the scale contemplated may

require. Experience, however, suggests that they would be well-advised to resume all educational powers from local bodies, except where these are functioning efficiently. •

(e) In order to enlist local interest in education, School Managing Bodies, School Boards and District Education Committees may be constituted, if and when sufficient people of the right type are available to serve on them. An Education Advisory Board for the whole Province may be desirable.

(f) A strong Education Department will be required at the Centre and in this connection the scope and functions of the Central Advisory Board should be enlarged.

(g) Steps should be taken in accordance with the recommendations of the Board's Committee on the Recruitment of Education Officers (1943) to check the present deterioration in the status and calibre of the educational administrative service and to enable it to secure the services of the type of officer who will be capable of carrying a scheme of the kind contemplated into successful operation.

(h) Arrangements should be made for the exchange of officers between the Centre and the

Provinces and between one Province and another. The desirability of establishing a senior educational administrative service on an All India basis should receive consideration.

(z) The Director of Public Instruction should be directly responsible for the general administration of education, other than University and higher Technical education, throughout the Province. He should also be Secretary for Education, should it be thought necessary to keep in existence a separate post of this kind.

(j) Provision has been made under each separate branch of education for the cost of administration which may be estimated at 5 per cent of the gross annual expenditure.

CHAPTER XI

HINTS FOR PUBLIC SPEAKING

1. Essentials of good speaking

Public activity keeps office life alive. Public speaking is a vital part of public activity. The first requisite for public speaking is the power of clothing thoughts previously conceived in appropriate language. The second requisite is the power of arranging a succession of thoughts into a harmonious whole.

It is therefore necessary that a speaker should have ample knowledge of the subject and with this aim in view he must hunt up and collect all material on the 'subject before he speaks. At least half of bad speaking is due to the lack of knowledge of the speaker.

The man who is full of his subject seldom exhibits nervousness, and seldom fails to grip his audience. Because he knows that he cannot be pulled up on inaccuracies arising from ignorance of his subject. A well-informed speaker is full of self-confidence. This fact

does not escape the audience, who listen with the respect and attention.

2. Outline for speeches.

When full material has been collected, the speaker may proceed in three ways. The first and best method is to go mentally over the subject on which one has to speak and merely think of what one intends to say. And, then, when the time comes, to say it.

The second way of planning a speech is to think out all the points that have to be said and to jot down a list of headings on a piece of paper. The slip can then be referred while the speech is being actually delivered. The headings will keep the speaker alive to the points and will help him to remember all the thoughts. In other words, they will assist and not restrict the speaker. The headings usually are:—

1. General introduction of subject.
2. Statement of the particular proposition which is to be expounded
3. The evidence in details.
4. The summary of evidence.
5. Exposition of the conclusion logically to be drawn from such evidence.

6. The appeal for support, or the "peroration,"

Under these headings notes may most conveniently be set down. Naturally, certain of the divisions are capable of further subdivision. Evidence in detail, for instance, may well have six divisions of its own the number being mainly dependent on its bulk.

The third method is to sit down and write out what a speaker intends to say from beginning to end. He can, then go over it aloud a dozen or, perhaps, forty times, until he has learnt much of it by heart, while the rest he can fill in by a system of paraphrasing. A glance at the paper, just before one goes to speak, will refresh his memory splendidly and, quite likely he will be surprised and pleased at his powers of oratory, after the event.

Cicero recognizes the following *quinque quasi membra eloquentiae*:—the selection and arrangement of the subject-matter, the clothing it in suitable language, the charging the whole upon the memory, and lastly, the delivery of the speech so prepared with appropriate gesture and elocution.

The course to be adopted by a speaker, as by a traveller is first, to decide what point he wishes to make for, and then to set about finding the readiest means of arriving at it. Many speakers resemble the men of an exploring party, in a newly settled country, who have no particular object in view ; as long as they do but get over a certain amount of ground, they are careless as to the direction they may have taken, and are not much surprised if they find at last that they have been walking in a circle, and have arrived at the very spot from which they originally started. on the other hand, a good speaker may be compared to a native of the same country, who, striking unhesitatingly into the right path, never once pauses or turns aside until he attains the object of his journey.

Absurd as it may seem, experience would lead us to believe that a large number, even of those who speak after considerable preparation, never clearly decide in their own minds the exact purpose which their speech is to effect; the consequence of which is, that, having neither method nor concentration, they fritter away, in slight skirmishes and it may be in trivial successes, opportunities and resources which, if

rightly used, would have enabled them at once to strike a decisive blow.

Such men generally excel, more or less, in that style of speaking which Mr. Addison has humourously denominated "high nonsense." The peculiar characteristic of which he shows to be that the speaker without really having any meaning seems to have it, and so imposes upon the hearers by the range and sound of his words, that they are apt to fancy they signify something; "a deceit" he say, "which is only to be detected by those who lie under this delusion asking themselves what they have learnt from it." Let a speaker, however, only apply the test to himself, and throughout the whole course of his preparation keep prominently before his mind the lesson which he really wishes to convey, and he will hardly fail to see, even at a glance, what portions of his subject matter are superfluous, and what parts he may with advantage enlarge upon.

3. Method of delivering Speeches

With regard to the actual delivery of a speech, only a few general hints can be given. There are many books upon elocution to which reference may be profitably made, and it may be

remarked, incidentally, that not enough attention is paid nowadays to elocution as part of the education of cultured people. It is a regrettable fact that insufficient stress is laid upon the importance of really good reading and speaking as part of a gentleman's equipment for the world.

Proper management of the breath is the fundamental necessity in the effective use of the voice. The nostrils are the proper organs of breathing, and abdominal breathing is the proper method; it has been laid down as a definition that "the criterion of correct inspiration is an increase of the size of the abdomen and of the lower part of the chest; whoever draws in the abdomen and raises the upper part of the chest breathes wrongly." For public speaking the important thing is to take in as much breath as possible, inflate the lungs to their fullest extent with air, and never exhaust them, taking fresh inspirations whenever and wherever opportunity offers.

Some control of the breath having been acquired, the next point to consider is its application to the vocal organs in producing speech. The vowels and consonants are elementary sounds of which, when blended into complex

forms, words are compounded. "Pronunciation" is simply giving utterance to words, and when clearly and effectively done the vocal act is defined as correct articulation; when many words are spoken successively, with due regard to their emphasis and inflection, the speaker is said to have flexibility of utterance. Words are formed by the action of the tongue, lips and nose, and consequently the sounds should be articulated by the organs of the mouth, not by those of the throat. To acquire just articulation every word should be delivered perfectly finished; they should not be hurried over nor run one into another, nor should they be prolonged or drawled. When all the vocal apparatus is subordinated to the will so completely that each organ responds to the production of any tone or variation of sound. "flexibility" has been acquired.

4. Articulation.

An admirable exercise in articulation has been suggested by one writer on the subject. After describing various exercises, he says; "It would be advantageous to take any piece and read it backwards. I do not know of any

practice more calculated to produce clear articulation than this. In performing it, great care should be taken to let each word stand out, above and apart from its neighbours. It will also be necessary that each letter in the syllable and each syllable in the word should be distinctly heard. And here we may lay down a very good rule—let every letter and every syllable be distinctly heard, unless there be some good reason against it. Take care to enunciate each word as loud as conveniently possible. Breathe between each word. It would be a good practice, and would vary the above, to elongate the syllables as much as possible, and also to read in several keys, or in other words, with the different kinds of pitch of which the voice is capable.”

We quote this because a single experiment will convince any honest person that his ordinary articulation is much more faulty than he would previously have believed, and whatever else a sympathetic audience may condone in the way of harshness of voice, or stiffness of gesture, they will not condone failure in articulation. If a speaker will not take the trouble to make every word he says clear, he will forfeit the sympathy, and very speedily the patience, of

his hearers and be compelled to make room for some more intelligible person.

It should further not be forgotten that clear articulation goes a long way to compensate for weakness of voice, and that sense can be conveyed with a minimum of sound. If the audience are interested at the outset, they bring their eyes as well as their ears, and catch every word that is perfectly articulated; it is on this principle that deafmutes are taught lip-reading. No pains, therefore, should be spared to make the articulation precise and accurate.

5 Voice while speaking

For the rest, the would be orator must develop the natural tone of his voice in which he is accustomed to speak, and which he can vary and make orotund, guttural, hollow or even falsetto, according to the nature of the passage to be spoken. No theoretical remarks can be of much service here; only observation of living models coupled with patient practice can avail. He must further consider the question of "time" the rapidity with which he will give utterance to his words; in this case again he must be guided by the paramount necessity of clear articulation, with which neither speech nor

anything else must be allowed to interfere; something of the "time" will be indicated by the nature of the passage to be spoken, an impassioned appeal or a fiery denunciation demanding greater rapidity than a solemn exhortation or a critical analysis of the arguments of the other side. Finally, he must pay due regard to proper phrasing and grouping of his words; this has been well defined as "vocal punctuation" and consists in arranging the words of discourse into groups as to convey their actual meaning, and in separating them by the use of pauses in utterance.

To sum up, anyone with a very little preliminary instruction can learn to control and economise his breath, can acquire nice articulation, and practise affective gesticulation; the rest he can learn best by listening and attending to such good speakers as he may have the opportunity of hearing; by taking pains he may soon hope to become a competent speaker himself. That the trouble to which he may have been put will be well compensated by the event is a self evident proposition.

6. Some common errors in speaking.

Pronunciation is an important matter, the

difference between correct and incorrect pronunciation marking the difference between an educated and an uneducated man. In ordinary conversation the most common errors are due to carelessness, to a slipshod speech, which is tolerated for no apparent reason, and which many parents only check in their children when it degenerates into such glaring faults as omission of the aspirate or its insertion in places where it should not be. In public speaking, however, correct pronunciation is essential, because failure in this particular exposes the orator to public ridicule.

The rule is that, unless there is some explicit reason to the contrary, every letter and every syllable in a word should be heard, and upon the rule too much insistence cannot be laid, for it is to its breach that all the common errors in speech may be traced. It is unnecessary to refer here to variations in pronunciations so localised as to be known as dialect; outside these altogether there are a few words in which custom, or what is technically known as *usus loquendi*, justifies alternative pronunciations of the same word.

Thus experts disagree as to whether the

aspirate should or should not be sounded in *herb*, *hostler*, *hotel*, *humour* and *humble*, but all agree in omitting it from *heir*, *heiress*, *-honest*, *honour* and *hour*. It should not be omitted when it follows the letter *w*, but should be given its full value. *What when, where* and *whither* are not the same either in sound or sense as *wot*, *wen*, *were*, and *wither*; yet many people make no difference in their pronunciation, although they would never think of pronouncing *who* as if it were the exact equivalent of *woo*. But while in the few cases given above, the letter *h* is not sounded, there are no exceptions to the rule that it must never be sounded where it does not exist.

In the case of *either* and *neither* again; there seems to be an equal balance of authority for pronouncing the *ei* as if it were *ee* or *i*.

Quotations for Speakers

A speech often gains considerably by the introduction of an appropriate quotation. Below is a collection of quotations which may be of much help the those composing speeches.

Women forgive injuries, but never forget slights.

—Sam Slick,

Women, wind and fortune are ever changing.
Be slow in choosing a friend, slower in
changing.

—*Franklin.*

The youth of a nation are the trustees of
posterity.

—*Disraeli.*

They can conquer who believe they can.

—*Emerson.*

He that dares not venture must not complain
of ill-luck.

Patience and application will carry us
through.

One may buy even gold too dear.

To see may be easy ; but to foresee, that is
the great thing.

'Tis not every question that deserve an
answer.

In things that must be, it is good to be
resolute.

Success is sweet ; the sweeter if long delayed
and attained through manifold struggles and
defeats

—*Table Talk.*

The team that never meets a better one never need lose.

The world is not made for the prosperous alone, nor for the strong.

Man's record upon this wild world is the record of work, and of work alone.

—*J. G. Holland.*

For one word a man is often deemed to be wise and, for one word, he is often deemed to be foolish. We ought to be careful indeed what we say.

—*Confucius.*

Wise men say nothing in dangerous times

Wit sometimes enables us to act rudely with impunity.

—*La Rochefoucauld.*

It is easier to be wise for others than for ourselves.

—*La Rochefoucauld.*

There is no index of character so sure as the vice.

—*Disraeli.*

Everything is sweetened by risk.

There is no tyranny so despotic as that of public opinion among a free people.

—*Donn Piatt.*

The truth is always the strongest argument.
Sophocles.

Work is the great cure of all maladies and
 miseries that ever beset mankind.

—*Carlyle*

A halter made of silk is a halter still.

—*Cibber*

Idle bodies are generally busy bodies.
 Every ass loves to hear himself bray.
 Better not do the deed than weep it done.
 —*Prior.*

Can you remember when times were not
 hard and money scarce?

—*Emerson.*

Wisdom is knowing what to do next. Skill
 is knowing how to do it. Virtue is doing it.

The greatest truths are the simples; and so
 are the greatest men

Hare.

Amicably if they can; violently if they must.

—*De Quineey.*

God often visits us, but most of the while we
 are not at home.

—*Roux.*

Whatever makes men good Christians makes them good citizens.

—*Webster.*

Men's best successes come after their disappointments.

—*Beecher.*

The true use of speech is not so much to express our wants as to conceal them

—*Goldsmith*

Silence is the eternal duty of man.

—*Carlyle.*

There are some silent people who are more interesting than the best talkers.

—*Disraeli.*

CHAPTER XII

PROOF READING.

Every Office whether it is a private concern or a Government department has to get printed their report and other publications. This chapter is therefore concerned with Proof reading and allied matters. Proof reading is done by two persons better than one, the junior to read carefully and slowly from the manuscript, spelling out unusal or doubtful words, the other checks the proof copy and make any alterations that may be required. Every character should be regarded as potential error, and numerals call for especial care, for if passed over now they will be apt to pass unnoticed until the mistake is pointed out by some victimized reader. Corrections should be made in the margins of the proofs, and the exact type matter to be altered must also be marked in the text itself. The recognized signs for proof marking are illustrated in chasts for proof reading obtainable from

Government presses in the Province or from recognised booksellers

It is not usual to add to manuscript in proof stage and additional entries should be made only when it is absolutely necessary, and those must be made in the clearest possible manner so that the printer may know beyond all doubt what the fresh matter is, how it is to be set, and precisely where it is to go in. Any corrections which may have escaped the attention of the printer, or be wrongly made, should be re-marked, and since printers accept responsibility for their own mistakes alone and will charge author's corrections as "extras", to be paid it may be desirable to slowly encircling or some other device those alterations for which liability is admitted. Sometime the printers send a second proof to avoid ambiguities. In such cases it is obviously unwise at this stage to interpolate fresh matter or to disturb the type in any way unless through sheer necessity. Even the advisability of adjusting minute error is questionable since it would entail unlocking the "forms" and upsetting the pages. Such alterations would, unless admittedly due to the printer, involve an additional charge for correction.

But there is another reason for hesitation, for as this is the Final proof, and failing a special arrangement, no further opportunity will be given for checking, there is a possibility of introducing one error while correcting the other, Such things have happened ! At this late stage insertions are better made in the form of a supplement under a suitable heading

Spelling

The following rules regarding spelling and other matters should be carefully observed by Proofreaders.

1. Spell words ending in 'able' without 'e' except when 'e' is necessary to indicate the pronunciation of the previous letter or letters. For instance, "desirable," 'movable;' but 'blameable,' 'changeable,' 'noticeable.'

2. It is often hard to know whether to spell certain words with 'ise' or 'ize.' The Oxford University Press adopts the following spellings for certain common words:—

'Advertise;' 'apologize;' 'authorize;' 'capitalize;' 'characterize;' 'comprise;' 'criticize;' 'despise;' 'devise;' 'economize;' 'emphasize;' 'enterprise;' 'equalize;' 'excise;' 'exercise;' 'familiarize;' 'franchise;' 'legalize;' 'memorialize;' 'minimize;' 'mono-

polize;' 'particularize;' penalize;' 'popularize;' 'premise,' 'prize;' 'realize;' 'recognize;' 'scrutinize;' 'specialize;' 'summarize;' 'sympathize.'

3. According to the same authority write words such as 'judgement,' 'acknowledgement' with 'e' between the 'g' and 'm;' e.g., 'judgement' not 'judgment.' The other form, however, is in common use, and some good writers prefer it.

4. *Note the spelling of some difficult words.*—Accommodation (two *m*'s); accumulation (one *m*); analyse (not analyze); canvas (cloth); canvass (political); cipher (not cypher); connexion (not connection); dependant (noun), dependent (adjective), dependence; distil: but distiller, enroll: but enrolment; ensure (to make safe or certain); foregone (gone before); forgone (given up—"forgone" conclusion); granter (one who grants); grantor (one who makes a grant—legal); inquire, inquiry (not enquire, enquiry); install:

Use of hypens.

1. When you use a noun and adjective, or adjective and noun, together as a compound adjective link the two words with a hyphen e.g., a nineteenth-century invention: a blood-red hand.

2. Do not join an adverb by a hyphen to the adjective which it qualifies unless the word might escape notice as an adverb. e.g., A well-known statesman : but

A well considered scheme.

3. (a) Write the following compound words as one word:—

Anybody, anything, anywhere (every-, no-, some-); byname, byword. (also byname, byword); daybreak; goodwill; handbook; textbook; inasmuch; indoor; lifetime; meantime meanwhile; midday (noon-); nevertheless; notwithstanding; nowadays; oneself (my-, him-, her-, your-); overleaf, oversea; schoolboy, school-girl; selfsame; wellnigh; wrongdoing

b) Write the following compound words or phrases as two or more words without hyphens:—

any one (every-, no-, some-); by and by (also bye and bye); by the by (also bye the bye); common sense (noun; court martial: dare say; fellow men; for ever; Governor in Council; half an inch (dozen, score); ill health (-luck, -nature); none the less; post office.

(c) Write the following compound words and phrases separately with hyphens:—

bi-weekly; by-law (-way; though byelaw and

byeway are also common); common-sense (used as an adjective); first-hand (adjective); Governor-General; guide-book (year-); india-rubber; life-like; never-ending; one-forth, (-sixth, etc.); out-of-date, (up-to-date, when used as adjectives); quarter day; starting-point; second-hand; such-like; to-day.

Use of capitals.

1. The use of capitals is much overdone. People seem to think that a profusion of capitals is decorative and lends dignity to their compositions. Generally speaking, use a capital only with proper names, and after a full stop. There are apparent exceptions, given below: but examination will show that they are more apparent than real. When words that are not proper names are *used* as proper names give them capitals.

(a) *Honorifics.*—

Write —

His Majesty, His Excellency, Hon'ble Mr. (etc., etc.).

(b) *Names of posts or offices*—

(1) When you refer to a post, office, or appointment in general terms do not use capitals

e.g., "The first duty of a settlement officer is to classify the soils "

(2) When you address a particular officer by his office, use capitals, e.g., "The Settlement Officer of --- has reported "

The same applies to abstract terms such as "government," "department," which are used with a personal meaning.

Write, e.g., "It is the duty of a government to govern " "It is not the duty of an administrative department to . . . ;"

But—

'This Government consider it their duty ;"
"The Finance Department has concurred "

(c) "*Bill* " and "*Act* "

Write these words with capitals whether alone or as part of the name of a particular "*Bill* " or "*Act*."

(d) *Abstract words used as names.*—

(1) Terms such as "land revenue," "police," "forest," "finance " are often used as adjectives in conjunction with such words as "department " or "service." The use of capitals is then governed by the rule given above, (b), and the adjective follows the noun which governs it.

(2) Such terms are also sometimes used by

themselves as convenient names or descriptions of a department, service, head of account, etc., and should then be written with a capital, e.g., "A sum of Rs. 1,000 will be found under Land revenue"

The unnecessary use of capitals is a serious fault.

Foreign Words, Italics etc.

The following rules regarding the use of italics, foreign words, accents etc., are reproduced from the "Rules for the guidance of clerks and readers" which were issued by Government Presses.

Rules for the guidance of clerks and readers.

1. Print in Roman, with accents as marked,—

a propos	et cetera	regime
ad valorem	fete	sub pro tem.
alias	gratis	versus
bona fide	lcvee	via
carte blanche	per se	vice
contra	post mortem	vice versa
debris	precis	vide
depot	prima facie	viva voce
employe (mas.)	pro rata	
employee (fem.)	protege	
Also—		
cf.	ib.	l.c.
eg.	ibid	q.v.
et seq.	idem.	viz.

2. Print in italic type, with accents as noted,—

<i>a fortiori</i> .	<i>entree</i>	<i>passim</i>
<i>ante</i>	<i>ex officio</i>	<i>post</i>
<i>a priori</i>	<i>ex parte</i>	<i>pro forma</i>
<i>en bloc</i>	<i>infra</i>	<i>pro tempore</i>
<i>en masse</i>	<i>in propria persona</i>	<i>resume</i>
<i>en route</i>	<i>modus operandi</i>	<i>sine qua non</i>
	<i>pari passu</i>	<i>supra</i>

Note — *Aharaj*, *rob* and a few other well known Indian words should also be printed in italics.

3. Print—

acknowledgement,	not acknowledgment.
judgement,	„ judgment.
abridgement,	„ abridgment.
head quarters,	„ headquarters.
head master,	„ headmaster.
descriptive roll,	„ descriptive-roll.
etc.,	„ &c.

4. In Latin and Greek words or words from derived Latin or Greek use no diphthongs and spell—

archaeology,	not archæology.
mediaeval,	„ mediæval.
encyclopaedia,	„ encyclopædia.
phocnix,	„ phoenix.
Caesar,	„ Cæsar.

In French words, however, a diphthong should be used, e.g., *manceuvre*.

5. Print—

18 lb.,	not	18 lbs.
SS. (stemship)	„	S.S.
MS.,	„	M.S.
MSS.,	„	M.SS.
N.B.,	„	N.B.
PS.,	„	P.S.
2.30 p.m.,	„	2-30 P.M.
1897-8,	„	1897-98.
1908-9,	„	1908-09.
from 1672 to 1674,	„	from 1672—74.

6. When some words in a sentence, or some sentences in a paragraph, are omitted, mark the omission by three fullstops with en quadrats between thus

CHAPTER XIII.

OFFICE LIBRARY.

Every Office must have some books on subjects dealt with by its workers. The necessity of obtaining more and upto-date books has not yet been fully realised in India. In western countries, particularly America, every Office possesses standard books for the workers in his Office.

Books when obtained from bookseller or agents of Government publications should be duly classified catalogued and kept properly as far as in open shelves. There are various schemes of book classification but the Dewey scheme or the Decimal scheme is most popular. This widely applied of all library schemes, was invented by Melvil Dewey in 1873—76, and has been under revision constantly since, and is to-day in general a very extensive and detailed scheme. As indicated by its name, the system is divided into groups of ten, and from this

results an admirable notation of unlimited expansibility.

Its chief divisions are as follows.

- 000 General Workers.
- 010 Bibliography.
- 020 Library Economy.
- 030 General Cyclopaedias.
- 040 General Collections
- 050 General Periodicals.
- 060 General Societies.
- 070 Newspapers.
- 080 Special Libraries.
- 090 Book Rarities,
- 100 Philosophy.
- 110 Metaphysics.
- 120 Metaphysics. Special Topics.
- 130 Mind and Body.
- 140 Philosophical systems.
- 150 Mental Faculties, Psychology
- 160 Logic
- 170 Ethics
- 180 Ancient Philosophers.
- 190 Modern Philosophers.
- 200 Religion.
- 210 Natural Theology
- 220 Bible.

- 230 Doctrinal Theology.
- 240 Devotional and Practical.
- 250 • Homiletic, Pastoral etc.
- 260 Church Institutions.
- 270 Religious History
- 280 Christian churches and sects.
- 290 Non christian Religions.
- 300 Sociology.
- 310 Statistics.
- 320 Political Science.
- 330 Political Economy.
- 340 Law.
- 350 Administration.
- 360 Associations.
- 370 Education.
- 380 Commerce, etc.
- 390 Customs, costumes, Folklore
- 400 Philology.
- 410 Comparative.
- 420 Engl sh.
- 430 German.
- 440 French.
- 450 Italian.
- 460 Spanish.
- 470 Latin.
- 480 Greek.

- 490 Minor Languages.
- 500 Natural Science.
- 510 Mathematics.
- 520 Astronomy.
- 530 Physics
- 540 Chemistry.
- 550 Geology.
- 560 Palaeontology.
- 570 Biology.
- 580 Botany
- 590 Zoology
- 600 Useful Arts.
- 610 Medicine
- 620 Engineering.
- 630 Agriculture
- 640 Domestic Economy
- 650 Communications
- 660 Chemical Technology
- 670 Manufactures
- 680 Machanic Trades
- 690 Building
- 700 Fine Arts.
- 710 Landscape Gardening
- 720 Architecture.
- 730 Sculpture.
- 740 Drawing Decoration.

750	Painting	
760	Engraving.	
770	Photography	
780	Music	
790	Amusements.	
800	Literature	
810	American.	
820	English.	
830	German	
840	French	
850	Italian	
860	Spanish.	
870	Latin.	
880	Greek	
890	Minor Languages.	
900	History.	
910	Geography and description.	
920	Biography.	
930	Ancient History.	
940	Europe	} Modern.
950	Asia	
960	Africa	
970	N. America	
980	S America	
990	Oceanica and Polar Regions	

This scheme is published separately as
Tables and Index of the Decimal Classification

and relative. Index for arranging and Cataloguing Libraries, Clippings, Notes, etc., by Melvi Dewey, Boston, and has been largely expanded, with an elaborate additional apparatus of form and relation marks, by the Institute International de Bibliographic, Brussels.

CHAPTER XIV

USEFUL INFORMATION

GENERAL

India is the second largest country in the world next only to China in population. According to census statistics of 1941, her population was 389000000 and area 1581410 square miles. India extends from north to south for a distance of about 2000 miles and almost an equal distance from east to west. India is 15 times as large as Great Britain and equal to the whole of Europe except Russia. It has a land frontier of 6000 miles and sea frontier of about 5000 miles. It may be interesting to note that the total population of British Empire is 494770000. The total world population is estimated at 1850000000. India is 1/5 of the entire population of the world and thirteen times that of the overseas Dominions put together. The British Empire consists of 240 million Hindus; 100 million Muhammedans; 80 million Christians; 12 million Budhists; 4

million Sikhs; 750000 Jews and the remaining with minor religions.

Of the population of India 295000000 live in British India and 93000000 live in Indian States. The area of British India is 865000 and that of Indian States 715000 Square miles. British India consists of 11 major Provinces each under a governor and 6 minor provinces each under a Chief Commissioner. The major Provinces are Bengal (60' 00000) United Provinces (55000000), Madras (49000000) Bihar (360' 0000), Punjab (28000000), Bombay (20000000), Central Provinces (16800000), Assam (10000000), Orissa (8700000), Sind (4500000) and North Frontier Province (3000000). The Chief Commissioneries Provinces are Ajmer (600000), Andaman & Nicobar (33000), Baluchistan (500000), Coorg (168000), Delhi (17000) and Panth Piploda (5267).

About 70% population of India are Hindus, 22% Muhammedans, 2% Christians and 1.5% Sikhs and rest others. The population of Bengal is about 55% Muslims, 44% Hindus. The United Provinces has 85% Hindus, 14% Muhammedans. Madras has about 88% Hindus,

7% Muhammedans, and 3% Christians. Bihar has only 12% Muslims and rest are Hindus. Punjab about 28% Hindus, 14% Sikhs and 56% Muhammedans. Bombay has 88% Hindus, 10% Muhammedans. Central Provinces has 88% Hindus, 5% Muslims and rest consists of tribal religions. Assam has about 31% Muhammedans and the rest consists of Hindus and Tribal religions. The newly created Province of Orissa has only 4% Muslims, 3% Christians and the rest are Hindus or profess Tribal religion. Sind is also a newly created Province having about 27% Hindus and rest are Muhammedans. North Western Frontier Province has about 91% Muslims population, 6% Hindus and the rest profess other religions. In British Baluchistan there are 87% Muslims and 9% Hindus. Delhi consists of 63% Hindus and 32% Muslims. In other Chief Commissioneries Provinces Hindus are in overwhelming majority.

The Indian States are in all 562 in number and their area and population are about one half and one fourth respectively of that of the whole of India. Of their total population of over 9 crores 78% are Hindus, 13% Muhammedans, 3% Christians, 3% Tribal religions, 1%

Sikhs and 1% Jains. They include states of varying size and population. The biggest of them Hyderabad has an area of about 82,700 sq. miles and a population of over 160 lakhs, as big as Italy. In other words it is as large as Great Britain and has nearly twice the number of inhabitants of Portugal or Austria. Its revenue is over 7 crores of rupees.

Kashmir State, in the extreme north, is of approximately equal size and has a population of over 4 millions. Mysore, in the south has about 70 lakhs of inhabitants, with an area just under 30000 sq. miles, so that it is larger than the Irish Free State and has twice its population. Gwalior has a population of over 40 lakhs. The territory of the Gaekwar of Baroda, which is made up of several separated areas north of Bombay, includes a population of about 30 lakhs.

Other big States are those of Jaipur, Jodhpur, Patiala and Indore which are each equal to small countries outside India. On the other hand there are small states like Lawa, in Rajputana with an area of 19 sq. miles and the Simla Hill States which are little more than small holdings.

About 90% of Indian population live in villages. The number of villages in 1941 was 655000 and that of towns 2703, of which about 2 lakhs villages and a thousand towns are situated in Indian States. There are 58 cities of over one lakh population. The largest of them is Calcutta with a population of 21 lakhs, Bombay 14 lakhs, Madras 7·7, Hyderabad 7·3, Lahore 6·7, Ahmedabad 5·9, Delhi 5·2, Cawnpore 4·8, Amritsar 3·9 and Lucknow 3·8 lakhs.

Average income in India was estimated to be Rs. 20/- per head per annum by Dadabhoy Naoroji in 1878. It was estimated at Rs. 116 in 1922. India contributes about 3% of World's production of gold. The density of population per sq. mile is 196 in British India and 133 in Indian States. Nearly 70% people of India live on agriculture and other professions. Agricultural indebtedness in India was assessed at Rs. 900 crores by Central Bank Enquiry Committee which is 15 times the total land assessment.

Indian Calendar

The *samvat* era is popularly believed to have been established by Vikramaditya, the king of Ujjain to commemorate his victory over Saka,

kings in the year 57 B.C. Samvat is a luni-solar year.

The *Saka* era is said to date from the king Salivahana in commemoration of his victory over *Sakas* or Scythians, and dates from 78 A.D.

Bengali Year was originally a reckoning for agricultural and revenue purposes instituted at the time of Emperor Akbar. It began in April 1556.

The Mahomedan era is based on *Hijra* or flight of Mahomed from Mecca to Medina. The first day of the era is not the actual date of flight but 16th July 622 A.D. *Hijra* is a purely lunar year consisting of 12 months of 30 and 29 days alternately making a total of 354 or 355 days.

In A.D. 1555-6 corresponding to Hijra 962-3, solar computation was introduced to Mahomedan era which became *Fasli* or harvest era of Northern India. It also dates from the reign of Akbar.

Christian Calendar

In very ancient times the calendar was based almost entirely on the moon. The month is the period from full moon to full moon, about 29·5

days, or a little more than four weeks. Consequently, the month was introduced and twelve months were taken to make a year. But since there was 12.4 months, by the moon, in a year, the year was gradually displaced with respect to the seasons.

The confusion was serious until 45 B.C., when Julius Cæsar decreed that there should henceforth be three years of 365 days each and then one year of 366 days in perpetual cycle. This was known as a Julian Calendar. Since there are approximately $365\frac{1}{4}$ days in a year, this arrangement was satisfactory for many years. But there was not exactly $365\frac{1}{4}$ days in a year and in the course of centuries, the error became appreciable.

This accumulated error was corrected by a council of astronomers summoned by Pope Gregory XIII in 1582 by omitting 11 days from that year. At the same time he introduced a leap year rule. The Gregorian calendar gradually came into use in Western Europe being finally adopted in England in 1752 and in American colonies about the same time. In Eastern Europe however where the Greek Church was dominant, the Julian reckoning was

retained. In 1917 Turkey adopted the Gregorian calendar, Russia followed in 1918; and in 1923 a Congress of Eastern Orthodox Church decreed the adoption of the reckoning used by the rest of the world. The use of Gregorian calendar is now uniform throughout the civilised world.

The leap year rule is as follows: Those years whose date numbers are exactly divisible by 4 as leap years, unless they are also exactly divisible by 100. In such cases they are not leap years unless they are exactly divisible by 400. Thus the year 1900 was not leap year but the year 2000 will be a leap year.

Names of month

The months of the year received their English names from corresponding Latin names. Those from September to December are so called from the numbers *Septem*, 'seven'; *Octo*, 'eight'; *Novem*, 'nine'; and *Decem* 'ten'. September was the seventh month when the year began with March. July was formerly called *Quintilis* from *Quintus*, fifth; but when Julius Cæsar reformed the calendar, he changed the month's name to Julius in his own honour. Julius became July in English. Similarly *sextilis*, from *sextus* 'sixth' was named Augustus after

the emperor of that name and became August.

January was named from Janus, God of entrances. February is derived from *februa*, a festival of purification held in that month by the Romans. Martius is the month of Mars, who was originally a God of agriculture, his month being the one when crops were ordinarily planted. The origin of April is not known. May is named from Maria, the mother of Roman God Mercury, June is derived from Juna, the Goddess of women and of marriage.

Roman Numerals

I	..	1	...	LXX	....	70
II	...	2	....	LXXX	...	80
III	....	3	...	XC	...	90
IV		4		C	....	100
V	...	5	...	CL	...	150
VI	...	6	....	CC	...	200
VII	...	7	...	CCC	....	300
VIII	...	8	...	CD	....	400
IX	....	9	...	D	...	500
X	...	10	..	DC	...	600
XIX	...	19	...	DCC	...	700
XX	...	20	...	DCCC	...	800
XXX	...	30	...	CM	....	900
XL	...	40	...	M	...	1000
L	...	50	...	MD	...	1500
LX	...	60	....	MCM	...	1901